



EUROPEAN EDUCATION AND CULTURE EXECUTIVE AGENCY (EACEA)

EACEA.A – Erasmus+, EU Solidarity Corps
A.2 – Skills and Innovation

GRANT AGREEMENT

Project 101102844 — Auto-Cove 2.0

PREAMBLE

This **Agreement** ('the Agreement') is **between** the following parties:

on the one part,

the **European Education and Culture Executive Agency (EACEA)** ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and

on the other part,

1. 'the coordinator':

ESPOON SEUDUN KOULUTUSKUNTAYHTYMA OMNIA (OMNIA), PIC 946099783, established in PO BOX 77700, ESPOO 02070, Finland,

and the following other beneficiaries, if they sign their 'accession form' (see Annex 3 and Article 40):

2. **TARTU LINN (TARTU CITY)**, PIC 996380024, established in RAEKODA, TARTU 50089, Estonia,

3. **VENTSPILS TEHNIKUMS (VT)**, PIC 946960076, established in SAULES IELA 15, VENTSPILI LV-3601, Latvia,

4. **SOCIETE D'ENSEIGNEMENT PROFESSIONNEL DU RHONE (SEPR)**, PIC 947427422, established in 46 RUE PROFESSEUR ROCHAIX, LYON 69424, France,

5. **JAKOB-PREH-SCHULE STAATLICHE BERUFSSCHULE BAD NEUSTADT AD SAALE (JPS)**, PIC 910049345, established in POSTSTRASSE 31, BAD NEUSTADT AD SAALE 97616, Germany,

6. **TECHNISCHE HOCHSCHULE WUERZBURG-SCHWEINFURT (THWS)**, PIC 972534223, established in MUNZSTRASSE 12, WURZBURG 97070, Germany,

7. **STICHTING REGIONAAL ONDERWIJS CENTRUM NOORDOOST-BRABANT (KWIC)**, PIC 948240282, established in VLIJMENSEWEG 2, 'S HERTOGENBOSCH 5223 GW, Netherlands,

8. **TEKNOLOGIAN TUTKIMUSKESKUS VTT OY (VTT)**, PIC 932760440, established in TEKNIKANTIE 21, ESPOO 02150, Finland,
9. **PREH GMBH (Preh GmbH)**, PIC 890227783, established in SCHWEINFURTER STRASSE 5-9, BAD NEUSTADT A.D. SAALE 97616, Germany,
10. **EESTI MAULIKOOL (Eesti Maulikool)**, PIC 999857280, established in KREUTZWALDI 1, TARTU 51014, Estonia,
11. **BILIA OY AB (Bilia Oy Ab)**, PIC 889639866, established in VANTAANLAAKSONTIE 6 C, VANTAA 01610, Finland,
12. **VOLVO CAR FINLAND OY AB (Volvo Finland)**, PIC 889642000, established in TAIVALTIE 1, VANTAA 01610, Finland,
13. **ELECTUDE INTERNATIONAL BV (Electude)**, PIC 882578654, established in COLLSEWEG 30, NUENEN 5674 TR, Netherlands,
14. **TOYOTA BALTIC AKTSIASELTS (Toyota Baltic)**, PIC 889540053, established in JARVEVANA TEE 7B, TALLINN 10112, Estonia,
15. **KAUNO TECHNOLOGIJU MOKYMO CENTRAS (Kauno technikos)**, PIC 882880033, established in V KREVES PR 114, KAUNAS 50315, Lithuania,
16. **KAUNO TECHNIKOS KOLEGIJA (KTK)**, PIC 882647621, established in TVIRTOVES AL 35, KAUNAS 50155, Lithuania,

Unless otherwise specified, references to ‘beneficiary’ or ‘beneficiaries’ include the coordinator and affiliated entities (if any).

If only one beneficiary signs the grant agreement (‘mono-beneficiary grant’), all provisions referring to the ‘coordinator’ or the ‘beneficiaries’ will be considered — mutatis mutandis — as referring to the beneficiary.

The parties referred to above have agreed to enter into the Agreement.

By signing the Agreement and the accession forms, the beneficiaries accept the grant and agree to implement the action under their own responsibility and in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

The Agreement is composed of:

Preamble

Terms and Conditions (including Data Sheet)

- Annex 1 Description of the action¹
- Annex 2 Estimated budget for the action
- Annex 3 Accession forms (if applicable)²
- Annex 3a Declaration on joint and several liability of affiliated entities (if applicable)³
- Annex 4 Model for the financial statements
- Annex 5 Specific rules (if applicable)

¹ Template published on [Portal Reference Documents](#).

² Template published on [Portal Reference Documents](#).

³ Template published on [Portal Reference Documents](#).

TERMS AND CONDITIONS

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DATA SHEET

1. General data

Project summary:

Project summary
<p>Developing digital and practical skills in fields, which combat climate change and adopt clean energy is essential for Europe's sustainable growth. Global warming has awakened many vehicle brands to decide quitting manufacture of traditional fuel driven vehicles by 2030. New innovations and fuel technologies require a new kind of expertise in automotive industry. This also requires a reform of vocational training. Due to this, car mechanic, vehicle business and vehicle engineer educations need to be developed to educate skilled mechanics, vehicle salespersons, engineers, and vehicle sector teachers with modern technology know-how. There are very little content of servicing modern technology vehicles in VET in Europe. Additionally, the radical changes in European safety situation have made all alternative energy sources even more crucial for all project countries, especially those with dependence on the traditional fuel from other countries. The Auto-Cove project partners will create 17 study modules or training courses of modern vehicle technology and vehicle sales and pilot them among VET-teachers, vehicle company service and sales personnel and vehicle students on secondary and tertiary levels. The development work will be done by listening to needs from labor market and vocational teachers in vehicle field. Industry representatives and VET-teachers in vehicle sector in seven European countries will be interviewed about real needs in vehicle sector education. Auto-Cove partners' collaborative development work will be based on the skills-gap analysis and partners specific expertise in the vehicle and sales sectors. Finnish research center and German and Estonian universities of applied sciences contribute development work with updated research data of the field. The project outputs will be disseminated by Dutch Electude International- company to 3400 active VET-providers worldwide in 8 language versions and in English via OER-platform in English in Europe.</p>

Keywords:

- alternative fuel, climate change, skills gap analysis, secondary and tertiary level VET in vehicle and business sectors

Project number: 101102844

Project name: Auto-Cove 2.0; Greening Europe with support of Clean-tech-vehicle education

Project acronym: Auto-Cove 2.0

Call: ERASMUS-EDU-2022-PEX-COVE

Topic: ERASMUS-EDU-2022-PEX-COVE

Type of action: ERASMUS Lump Sum Grants

Granting authority: European Education and Culture Executive Agency

Grant managed through EU Funding & Tenders Portal: Yes (eGrants)

Project starting date: fixed date: 15 June 2023

Project end date: 14 June 2027

Project duration: 48 months

Consortium agreement: Yes

2. Participants

List of participants:

N°	Role	Short name	Legal name	Ctry	PIC	Max grant amount
1	COO	OMNIA	ESPOON SEUDUN KOULUTUSKUNTAYHTYMA OMNIA	FI	946099783	789 773.00
2	BEN	TARTU CITY	TARTU LINN	EE	996380024	271 352.00
3	BEN	VT	VENTSPILS TEHNIKUMS	LV	946960076	172 983.00
4	BEN	SEPR	SOCIETE D'ENSEIGNEMENT PROFESSIONNEL DU RHONE	FR	947427422	359 876.00

N°	Role	Short name	Legal name	Ctry	PIC	Max grant amount
5	BEN	JPS	JAKOB-PREH-SCHULE STAATLICHE BERUFSSCHULE BAD NEUSTADT AD SAALE	DE	910049345	352 285.00
6	BEN	THWS	TECHNISCHE HOCHSCHULE WUERZBURG-SCHWEINFURT	DE	972534223	722 157.00
7	BEN	KWIC	STICHTING REGIONAAL ONDERWIJS CENTRUM NOORDOOST-BRABANT	NL	948240282	374 066.00
8	BEN	VTT	TEKNOLOGIAN TUTKIMUSKESKUS VTT OY	FI	932760440	230 079.00
9	BEN	Preh GmbH	PREH GMBH	DE	890227783	13 453.00
10	BEN	Eesti Maulikool	EESTI MAAULIKOOL	EE	999857280	95 595.00
11	BEN	Bilia Oy Ab	BILIA OY AB	FI	889639866	19 158.00
12	BEN	Volvo Finland	VOLVO CAR FINLAND OY AB	FI	889642000	17 874.00
13	BEN	Electude	ELECTUDE INTERNATIONAL BV	NL	882578654	222 819.00
14	BEN	Toyota Baltic	TOYOTA BALTIC AKTSIASELTS	EE	889540053	12 529.00
15	BEN	Kauno technikos	KAUNO TECHNOLOGIJU MOKYMO CENTRAS	LT	882880033	202 299.00
16	BEN	KTK	KAUNO TECHNIKOS KOLEGIJA	LT	882647621	142 718.00
17	AP	CITY OF ESPOO	ESPOON KAUPUNKI	FI	950240325	0.00
18	AP	Kaunas CCIC	KAUNO PREKYBOS, PRAMONES IR AMATU RUMAI	LT	999834679	0.00
19	AP	ISTAIGU	LIEUVOS PROFESINIO MOKYMO ISTAIGU ASOCIACIJA	LT	919085768	0.00
20	AP	VAVM	VILNIAUS AUTOMECHANIKOS IR VERSLO MOKYKLA	LT	946139941	0.00
21	AP	RTK	Profesionalas izglitibas kompetences centrs "Rigas Tehniska koledza"	LV	949430278	0.00
22	AP	Optima	Optima samkommun	FI	943025174	0.00
23	AP	OPH Finland	OPETUSHALLITUS OPH	FI	914643750	0.00
24	AP	Unterfranken	Regierung von Unterfranken - 40.1	DE	932564306	0.00
25	AP	Main-Spessart	Staatliche Berufsschule Main-Spessart	DE	947805334	0.00
26	AP	METROPOLIA	METROPOLIA AMMATTIKORKEAKOULU OY	FI	997340033	0.00
27	AP	VOLVO Group NL	VOLVO GROUP THE NETHERLANDS BV	NL	891791714	0.00
28	AP	Pletros	KVALIFIKACIJU IR PROFESINIO MOKYMO PLETROS CENTRAS	LT	945934495	0.00
29	AP	Stadin AO	Helsingin kaupunki	FI	946742796	0.00
30	AP	PIKC LVT	PROFESIONALAS IZGLITIBAS KOMPETENCES CENTRS LIEPAJAS VALSTS TEHNIKUMS	LV	945213009	0.00
Total						3 999 016.00

Coordinator:

- ESPOON SEUDUN KOULUTUSKUNTAYHTYMA OMNIA (OMNIA)

3. Grant**Maximum grant amount, total estimated eligible costs and contributions and funding rate:**

Maximum grant amount (Annex 2)	Maximum grant amount (award decision)
3 999 016.00	3 999 016.00

Grant form: Lump Sum**Grant mode:** Action grant**Budget categories/activity types:** Lump sum contributions

Cost eligibility options: n/a

Budget flexibility: No

4. Reporting, payments and recoveries

4.1 Continuous reporting (art 21)

Deliverables: see Funding & Tenders Portal Continuous Reporting tool

4.2 Periodic reporting and payments

Reporting and payment schedule (art 21, 22):

Reporting					Payments	
Reporting periods			Type	Deadline	Type	Deadline (time to pay)
RP No	Month from	Month to				
					Initial prefinancing	30 days from entry into force/ financial guarantee (if required) – whichever is the latest
1	1	24	Additional prefinancing report	60 days after end of reporting period	Additional prefinancing	60 days from receiving additional prefinancing report/ financial guarantee (if required) – whichever is the latest
2	25	48	Periodic report	60 days after end of reporting period	Final payment	90 days from receiving periodic report

Prefinancing payments and guarantees:

Prefinancing payment		Prefinancing guarantee		
Type	Amount	Guarantee amount	Division per participant	
Prefinancing 1 (initial)	1 599 606.40	n/a	1 - OMNIA	n/a
			2 - TARTU CITY	n/a
			3 - VT	n/a
			4 - SEPR	n/a
			5 - JPS	n/a
			6 - THWS	n/a
			7 - KWIC	n/a
			8 - VTT	n/a
			9 - Preh GmbH	n/a
			10 - Eesti Maulikool	n/a
			11 - Bilia Oy Ab	n/a
			12 - Volvo Finland	n/a
			13 - Electude	n/a
			14 - Toyota Baltic	n/a
			15 - Kauno technikos	n/a

Prefinancing payment		Prefinancing guarantee		
Type	Amount	Guarantee amount	Division per participant	
			16 - KTK	n/a
Prefinancing 2 (additional)	1 599 606.40	n/a	1 - OMNIA	n/a
			2 - TARTU CITY	n/a
			3 - VT	n/a
			4 - SEPR	n/a
			5 - JPS	n/a
			6 - THWS	n/a
			7 - KWIC	n/a
			8 - VTT	n/a
			9 - Preh GmbH	n/a
			10 - Eesti Maulikool	n/a
			11 - Bilia Oy Ab	n/a
			12 - Volvo Finland	n/a
			13 - Electude	n/a
			14 - Toyota Baltic	n/a
			15 - Kauno technikos	n/a
			16 - KTK	n/a

Reporting and payment modalities (art 21, 22):

Mutual Insurance Mechanism (MIM): No

Restrictions on distribution of initial prefinancing: The prefinancing may be distributed only if the minimum number of beneficiaries set out in the call conditions (if any) have acceded to the Agreement and only to beneficiaries that have acceded.

Interim payment ceiling (if any): 100% of the maximum grant amount

No-profit rule: n/a

Late payment interest: ECB + 3.5%

Bank account for payments:

FI6180001701796766

Conversion into euros: n/a

Reporting language: Language of the Agreement

4.3 Certificates (art 24): n/a

4.4 Recoveries (art 22)

First-line liability for recoveries:

Beneficiary termination: Beneficiary concerned

Final payment: Coordinator

After final payment: Beneficiary concerned

Joint and several liability for enforced recoveries (in case of non-payment):

Limited joint and several liability of other beneficiaries — up to the maximum grant amount of the beneficiary

Joint and several liability of affiliated entities — n/a

5. Consequences of non-compliance, applicable law & dispute settlement forum

Applicable law (art 43):

Standard applicable law regime: EU law + law of Belgium

Dispute settlement forum (art 43):

Standard dispute settlement forum:

EU beneficiaries: EU General Court + EU Court of Justice (on appeal)

Non-EU beneficiaries: Courts of Brussels, Belgium (unless an international agreement provides for the enforceability of EU court judgements)

6. Other

Specific rules (Annex 5): Yes

Standard time-limits after project end:

Confidentiality (for X years after final payment): 5

Record-keeping (for X years after final payment): 5 (or 3 for grants of not more than EUR 60 000)

Reviews (up to X years after final payment): 5 (or 3 for grants of not more than EUR 60 000)

Audits (up to X years after final payment): 5 (or 3 for grants of not more than EUR 60 000)

Extension of findings from other grants to this grant (no later than X years after final payment): 5 (or 3 for grants of not more than EUR 60 000)

Impact evaluation (up to X years after final payment): 5 (or 3 for grants of not more than EUR 60 000)

CHAPTER 1 GENERAL

ARTICLE 1 — SUBJECT OF THE AGREEMENT

This Agreement sets out the rights and obligations and terms and conditions applicable to the grant awarded for the implementation of the action set out in Chapter 2.

ARTICLE 2 — DEFINITIONS

For the purpose of this Agreement, the following definitions apply:

Actions — The project which is being funded in the context of this Agreement.

Grant — The grant awarded in the context of this Agreement.

EU grants — Grants awarded by EU institutions, bodies, offices or agencies (including EU executive agencies, EU regulatory agencies, EDA, joint undertakings, etc.).

Participants — Entities participating in the action as beneficiaries, affiliated entities, associated partners, third parties giving in-kind contributions, subcontractors or recipients of financial support to third parties.

Beneficiaries (BEN) — The signatories of this Agreement (either directly or through an accession form).

Affiliated entities (AE) — Entities affiliated to a beneficiary within the meaning of Article 187 of EU Financial Regulation 2018/1046⁴ which participate in the action with similar rights and obligations as the beneficiaries (obligation to implement action tasks and right to charge costs and claim contributions).

Associated partners (AP) — Entities which participate in the action, but without the right to charge costs or claim contributions.

Purchases — Contracts for goods, works or services needed to carry out the action (e.g. equipment, consumables and supplies) but which are not part of the action tasks (see Annex 1).

Subcontracting — Contracts for goods, works or services that are part of the action tasks (see Annex 1).

In-kind contributions — In-kind contributions within the meaning of Article 2(36) of EU Financial

⁴ For the definition, see Article 187 Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council of 18 July 2018 on the financial rules applicable to the general budget of the Union, amending Regulations (EU) No 1296/2013, (EU) No 1301/2013, (EU) No 1303/2013, (EU) No 1304/2013, (EU) No 1309/2013, (EU) No 1316/2013, (EU) No 223/2014, (EU) No 283/2014, and Decision No 541/2014/EU and repealing Regulation (EU, Euratom) No 966/2012 ('EU Financial Regulation') (OJ L 193, 30.7.2018, p. 1): "**affiliated entities** [are]:

- (a) entities that form a sole beneficiary [(i.e. where an entity is formed of several entities that satisfy the criteria for being awarded a grant, including where the entity is specifically established for the purpose of implementing an action to be financed by a grant)];
- (b) entities that satisfy the eligibility criteria and that do not fall within one of the situations referred to in Article 136(1) and 141(1) and that have a link with the beneficiary, in particular a legal or capital link, which is neither limited to the action nor established for the sole purpose of its implementation".

Regulation 2018/1046, i.e. non-financial resources made available free of charge by third parties.

Fraud — Fraud within the meaning of Article 3 of EU Directive 2017/1371⁵ and Article 1 of the Convention on the protection of the European Communities' financial interests, drawn up by the Council Act of 26 July 1995⁶, as well as any other wrongful or criminal deception intended to result in financial or personal gain.

Irregularities — Any type of breach (regulatory or contractual) which could impact the EU financial interests, including irregularities within the meaning of Article 1(2) of EU Regulation 2988/95⁷.

Grave professional misconduct — Any type of unacceptable or improper behaviour in exercising one's profession, especially by employees, including grave professional misconduct within the meaning of Article 136(1)(c) of EU Financial Regulation 2018/1046.

Applicable EU, international and national law — Any legal acts or other (binding or non-binding) rules and guidance in the area concerned.

Portal — EU Funding & Tenders Portal; electronic portal and exchange system managed by the European Commission and used by itself and other EU institutions, bodies, offices or agencies for the management of their funding programmes (grants, procurements, prizes, etc.).

CHAPTER 2 ACTION

ARTICLE 3 — ACTION

The grant is awarded for the action **101102844 — Auto-Cove 2.0** ('action'), as described in Annex 1.

ARTICLE 4 — DURATION AND STARTING DATE

The duration and the starting date of the action are set out in the Data Sheet (see Point 1).

CHAPTER 3 GRANT

ARTICLE 5 — GRANT

5.1 Form of grant

⁵ Directive (EU) 2017/1371 of the European Parliament and of the Council of 5 July 2017 on the fight against fraud to the Union's financial interests by means of criminal law (OJ L 198, 28.7.2017, p. 29).

⁶ OJ C 316, 27.11.1995, p. 48.

⁷ Council Regulation (EC, Euratom) No 2988/95 of 18 December 1995 on the protection of the European Communities financial interests (OJ L 312, 23.12.1995, p. 1).

The grant is an action grant⁸ which takes the form of a lump sum grant for the completion of work packages.

5.2 Maximum grant amount

The maximum grant amount is set out in the Data Sheet (see Point 3) and in the estimated budget (Annex 2).

5.3 Funding rate

Not applicable

5.4 Estimated budget, budget categories and forms of funding

The estimated budget for the action (lump sum breakdown) is set out in Annex 2.

It contains the estimated eligible contributions for the action (lump sum contributions), broken down by participant and work package.

Annex 2 also shows the types of contributions (forms of funding)⁹ to be used for each work package.

5.5 Budget flexibility

Budget flexibility does not apply; changes to the estimated budget (lump sum breakdown) always require an amendment (see Article 39).

Amendments for transfers between *work packages* are moreover possible only if:

- the work packages concerned are not already completed (and declared in a financial statement) and
- the transfers are justified by the technical implementation of the action.

ARTICLE 6 — ELIGIBLE AND INELIGIBLE CONTRIBUTIONS

6.1 and 6.2 General and specific eligibility conditions

Lump sum contributions are eligible ('eligible contributions'), if:

- (a) they are set out in Annex 2 and
- (b) the work packages are completed and the work is properly implemented by the beneficiaries and/or the results are achieved, in accordance with Annex 1 and during in the period set out in Article 4 (with the exception of work/results relating to the submission of the final periodic report, which may be achieved afterwards; see Article 21)

They will be calculated on the basis of the amounts set out in Annex 2.

⁸ For the definition, see Article 180(2)(a) EU Financial Regulation 2018/1046: '**action grant**' means an EU grant to finance "an action intended to help achieve a Union policy objective".

⁹ See Article 125 EU Financial Regulation 2018/1046.

6.3 Ineligible contributions

‘Ineligible contributions’ are:

- (a) lump sum contributions that do not comply with the conditions set out above (see Article 6.1 and 6.2)
- (b) lump sum contributions for activities already funded under other EU grants (or grants awarded by an EU Member State, non-EU country or other body implementing the EU budget), except for the following case:
 - (i) Synergy actions: not applicable
- (c) other:
 - (i) country restrictions for eligible costs: not applicable.

6.4 Consequences of non-compliance

If a beneficiary declares lump sum contributions that are ineligible, they will be rejected (see Article 27).

This may also lead to other measures described in Chapter 5.

CHAPTER 4 GRANT IMPLEMENTATION

SECTION 1 CONSORTIUM: BENEFICIARIES, AFFILIATED ENTITIES AND OTHER PARTICIPANTS

ARTICLE 7 — BENEFICIARIES

The beneficiaries, as signatories of the Agreement, are fully responsible towards the granting authority for implementing it and for complying with all its obligations.

They must implement the Agreement to their best abilities, in good faith and in accordance with all the obligations and terms and conditions it sets out.

They must have the appropriate resources to implement the action and implement the action under their own responsibility and in accordance with Article 11. If they rely on affiliated entities or other participants (see Articles 8 and 9), they retain sole responsibility towards the granting authority and the other beneficiaries.

They are jointly responsible for the *technical* implementation of the action. If one of the beneficiaries fails to implement their part of the action, the other beneficiaries must ensure that this part is implemented by someone else (without being entitled to an increase of the maximum grant amount and subject to an amendment; see Article 39). The *financial* responsibility of each beneficiary in case of recoveries is governed by Article 22.

The beneficiaries (and their action) must remain eligible under the EU programme funding the grant

for the entire duration of the action. Lump sum contributions will be eligible only as long as the beneficiary and the action are eligible.

The **internal roles and responsibilities** of the beneficiaries are divided as follows:

(a) Each beneficiary must:

- (i) keep information stored in the Portal Participant Register up to date (see Article 19)
- (ii) inform the granting authority (and the other beneficiaries) immediately of any events or circumstances likely to affect significantly or delay the implementation of the action (see Article 19)
- (iii) submit to the coordinator in good time:
 - the prefinancing guarantees (if required; see Article 23)
 - the financial statements and certificates on the financial statements (CFS): not applicable
 - the contribution to the deliverables and technical reports (see Article 21)
 - any other documents or information required by the granting authority under the Agreement
- (iv) submit via the Portal data and information related to the participation of their affiliated entities.

(b) The coordinator must:

- (i) monitor that the action is implemented properly (see Article 11)
- (ii) act as the intermediary for all communications between the consortium and the granting authority, unless the Agreement or granting authority specifies otherwise, and in particular:
 - submit the prefinancing guarantees to the granting authority (if any)
 - request and review any documents or information required and verify their quality and completeness before passing them on to the granting authority
 - submit the deliverables and reports to the granting authority
 - inform the granting authority about the payments made to the other beneficiaries (report on the distribution of payments; if required, see Articles 22 and 32)
- (iii) distribute the payments received from the granting authority to the other beneficiaries without unjustified delay (see Article 22).

The coordinator may not delegate or subcontract the above-mentioned tasks to any other beneficiary or third party (including affiliated entities).

However, coordinators which are public bodies may delegate the tasks set out in Point (b)(ii) last

indent and (iii) above to entities with ‘authorisation to administer’ which they have created or which are controlled by or affiliated to them. In this case, the coordinator retains sole responsibility for the payments and for compliance with the obligations under the Agreement.

Moreover, coordinators which are ‘sole beneficiaries’¹⁰ (or similar, such as European research infrastructure consortia (ERICs)) may delegate the tasks set out in Point (b)(i) to (iii) above to one of their members. The coordinator retains sole responsibility for compliance with the obligations under the Agreement.

The beneficiaries must have **internal arrangements** regarding their operation and co-ordination, to ensure that the action is implemented properly.

If required by the granting authority (see Data Sheet, Point 1), these arrangements must be set out in a written **consortium agreement** between the beneficiaries, covering for instance:

- the internal organisation of the consortium
- the management of access to the Portal
- different distribution keys for the payments and financial responsibilities in case of recoveries (if any)
- additional rules on rights and obligations related to background and results (see Article 16)
- settlement of internal disputes
- liability, indemnification and confidentiality arrangements between the beneficiaries.

what does recoveries mean?

The internal arrangements must not contain any provision contrary to this Agreement.

ARTICLE 8 — AFFILIATED ENTITIES

Not applicable

ARTICLE 9 — OTHER PARTICIPANTS INVOLVED IN THE ACTION

9.1 Associated partners

The following entities which cooperate with a beneficiary will participate in the action as ‘associated partners’:

- **ESPOON KAUPUNKI (CITY OF ESPOO)**, PIC 950240325
- **KAUNO PREKYBOS, PRAMONES IR AMATU RUMAI (Kaunas CCIC)**, PIC 999834679
- **LIETUVOS PROFESINIO MOKYMO ISTAIGU ASOCIACIJA (ISTAIGU)**, PIC 919085768

¹⁰ For the definition, see Article 187(2) EU Financial Regulation 2018/1046: “Where several entities satisfy the criteria for being awarded a grant and together form one entity, that entity may be treated as the **sole beneficiary**, including where it is specifically established for the purpose of implementing the action financed by the grant.”

- **VILNIAUS AUTOMECHANIKOS IR VERSLO MOKYKLA (VAVM)**, PIC 946139941
- **Profesionalas izglitibas kompetences centrs "Rigas Tehniska koledza" (RTK)**, PIC 949430278
- **Optima samkommun (Optima)**, PIC 943025174
- **OPETUSHALLITUS OPH (OPH Finland)**, PIC 914643750
- **Regierung von Unterfranken - 40.1 (Unterfranken)**, PIC 932564306
- **Staatliche Berufsschule Main-Spessart (Main-Spessart)**, PIC 947805334
- **METROPOLIA AMMATTIKORKEAKOULU OY (METROPOLIA)**, PIC 997340033
- **VOLVO GROUP THE NETHERLANDS BV (VOLVO Group NL)**, PIC 891791714
- **KVALIFIKACIJU IR PROFESINIO MOKYMO PLETROS CENTRAS (Pletros)**, PIC 945934495
- **Helsingin kaupunki (Stadin AO)**, PIC 946742796
- **PROFESIONALAS IZGLITIBAS KOMPETENCES CENTRS LIEPAJAS VALSTS TEHNIKUMS (PIKC LVT)**, PIC 945213009

Associated partners must implement the action tasks attributed to them in Annex 1 in accordance with Article 11. They may not charge contributions to the action (no lump sum contributions) and the costs for their tasks are not eligible (may not be included in the estimated budget in Annex 2).

The tasks must be set out in Annex 1.

The beneficiaries must ensure that their contractual obligations under Articles 11 (proper implementation), 12 (conflict of interests), 13 (confidentiality and security), 14 (ethics), 17.2 (visibility), 18 (specific rules for carrying out action), 19 (information) and 20 (record-keeping) also apply to the associated partners.

The beneficiaries must ensure that the bodies mentioned in Article 25 (e.g. granting authority, OLAF, Court of Auditors (ECA), etc.) can exercise their rights also towards the associated partners.

9.2 Third parties giving in-kind contributions to the action

Other third parties may give in-kind contributions to the action (i.e. personnel, equipment, other goods, works and services, etc. which are free-of-charge), if necessary for the implementation.

Third parties giving in-kind contributions do not implement any action tasks. They may not charge contributions to the action (no lump sum contributions) and the costs for the in-kind contributions are not eligible (may not be included in the estimated budget in Annex 2).

The third parties and their in-kind contributions should be set out in Annex 1.

9.3 Subcontractors

Subcontractors may participate in the action, if necessary for the implementation.

Subcontractors must implement their action tasks in accordance with Article 11. The beneficiaries' costs for subcontracting are considered entirely covered by the lump sum contributions for implementing the work packages (irrespective of the actual subcontracting costs incurred, if any).

The beneficiaries must ensure that their contractual obligations under Articles 11 (proper implementation), 12 (conflict of interest), 13 (confidentiality and security), 14 (ethics), 17.2 (visibility), 18 (specific rules for carrying out action), 19 (information) and 20 (record-keeping) also apply to the subcontractors.

The beneficiaries must ensure that the bodies mentioned in Article 25 (e.g. granting authority, OLAF, Court of Auditors (ECA), etc.) can exercise their rights also towards the subcontractors.

9.4 Recipients of financial support to third parties

If the action includes providing financial support to third parties (e.g. grants, prizes or similar forms of support), the beneficiaries must ensure that their contractual obligations under Articles 12 (conflict of interest), 13 (confidentiality and security), 14 (ethics), 17.2 (visibility), 18 (specific rules for carrying out action), 19 (information) and 20 (record-keeping) also apply to the third parties receiving the support (recipients).

The beneficiaries must also ensure that the bodies mentioned in Article 25 (e.g. granting authority, OLAF, Court of Auditors (ECA), etc.) can exercise their rights also towards the recipients.

ARTICLE 10 — PARTICIPANTS WITH SPECIAL STATUS

10.1 Non-EU participants

Participants which are established in a non-EU country (if any) undertake to comply with their obligations under the Agreement and:

- to respect general principles (including fundamental rights, values and ethical principles, environmental and labour standards, rules on classified information, intellectual property rights, visibility of funding and protection of personal data)
- for the submission of certificates under Article 24: use qualified external auditors which are independent and comply with comparable standards as those set out in EU Directive 2006/43/EC¹¹
- for the controls under Article 25: allow for checks, reviews, audits and investigations (including on-the-spot checks, visits and inspections) by the bodies mentioned in that Article (e.g. granting authority, OLAF, Court of Auditors (ECA), etc.).

Special rules on dispute settlement apply (see Data Sheet, Point 5).

10.2 Participants which are international organisations

Participants which are international organisations (IOs; if any) undertake to comply with their obligations under the Agreement and:

¹¹ Directive 2006/43/EC of the European Parliament and of the Council of 17 May 2006 on statutory audits of annual accounts and consolidated accounts or similar national regulations (OJ L 157, 9.6.2006, p. 87).

- to respect general principles (including fundamental rights, values and ethical principles, environmental and labour standards, rules on classified information, intellectual property rights, visibility of funding and protection of personal data)
- for the submission of certificates under Article 24: to use either independent public officers or external auditors which comply with comparable standards as those set out in EU Directive 2006/43/EC
- for the controls under Article 25: to allow for the checks, reviews, audits and investigations by the bodies mentioned in that Article, taking into account the specific agreements concluded by them and the EU (if any).

For such participants, nothing in the Agreement will be interpreted as a waiver of their privileges or immunities, as accorded by their constituent documents or international law.

Special rules on applicable law and dispute settlement apply (see Article 43 and Data Sheet, Point 5).

10.3 Pillar-assessed participants

Pillar-assessed participants (if any) may rely on their own systems, rules and procedures, in so far as they have been positively assessed and do not call into question the decision awarding the grant or breach the principle of equal treatment of applicants or beneficiaries.

‘Pillar-assessment’ means a review by the European Commission on the systems, rules and procedures which participants use for managing EU grants (in particular internal control system, accounting system, external audits, financing of third parties, rules on recovery and exclusion, information on recipients and protection of personal data; see Article 154 EU Financial Regulation 2018/1046).

Participants with a positive pillar assessment may rely on their own systems, rules and procedures, in particular for:

- record-keeping (Article 20): may be done in accordance with internal standards, rules and procedures
- currency conversion for financial statements (Article 21): may be done in accordance with usual accounting practices
- guarantees (Article 23): for public law bodies, prefinancing guarantees are not needed
- certificates (Article 24):
 - certificates on the financial statements (CFS): may be provided by their regular internal or external auditors and in accordance with their internal financial regulations and procedures
 - certificates on usual accounting practices (CoMUC): are not needed if those practices are covered by an ex-ante assessment

and use the following specific rules, for:

- recoveries (Article 22): in case of financial support to third parties, there will be no recovery if the participant has done everything possible to retrieve the undue amounts from the third party

receiving the support (including legal proceedings) and non-recovery is not due to an error or negligence on its part

- checks, reviews, audits and investigations by the EU (Article 25): will be conducted taking into account the rules and procedures specifically agreed between them and the framework agreement (if any)
- impact evaluation (Article 26): will be conducted in accordance with the participant's internal rules and procedures and the framework agreement (if any)
- grant agreement suspension (Article 31): certain costs incurred during grant suspension are eligible (notably, minimum costs necessary for a possible resumption of the action and costs relating to contracts which were entered into before the pre-information letter was received and which could not reasonably be suspended, reallocated or terminated on legal grounds)
- grant agreement termination (Article 32): the final grant amount and final payment will be calculated taking into account also costs relating to contracts due for execution only after termination takes effect, if the contract was entered into before the pre-information letter was received and could not reasonably be terminated on legal grounds
- liability for damages (Article 33.2): the granting authority must be compensated for damage it sustains as a result of the implementation of the action or because the action was not implemented in full compliance with the Agreement only if the damage is due to an infringement of the participant's internal rules and procedures or due to a violation of third parties' rights by the participant or one of its employees or individual for whom the employees are responsible.

Participants whose pillar assessment covers procurement and granting procedures may also do purchases, subcontracting and financial support to third parties (Article 6.2) in accordance with their internal rules and procedures for purchases, subcontracting and financial support.

Participants whose pillar assessment covers data protection rules may rely on their internal standards, rules and procedures for data protection (Article 15).

The participants may however not rely on provisions which would breach the principle of equal treatment of applicants or beneficiaries or call into question the decision awarding the grant, such as in particular:

- eligibility (Article 6)
- consortium roles and set-up (Articles 7-9)
- security and ethics (Articles 13, 14)
- IPR (including background and results, access rights and rights of use), communication, dissemination and visibility (Articles 16 and 17)
- information obligation (Article 19)
- payment, reporting and amendments (Articles 21, 22 and 39)
- rejections, reductions, suspensions and terminations (Articles 27, 28, 29-32)

If the pillar assessment was subject to remedial measures, reliance on the internal systems, rules and procedures is subject to compliance with those remedial measures.

Participants whose assessment has not yet been updated to cover (the new rules on) data protection may rely on their internal systems, rules and procedures, provided that they ensure that personal data is:

- processed lawfully, fairly and in a transparent manner in relation to the data subject
- collected for specified, explicit and legitimate purposes and not further processed in a manner that is incompatible with those purposes
- adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed
- accurate and, where necessary, kept up to date
- kept in a form which permits identification of data subjects for no longer than is necessary for the purposes for which the data is processed and
- processed in a manner that ensures appropriate security of the personal data.

Participants must inform the coordinator without delay of any changes to the systems, rules and procedures that were part of the pillar assessment. The coordinator must immediately inform the granting authority.

Pillar-assessed participants that have also concluded a framework agreement with the EU, may moreover — under the same conditions as those above (i.e. not call into question the decision awarding the grant or breach the principle of equal treatment of applicants or beneficiaries) — rely on provisions set out in that framework agreement.

SECTION 2 RULES FOR CARRYING OUT THE ACTION

ARTICLE 11 — PROPER IMPLEMENTATION OF THE ACTION

11.1 Obligation to properly implement the action

The beneficiaries must implement the action as described in Annex 1 and in compliance with the provisions of the Agreement, the call conditions and all legal obligations under applicable EU, international and national law.

11.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28).

Such breaches may also lead to other measures described in Chapter 5.

ARTICLE 12 — CONFLICT OF INTERESTS

12.1 Conflict of interests

The beneficiaries must take all measures to prevent any situation where the impartial and objective implementation of the Agreement could be compromised for reasons involving family, emotional life, political or national affinity, economic interest or any other direct or indirect interest ('conflict of interests').

They must formally notify the granting authority without delay of any situation constituting or likely to lead to a conflict of interests and immediately take all the necessary steps to rectify this situation.

The granting authority may verify that the measures taken are appropriate and may require additional measures to be taken by a specified deadline.

12.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28) and the grant or the beneficiary may be terminated (see Article 32).

Such breaches may also lead to other measures described in Chapter 5.

ARTICLE 13 — CONFIDENTIALITY AND SECURITY

13.1 Sensitive information

The parties must keep confidential any data, documents or other material (in any form) that is identified as sensitive in writing ('sensitive information') — during the implementation of the action and for at least until the time-limit set out in the Data Sheet (see Point 6).

If a beneficiary requests, the granting authority may agree to keep such information confidential for a longer period.

Unless otherwise agreed between the parties, they may use sensitive information only to implement the Agreement.

The beneficiaries may disclose sensitive information to their personnel or other participants involved in the action only if they:

- (a) need to know it in order to implement the Agreement and
- (b) are bound by an obligation of confidentiality.

The granting authority may disclose sensitive information to its staff and to other EU institutions and bodies.

It may moreover disclose sensitive information to third parties, if:

- (a) this is necessary to implement the Agreement or safeguard the EU financial interests and
- (b) the recipients of the information are bound by an obligation of confidentiality.

The confidentiality obligations no longer apply if:

- (a) the disclosing party agrees to release the other party
- (b) the information becomes publicly available, without breaching any confidentiality obligation

(c) the disclosure of the sensitive information is required by EU, international or national law.

Specific confidentiality rules (if any) are set out in Annex 5.

13.2 Classified information

The parties must handle classified information in accordance with the applicable EU, international or national law on classified information (in particular, Decision 2015/444¹² and its implementing rules).

Deliverables which contain classified information must be submitted according to special procedures agreed with the granting authority.

Action tasks involving classified information may be subcontracted only after explicit approval (in writing) from the granting authority.

Classified information may not be disclosed to any third party (including participants involved in the action implementation) without prior explicit written approval from the granting authority.

Specific security rules (if any) are set out in Annex 5.

13.3 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28).

Such breaches may also lead to other measures described in Chapter 5.

ARTICLE 14 — ETHICS AND VALUES

14.1 Ethics

The action must be carried out in line with the highest ethical standards and the applicable EU, international and national law on ethical principles.

Specific ethics rules (if any) are set out in Annex 5.

14.2 Values

The beneficiaries must commit to and ensure the respect of basic EU values (such as respect for human dignity, freedom, democracy, equality, the rule of law and human rights, including the rights of minorities).

Specific rules on values (if any) are set out in Annex 5.

14.3 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28).

¹² Commission Decision 2015/444/EC, Euratom of 13 March 2015 on the security rules for protecting EU classified information (OJ L 72, 17.3.2015, p. 53).

Such breaches may also lead to other measures described in Chapter 5.

ARTICLE 15 — DATA PROTECTION

15.1 Data processing by the granting authority

Any personal data under the Agreement will be processed under the responsibility of the data controller of the granting authority in accordance with and for the purposes set out in the Portal Privacy Statement.

For grants where the granting authority is the European Commission, an EU regulatory or executive agency, joint undertaking or other EU body, the processing will be subject to Regulation 2018/1725¹³.

15.2 Data processing by the beneficiaries

The beneficiaries must process personal data under the Agreement in compliance with the applicable EU, international and national law on data protection (in particular, Regulation 2016/679¹⁴).

They must ensure that personal data is:

- processed lawfully, fairly and in a transparent manner in relation to the data subjects
- collected for specified, explicit and legitimate purposes and not further processed in a manner that is incompatible with those purposes
- adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed
- accurate and, where necessary, kept up to date
- kept in a form which permits identification of data subjects for no longer than is necessary for the purposes for which the data is processed and
- processed in a manner that ensures appropriate security of the data.

The beneficiaries may grant their personnel access to personal data only if it is strictly necessary for implementing, managing and monitoring the Agreement. The beneficiaries must ensure that the personnel is under a confidentiality obligation.

The beneficiaries must inform the persons whose data are transferred to the granting authority and provide them with the Portal Privacy Statement.

15.3 Consequences of non-compliance

¹³ Regulation (EU) 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC (OJ L 295, 21.11.2018, p. 39).

¹⁴ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC ('GDPR') (OJ L 119, 4.5.2016, p. 1).

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28).

Such breaches may also lead to other measures described in Chapter 5.

ARTICLE 16 — INTELLECTUAL PROPERTY RIGHTS (IPR) — BACKGROUND AND RESULTS — ACCESS RIGHTS AND RIGHTS OF USE

16.1 Background and access rights to background

The beneficiaries must give each other and the other participants access to the background identified as needed for implementing the action, subject to any specific rules in Annex 5.

‘Background’ means any data, know-how or information — whatever its form or nature (tangible or intangible), including any rights such as intellectual property rights — that is:

- (a) held by the beneficiaries before they acceded to the Agreement and
- (b) needed to implement the action or exploit the results.

If background is subject to rights of a third party, the beneficiary concerned must ensure that it is able to comply with its obligations under the Agreement.

16.2 Ownership of results

The granting authority does not obtain ownership of the results produced under the action.

‘Results’ means any tangible or intangible effect of the action, such as data, know-how or information, whatever its form or nature, whether or not it can be protected, as well as any rights attached to it, including intellectual property rights.

16.3 Rights of use of the granting authority on materials, documents and information received for policy, information, communication, dissemination and publicity purposes

The granting authority has the right to use non-sensitive information relating to the action and materials and documents received from the beneficiaries (notably summaries for publication, deliverables, as well as any other material, such as pictures or audio-visual material, in paper or electronic form) for policy information, communication, dissemination and publicity purposes — during the action or afterwards.

The right to use the beneficiaries’ materials, documents and information is granted in the form of a royalty-free, non-exclusive and irrevocable licence, which includes the following rights:

- (a) **use for its own purposes** (in particular, making them available to persons working for the granting authority or any other EU service (including institutions, bodies, offices, agencies, etc.) or EU Member State institution or body; copying or reproducing them in whole or in part, in unlimited numbers; and communication through press information services)
- (b) **distribution to the public** (in particular, publication as hard copies and in electronic or digital format, publication on the internet, as a downloadable or non-downloadable file, broadcasting by any channel, public display or presentation, communicating through press information services, or inclusion in widely accessible databases or indexes)

- (c) **editing or redrafting** (including shortening, summarising, inserting other elements (e.g. meta-data, legends, other graphic, visual, audio or text elements), extracting parts (e.g. audio or video files), dividing into parts, use in a compilation)
- (d) **translation**
- (e) **storage** in paper, electronic or other form
- (f) **archiving**, in line with applicable document-management rules
- (g) the right to authorise **third parties** to act on its behalf or sub-license to third parties the modes of use set out in Points (b), (c), (d) and (f), if needed for the information, communication and publicity activity of the granting authority and
- (h) **processing**, analysing, aggregating the materials, documents and information received and **producing derivative works**.

The rights of use are granted for the whole duration of the industrial or intellectual property rights concerned.

If materials or documents are subject to moral rights or third party rights (including intellectual property rights or rights of natural persons on their image and voice), the beneficiaries must ensure that they comply with their obligations under this Agreement (in particular, by obtaining the necessary licences and authorisations from the rights holders concerned).

Where applicable, the granting authority will insert the following information:

“© – [year] – [name of the copyright owner]. All rights reserved. Licensed to the [name of granting authority] under conditions.”

16.4 Specific rules on IPR, results and background

Specific rules regarding intellectual property rights, results and background (if any) are set out in Annex 5.

16.5 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28).

Such a breach may also lead to other measures described in Chapter 5.

ARTICLE 17 — COMMUNICATION, DISSEMINATION AND VISIBILITY

17.1 Communication — Dissemination — Promoting the action

Unless otherwise agreed with the granting authority, the beneficiaries must promote the action and its results by providing targeted information to multiple audiences (including the media and the public), in accordance with Annex 1 and in a strategic, coherent and effective manner.

Before engaging in a communication or dissemination activity expected to have a major media impact, the beneficiaries must inform the granting authority.

17.2 Visibility — European flag and funding statement

Unless otherwise agreed with the granting authority, communication activities of the beneficiaries related to the action (including media relations, conferences, seminars, information material, such as brochures, leaflets, posters, presentations, etc., in electronic form, via traditional or social media, etc.), dissemination activities and any infrastructure, equipment, vehicles, supplies or major result funded by the grant must acknowledge the EU support and display the European flag (emblem) and funding statement (translated into local languages, where appropriate):



Funded by the
European Union



Co-funded by the
European Union



Funded by the
European Union



Co-funded by the
European Union

The emblem must remain distinct and separate and cannot be modified by adding other visual marks, brands or text.

Apart from the emblem, no other visual identity or logo may be used to highlight the EU support.

When displayed in association with other logos (e.g. of beneficiaries or sponsors), the emblem must be displayed at least as prominently and visibly as the other logos.

For the purposes of their obligations under this Article, the beneficiaries may use the emblem without first obtaining approval from the granting authority. This does not, however, give them the right to exclusive use. Moreover, they may not appropriate the emblem or any similar trademark or logo, either by registration or by any other means.

17.3 Quality of information — Disclaimer

Any communication or dissemination activity related to the action must use factually accurate information.

Moreover, it must indicate the following disclaimer (translated into local languages where appropriate):

“Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or [name of the granting authority]. Neither the European Union nor the granting authority can be held responsible for them.”

17.4 Specific communication, dissemination and visibility rules

Specific communication, dissemination and visibility rules (if any) are set out in Annex 5.

17.5 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28).

Such breaches may also lead to other measures described in Chapter 5.

ARTICLE 18 — SPECIFIC RULES FOR CARRYING OUT THE ACTION

18.1 Specific rules for carrying out the action

Specific rules for implementing the action (if any) are set out in Annex 5.

18.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28).

Such a breach may also lead to other measures described in Chapter 5.

SECTION 3 GRANT ADMINISTRATION

ARTICLE 19 — GENERAL INFORMATION OBLIGATIONS

19.1 Information requests

The beneficiaries must provide — during the action or afterwards and in accordance with Article 7 — any information requested in order to verify eligibility of the lump sum contributions declared, proper implementation of the action and compliance with the other obligations under the Agreement.

The information provided must be accurate, precise and complete and in the format requested, including electronic format.

19.2 Participant Register data updates

The beneficiaries must keep — at all times, during the action or afterwards — their information stored in the Portal Participant Register up to date, in particular, their name, address, legal representatives, legal form and organisation type.

19.3 Information about events and circumstances which impact the action

The beneficiaries must immediately inform the granting authority (and the other beneficiaries) of any of the following:

(a) **events** which are likely to affect or delay the implementation of the action or affect the EU's financial interests, in particular:

(i) changes in their legal, financial, technical, organisational or ownership situation (including changes linked to one of the exclusion grounds listed in the declaration of honour signed before grant signature)

(ii) linked action information: not applicable

(b) **circumstances** affecting:

(i) the decision to award the grant or

(ii) compliance with requirements under the Agreement.

19.4 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28).

Such breaches may also lead to other measures described in Chapter 5.

ARTICLE 20 — RECORD-KEEPING

20.1 Keeping records and supporting documents

The beneficiaries must — at least until the time-limit set out in the Data Sheet (see Point 6) — keep records and other supporting documents to prove the proper implementation of the action (proper implementation of the work and/or achievement of the results as described in Annex 1) in line with the accepted standards in the respective field (if any); beneficiaries do not need to keep specific records on the actual costs incurred.

The records and supporting documents must be made available upon request (see Article 19) or in the context of checks, reviews, audits or investigations (see Article 25).

If there are on-going checks, reviews, audits, investigations, litigation or other pursuits of claims under the Agreement (including the extension of findings; see Article 25), the beneficiaries must keep these records and other supporting documentation until the end of these procedures.

The beneficiaries must keep the original documents. Digital and digitalised documents are considered originals if they are authorised by the applicable national law. The granting authority may accept non-original documents if they offer a comparable level of assurance.

20.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, lump sum contributions insufficiently substantiated will be ineligible (see Article 6) and will be rejected (see Article 27), and the grant may be reduced (see Article 28).

Such breaches may also lead to other measures described in Chapter 5.

ARTICLE 21 — REPORTING

21.1 Continuous reporting

The beneficiaries must continuously report on the progress of the action (e.g. **deliverables, milestones, outputs/outcomes, critical risks, indicators**, etc; if any), in the Portal Continuous Reporting tool and in accordance with the timing and conditions it sets out (as agreed with the granting authority).

Standardised deliverables (e.g. progress reports not linked to payments, reports on cumulative expenditure, special reports, etc; if any) must be submitted using the templates published on the Portal.

21.2 Periodic reporting: Technical reports and financial statements

In addition, the beneficiaries must provide reports to request payments, in accordance with the schedule and modalities set out in the Data Sheet (see Point 4.2):

- for additional prefinancings (if any): **an additional prefinancing report**
- for interim payments (if any) and the final payment: a **periodic report**

The prefinancing and periodic reports include a technical and financial part.

The technical part includes an overview of the action implementation. It must be prepared using the template available in the Portal Periodic Reporting tool.

The financial part of the additional prefinancing report includes a statement on the use of the previous prefinancing payment.

The financial part of the periodic report includes:

- the financial statement (consolidated statement for the consortium)
- the explanation on the use of resources (or detailed cost reporting table): not applicable
- the certificates on the financial statements (CFS): not applicable.

The **financial statement** must contain the lump sum contributions indicated in Annex 2, for the work packages that were completed during the reporting period.

For the last reporting period, the beneficiaries may exceptionally also declare partial lump sum contributions for work packages that were not completed (e.g. due to force majeure or technical impossibility).

Lump sum contributions which are not declared in a financial statement will not be taken into account by the granting authority.

By signing the financial statement (directly in the Portal Periodic Reporting tool), the coordinator confirms (on behalf of the consortium) that:

- the information provided is complete, reliable and true
- the lump sum contributions declared are eligible (in particular, the work packages have been completed, that the work has been properly implemented and/or the results were achieved in accordance with Annex 1; see Article 6)

- the proper implementation and/or achievement can be substantiated by adequate records and supporting documents (see Article 20) that will be produced upon request (see Article 19) or in the context of checks, reviews, audits and investigations (see Article 25).

In case of recoveries (see Article 22), beneficiaries will be held responsible also for the lump sum contributions declared for their affiliated entities (if any).

21.3 Currency for financial statements and conversion into euros

The financial statements must be drafted in euro.

21.4 Reporting language

The reporting must be in the language of the Agreement, unless otherwise agreed with the granting authority (see Data Sheet, Point 4.2).

21.5 Consequences of non-compliance

If a report submitted does not comply with this Article, the granting authority may suspend the payment deadline (see Article 29) and apply other measures described in Chapter 5.

If the coordinator breaches its reporting obligations, the granting authority may terminate the grant or the coordinator's participation (see Article 32) or apply other measures described in Chapter 5.

ARTICLE 22 — PAYMENTS AND RECOVERIES — CALCULATION OF AMOUNTS DUE

22.1 Payments and payment arrangements

Payments will be made in accordance with the schedule and modalities set out in the Data Sheet (see Point 4.2).

They will be made in euro to the bank account indicated by the coordinator (see Data Sheet, Point 4.2) and must be distributed without unjustified delay (restrictions may apply to distribution of the initial prefinancing payment; see Data Sheet, Point 4.2).

Payments to this bank account will discharge the granting authority from its payment obligation.

The cost of payment transfers will be borne as follows:

- the granting authority bears the cost of transfers charged by its bank
- the beneficiary bears the cost of transfers charged by its bank
- the party causing a repetition of a transfer bears all costs of the repeated transfer.

Payments by the granting authority will be considered to have been carried out on the date when they are debited to its account.

22.2 Recoveries

Recoveries will be made, if — at beneficiary termination, final payment or afterwards — it turns out that the granting authority has paid too much and needs to recover the amounts undue.

The general liability regime for recoveries (first-line liability) is as follows: At final payment, the coordinator will be fully liable for recoveries, even if it has not been the final recipient of the undue amounts. At beneficiary termination or after final payment, recoveries will be made directly against the beneficiaries concerned.

Beneficiaries will be fully liable for repaying the debts of their affiliated entities.

In case of enforced recoveries (see Article 22.4):

- the beneficiaries will be jointly and severally liable for repaying debts of another beneficiary under the Agreement (including late-payment interest), if required by the granting authority (see Data Sheet, Point 4.4)
- affiliated entities will be held liable for repaying debts of their beneficiaries under the Agreement (including late-payment interest), if required by the granting authority (see Data Sheet, Point 4.4).

22.3 Amounts due

22.3.1 Prefinancing payments

The aim of the prefinancing is to provide the beneficiaries with a float.

It remains the property of the EU until the final payment.

For **initial prefinancings** (if any), the amount due, schedule and modalities are set out in the Data Sheet (see Point 4.2).

For **additional prefinancings** (if any), the amount due, schedule and modalities are also set out in the Data Sheet (see Point 4.2). However, if the statement on the use of the previous prefinancing payment shows that less than 70% was used, the amount set out in the Data Sheet will be reduced by the difference between the 70% threshold and the amount used.

Prefinancing payments (or parts of them) may be offset (without the beneficiaries' consent) against amounts owed by a beneficiary to the granting authority — up to the amount due to that beneficiary.

For grants where the granting authority is the European Commission or an EU executive agency, offsetting may also be done against amounts owed to other Commission services or executive agencies.

Payments will not be made if the payment deadline or payments are suspended (see Articles 29 and 30).

22.3.2 Amount due at beneficiary termination — Recovery

In case of beneficiary termination, the granting authority will determine the provisional amount due for the beneficiary concerned.

This will be done on the basis of work packages already completed in previous interim payments. Payments for ongoing/not yet completed work packages which the beneficiary was working on before

termination (if any) will therefore be made only later on, with the next interim or final payments when those work packages have been completed.

The **amount due** will be calculated in the following step:

Step 1 — Calculation of the total accepted EU contribution

Step 1 — Calculation of the total accepted EU contribution

The granting authority will first calculate the ‘accepted EU contribution’ for the beneficiary, on the basis of the beneficiary’s lump sum contributions for the work packages which were approved in previous interim payments.

After that, the granting authority will take into account grant reductions (if any). The resulting amount is the ‘total accepted EU contribution’ for the beneficiary.

The **balance** is then calculated by deducting the payments received (if any; see report on the distribution of payments in Article 32), from the total accepted EU contribution:

$$\left\{ \begin{array}{l} \text{total accepted EU contribution for the beneficiary} \\ \text{minus} \\ \text{prefinancing and interim payments received (if any)} \end{array} \right\}.$$

If the balance is **negative**, it will be **recovered** in accordance with the following procedure:

The granting authority will send a **pre-information letter** to the beneficiary concerned:

- formally notifying the intention to recover, the amount due, the amount to be recovered and the reasons why and
- requesting observations within 30 days of receiving notification.

If no observations are submitted (or the granting authority decides to pursue recovery despite the observations it has received), it will confirm the amount to be recovered and ask this amount to be paid to the coordinator (**confirmation letter**).

22.3.3 Interim payments

Interim payments reimburse the eligible lump sum contributions claimed for work packages implemented during the reporting periods (if any).

Interim payments (if any) will be made in accordance with the schedule and modalities set out the Data Sheet (see Point 4.2).

Payment is subject to the approval of the periodic report and the work packages declared. Their approval does not imply recognition of compliance, authenticity, completeness or correctness of their content.

Incomplete work packages and work packages that have not been delivered or cannot be approved will be rejected (see Article 27).

The **interim payment** will be calculated by the granting authority in the following steps:

Step 1 — Calculation of the total accepted EU contribution

Step 2 — Limit to the interim payment ceiling

Step 1 — Calculation of the total accepted EU contribution

The granting authority will first calculate the ‘accepted EU contribution’ for the action for the reporting period, by calculating the lump sum contributions for the approved work packages.

After that, the granting authority will take into account grant reductions from beneficiary termination (if any). The resulting amount is the ‘total accepted EU contribution’.

Step 2 — Limit to the interim payment ceiling

The resulting amount is then capped to ensure that the total amount of prefinancing and interim payments (if any) does not exceed the interim payment ceiling set out in the Data Sheet (see Point 4.2).

Interim payments (or parts of them) may be offset (without the beneficiaries’ consent) against amounts owed by a beneficiary to the granting authority — up to the amount due to that beneficiary.

For grants where the granting authority is the European Commission or an EU executive agency, offsetting may also be done against amounts owed to other Commission services or executive agencies.

Payments will not be made if the payment deadline or payments are suspended (see Articles 29 and 30).

22.3.4 Final payment — Final grant amount — Revenues and Profit — Recovery

The final payment (payment of the balance) reimburses the remaining eligible lump sum contributions claimed for the implemented work packages (if any).

The final payment will be made in accordance with the schedule and modalities set out in the Data Sheet (see Point 4.2).

Payment is subject to the approval of the final periodic report and the work packages declared. Their approval does not imply recognition of compliance, authenticity, completeness or correctness of their content.

Work packages (or parts of them) that have not been delivered or cannot be approved will be rejected (see Article 27).

The **final grant amount for the action** will be calculated in the following steps:

Step 1 — Calculation of the total accepted EU contribution

Step 2 — Limit to the maximum grant amount

Step 3 — Reduction due to the no-profit rule

Step 1 — Calculation of the total accepted EU contribution

The granting authority will first calculate the ‘accepted EU contribution’ for the action for all reporting periods, by calculating the lump sum contributions for the approved work packages.

After that, the granting authority will take into account grant reductions (if any). The resulting amount is the ‘total accepted EU contribution’.

Step 2 — Limit to the maximum grant amount

Not applicable

Step 3 — Reduction due to the no-profit rule

Not applicable

The **balance** (final payment) is then calculated by deducting the total amount of prefinancing and interim payments already made (if any), from the final grant amount:

$$\begin{aligned} & \{\text{final grant amount} \\ & \text{minus} \\ & \{\text{prefinancing and interim payments made (if any)}\} \}. \end{aligned}$$

If the balance is **positive**, it will be **paid** to the coordinator.

The final payment (or part of it) may be offset (without the beneficiaries’ consent) against amounts owed by a beneficiary to the granting authority — up to the amount due to that beneficiary.

For grants where the granting authority is the European Commission or an EU executive agency, offsetting may also be done against amounts owed to other Commission services or executive agencies.

Payments will not be made if the payment deadline or payments are suspended (see Articles 29 and 30).

If the balance is **negative**, it will be **recovered** in accordance with the following procedure:

The granting authority will send a **pre-information letter** to the coordinator:

- formally notifying the intention to recover, the final grant amount, the amount to be recovered and the reasons why
- requesting observations within 30 days of receiving notification.

If no observations are submitted (or the granting authority decides to pursue recovery despite the observations it has received), it will confirm the amount to be recovered (**confirmation letter**), together with a **debit note** with the terms and date for payment.

If payment is not made by the date specified in the debit note, the granting authority will **enforce recovery** in accordance with Article 22.4.

22.3.5 Audit implementation after final payment — Revised final grant amount — Recovery

If — after the final payment (in particular, after checks, reviews, audits or investigations; see

Article 25) — the granting authority rejects lump sum contributions (see Article 27) or reduces the grant (see Article 28), it will calculate the **revised final grant amount** for the beneficiary concerned.

The **beneficiary revised final grant amount** will be calculated in the following step:

Step 1 — Calculation of the revised total accepted EU contribution

Step 1 — Calculation of the revised total accepted EU contribution

The granting authority will first calculate the ‘revised accepted EU contribution’ for the beneficiary, by calculating the ‘revised accepted contributions’.

After that, it will take into account grant reductions (if any). The resulting ‘revised total accepted EU contribution’ is the beneficiary revised final grant amount.

If the revised final grant amount is lower than the beneficiary’s final grant amount (i.e. its share in the final grant amount for the action), it will be **recovered** in accordance with the following procedure:

The **beneficiary final grant amount** (i.e. share in the final grant amount for the action) is calculated as follows:

$$\left\{ \begin{array}{l} \text{\{total accepted EU contribution for the beneficiary} \\ \text{divided by} \\ \text{total accepted EU contribution for the action\}} \\ \text{multiplied by} \\ \text{final grant amount for the action\}}. \end{array} \right.$$

The granting authority will send a **pre-information letter** to the beneficiary concerned:

- formally notifying the intention to recover, the amount to be recovered and the reasons why and
- requesting observations within 30 days of receiving notification.

If no observations are submitted (or the granting authority decides to pursue recovery despite the observations it has received), it will confirm the amount to be recovered (**confirmation letter**), together with a **debit note** with the terms and the date for payment.

Recoveries against affiliated entities (if any) will be handled through their beneficiaries.

If payment is not made by the date specified in the debit note, the granting authority will **enforce recovery** in accordance with Article 22.4.

22.4 Enforced recovery

If payment is not made by the date specified in the debit note, the amount due will be recovered:

- (a) by offsetting the amount — without the coordinator or beneficiary’s consent — against any amounts owed to the coordinator or beneficiary by the granting authority.

In exceptional circumstances, to safeguard the EU financial interests, the amount may be offset before the payment date specified in the debit note.

For grants where the granting authority is the European Commission or an EU executive agency, debts may also be offset against amounts owed by other Commission services or executive agencies.

- (b) by drawing on the financial guarantee(s) (if any)
- (c) by holding other beneficiaries jointly and severally liable (if any; see Data Sheet, Point 4.4)
- (d) by holding affiliated entities jointly and severally liable (if any, see Data Sheet, Point 4.4)
- (e) by taking legal action (see Article 43) or, provided that the granting authority is the European Commission or an EU executive agency, by adopting an enforceable decision under Article 299 of the Treaty on the Functioning of the EU (TFEU) and Article 100(2) of EU Financial Regulation 2018/1046.

The amount to be recovered will be increased by **late-payment interest** at the rate set out in Article 23.5, from the day following the payment date in the debit note, up to and including the date the full payment is received.

Partial payments will be first credited against expenses, charges and late-payment interest and then against the principal.

Bank charges incurred in the recovery process will be borne by the beneficiary, unless Directive 2015/2366¹⁵ applies.

For grants where the granting authority is an EU executive agency, enforced recovery by offsetting or enforceable decision will be done by the services of the European Commission (see also Article 43).

22.5 Consequences of non-compliance

22.5.1 If the granting authority does not pay within the payment deadlines (see above), the beneficiaries are entitled to **late-payment interest** at the reference rate applied by the European Central Bank (ECB) for its main refinancing operations in euros, plus the percentage specified in the Data Sheet (Point 4.2). The ECB reference rate to be used is the rate in force on the first day of the month in which the payment deadline expires, as published in the C series of the *Official Journal of the European Union*.

If the late-payment interest is lower than or equal to EUR 200, it will be paid to the coordinator only on request submitted within two months of receiving the late payment.

Late-payment interest is not due if all beneficiaries are EU Member States (including regional and local government authorities or other public bodies acting on behalf of a Member State for the purpose of this Agreement).

If payments or the payment deadline are suspended (see Articles 29 and 30), payment will not be considered as late.

¹⁵ Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation (EU) No 1093/2010, and repealing Directive 2007/64/EC (OJ L 337, 23.12.2015, p. 35).

Late-payment interest covers the period running from the day following the due date for payment (see above), up to and including the date of payment.

Late-payment interest is not considered for the purposes of calculating the final grant amount.

22.5.2 If the coordinator breaches any of its obligations under this Article, the grant may be reduced (see Article 28) and the grant or the coordinator may be terminated (see Article 32).

Such breaches may also lead to other measures described in Chapter 5.

ARTICLE 23 — GUARANTEES

23.1 Prefinancing guarantee

If required by the granting authority (see Data Sheet, Point 4.2), the beneficiaries must provide (one or more) prefinancing guarantee(s) in accordance with the timing and the amounts set out in the Data Sheet.

The coordinator must submit them to the granting authority in due time before the prefinancing they are linked to.

The guarantees must be drawn up using the template published on the Portal and fulfil the following conditions:

- (a) be provided by a bank or approved financial institution established in the EU or — if requested by the coordinator and accepted by the granting authority — by a third party or a bank or financial institution established outside the EU offering equivalent security
- (b) the guarantor stands as first-call guarantor and does not require the granting authority to first have recourse against the principal debtor (i.e. the beneficiary concerned) and
- (c) remain explicitly in force until the final payment and, if the final payment takes the form of a recovery, until five months after the debit note is notified to a beneficiary.

They will be released within the following month.

23.2 Consequences of non-compliance

If the beneficiaries breach their obligation to provide the prefinancing guarantee, the prefinancing will not be paid.

Such breaches may also lead to other measures described in Chapter 5.

ARTICLE 24 — CERTIFICATES

Not applicable

ARTICLE 25 — CHECKS, REVIEWS, AUDITS AND INVESTIGATIONS — EXTENSION OF FINDINGS

25.1 Granting authority checks, reviews and audits

25.1.1 Internal checks

The granting authority may — during the action or afterwards — check the proper implementation of the action and compliance with the obligations under the Agreement, including assessing lump sum contributions, deliverables and reports.

25.1.2 Project reviews

The granting authority may carry out reviews on the proper implementation of the action and compliance with the obligations under the Agreement (general project reviews or specific issues reviews).

Such project reviews may be started during the implementation of the action and until the time-limit set out in the Data Sheet (see Point 6). They will be formally notified to the coordinator or beneficiary concerned and will be considered to start on the date of the notification.

If needed, the granting authority may be assisted by independent, outside experts. If it uses outside experts, the coordinator or beneficiary concerned will be informed and have the right to object on grounds of commercial confidentiality or conflict of interest.

The coordinator or beneficiary concerned must cooperate diligently and provide — within the deadline requested — any information and data in addition to deliverables and reports already submitted. The granting authority may request beneficiaries to provide such information to it directly. Sensitive information and documents will be treated in accordance with Article 13.

The coordinator or beneficiary concerned may be requested to participate in meetings, including with the outside experts.

For **on-the-spot visits**, the beneficiary concerned must allow access to sites and premises (including to the outside experts) and must ensure that information requested is readily available.

Information provided must be accurate, precise and complete and in the format requested, including electronic format.

On the basis of the review findings, a **project review report** will be drawn up.

The granting authority will formally notify the project review report to the coordinator or beneficiary concerned, which has 30 days from receiving notification to make observations.

Project reviews (including project review reports) will be in the language of the Agreement.

25.1.3 Audits

The granting authority may carry out audits on the proper implementation of the action and compliance with the obligations under the Agreement.

Such audits may be started during the implementation of the action and until the time-limit set out in the Data Sheet (see Point 6). They will be formally notified to the beneficiary concerned and will be considered to start on the date of the notification.

The granting authority may use its own audit service, delegate audits to a centralised service or use external audit firms. If it uses an external firm, the beneficiary concerned will be informed and have the right to object on grounds of commercial confidentiality or conflict of interest.

The beneficiary concerned must cooperate diligently and provide — within the deadline requested — any information (including complete accounts, individual salary statements or other personal data) to verify compliance with the Agreement. Sensitive information and documents will be treated in accordance with Article 13.

For **on-the-spot** visits, the beneficiary concerned must allow access to sites and premises (including for the external audit firm) and must ensure that information requested is readily available.

Information provided must be accurate, precise and complete and in the format requested, including electronic format.

On the basis of the audit findings, a **draft audit report** will be drawn up.

The auditors will formally notify the draft audit report to the beneficiary concerned, which has 30 days from receiving notification to make observations (contradictory audit procedure).

The **final audit report** will take into account observations by the beneficiary concerned and will be formally notified to them.

Audits (including audit reports) will be in the language of the Agreement.

25.2 European Commission checks, reviews and audits in grants of other granting authorities

Where the granting authority is not the European Commission, the latter has the same rights of checks, reviews and audits as the granting authority.

25.3 Access to records for assessing simplified forms of funding

The beneficiaries must give the European Commission access to their statutory records for the periodic assessment of simplified forms of funding which are used in EU programmes.

25.4 OLAF, EPPO and ECA audits and investigations

The following bodies may also carry out checks, reviews, audits and investigations — during the action or afterwards:

- the European Anti-Fraud Office (OLAF) under Regulations No 883/2013¹⁶ and No 2185/96¹⁷
- the European Public Prosecutor's Office (EPPO) under Regulation 2017/1939
- the European Court of Auditors (ECA) under Article 287 of the Treaty on the Functioning of the EU (TFEU) and Article 257 of EU Financial Regulation 2018/1046.

If requested by these bodies, the beneficiary concerned must provide full, accurate and complete

¹⁶ Regulation (EU, Euratom) No 883/2013 of the European Parliament and of the Council of 11 September 2013 concerning investigations conducted by the European Anti-Fraud Office (OLAF) and repealing Regulation (EC) No 1073/1999 of the European Parliament and of the Council and Council Regulation (Euratom) No 1074/1999 (OJ L 248, 18/09/2013, p. 1).

¹⁷ Council Regulation (Euratom, EC) No 2185/96 of 11 November 1996 concerning on-the-spot checks and inspections carried out by the Commission in order to protect the European Communities' financial interests against fraud and other irregularities (OJ L 292, 15/11/1996, p. 2).

information in the format requested (including complete accounts, individual salary statements or other personal data, including in electronic format) and allow access to sites and premises for on-the-spot visits or inspections — as provided for under these Regulations.

To this end, the beneficiary concerned must keep all relevant information relating to the action, at least until the time-limit set out in the Data Sheet (Point 6) and, in any case, until any ongoing checks, reviews, audits, investigations, litigation or other pursuits of claims have been concluded.

25.5 Consequences of checks, reviews, audits and investigations — Extension of findings

25.5.1 Consequences of checks, reviews, audits and investigations in this grant

Findings in checks, reviews, audits or investigations carried out in the context of this grant may lead to rejections (see Article 27), grant reduction (see Article 28) or other measures described in Chapter 5.

Rejections or grant reductions after the final payment will lead to a revised final grant amount (see Article 22).

Findings in checks, reviews, audits or investigations during the action implementation may lead to a request for amendment (see Article 39), to change the description of the action set out in Annex 1.

Checks, reviews, audits or investigations that find systemic or recurrent errors, irregularities, fraud or breach of obligations in any EU grant may also lead to consequences in other EU grants awarded under similar conditions ('extension to other grants').

Moreover, findings arising from an OLAF or EPPO investigation may lead to criminal prosecution under national law.

25.5.2 Extension from other grants

Findings of checks, reviews, audits or investigations in other grants may be extended to this grant, if:

- (a) the beneficiary concerned is found, in other EU grants awarded under similar conditions, to have committed systemic or recurrent errors, irregularities, fraud or breach of obligations that have a material impact on this grant and
- (b) those findings are formally notified to the beneficiary concerned — together with the list of grants affected by the findings — within the time-limit for audits set out in the Data Sheet (see Point 6).

The granting authority will formally notify the beneficiary concerned of the intention to extend the findings and the list of grants affected.

If the extension concerns **rejections of lump sum contributions**: the notification will include:

- (a) an invitation to submit observations on the list of grants affected by the findings
- (b) the request to submit revised financial statements for all grants affected
- (c) the correction rate for extrapolation, established on the basis of the systemic or recurrent errors, to calculate the amounts to be rejected, if the beneficiary concerned:

- (i) considers that the submission of revised financial statements is not possible or practicable or
- (ii) does not submit revised financial statements.

If the extension concerns **grant reductions**: the notification will include:

- (a) an invitation to submit observations on the list of grants affected by the findings and
- (b) the **correction rate for extrapolation**, established on the basis of the systemic or recurrent errors and the principle of proportionality.

The beneficiary concerned has **60 days** from receiving notification to submit observations, revised financial statements or to propose a duly substantiated **alternative correction method/rate**.

On the basis of this, the granting authority will analyse the impact and decide on the implementation (i.e. start rejection or grant reduction procedures, either on the basis of the revised financial statements or the announced/alternative method/rate or a mix of those; see Articles 27 and 28).

25.6 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, lump sum contributions insufficiently substantiated will be ineligible (see Article 6) and will be rejected (see Article 27), and the grant may be reduced (see Article 28).

Such breaches may also lead to other measures described in Chapter 5.

ARTICLE 26 — IMPACT EVALUATIONS

26.1 Impact evaluation

The granting authority may carry out impact evaluations of the action, measured against the objectives and indicators of the EU programme funding the grant.

Such evaluations may be started during implementation of the action and until the time-limit set out in the Data Sheet (see Point 6). They will be formally notified to the coordinator or beneficiaries and will be considered to start on the date of the notification.

If needed, the granting authority may be assisted by independent outside experts.

The coordinator or beneficiaries must provide any information relevant to evaluate the impact of the action, including information in electronic format.

26.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the granting authority may apply the measures described in Chapter 5.

CHAPTER 5 CONSEQUENCES OF NON-COMPLIANCE

SECTION 1 REJECTIONS AND GRANT REDUCTION

ARTICLE 27 — REJECTION OF CONTRIBUTIONS

27.1 Conditions

The granting authority will — at interim payment, final payment or afterwards — reject any lump sum contributions which are ineligible (see Article 6), in particular following checks, reviews, audits or investigations (see Article 25).

The rejection may also be based on the extension of findings from other grants to this grant (see Article 25).

Ineligible lump sum contributions will be rejected.

27.2 Procedure

If the rejection does not lead to a recovery, the granting authority will formally notify the coordinator or beneficiary concerned of the rejection, the amounts and the reasons why. The coordinator or beneficiary concerned may — within 30 days of receiving notification — submit observations if it disagrees with the rejection (payment review procedure).

If the rejection leads to a recovery, the granting authority will follow the contradictory procedure with pre-information letter set out in Article 22.

27.3 Effects

If the granting authority rejects lump sum contributions, it will deduct them from the lump sum contributions declared and then calculate the amount due (and, if needed, make a recovery; see Article 22).

ARTICLE 28 — GRANT REDUCTION

28.1 Conditions

The granting authority may — at beneficiary termination, final payment or afterwards — reduce the grant for a beneficiary, if:

- (a) the beneficiary (or a person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed:
 - (i) substantial errors, irregularities or fraud or
 - (ii) serious breach of obligations under this Agreement or during its award (including improper implementation of the action, non-compliance with the call conditions, submission of false information, failure to provide required information, breach of ethics or security rules (if applicable), etc.), or
- (b) the beneficiary (or a person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed — in other EU grants awarded to it under similar conditions — systemic or recurrent errors, irregularities, fraud or

serious breach of obligations that have a material impact on this grant (extension of findings; see Article 25.5).

The amount of the reduction will be calculated for each beneficiary concerned and proportionate to the seriousness and the duration of the errors, irregularities or fraud or breach of obligations, by applying an individual reduction rate to their accepted EU contribution.

28.2 Procedure

If the grant reduction does not lead to a recovery, the granting authority will formally notify the coordinator or beneficiary concerned of the reduction, the amount to be reduced and the reasons why. The coordinator or beneficiary concerned may — within 30 days of receiving notification — submit observations if it disagrees with the reduction (payment review procedure).

If the grant reduction leads to a recovery, the granting authority will follow the contradictory procedure with pre-information letter set out in Article 22.

28.3 Effects

If the granting authority reduces the grant, it will deduct the reduction and then calculate the amount due (and, if needed, make a recovery; see Article 22).

SECTION 2 SUSPENSION AND TERMINATION

ARTICLE 29 — PAYMENT DEADLINE SUSPENSION

29.1 Conditions

The granting authority may — at any moment — suspend the payment deadline if a payment cannot be processed because:

- (a) the required report (see Article 21) has not been submitted or is not complete or additional information is needed
- (b) there are doubts about the amount to be paid (e.g. ongoing extension procedure, queries about eligibility, need for a grant reduction, etc.) and additional checks, reviews, audits or investigations are necessary, or
- (c) there are other issues affecting the EU financial interests.

29.2 Procedure

The granting authority will formally notify the coordinator of the suspension and the reasons why.

The suspension will **take effect** the day the notification is sent.

If the conditions for suspending the payment deadline are no longer met, the suspension will be **lifted** — and the remaining time to pay (see Data Sheet, Point 4.2) will resume.

If the suspension exceeds two months, the coordinator may request the granting authority to confirm if the suspension will continue.

If the payment deadline has been suspended due to the non-compliance of the report and the revised report is not submitted (or was submitted but is also rejected), the granting authority may also terminate the grant or the participation of the coordinator (see Article 32).

ARTICLE 30 — PAYMENT SUSPENSION

30.1 Conditions

The granting authority may — at any moment — suspend payments, in whole or in part for one or more beneficiaries, if:

- (a) a beneficiary (or a person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed or is suspected of having committed:
 - (i) substantial errors, irregularities or fraud or
 - (ii) serious breach of obligations under this Agreement or during its award (including improper implementation of the action, non-compliance with the call conditions, submission of false information, failure to provide required information, breach of ethics or security rules (if applicable), etc.), or
- (b) a beneficiary (or a person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed — in other EU grants awarded to it under similar conditions — systemic or recurrent errors, irregularities, fraud or serious breach of obligations that have a material impact on this grant (extension of findings; see Article 25.5).

If payments are suspended for one or more beneficiaries, the granting authority will make partial payment(s) for the part(s) not suspended. If suspension concerns the final payment, the payment (or recovery) of the remaining amount after suspension is lifted will be considered to be the payment that closes the action.

30.2 Procedure

Before suspending payments, the granting authority will send a **pre-information letter** to the beneficiary concerned:

- formally notifying the intention to suspend payments and the reasons why and
- requesting observations within 30 days of receiving notification.

If the granting authority does not receive observations or decides to pursue the procedure despite the observations it has received, it will confirm the suspension (**confirmation letter**). Otherwise, it will formally notify that the procedure is discontinued.

At the end of the suspension procedure, the granting authority will also inform the coordinator.

The suspension will **take effect** the day after the confirmation notification is sent.

If the conditions for resuming payments are met, the suspension will be **lifted**. The granting authority will formally notify the beneficiary concerned (and the coordinator) and set the suspension end date.

During the suspension, no prefinancing will be paid to the beneficiaries concerned. For interim payments, the periodic reports for all reporting periods except the last one (see Article 21) must not contain any financial statements from the beneficiary concerned (or its affiliated entities). The coordinator must include them in the next periodic report after the suspension is lifted or — if suspension is not lifted before the end of the action — in the last periodic report.

ARTICLE 31 — GRANT AGREEMENT SUSPENSION

31.1 Consortium-requested GA suspension

31.1.1 Conditions and procedure

The beneficiaries may request the suspension of the grant or any part of it, if exceptional circumstances — in particular *force majeure* (see Article 35) — make implementation impossible or excessively difficult.

The coordinator must submit a request for **amendment** (see Article 39), with:

- the reasons why
- the date the suspension takes effect; this date may be before the date of the submission of the amendment request and
- the expected date of resumption.

The suspension will **take effect** on the day specified in the amendment.

Once circumstances allow for implementation to resume, the coordinator must immediately request another **amendment** of the Agreement to set the suspension end date, the resumption date (one day after suspension end date), extend the duration and make other changes necessary to adapt the action to the new situation (see Article 39) — unless the grant has been terminated (see Article 32). The suspension will be **lifted** with effect from the suspension end date set out in the amendment. This date may be before the date of the submission of the amendment request.

During the suspension, no prefinancing will be paid. Moreover, no work may be done. Ongoing work packages must be interrupted and no new work packages may be started.

31.2 EU-initiated GA suspension

31.2.1 Conditions

The granting authority may suspend the grant or any part of it, if:

- (a) a beneficiary (or a person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed or is suspected of having committed:
 - (i) substantial errors, irregularities or fraud or
 - (ii) serious breach of obligations under this Agreement or during its award (including improper implementation of the action, non-compliance with the call conditions,

submission of false information, failure to provide required information, breach of ethics or security rules (if applicable), etc.), or

(b) a beneficiary (or a person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed — in other EU grants awarded to it under similar conditions — systemic or recurrent errors, irregularities, fraud or serious breach of obligations that have a material impact on this grant (extension of findings; see Article 25.5)

(c) other:

(i) linked action issues: not applicable

(ii) additional GA suspension grounds: not applicable.

31.2.2 Procedure

Before suspending the grant, the granting authority will send a **pre-information letter** to the coordinator:

- formally notifying the intention to suspend the grant and the reasons why and
- requesting observations within 30 days of receiving notification.

If the granting authority does not receive observations or decides to pursue the procedure despite the observations it has received, it will confirm the suspension (**confirmation letter**). Otherwise, it will formally notify that the procedure is discontinued.

The suspension will **take effect** the day after the confirmation notification is sent (or on a later date specified in the notification).

Once the conditions for resuming implementation of the action are met, the granting authority will formally notify the coordinator a **lifting of suspension letter**, in which it will set the suspension end date and invite the coordinator to request an amendment of the Agreement to set the resumption date (one day after suspension end date), extend the duration and make other changes necessary to adapt the action to the new situation (see Article 39) — unless the grant has been terminated (see Article 32). The suspension will be **lifted** with effect from the suspension end date set out in the lifting of suspension letter. This date may be before the date on which the letter is sent.

During the suspension, no prefinancing will be paid. Moreover, no work may be done. Ongoing work packages must be interrupted and no new work packages may be started.

The beneficiaries may not claim damages due to suspension by the granting authority (see Article 33).

Grant suspension does not affect the granting authority's right to terminate the grant or a beneficiary (see Article 32) or reduce the grant (see Article 28).

ARTICLE 32 — GRANT AGREEMENT OR BENEFICIARY TERMINATION

32.1 Consortium-requested GA termination

32.1.1 Conditions and procedure

The beneficiaries may request the termination of the grant.

The coordinator must submit a request for **amendment** (see Article 39), with:

- the reasons why
- the date the consortium ends work on the action ('end of work date') and
- the date the termination takes effect ('termination date'); this date must be after the date of the submission of the amendment request.

The termination will **take effect** on the termination date specified in the amendment.

If no reasons are given or if the granting authority considers the reasons do not justify termination, it may consider the grant terminated improperly.

32.1.2 Effects

The coordinator must — within 60 days from when termination takes effect — submit a **periodic report** (for the open reporting period until termination).

The granting authority will calculate the final grant amount and final payment on the basis of the report submitted and taking into account the lump sum contributions for activities implemented before the end of work date (see Article 22). Partial lump sum contributions for work packages that were not completed (e.g. due to technical reasons) may exceptionally be taken into account.

If the granting authority does not receive the report within the deadline, only lump sum contributions which are included in an approved periodic report will be taken into account (no contributions if no periodic report was ever approved).

Improper termination may lead to a grant reduction (see Article 28).

After termination, the beneficiaries' obligations (in particular Articles 13 (confidentiality and security), 16 (IPR), 17 (communication, dissemination and visibility), 21 (reporting), 25 (checks, reviews, audits and investigations), 26 (impact evaluation), 27 (rejections), 28 (grant reduction) and 42 (assignment of claims)) continue to apply.

32.2 Consortium-requested beneficiary termination

32.2.1 Conditions and procedure

The coordinator may request the termination of the participation of one or more beneficiaries, on request of the beneficiary concerned or on behalf of the other beneficiaries.

The coordinator must submit a request for **amendment** (see Article 39), with:

- the reasons why
- the opinion of the beneficiary concerned (or proof that this opinion has been requested in writing)
- the date the beneficiary ends work on the action ('end of work date')

- the date the termination takes effect ('termination date'); this date must be after the date of the submission of the amendment request.

If the termination concerns the coordinator and is done without its agreement, the amendment request must be submitted by another beneficiary (acting on behalf of the consortium).

The termination will **take effect** on the termination date specified in the amendment.

If no information is given or if the granting authority considers that the reasons do not justify termination, it may consider the beneficiary to have been terminated improperly.

32.2.2 Effects

The coordinator must — within 60 days from when termination takes effect — submit:

- (i) a **report on the distribution of payments** to the beneficiary concerned
- (ii) a **termination report** from the beneficiary concerned, for the open reporting period until termination, containing an overview of the progress of the work
- (iii) a second **request for amendment** (see Article 39) with other amendments needed (e.g. reallocation of the tasks and the estimated budget of the terminated beneficiary; addition of a new beneficiary to replace the terminated beneficiary; change of coordinator, etc.).

The granting authority will calculate the amount due to the beneficiary on the basis of the reports submitted in previous interim payments (i.e. beneficiary's lump sum contributions for completed and approved work packages).

Lump sum contributions for ongoing/not yet completed work packages will have to be included in the periodic report for the next reporting periods when those work packages have been completed.

If the granting authority does not receive the report on the distribution of payments within the deadline, it will consider that:

- the coordinator did not distribute any payment to the beneficiary concerned and that
- the beneficiary concerned must not repay any amount to the coordinator.

If the second request for amendment is accepted by the granting authority, the Agreement is **amended** to introduce the necessary changes (see Article 39).

If the second request for amendment is rejected by the granting authority (because it calls into question the decision awarding the grant or breaches the principle of equal treatment of applicants), the grant may be terminated (see Article 32).

Improper termination may lead to a reduction of the grant (see Article 31) or grant termination (see Article 32).

After termination, the concerned beneficiary's obligations (in particular Articles 13 (confidentiality and security), 16 (IPR), 17 (communication, dissemination and visibility), 21 (reporting), 25 (checks, reviews, audits and investigations), 26 (impact evaluation), 27 (rejections), 28 (grant reduction) and 42 (assignment of claims)) continue to apply.

32.3 EU-initiated GA or beneficiary termination

32.3.1 Conditions

The granting authority may terminate the grant or the participation of one or more beneficiaries, if:

- (a) one or more beneficiaries do not accede to the Agreement (see Article 40)
- (b) a change to the action or the legal, financial, technical, organisational or ownership situation of a beneficiary is likely to substantially affect the implementation of the action or calls into question the decision to award the grant (including changes linked to one of the exclusion grounds listed in the declaration of honour)
- (c) following termination of one or more beneficiaries, the necessary changes to the Agreement (and their impact on the action) would call into question the decision awarding the grant or breach the principle of equal treatment of applicants
- (d) implementation of the action has become impossible or the changes necessary for its continuation would call into question the decision awarding the grant or breach the principle of equal treatment of applicants
- (e) a beneficiary (or person with unlimited liability for its debts) is subject to bankruptcy proceedings or similar (including insolvency, winding-up, administration by a liquidator or court, arrangement with creditors, suspension of business activities, etc.)
- (f) a beneficiary (or person with unlimited liability for its debts) is in breach of social security or tax obligations
- (g) a beneficiary (or person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has been found guilty of grave professional misconduct
- (h) a beneficiary (or person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed fraud, corruption, or is involved in a criminal organisation, money laundering, terrorism-related crimes (including terrorism financing), child labour or human trafficking
- (i) a beneficiary (or person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) was created under a different jurisdiction with the intent to circumvent fiscal, social or other legal obligations in the country of origin (or created another entity with this purpose)
- (j) a beneficiary (or person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed:
 - (i) substantial errors, irregularities or fraud or
 - (ii) serious breach of obligations under this Agreement or during its award (including improper implementation of the action, non-compliance with the call conditions, submission of false information, failure to provide required information, breach of ethics or security rules (if applicable), etc.)

- (k) a beneficiary (or person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed — in other EU grants awarded to it under similar conditions — systemic or recurrent errors, irregularities, fraud or serious breach of obligations that have a material impact on this grant (extension of findings; see Article 25.5)
- (l) despite a specific request by the granting authority, a beneficiary does not request — through the coordinator — an amendment to the Agreement to end the participation of one of its affiliated entities or associated partners that is in one of the situations under points (d), (f), (e), (g), (h), (i) or (j) and to reallocate its tasks, or
- (m) other:
 - (i) linked action issues: not applicable
 - (ii) additional GA termination grounds: not applicable.

32.3.2 Procedure

Before terminating the grant or participation of one or more beneficiaries, the granting authority will send a **pre-information letter** to the coordinator or beneficiary concerned:

- formally notifying the intention to terminate and the reasons why and
- requesting observations within 30 days of receiving notification.

If the granting authority does not receive observations or decides to pursue the procedure despite the observations it has received, it will confirm the termination and the date it will take effect (**confirmation letter**). Otherwise, it will formally notify that the procedure is discontinued.

For beneficiary terminations, the granting authority will — at the end of the procedure — also inform the coordinator.

The termination will **take effect** the day after the confirmation notification is sent (or on a later date specified in the notification; ‘termination date’).

32.3.3 Effects

- (a) for **GA termination**:

The coordinator must — within 60 days from when termination takes effect — submit a **periodic report** (for the last open reporting period until termination).

The granting authority will calculate the final grant amount and final payment on the basis of the report submitted and taking into account the lump sum contributions for activities implemented before termination takes effect (see Article 22). Partial lump sum contributions for work packages that were not completed (e.g. due to technical reasons) may exceptionally be taken into account.

If the grant is terminated for breach of the obligation to submit reports, the coordinator may not submit any report after termination.

If the granting authority does not receive the report within the deadline, only lump sum

contributions which are included in an approved periodic report will be taken into account (no contributions if no periodic report was ever approved).

Termination does not affect the granting authority's right to reduce the grant (see Article 28) or to impose administrative sanctions (see Article 34).

The beneficiaries may not claim damages due to termination by the granting authority (see Article 33).

After termination, the beneficiaries' obligations (in particular Articles 13 (confidentiality and security), 16 (IPR), 17 (communication, dissemination and visibility), 21 (reporting), 25 (checks, reviews, audits and investigations), 26 (impact evaluation), 27 (rejections), 28 (grant reduction) and 42 (assignment of claims)) continue to apply.

(b) for **beneficiary termination**:

The coordinator must — within 60 days from when termination takes effect — submit:

- (i) a **report on the distribution of payments** to the beneficiary concerned
- (ii) a **termination report** from the beneficiary concerned, for the open reporting period until termination, containing an overview of the progress of the work
- (iii) a **request for amendment** (see Article 39) with any amendments needed (e.g. reallocation of the tasks and the estimated budget of the terminated beneficiary; addition of a new beneficiary to replace the terminated beneficiary; change of coordinator, etc.).

The granting authority will calculate the amount due to the beneficiary on the basis of the reports submitted in previous interim payments (i.e. beneficiary's lump sum contributions for completed and approved work packages).

Lump sum contributions for ongoing/not yet completed work packages will have to be included in the periodic report for the next reporting periods when those work packages have been completed.

If the granting authority does not receive the report on the distribution of payments within the deadline, it will consider that:

- the coordinator did not distribute any payment to the beneficiary concerned and that
- the beneficiary concerned must not repay any amount to the coordinator.

If the request for amendment is accepted by the granting authority, the Agreement is **amended** to introduce the necessary changes (see Article 39).

If the request for amendment is rejected by the granting authority (because it calls into question the decision awarding the grant or breaches the principle of equal treatment of applicants), the grant may be terminated (see Article 32).

After termination, the concerned beneficiary's obligations (in particular Articles 13 (confidentiality and security), 16 (IPR), 17 (communication, dissemination and visibility),

21 (reporting), 25 (checks, reviews, audits and investigations), 26 (impact evaluation), 27 (rejections), 28 (grant reduction) and 42 (assignment of claims)) continue to apply.

SECTION 3 OTHER CONSEQUENCES: DAMAGES AND ADMINISTRATIVE SANCTIONS

ARTICLE 33 — DAMAGES

33.1 Liability of the granting authority

The granting authority cannot be held liable for any damage caused to the beneficiaries or to third parties as a consequence of the implementation of the Agreement, including for gross negligence.

The granting authority cannot be held liable for any damage caused by any of the beneficiaries or other participants involved in the action, as a consequence of the implementation of the Agreement.

33.2 Liability of the beneficiaries

The beneficiaries must compensate the granting authority for any damage it sustains as a result of the implementation of the action or because the action was not implemented in full compliance with the Agreement, provided that it was caused by gross negligence or wilful act.

The liability does not extend to indirect or consequential losses or similar damage (such as loss of profit, loss of revenue or loss of contracts), provided such damage was not caused by wilful act or by a breach of confidentiality.

ARTICLE 34 — ADMINISTRATIVE SANCTIONS AND OTHER MEASURES

Nothing in this Agreement may be construed as preventing the adoption of administrative sanctions (i.e. exclusion from EU award procedures and/or financial penalties) or other public law measures, in addition or as an alternative to the contractual measures provided under this Agreement (see, for instance, Articles 135 to 145 EU Financial Regulation 2018/1046 and Articles 4 and 7 of Regulation 2988/95¹⁸).

SECTION 4 FORCE MAJEURE

ARTICLE 35 — FORCE MAJEURE

A party prevented by force majeure from fulfilling its obligations under the Agreement cannot be considered in breach of them.

‘Force majeure’ means any situation or event that:

- prevents either party from fulfilling their obligations under the Agreement,
- was unforeseeable, exceptional situation and beyond the parties’ control,

¹⁸ Council Regulation (EC, Euratom) No 2988/95 of 18 December 1995 on the protection of the European Communities financial interests (OJ L 312, 23.12.1995, p. 1).

- was not due to error or negligence on their part (or on the part of other participants involved in the action), and
- proves to be inevitable in spite of exercising all due diligence.

Any situation constituting force majeure must be formally notified to the other party without delay, stating the nature, likely duration and foreseeable effects.

The parties must immediately take all the necessary steps to limit any damage due to force majeure and do their best to resume implementation of the action as soon as possible.

CHAPTER 6 FINAL PROVISIONS

ARTICLE 36 — COMMUNICATION BETWEEN THE PARTIES

36.1 Forms and means of communication — Electronic management

EU grants are managed fully electronically through the EU Funding & Tenders Portal ('Portal').

All communications must be made electronically through the Portal in accordance with the Portal Terms and Conditions and using the forms and templates provided there (except if explicitly instructed otherwise by the granting authority).

Communications must be made in writing and clearly identify the grant agreement (project number and acronym).

Communications must be made by persons authorised according to the Portal Terms and Conditions. For naming the authorised persons, each beneficiary must have designated — before the signature of this Agreement — a 'legal entity appointed representative (LEAR)'. The role and tasks of the LEAR are stipulated in their appointment letter (see Portal Terms and Conditions).

If the electronic exchange system is temporarily unavailable, instructions will be given on the Portal.

36.2 Date of communication

The sending date for communications made through the Portal will be the date and time of sending, as indicated by the time logs.

The receiving date for communications made through the Portal will be the date and time the communication is accessed, as indicated by the time logs. Formal notifications that have not been accessed within 10 days after sending, will be considered to have been accessed (see Portal Terms and Conditions).

If a communication is exceptionally made on paper (by e-mail or postal service), general principles apply (i.e. date of sending/receipt). Formal notifications by registered post with proof of delivery will be considered to have been received either on the delivery date registered by the postal service or the deadline for collection at the post office.

If the electronic exchange system is temporarily unavailable, the sending party cannot be considered in breach of its obligation to send a communication within a specified deadline.

36.3 Addresses for communication

The Portal can be accessed via the Europa website.

The address for paper communications to the granting authority (if exceptionally allowed) is the official mailing address indicated on its website.

For beneficiaries, it is the legal address specified in the Portal Participant Register.

ARTICLE 37 — INTERPRETATION OF THE AGREEMENT

The provisions in the Data Sheet take precedence over the rest of the Terms and Conditions of the Agreement.

Annex 5 takes precedence over the Terms and Conditions.

The Terms and Conditions take precedence over the Annexes other than Annex 5.

Annex 2 takes precedence over Annex 1.

ARTICLE 38 — CALCULATION OF PERIODS AND DEADLINES

In accordance with Regulation No 1182/71¹⁹, periods expressed in days, months or years are calculated from the moment the triggering event occurs.

The day during which that event occurs is not considered as falling within the period.

‘Days’ means calendar days, not working days.

ARTICLE 39 — AMENDMENTS

39.1 Conditions

The Agreement may be amended, unless the amendment entails changes to the Agreement which would call into question the decision awarding the grant or breach the principle of equal treatment of applicants.

Amendments may be requested by any of the parties.

39.2 Procedure

The party requesting an amendment must submit a request for amendment signed directly in the Portal Amendment tool.

The coordinator submits and receives requests for amendment on behalf of the beneficiaries (see Annex 3). If a change of coordinator is requested without its agreement, the submission must be done by another beneficiary (acting on behalf of the other beneficiaries).

The request for amendment must include:

¹⁹ Regulation (EEC, Euratom) No 1182/71 of the Council of 3 June 1971 determining the rules applicable to periods, dates and time-limits (OJ L 124, 8/6/1971, p. 1).

- the reasons why
- the appropriate supporting documents and
- for a change of coordinator without its agreement: the opinion of the coordinator (or proof that this opinion has been requested in writing).

The granting authority may request additional information.

If the party receiving the request agrees, it must sign the amendment in the tool within 45 days of receiving notification (or any additional information the granting authority has requested). If it does not agree, it must formally notify its disagreement within the same deadline. The deadline may be extended, if necessary for the assessment of the request. If no notification is received within the deadline, the request is considered to have been rejected.

An amendment **enters into force** on the day of the signature of the receiving party.

An amendment **takes effect** on the date of entry into force or other date specified in the amendment.

ARTICLE 40 — ACCESSION AND ADDITION OF NEW BENEFICIARIES

40.1 Accession of the beneficiaries mentioned in the Preamble

The beneficiaries which are not coordinator must accede to the grant by signing the accession form (see Annex 3) directly in the Portal Grant Preparation tool, within 30 days after the entry into force of the Agreement (see Article 44).

They will assume the rights and obligations under the Agreement with effect from the date of its entry into force (see Article 44).

If a beneficiary does not accede to the grant within the above deadline, the coordinator must — within 30 days — request an amendment (see Article 39) to terminate the beneficiary and make any changes necessary to ensure proper implementation of the action. This does not affect the granting authority's right to terminate the grant (see Article 32).

40.2 Addition of new beneficiaries

In justified cases, the beneficiaries may request the addition of a new beneficiary.

For this purpose, the coordinator must submit a request for amendment in accordance with Article 39. It must include an accession form (see Annex 3) signed by the new beneficiary directly in the Portal Amendment tool.

New beneficiaries will assume the rights and obligations under the Agreement with effect from the date of their accession specified in the accession form (see Annex 3).

Additions are also possible in mono-beneficiary grants.

ARTICLE 41 — TRANSFER OF THE AGREEMENT

In justified cases, the beneficiary of a mono-beneficiary grant may request the transfer of the grant to

a new beneficiary, provided that this would not call into question the decision awarding the grant or breach the principle of equal treatment of applicants.

The beneficiary must submit a request for **amendment** (see Article 39), with

- the reasons why
- the accession form (see Annex 3) signed by the new beneficiary directly in the Portal Amendment tool and
- additional supporting documents (if required by the granting authority).

The new beneficiary will assume the rights and obligations under the Agreement with effect from the date of accession specified in the accession form (see Annex 3).

ARTICLE 42 — ASSIGNMENTS OF CLAIMS FOR PAYMENT AGAINST THE GRANTING AUTHORITY

The beneficiaries may not assign any of their claims for payment against the granting authority to any third party, except if expressly approved in writing by the granting authority on the basis of a reasoned, written request by the coordinator (on behalf of the beneficiary concerned).

If the granting authority has not accepted the assignment or if the terms of it are not observed, the assignment will have no effect on it.

In no circumstances will an assignment release the beneficiaries from their obligations towards the granting authority.

ARTICLE 43 — APPLICABLE LAW AND SETTLEMENT OF DISPUTES

43.1 Applicable law

The Agreement is governed by the applicable EU law, supplemented if necessary by the law of Belgium.

Special rules may apply for beneficiaries which are international organisations (if any; see Data Sheet, Point 5).

43.2 Dispute settlement

If a dispute concerns the interpretation, application or validity of the Agreement, the parties must bring action before the EU General Court — or, on appeal, the EU Court of Justice — under Article 272 of the Treaty on the Functioning of the EU (TFEU).

For non-EU beneficiaries (if any), such disputes must be brought before the courts of Brussels, Belgium — unless an international agreement provides for the enforceability of EU court judgements.

For beneficiaries with arbitration as special dispute settlement forum (if any; see Data Sheet, Point 5), the dispute will — in the absence of an amicable settlement — be settled in accordance with the Rules for Arbitration published on the Portal.

If a dispute concerns administrative sanctions, offsetting or an enforceable decision under Article 299

TFEU (see Articles 22 and 34), the beneficiaries must bring action before the General Court — or, on appeal, the Court of Justice — under Article 263 TFEU.

For grants where the granting authority is an EU executive agency (see Preamble), actions against offsetting and enforceable decisions must be brought against the European Commission (not against the granting authority; see also Article 22).

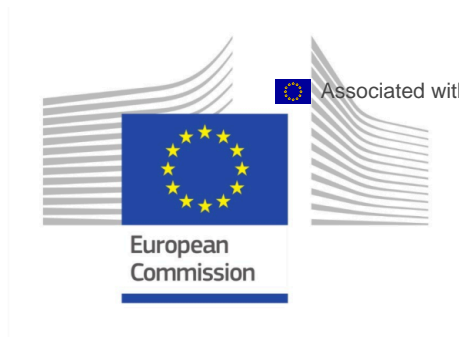
ARTICLE 44 — ENTRY INTO FORCE

The Agreement will enter into force on the day of signature by the granting authority or the coordinator, depending on which is later.

SIGNATURES

For the coordinator

For the granting authority



ANNEX 1



Erasmus+ (ERASMUS+)

Description of the action (DoA)

Part A

Part B

DESCRIPTION OF THE ACTION (PART A)

COVER PAGE

Part A of the Description of the Action (DoA) must be completed directly on the Portal Grant Preparation screens.

PROJECT	
<i>Grant Preparation (General Information screen) — Enter the info.</i>	
Project number:	101102844
Project name:	Auto-Cove 2.0; Greening Europe with support of Clean-tech-vehicle education
Project acronym:	Auto-Cove 2.0
Call:	ERASMUS-EDU-2022-PEX-COVE
Topic:	ERASMUS-EDU-2022-PEX-COVE
Type of action:	ERASMUS-LS
Service:	EACEA/A/02
Project starting date:	fixed date: 15 June 2023
Project duration:	48 months

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List of work packages	5
Staff effort	13
List of deliverables	14
List of milestones (outputs/outcomes)	26
List of critical risks	29

PROJECT SUMMARY

Project summary

Grant Preparation (General Information screen) — Provide an overall description of your project (including context and overall objectives, planned activities and main achievements, and expected results and impacts (on target groups, change procedures, capacities, innovation etc)). This summary should give readers a clear idea of what your project is about.

Use the project summary from your proposal.

Developing digital and practical skills in fields, which combat climate change and adopt clean energy is essential for Europe's sustainable growth. Global warming has awakened many vehicle brands to decide quitting manufacture of traditional fuel driven vehicles by 2030.

New innovations and fuel technologies require a new kind of expertise in automotive industry. This also requires a reform of vocational training. Due to this, car mechanic, vehicle business and vehicle engineer educations need to be developed to educate skilled mechanics, vehicle salespersons, engineers, and vehicle sector teachers with modern technology know-how. There are very little content of servicing modern technology vehicles in VET in Europe.

Additionally, the radical changes in European safety situation have made all alternative energy sources even more crucial for all project countries, especially those with dependence on the traditional fuel from other countries.

The Auto-Cove project partners will create 17 study modules or training courses of modern vehicle technology and vehicle sales and pilot them among VET-teachers, vehicle company service and sales personnel and vehicle students on secondary and tertiary levels. The development work will be done by listening to needs from labor market and vocational teachers in vehicle field. Industry representatives and VET-teachers in vehicle sector in seven European countries will be interviewed about real needs in vehicle sector education. Auto-Cove partners' collaborative development work will be based on the skills-gap analysis and partners specific expertise in the vehicle and sales sectors. Finnish research center and German and Estonian universities of applied sciences contribute development work with updated research data of the field.

The project outputs will be disseminated by Dutch Electude International- company to 3400 active VET-providers worldwide in 8 language versions and in English via OER-platform in English in Europe.

LIST OF PARTICIPANTS

PARTICIPANTS

Grant Preparation (Beneficiaries screen) — Enter the info.

Number	Role	Short name	Legal name	Country	PIC
1	COO	OMNIA	ESPOON SEUDUN KOULUTUSKUNTAYHTYMA OMNIA	FI	946099783
2	BEN	TARTU CITY	TARTU LINN	EE	996380024
3	BEN	VT	VENTSPILS TEHNIKUMS	LV	946960076
4	BEN	SEPR	SOCIETE D'ENSEIGNEMENT PROFESSIONNEL DU RHONE	FR	947427422
5	BEN	JPS	JAKOB-PREH-SCHULE STAATLICHE BERUFSSCHULE BAD NEUSTADT AD SAALE	DE	910049345
6	BEN	THWS	TECHNISCHE HOCHSCHULE WUERZBURG- SCHWEINFURT	DE	972534223
7	BEN	KW1C	STICHTING REGIONAAL ONDERWIJS CENTRUM NOORDOOST-BRABANT	NL	948240282

PARTICIPANTS					
<i>Grant Preparation (Beneficiaries screen) — Enter the info.</i>					
Number	Role	Short name	Legal name	Country	PIC
8	BEN	VTT	TEKNOLOGIAN TUTKIMUSKESKUS VTT OY	FI	932760440
9	BEN	Preh GmbH	PREH GMBH	DE	890227783
10	BEN	Eesti Maulikool	EESTI MAULIKOOL	EE	999857280
11	BEN	Bilia Oy Ab	BILIA OY AB	FI	889639866
12	BEN	Volvo Finland	VOLVO CAR FINLAND OY AB	FI	889642000
13	BEN	Electude	ELECTUDE INTERNATIONAL BV	NL	882578654
14	BEN	Toyota Baltic	TOYOTA BALTIC AKTSIASELTS	EE	889540053
15	BEN	Kauno technikos	KAUNO TECHNOLOGIJU MOKYMO CENTRAS	LT	882880033
16	BEN	KTK	KAUNO TECHNIKOS KOLEGIJA	LT	882647621
17	AP	CITY OF ESPOO	ESPOON KAUPUNKI	FI	950240325
18	AP	Kaunas CCIC	KAUNO PREKYBOS, PRAMONES IR AMATU RUMAI	LT	999834679
19	AP	ISTAIGU	LIETUVOS PROFESINIO MOKYMO ISTAIGU ASOCIACIJA	LT	919085768
20	AP	VAVM	VILNIAUS AUTOMECHANIKOS IR VERSLO MOKYKLA	LT	946139941
21	AP	RTK	Profesionalas izglitibas kompetences centrs "Rigas Tehniska koledza"	LV	949430278
22	AP	Optima	Optima samkommun	FI	943025174
23	AP	OPH Finland	OPETUSHALLITUS OPH	FI	914643750
24	AP	Unterfranken	Regierung von Unterfranken - 40.1	DE	932564306
25	AP	Main-Spessart	Staatliche Berufsschule Main-Spessart	DE	947805334
26	AP	METROPOLIA	METROPOLIA AMMATTIKORKEAKOULU OY	FI	997340033
27	AP	VOLVO Group NL	VOLVO GROUP THE NETHERLANDS BV	NL	891791714
28	AP	Pletros	KVALIFIKACIJU IR PROFESINIO MOKYMO PLETROS CENTRAS	LT	945934495
29	AP	Stadin AO	Helsingin kaupunki	FI	946742796
30	AP	PIKC LVT	PROFESIONALAS IZGLITIBAS KOMPETENCES CENTRS LIEPAJAS VALSTS TEHNIKUMS	LV	945213009

LIST OF WORK PACKAGES

Work packages						
<i>Grant Preparation (Work Packages screen) — Enter the info.</i>						
Work Package No	Work Package name	Lead Beneficiary	Effort (Person-Months)	Start Month	End Month	Deliverables
WP1	Project Management and Coordination	1 - OMNIA	100.04	1	48	D1.1 – Management Strategy D1.2 – Project Work Plan D1.3 – Progress report for EACEA month 14 D1.4 – Progress report for EACEA month 38
WP2	R & D	8 - VTT	27.50	1	32	D2.1 – Trend description in vehicle fleet, sales and maintenance services D2.2 – Skills-gap-analysis
WP3	Innovative Study modules and training courses for VET-students and EQF-levels 4 and 5	2 - TARTU CITY	278.71	3	42	D3.1 – Study modules of ADAS-systems D3.2 – Study modules of Hybrid systems D3.3 – Study module of dismantling and recycling e-batteries D3.4 – Study module of Fire safety of HV batteries D3.5 – Five study modules of Electric battery systems and charging technologies D3.6 – Study modules on Hydrogen Technology D3.7 – Study module about alternative fuel vehicle sales D3.8 – Study module about alternative fuel vehicle spare parts sales
WP4	Innovative training courses for VET-teachers and industry representatives; EQF-levels 5 and 6	15 - Kauno technikos	77.59	6	42	D4.1 – Training Course for teachers about dismantling and recycling of electric batteries

Work packages						
<i>Grant Preparation (Work Packages screen) — Enter the info.</i>						
Work Package No	Work Package name	Lead Beneficiary	Effort (Person-Months)	Start Month	End Month	Deliverables
						D4.2 – Training cours about ADAS systems D4.3 – Training Course about Hybrid Technologies D4.4 – Training course about hydrogen technologies D4.5 – Training course of Fire Safety of H V batteries D4.6 – Training Course of charging systems D4.7 – Training Course of charging technologies D4.8 – Training Course on clean-tech vehicle sales D4.9 – Training course of clean-tech vehicle spare parts sales D4.10 – Training cours of aged batteries and their sustainable use
WP5	Student Mobilities (includes accompanying teachers and pathway study module development teachers)	1 - OMNIA	4.80	12	36	D5.1 – Mobility Plan D5.2 – Pedagogical Influence study D5.3 – Pathway study module of Math D5.4 – Pathway study module of Physics
WP6	Quality Assurance and Risk Management	4 - SEPR	80.00	1	48	D6.1 – Quality management plan D6.2 – Internal quality reports D6.3 – External Evaluator reports
WP7	Dissemination and Impact	3 - VT	70.30	1	48	D7.1 – Dissemination Plan D7.2 – Sustainability strategy D7.3 – Newsletters

Work package WP1 – Project Management and Coordination

Work Package Number	WP1	Lead Beneficiary	1. OMNIA
Work Package Name	Project Management and Coordination		
Start Month	1	End Month	48

Objectives

- a) To ensure good communication among all partners
- b) To coordinate the activities of all WPs
- c) To make sure that the work plan and deadlines for delivering the project's outputs are respected
- d) To ensure proper budget control system and transfer of budget among the partners.

Description

T1.1 Drafting and signing of partnership agreements
M1-M4: Partnership grant agreements with roles and responsibilities of each partner will be completed between Omnia and each project full partner.

T1.2 Steering Committee Meetings in presence
8 coordination meetings in presence; 2/project year

T1.3 Online Steering Committee Meetings
8 online meetings, twice each project year

T1.4 Internal communication
Mails, video and physical meetings to evaluate and plan the activities

T1.5 Administrative checks and financial reporting
Analysis of cash flows based on the expenses reported from partners. The financial checks are made with the partners every 3 months

1.6. Intermediate and final reporting to EC
Preparing requested reports to the EC to evaluate the progress of the project

1.7. Budget transfers
Sharing budget to partners in three items, as instructed

T 1.8 Communication with EC
Communication via mail or calls or the Communication center with EC in case of questions, doubts or requests for support

Work package WP2 – R & D

Work Package Number	WP2	Lead Beneficiary	8. VTT
Work Package Name	R & D		
Start Month	1	End Month	32

Objectives

Leadership of this WP is shared between VTT and THWS

Objectives:

- a) listing stakeholders, who participate in skills-gap-analysis and requesting them to reply to the analysis. Gathering the information for VTT and THWS to be analysed

- b) Drafting and implementing a skills-gap-analysis for two target groups: a) VET- teachers and b) Company representatives in vehicle maintenance and sales fields
- c) Analysis and classification of the research data and disseminating it to the partners for the foundation of the development work in WP3 and WP4 by month 7.
- d) Research data contribution for study module development teams

Description
<p>T2.1 Development trends in vehicle fleet, vehicle sales and maintenance services</p> <p>Development trends in vehicle fleet, vehicle sales and maintenance services will be summarized based on a literature study and interviews of industry stakeholders. Building a complete picture of the ongoing development trends and developments expected in near future (e.g. development of vehicle technology, recent and expected regulation of vehicles, existing vehicle fleet and expected developments etc) will contribute to planning of the skills gap analysis.</p> <p>T2.2 Preparation and implementation of skills-gap-analysis in seven countries</p> <p>Two target groups: VET-teachers (20/country) + industry representatives (20/country) will respond to the analysis (N=280)</p> <p>T2.3 Creating stakeholder pool for skills-gap- analysis and collection of survey responses</p> <p>Vocational colleges create stakeholder pools of sectoral companies and sister educational institutes for skills-gap-analysis and share the questionnaires + gather the info from them for the analysis for research institutes.</p> <p>T2.4 Analysis of the skills gap</p> <p>Results of the literature study and two surveys carried out in previous tasks will be analysed to identify the skills gaps. The identified skills gaps will be classified in thematic areas and shared with WP3 and WP4 developers to provide a basis for collaborative development work in the project.</p> <p>T2.5 Research data contribution for study module developers</p> <p>Research organisations involved in the project (THWS and VTT) will collect and share research data with developers of study modules. The up-to-date research results and technical data provided by THWS and VTT will provide a solid basis for development of the study modules.</p>

Work package WP3 – Innovative Study modules and training courses for VET-students and EQF-levels 4 and 5

Work Package Number	WP3	Lead Beneficiary	2. TARTU CITY
Work Package Name	Innovative Study modules and training courses for VET-students and EQF-levels 4 and 5		
Start Month	3	End Month	42

Objectives
<ul style="list-style-type: none"> a) studying already existing automotive sector-related modules in each partners' topic area from Electude International's e-learning platform b) Receiving and studying data from Skills-gap-analysis and planning the study module development framework c) Developing respective study modules/training courses for students on EQF-levels 4-6 (Vocational college personnel produce content for EQF-level 4, Polytechnics for levels 5 and 6, Research units and company representatives contribute the development work). d) Participating in Collaborative development workshops + reflecting and fertilizing each other's development work, when presented there at the phase, they are every 6th month, until completed

Description
<p>T3.1 Studying the background data on Electude's e-learning platform for the basis of the development work</p> <p>Learning the content on modern vehicle sales and service that has already been created on Electude's e-learning platform. Planning to build the study module development work on the already existing content.</p>

<p>T3.2 Learning the content of Skills-gap-analysis Planning the study module development work based on the data from Skills-gap-analysis</p> <p>T3.3. Study module and training course development work Development of study modules at local level, fertilizing each other's work in collaborative development workshops</p> <p>T3.4 Purchasing necessary technical equipment for study module development work Purchasing necessary equipment in a cost-effective way by looking for the best price-quality relationship</p> <p>T3.5 Arranging collaborative development workshops, 5 times during the project Collaborative development workshops in Finland, Estonia, Lithuania, Germany and the Netherlands; 2 VET-teachers from each 9 VET-providers + 4 teachers from Omnia + 2 industry representatives from each full partner company participate in each workshop (5 times during the project). Also SEPR and Ventspils Tehnikums representatives participate in these events.</p> <p>T 3.6 Development teams' online meetings in min twice per school year. Reflection and feedback, benchmarking and sharing the development work, in regular meetings between the workshops to contribute each other and to ask for help, if needed.</p> <p>T 3.7 Pedagogical influence study for experts in each collaborative development workshops In connection with each workshop, a pedagogical influence study is done for the participants to receive valuable information for study modules' pedagogical aspects for WP4.</p>
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Work package WP4 – Innovative training courses for VET-teachers and industry representatives; EQF-levels 5 and 6

Work Package Number	WP4	Lead Beneficiary	15. Kauno technikos
Work Package Name	Innovative training courses for VET-teachers and industry representatives; EQF-levels 5 and 6		
Start Month	6	End Month	42

Objectives
<ul style="list-style-type: none"> - Purchasing the necessary technical equipment for the study module development work (during the first project year) - Summarising student-oriented study module content for teacher training and enriching them with pedagogical aspects (starting from month 24) - Reskilling already working car mechanics and work leaders as well as modern vehicle sales and spare sales personnel - Updating vehicle field VET-teachers' skills about modern vehicle technologies on both secondary and tertiary levels.

Description
<p>T. 4.1 Drafting teacher and industry representatives education courses in technical study modules (excluding pathway study modules)</p> <p>Training courses on ADAS-systems, hybrid technology, hydrogen technology, battery charging systems and battery technologies, discharging, dismantling and recycling e-batteries, fire safety of High Voltage batteries. Training courses also on modern vehicle sales and modern vehicle spare parts sales.</p>

Work package WP5 – Student Mobilities (includes accompanying teachers and pathway study module development teachers)

Work Package Number	WP5	Lead Beneficiary	1. OMNIA
Work Package Name	Student Mobilities (includes accompanying teachers and pathway study module development teachers)		
Start Month	12	End Month	36

Objectives
<ul style="list-style-type: none"> - Implementing the Mobility Plan, where all staff (339 staff members) and 60 student mobilities and mobilities are scheduled and instructions about sending and receiving students have drafted - Organising Student mobilities in flows of 3 students + accompanying persons (due to students with special needs) at a time during the 2nd and 3rd project years. - Organising 5 pathway study module development mobilities for Estonian and Finnish teachers/researchers. - Coaching participants for mobilities, making travel and accommodation arrangements - Ensuring the content of each mobility to support students' modern vehicle technology content learning objective with hosting companies already prior the mobility implementation - Implementing pedagogical influence study of participants' experiences

Description
<p>T5.1 - Drafting a mobility Plan Scheduling all project mobilities (both staff and student) in one big mobility plan.</p> <p>T5.2 - Organising both secondary and tertiary level students mobilities to vehicle companies Participants: 6 secondary level students from each VET-provider, 42 four-week-mobilities 6 tertiary level students from three Polytechnics, 18 students for 18-week-mobilities</p> <p>T5.3 - Pedagogical influence study for students Gathering feedback from students participating in student mobilities; Quality analysis</p>

Work package WP6 – Quality Assurance and Risk Management

Work Package Number	WP6	Lead Beneficiary	4. SEPR
Work Package Name	Quality Assurance and Risk Management		
Start Month	1	End Month	48

Objectives
<ul style="list-style-type: none"> ▪ Establishing an effective internal evaluation and monitoring framework; ▪ Assessing the coherence between expected results and effective results ▪ Verifying that the results reached by the project follow the objectives outlined in the application form ▪ Avoiding pitfalls and correcting possible problematic elements; ▪ Evaluating effectiveness and quality of the implementation process set out by the partnership, delivered activities, outputs and impact; ▪ Providing suggestions ▪ to maximise the long-term impact of the project and its sustainability <p>Monitoring reports will be produced twice a year to resume all the information collected by the partners through quality assessment tools like:</p> <ul style="list-style-type: none"> - Evaluation questionnaires and interviews of participants in collaborative development workshops (pedagogical influence study=, - Minutes of the TPM, where possible problems linked to the project implementation are discussed. - Reports of the influence study parts

Description
<p>T6.1 - Drafting Quality Management Plan Writing the Quality Management Plan to define the rules to be followed by partners to evaluate the quality of the project. It will be drafted during the 4 first months of the project and presented in the first transversal Steering Committee meeting to the partners.</p>

<p>T6.2 - Drafting Risk Management Plan It started from the risks identified and listed in this application and will be completed with more risks that partners signal during the implementation phase with solutions to anticipate and tackle the problems.</p> <p>T6.3 - Development of assessment tools Set of tools, created by SEPR with other partners. Tools will be presented to the coordination group and feedback collected and revised, if needed</p> <p>T6.4 - Selection and monitoring of the external evaluator An expert outside the project consortium will be selected to provide an evaluation of the project from an objective point of view, at mid-term and in the end of the project period.</p> <p>T6.5 - Assessment of project activities Measurements of the quantitative and qualitative indicators through the evaluation tools set out by the partnership. This will be an ongoing activity implemented during the whole project.</p> <p>T6.6 - Drafting quality reports every 6th month Summary of all results collected through evaluation tools</p>

Work package WP7 – Dissemination and Impact

Work Package Number	WP7	Lead Beneficiary	3. VT
Work Package Name	Dissemination and Impact		
Start Month	1	End Month	48

<p>Objectives</p> <p>Together with WP1 and WP6, this is the third WP containing the transversal activities needed to implement the project and ensure the achievement of all objectives. The objectives are:</p> <ul style="list-style-type: none"> - arranging the translation of each study module into partner languages by subcontractors in each partner country and proofreading and correcting them in relation to technical languages by the VET-institutes’ technical teachers. - developing strategy for widest dissemination of project outputs (deliverables in WP3 and WP4), - Identifying stakeholders, end users and networks; to whom and how the results should be disseminated. - Creating Newsletters for stakeholders every 6th month to inform about project progress, - Promoting vehicle field education among learners, VET-teachers and in industry, by using each partner’s national and international networks - Creating Auto-Cove 2.0 platforms for project output development work at Electude International’s e-learning platform - a) for project development (for internal project work) and b) for project output dissemination in 8 language versions - publishing the project outputs from WP3 and 4 on European OER commons platform in English - arranging dissemination events in two international conferences for automotive sector in Germany and Latvia - Arranging national dissemination events for national stakeholders (External VET-teachers in vehicle maintenance and sales sector and one event for industry representatives (two events in each partner country.
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<p>Description</p> <p>WP7 will be led by both Ventspils Tehnikums (and Electude International).</p> <p>T7.1 - Drafting the dissemination plan The dissemination plan will contain project's internal communication plan, schedule and method of sharing Newsletter creation work and plans to disseminate information about project outputs via two online platforms utilizing each partner's national and international sectoral networks.</p> <p>T7.2 - Creating network of regional stakeholders in each country and international stakeholders in Europe Identifying and listing all stakeholders, to whom we inform about project progress; sister VET-colleges, polytechnics, business partners and VT-policy makers in each country/region</p>
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T7.3 - Drafting and disseminating newsletters every 6th month

Informing project stakeholders about project progress

T7.4 - Organising study module translations

Organising study module translations into partner languages by subcontractors in each partner country from English - proofreading and correcting the translations in relation to the technical language in the VET-institutes in each partner country.

T7.5 - Publishing WP3 and WP4 outputs on Electude International's platform in 8 language versions

Once project outputs are completed, translated, proofread and refined, they will be published on Electude International's dissemination platform in different language versions.

T7.6 - Publishing WP3 and 4 outputs on European OER commons platform in English

Once project outputs are completed in English, they will be published on European OER commons platform.

T7.7 - Piloting the dissemination platforms with stakeholders in 2 national dissemination events in each project country (= 14 events)

Arranging two national dissemination events during the last half year of the project for a) VET- teachers and VET-policy makers in vehicle field and B) business stakeholders

T7.8 - Disseminating information of project outputs' content and usability via national and international networks, especially sectoral ones.

External dissemination outside the project consortium for wider public; each VET-provider will disseminate information about developed project outputs in their national and international networks.

T7.9 - Arranging dissemination events in connection with two automotive field trade fairs in Germany and Latvia

Disseminating info of project outputs for business actors in connection with two automotive field trade fairs, in Germany and Latvia

T7.10 - Drafting a sustainability strategy to guarantee project outputs' impact even after the project lifetime

Making a plan, how to maintain usability of project outputs and their widest possible use including updating suggestions, when needed

T7.11 - Follow-up of project impact 2 years after the project ends

Following the number of the end users of project outputs on two online platforms and number of modules, still utilized after two years of project's lifetime by the consortium's VET-providers

STAFF EFFORT

Staff effort per participant								
<i>Grant Preparation (Work packages - Effort screen) — Enter the info.</i>								
Participant	WP1	WP2	WP3	WP4	WP5	WP6	WP7	Total Person-Months
1 - OMNIA	44.38	0.50	51.14	20.00	0.48	8.00	6.00	130.50
2 - TARTU CITY	6.24	0.50	43.68	12.20	0.48	4.00	4.00	71.10
3 - VT	6.24	0.50	15.00	0.24	0.48	4.00	15.00	41.46
4 - SEPR	5.05	0.50	15.00	0.24	0.48	35.00	4.00	60.27
5 - JPS	5.52	0.50	22.70	6.50	0.48	4.00	4.00	43.70
6 - THWS	4.52	12.00	50.45	13.86	0.48	4.00	4.00	89.31
7 - KWIC	4.52	0.50	22.89	4.16	0.48	4.00	4.00	40.55
8 - VTT	3.57	12.00	5.46			4.00	4.00	29.03
9 - Preh GmbH			1.38					1.38
10 - Eesti Maulikool	6.00		4.50	1.24	0.48	1.00	4.00	17.22
11 - Bilia Oy Ab			1.38					1.38
12 - Volvo Finland			1.38					1.38
13 - Electude	0.86		11.37	2.95		4.00	13.30	32.48
14 - Toyota Baltic			1.38					1.38
15 - Kauno technikos	6.62	0.50	20.67	14.13	0.48	4.00	4.00	50.40
16 - KTK	6.52		10.33	2.07	0.48	4.00	4.00	27.40
Total Person-Months	100.04	27.50	278.71	77.59	4.80	80.00	70.30	638.94

LIST OF DELIVERABLES

Deliverables						
<i>Grant Preparation (Deliverables screen) — Enter the info.</i>						
<i>The labels used mean:</i>						
<i>Public — fully open (⚠ automatically posted online)</i>						
<i>Sensitive — limited under the conditions of the Grant Agreement</i>						
<i>EU classified —RESTREINT-UE/EU-RESTRICTED, CONFIDENTIEL-UE/EU-CONFIDENTIAL, SECRET-UE/EU-SECRET under Decision 2015/444</i>						
Deliverable No	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date (month)
D1.1	Management Strategy	WP1	1 - OMNIA	R — Document, report	PU - Public	4
D1.2	Project Work Plan	WP1	1 - OMNIA	R — Document, report	SEN - Sensitive	4
D1.3	Progress report for EACEA month 14	WP1	1 - OMNIA	R — Document, report	SEN - Sensitive	14
D1.4	Progress report for EACEA month 38	WP1	1 - OMNIA	R — Document, report	SEN - Sensitive	38
D2.1	Trend description in vehicle fleet, sales and maintenance services	WP2	8 - VTT	R — Document, report	PU - Public	3
D2.2	Skills-gap-analysis	WP2	6 - THWS	R — Document, report	PU - Public	7
D3.1	Study modules of ADAS-systems	WP3	1 - OMNIA	OTHER	PU - Public	35
D3.2	Study modules of Hybrid systems	WP3	2 - TARTU CITY	OTHER	PU - Public	35
D3.3	Study module of dismantling and recycling e-batteries	WP3	15 - Kauno technikos	OTHER	PU - Public	35
D3.4	Study module of Fire safety of HV batteries	WP3	16 - KTK	OTHER	PU - Public	35
D3.5	Five study modules of Electric battery systems and charging technologies	WP3	6 - THWS	OTHER	PU - Public	35
D3.6	Study modules on Hydrogen Technology	WP3	7 - KW1C	OTHER	PU - Public	35

Deliverables						
<i>Grant Preparation (Deliverables screen) — Enter the info.</i>						
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Deliverable No	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date (month)
D3.7	Study module about alternative fuel vehicle sales	WP3	1 - OMNIA	OTHER	PU - Public	35
D3.8	Study module about alternative fuel vehicle spare parts sales	WP3	1 - OMNIA	OTHER	PU - Public	35
D4.1	Training Course for teachers about dismantling and recycling of electric batteries	WP4	15 - Kauno technikos	OTHER	PU - Public	42
D4.2	Training cours about ADAS systems	WP4	1 - OMNIA	OTHER	PU - Public	42
D4.3	Training Course about Hybrid Technologies	WP4	2 - TARTU CITY	OTHER	PU - Public	42
D4.4	Training course about hydrogen technologies	WP4	7 - KWIC	OTHER	PU - Public	42
D4.5	Training course of Fire Safety of H V batteries	WP4	16 - KTK	OTHER	PU - Public	42
D4.6	Training Course of charging systems	WP4	6 - THWS	OTHER	PU - Public	42
D4.7	Training Course of charging technologies	WP4	5 - JPS	OTHER	PU - Public	42
D4.8	Training Course on clean-tech vehicle sales	WP4	1 - OMNIA	OTHER	PU - Public	42
D4.9	Training course of clean-tech vehicle spare parts sales	WP4	1 - OMNIA	OTHER	PU - Public	42

Deliverables						
<i>Grant Preparation (Deliverables screen) — Enter the info.</i>						
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Deliverable No	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date (month)
D4.10	Training cours of aged batteries and their sustainable use	WP4	6 - THWS	OTHER	PU - Public	42
D5.1	Mobility Plan	WP5	1 - OMNIA	R — Document, report	SEN - Sensitive	36
D5.2	Pedagogical Influence study	WP5	1 - OMNIA	R — Document, report	PU - Public	36
D5.3	Pathway study module of Math	WP5	1 - OMNIA	OTHER	PU - Public	35
D5.4	Pathway study module of Physics	WP5	1 - OMNIA	OTHER	PU - Public	35
D6.1	Quality management plan	WP6	4 - SEPR	R — Document, report	SEN - Sensitive	4
D6.2	Internal quality reports	WP6	4 - SEPR	R — Document, report	SEN - Sensitive	47
D6.3	External Evaluator reports	WP6	4 - SEPR	R — Document, report	SEN - Sensitive	46
D7.1	Dissemination Plan	WP7	3 - VT	R — Document, report	SEN - Sensitive	5
D7.2	Sustainability strategy	WP7	3 - VT	R — Document, report	PU - Public	40
D7.3	Newsletters	WP7	3 - VT	R — Document, report	PU - Public	48

Deliverable D1.1 – Management Strategy

Deliverable Number	D1.1	Lead Beneficiary	1. OMNIA
Deliverable Name	Management Strategy		
Type	R — Document, report	Dissemination Level	PU - Public
Due Date (month)	4	Work Package No	WP1

Description
Internal rules of the partnership, including communication and financial reporting

Deliverable D1.2 – Project Work Plan

Deliverable Number	D1.2	Lead Beneficiary	1. OMNIA
Deliverable Name	Project Work Plan		
Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	4	Work Package No	WP1

Description
Schedule of the project progress

Deliverable D1.3 – Progress report for EACEA month 14

Deliverable Number	D1.3	Lead Beneficiary	1. OMNIA
Deliverable Name	Progress report for EACEA month 14		
Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	14	Work Package No	WP1

Description
Progress report (without payment) to be submitted to EACEA on Month 14

Deliverable D1.4 – Progress report for EACEA month 38

Deliverable Number	D1.4	Lead Beneficiary	1. OMNIA
Deliverable Name	Progress report for EACEA month 38		
Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	38	Work Package No	WP1

Description
Progress report (without payment) to be submitted to EACEA on Month 38

Deliverable D2.1 – Trend description in vehicle fleet, sales and maintenance services

Deliverable Number	D2.1	Lead Beneficiary	8. VTT
Deliverable Name	Trend description in vehicle fleet, sales and maintenance services		
Type	R — Document, report	Dissemination Level	PU - Public
Due Date (month)	3	Work Package No	WP2

Description
Development trends in vehicle fleet, vehicle sales and maintenance services

Deliverable D2.2 – Skills-gap-analysis

Deliverable Number	D2.2	Lead Beneficiary	6. THWS
Deliverable Name	Skills-gap-analysis		
Type	R — Document, report	Dissemination Level	PU - Public
Due Date (month)	7	Work Package No	WP2

Description
Results of skills-gap-analysis; Summary on Vehicle maintenance and sales sector + VET- teachers replies for the skills-gap-analysis (English)

Deliverable D3.1 – Study modules of ADAS-systems

Deliverable Number	D3.1	Lead Beneficiary	1. OMNIA
Deliverable Name	Study modules of ADAS-systems		
Type	OTHER	Dissemination Level	PU - Public
Due Date (month)	35	Work Package No	WP3

Description
Two study modules of ADAS-systems, The first one basic level and the second one more proficient level, both at EQF-level 4, still.
Study module with volume 15-30 credits about servicing and calibrating Advanced Driver assistant systems in modern vehicles, will be produced in English and translated into all partner languages.

Deliverable D3.2 – Study modules of Hybrid systems

Deliverable Number	D3.2	Lead Beneficiary	2. TARTU CITY
Deliverable Name	Study modules of Hybrid systems		
Type	OTHER	Dissemination Level	PU - Public
Due Date (month)	35	Work Package No	WP3

Description

Two study modules (basic and more proficient)about servicing hybrid vehicles, EQF- level4, They will be produced on Electude International e-learning platform and produced in English but translated into all project languages in the last phase of the project.

Deliverable D3.3 – Study module of dismantling and recycling e-batteries

Deliverable Number	D3.3	Lead Beneficiary	15. Kauno technikos
Deliverable Name	Study module of dismantling and recycling e-batteries		
Type	OTHER	Dissemination Level	PU - Public
Due Date (month)	35	Work Package No	WP3

Description

A study module about dismantling and recycling e-batteries; volume 15-30 credits.It will be produced on Electude International e-learning platform and produced in English but translated into all project languages in the last phase of the project.

Deliverable D3.4 – Study module of Fire safety of HV batteries

Deliverable Number	D3.4	Lead Beneficiary	16. KTK
Deliverable Name	Study module of Fire safety of HV batteries		
Type	OTHER	Dissemination Level	PU - Public
Due Date (month)	35	Work Package No	WP3

Description

A study module of fire safety of high voltage batteries, eqf-level 5 or 6. Volume 15-30 credits. It will be produced on Electude International e-learning platform and produced in English but translated into all project languages in the last phase of the project.

Deliverable D3.5 – Five study modules of Electric battery systems and charging technologies

Deliverable Number	D3.5	Lead Beneficiary	6. THWS
Deliverable Name	Five study modules of Electric battery systems and charging technologies		
Type	OTHER	Dissemination Level	PU - Public
Due Date (month)	35	Work Package No	WP3

Description

Five study modules of Electric battery systems and charging technologies.
Lead by THWS, but will be produced in tight co-operation with Jakob Preh Schule and contributed by KTK (with charging systems in Nordic conditions);
They will be produced on Electude International e-learning platform and produced in English but translated into all project languages in the last phase of the project.

Deliverable D3.6 – Study modules on Hydrogen Technology

Deliverable Number	D3.6	Lead Beneficiary	7. KW1C
Deliverable Name	Study modules on Hydrogen Technology		
Type	OTHER	Dissemination Level	PU - Public
Due Date (month)	35	Work Package No	WP3

Description
Two study modules of Hydrogen Technology in vehicle maintenance; EQF-level 4; Volume from 15 to 30 credits; They will be produced on Electude International e-learning platform and produced in English but translated into all project languages in the last phase of the project.

Deliverable D3.7 – Study module about alternative fuel vehicle sales

Deliverable Number	D3.7	Lead Beneficiary	1. OMNIA
Deliverable Name	Study module about alternative fuel vehicle sales		
Type	OTHER	Dissemination Level	PU - Public
Due Date (month)	35	Work Package No	WP3

Description
A study module, volume 15 credits, about alternative vehicle sales, EQF-level 4; They will be produced on Electude International e-learning platform and produced in English but translated into all project languages in the last phase of the project.

Deliverable D3.8 – Study module about alternative fuel vehicle spare parts sales

Deliverable Number	D3.8	Lead Beneficiary	1. OMNIA
Deliverable Name	Study module about alternative fuel vehicle spare parts sales		
Type	OTHER	Dissemination Level	PU - Public
Due Date (month)	35	Work Package No	WP3

Description
A study module, volume 15 credits, about alternative fuel vehicle spare parts sales, They will be produced on Electude International e-learning platform and produced in English but translated into all project languages in the last phase of the project.

Deliverable D4.1 – Training Course for teachers about dismantling and recycling of electric batteries

Deliverable Number	D4.1	Lead Beneficiary	15. Kauno technikos
Deliverable Name	Training Course for teachers about dismantling and recycling of electric batteries		
Type	OTHER	Dissemination Level	PU - Public
Due Date (month)	42	Work Package No	WP4

Description
A summarized training course for teachers and industry representatives about dismantling and recycling of electric batteries; in English

Deliverable D4.2 – Training cours about ADAS systems

Deliverable Number	D4.2	Lead Beneficiary	1. OMNIA
Deliverable Name	Training cours about ADAS systems		
Type	OTHER	Dissemination Level	PU - Public
Due Date (month)	42	Work Package No	WP4

Description
A training course for teachers about ADAS systems, their repairing and calibration, in English

Deliverable D4.3 – Training Course about Hybrid Technologies

Deliverable Number	D4.3	Lead Beneficiary	2. TARTU CITY
Deliverable Name	Training Course about Hybrid Technologies		
Type	OTHER	Dissemination Level	PU - Public
Due Date (month)	42	Work Package No	WP4

Description
A training course for teachers and company representatives about hybrid vehicles, their maintenace and repairs, in English

Deliverable D4.4 – Training course about hydrogen technologies

Deliverable Number	D4.4	Lead Beneficiary	7. KW1C
Deliverable Name	Training course about hydrogen technologies		
Type	OTHER	Dissemination Level	PU - Public
Due Date (month)	42	Work Package No	WP4

Description
A training course about hydrogen technologies for VET- teachers and industry representatives, in English

Deliverable D4.5 – Training course of Fire Safety of H V batteries

Deliverable Number	D4.5	Lead Beneficiary	16. KTK
Deliverable Name	Training course of Fire Safety of H V batteries		
Type	OTHER	Dissemination Level	PU - Public

Due Date (month)	42	Work Package No	WP4
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Description
A training course for VET- teachers and company representatives about fire safety of High Voltage batteries, English

Deliverable D4.6 – Training Course of charging systems

Deliverable Number	D4.6	Lead Beneficiary	6. THWS
Deliverable Name	Training Course of charging systems		
Type	OTHER	Dissemination Level	PU - Public
Due Date (month)	42	Work Package No	WP4

Description
This deliverable will be produced in co-operation with THWs and Jakob Preh Schule, and will be directed to VET-teachers in automotive field as well as for the industry representatives in the field, English

Deliverable D4.7 – Training Course of charging technologies

Deliverable Number	D4.7	Lead Beneficiary	5. JPS
Deliverable Name	Training Course of charging technologies		
Type	OTHER	Dissemination Level	PU - Public
Due Date (month)	42	Work Package No	WP4

Description
This training course of charging technologies will be done in co-operation with THWS and KTK (KTK with the topic of charging systems in Nordic conditions), in English

Deliverable D4.8 – Training Course on clean-tech vehicle sales

Deliverable Number	D4.8	Lead Beneficiary	1. OMNIA
Deliverable Name	Training Course on clean-tech vehicle sales		
Type	OTHER	Dissemination Level	PU - Public
Due Date (month)	42	Work Package No	WP4

Description
A training course on modern vehicle sales, English

Deliverable D4.9 – Training course of clean-tech vehicle spare parts sales

Deliverable Number	D4.9	Lead Beneficiary	1. OMNIA
Deliverable Name	Training course of clean-tech vehicle spare parts sales		

Type	OTHER	Dissemination Level	PU - Public
Due Date (month)	42	Work Package No	WP4

Description
A Training Course of modern vehicle spare parts sales for VET- teachers and company representatives, English

Deliverable D4.10 – Training cours of aged batteries and their sustainable use

Deliverable Number	D4.10	Lead Beneficiary	6. THWS
Deliverable Name	Training cours of aged batteries and their sustainable use		
Type	OTHER	Dissemination Level	PU - Public
Due Date (month)	42	Work Package No	WP4

Description
A training course for VET teachers and industry representatives of aged e-batteries and their sustainable use, English

Deliverable D5.1 – Mobility Plan

Deliverable Number	D5.1	Lead Beneficiary	1. OMNIA
Deliverable Name	Mobility Plan		
Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	36	Work Package No	WP5

Description
Mobility plan with all student and staff mobilities in the project (around 330 staff mobilities and 60 student mobilities), their planned timing (month and year) + destination and duration

Deliverable D5.2 – Pedagogical Influence study

Deliverable Number	D5.2	Lead Beneficiary	1. OMNIA
Deliverable Name	Pedagogical Influence study		
Type	R — Document, report	Dissemination Level	PU - Public
Due Date (month)	36	Work Package No	WP5

Description
A summary of student feedback in the pedagogical influence study, done by interviewing students, who participate in student mobilities during the project in companies.

Deliverable D5.3 – Pathway study module of Math

Deliverable Number	D5.3	Lead Beneficiary	1. OMNIA
Deliverable Name	Pathway study module of Math		

Type	OTHER	Dissemination Level	PU - Public
Due Date (month)	35	Work Package No	WP5

Description
e-learning format, volume 15 credits (EN, FI and EE)

Deliverable D5.4 – Pathway study module of Physics

Deliverable Number	D5.4	Lead Beneficiary	1. OMNIA
Deliverable Name	Pathway study module of Physics		
Type	OTHER	Dissemination Level	PU - Public
Due Date (month)	35	Work Package No	WP5

Description
e-learning format, volume 15 credits (EN, FI and EE)

Deliverable D6.1 – Quality management plan

Deliverable Number	D6.1	Lead Beneficiary	4. SEPR
Deliverable Name	Quality management plan		
Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	4	Work Package No	WP6

Description
Quality management plan containing all the internal rules for assessing the quality of the project

Deliverable D6.2 – Internal quality reports

Deliverable Number	D6.2	Lead Beneficiary	4. SEPR
Deliverable Name	Internal quality reports		
Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	47	Work Package No	WP6

Description
A few quality reports drafted by SEPR summarising the results of the assessments carried out during implementation phase. They will measure the progress of the project against the target indicators for expected results and impact.

Deliverable D6.3 – External Evaluator reports

Deliverable Number	D6.3	Lead Beneficiary	4. SEPR
Deliverable Name	External Evaluator reports		

Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	46	Work Package No	WP6

Description
Reports from External evaluator, the first one in the mid project period and the second one by month 46, These present the findings and assessment of the project activities

Deliverable D7.1 – Dissemination Plan

Deliverable Number	D7.1	Lead Beneficiary	3. VT
Deliverable Name	Dissemination Plan		
Type	R — Document, report	Dissemination Level	SEN - Sensitive
Due Date (month)	5	Work Package No	WP7

Description
Document containing the strategy for internal communication and strategy for spreading information of the project's results of the external stakeholders

Deliverable D7.2 – Sustainability strategy

Deliverable Number	D7.2	Lead Beneficiary	3. VT
Deliverable Name	Sustainability strategy		
Type	R — Document, report	Dissemination Level	PU - Public
Due Date (month)	40	Work Package No	WP7

Description
Document explaining the partnership strategy to continue the activities of Auto-Cove 2.0 after the termination of the funding period

Deliverable D7.3 – Newsletters

Deliverable Number	D7.3	Lead Beneficiary	3. VT
Deliverable Name	Newsletters		
Type	R — Document, report	Dissemination Level	PU - Public
Due Date (month)	48	Work Package No	WP7

Description
Eight newsletters about project progress every 6th month + updates on the project webpage during the project, asking content from the other partners to be published and disseminated. Significance: informing all associate partners and other external stakeholders about the project progress.

LIST OF MILESTONES

Milestones					
<i>Grant Preparation (Milestones screen) — Enter the info.</i>					
Milestone No	Milestone Name	Work Package No	Lead Beneficiary	Means of Verification	Due Date (month)
1	1st steering committee meeting including one-day-workshop for technical persons by Electude Int.	WP1	1-OMNIA	Participants list and agenda	4
2	2nd Steering Committee meeting	WP1	2-TARTU CITY	Participants list and agenda	10
3	3rd SC meeting	WP1	15-Kauno technikos	Participants list and agenda	16
4	4th SC meeting	WP1	4-SEPR	Participants list and agenda	22
5	5th SC meeting	WP1	7-KW1C	Participants list and agenda	28
6	6th SC meeting	WP1	3-VT	Participants list and agenda	33
7	7th SC meeting	WP1	5-JPS	Participants list and agenda	39
8	8th SC meeting	WP1	1-OMNIA	Participant list and agenda	45
9	Development trends in vehicle fleet, vehicle sales and maintenance services	WP2	8-VTT	Report	3
10	Skills-gap-analysis completed	WP2	6-THWS	Report	7
11	Replies to the skills-gap-analysis gathered	WP3	2-TARTU CITY	List of all participating stakeholder institutes: bot VET-providers and companies	4
12	Background data for development work studied	WP3	2-TARTU CITY	Summary of topic-related content, what already exists/each module, the institutes are intending to develop	6
13	Development plans for different study modules and training courses	WP3	2-TARTU CITY	Document, Study module/training course development plans	8
14	The 1st Collaborative development workshop with influence study	WP3	1-OMNIA	Participant list, agenda and documentation of pedagogical influence study	12

Milestones					
<i>Grant Preparation (Milestones screen) — Enter the info.</i>					
Milestone No	Milestone Name	Work Package No	Lead Beneficiary	Means of Verification	Due Date (month)
15	The 2nd Collaborative development workshop with influence study	WP3	2-TARTU CITY	Participant list, Agenda and documentation of pedagogical influence study	18
16	The 3rd Collaborative Development workshop with influence study	WP3	15-Kauno technikos	Participant list, agenda and documentation of pedagogical influence study	23
17	The 4th Workshop with influence study	WP3	7-KW1C	Participant list, agenda and documentation of pedagogical influence study	34
18	The 5th Workshop with influence study	WP3	5-JPS	Participant list, agenda and documentation of pedagogical influence study	34
19	Finalizing the English versions of the study modules	WP3	2-TARTU CITY	Finalising each study module content, completing them and letting them to be translated by subcontractors	35
20	Training courses for VET teachers and industry representatives completed	WP4	15-Kauno technikos	e-learning courses on Electudes output development platform	38
21	Kic-off for pathway study module development	WP5	2-TARTU CITY	Omnia and Tartu Rakenduslik Kolledz + Eesti Maulikool share the responsibility of this deliverable; Means of verification>: participant list and agenda of the meeting in Estonia	17
22	Intermediate meeting for pathway study module development	WP5	1-OMNIA	Participant list and agenda	23
23	Each organisation has completed first mobility flows of students	WP5	1-OMNIA	Grant agreements, Training Agreements and certificates of the completed mobilities	24
24	Each organisation has completed the second mobility flow of the students	WP5	1-OMNIA	Grant Agreements, Training Agreements + certificates of the completed mobilities	36
25	Pedagogical influence study for all participating students	WP5	1-OMNIA	Questionnaires and feedack in them	37

Milestones					
<i>Grant Preparation (Milestones screen) — Enter the info.</i>					
Milestone No	Milestone Name	Work Package No	Lead Beneficiary	Means of Verification	Due Date (month)
26	1st Quality Report	WP6	4-SEPR	Production of the report	9
27	2nd quality report	WP6	4-SEPR	Production of the report	16
28	First External evaluator's report	WP6	4-SEPR	Production of the report	24
29	3rd Quality Report	WP6	4-SEPR	Production of the report	22
30	4th Quality Report	WP6	4-SEPR	Production of the report	28
31	5th Quality Report	WP6	4-SEPR	Production of the report	34
32	6th Quality Report	WP6	4-SEPR	Production of the report	40
33	7th Quality Report	WP6	4-SEPR	Production of the report	47
34	Second external evaluator's report	WP6	4-SEPR	Production of a report	48
35	Setting up local networks of stakeholders for dissemination purposes	WP7	1-OMNIA	Newsletters for stakeholders in all partner countries translated in each partner language every 6th month	12
36	National Dissemination events	WP7	1-OMNIA	Timing: between the months 40-46; All partners arrange two dissemination events in their own country, target: 20 participant/event, telling about project's outputs and their usability in VET-education and in reskilling business employees; target groups: VET-policy makers, industry representatives and VET teachers in automotive engineering field	46

LIST OF CRITICAL RISKS

Critical risks & risk management strategy			
<i>Grant Preparation (Critical Risks screen) — Enter the info.</i>			
Risk number	Description	Work Package No(s)	Proposed Mitigation Measures
1	Delay of activities and work plan: low probability Despite the drafting of work plan and the balanced workload distribution, some of the project activities can be delayed or not completed, due to reasons that can be external (war or new pandemic) or internal to each partner organisation	WP4, WP2, WP3, WP5, WP7, WP1, WP6	The regular control of the work plan will be crossed with the quality control plan and discussed in every Steering Committee meeting (every 6th month). Project's collaborative output development events 5-6 every 5th or 6th months will also act as concrete checkpoints for project progress as scheduled.
2	Weak commitment in project activities by business partners: medium probability Business realities regulate the pact of work in companies and project work is not normal everyday-life-activity in them. It might easily be forgotten in case regular communication is not done with the companies during the project.	WP4, WP2, WP3, WP5, WP7, WP1, WP6	Companies are involved in the project activities throughout the project and their role has been clearly defined and agreed already in the application phase. They will attend skills-gap-analysis, contribute project output development work with technical data and expertise knowledge. Project representatives will participate in collaborative project output development events every 6th month and host students mobilities in two flows, during the second and third project years. They will also participate in the national projects output dissemination events.
3	Project duration is long and vehicle technologies develop very quickly all the time: medium probability For instance, the main raw material of electric batteries might change in few years from lithium-ions into salt, which has far less fire risks and is more environmentally friendly material in batteries, although at the moment there is no commercial ones for sale yet. It might happen that some output is soon outdated after the project ends.	WP4, WP3	Consortium partners' triangle co-operation is the tool to enable quick reaction for changing conditions in the technical development work. VET-teachers and industry + research representatives will continuously update their know-how about becoming changes in the field and help each other. Project outputs will be developed in digital mode and changes in details can easily be made throughout the project on the project output development platform.
4	A lot of essential technical information is protected and confidential at different vehicle brands' databases; therefore maybe not accessible for development teachers; medium risk It might be challenging to gain access to all needed information	WP4, WP3	We emphasize our company partners about VET-providers intention to collaborate, not compete with companies and are non-profit organisations. Project is implemented to help companies by developing project outputs, which serve companies present employees and guarantee them skilled employees in future.

Critical risks & risk management strategy			
<i>Grant Preparation (Critical Risks screen) — Enter the info.</i>			
Risk number	Description	Work Package No(s)	Proposed Mitigation Measures
	for the study module development work. For instance, hydrogen technology is in its infancy phase, which means that development steps are highly protected by vehicle companies from each other and competition between them is hard. The protection of essential data might also hit in co-operation with VET-providers.		By including companies into project activities throughout the project, the consortium makes sure, they are aware of project progress and value for them and want to support the project work rather than prohibiting it.
5	Difficult to find financial sustainability oafter the end of the project: Low probability	WP7	<p>1. Omnia, as the coordinator of the project, will commit in investing 5000 euros to guarantee the sustainability of Auto-Cove 2.0 project even after it has been completed.</p> <p>2. Project's VET-partners will arrange dissemination events for external companies and VET-providers even after the project lifetime and charge of them, to make these stakeholders aware of the project outputs and whre the find and use them for free. This guarantees the financial sustainability of the project. (Partners have experience that these kinds of courses are demended by work life and it is not difficult to attract participants in them.)</p> <p>3. Electude International, which creates and maintains the project development (and after it is completed) and dissemination platforms, has committed to maintain and update the project platform for five years after the project ends. This guarantees the access for project outputs for five years after the project is completed.</p>
6	Staff turnover: medium probability This risk must not be underestimated, especially for the long duration of the project. Staff turnover could affect the quality of the project, in terms of continuity, time management and knowledge transfer.	WP4, WP2, WP3, WP5, WP7, WP1, WP6	<p>Each organisation names project teams, whose members have a stable position in the organisation. The steering committee consists of administrative project managers and development team manager from each organisation to guarantee the sustainability of knowledge transfer and update of project progress all the time at all levels.</p> <p>In general, all organisation members that are taking part in the project will be updated about project progress and are able to replace absent colleagues in a timely manner, without wasting too much time on handovers.</p>
7	Poor administrative and financial management: Low probability Report submissions, regular financial control, quality monitoring and control activities	WP4, WP2, WP3, WP5, WP7, WP1, WP6	Financial controls and partners' report on the expenditures are asked every 3rd month. If some partner cannot perform according to the budget received, the coordinating partner will propose a redistribution of budget to be approved by the majority of partners.

Critical risks & risk management strategy			
<i>Grant Preparation (Critical Risks screen) — Enter the info.</i>			
Risk number	Description	Work Package No(s)	Proposed Mitigation Measures
	will help the coordinator to detect inadequate budget management by one or more partners.		
8	Withdrawal of a Consortium partner: low probability Due to internal reorganisation of external factors a partner could find itself in the position of abandoning the project.	WP4, WP2, WP3, WP5, WP7, WP1, WP6	The consortium is composed of very reliable and committed partners. All of them have already led Erasmus+ projects. If one of them was forced to withdraw for case of force majeure, we would then use all partners already existing international networks to find a new one. Each VET-provider has several technical partners also outside Auto-Cove 2.0 consortium.



Erasmus+ Programme (ERASMUS)

Application Form

Technical Description (Part B)

(ERASMUS Standard Budget-based + LS Type II)

Version 1.0
25 February 2021

Disclaimer

This document is aimed at informing applicants for EU funding. It serves only as an example. The actual web forms and templates are provided in the Funding & Tenders Portal Submission System (and may contain certain differences). The applications (including annexes and supporting documents) must be prepared and submitted online via the Portal.





IMPORTANT NOTICE

What is the Application Form?

The Application Form is the template for EU grants applications; it must be submitted via the EU Funding & Tenders Portal before the call deadline.

The Form consists of 2 parts:

- Part A contains structured administrative information
- Part B is a narrative technical description of the project.

Part A is generated by the IT system. It is based on the information which you enter into the Portal Submission System screens.

Part B needs to be uploaded as PDF (+ annexes) in the Submission System. The templates to use are available there.


How to prepare and submit it?


The Application Form must be prepared by the consortium and submitted by a representative. Once submitted, you will receive a confirmation.

Character and page limits:

- page limit normally 40 pages for calls for low value grants (60 000 or below); 120 pages for all other calls (unless otherwise provided for in the Call document/Programme Guide)
- supporting documents can be provided as an annex and do not count towards the page limit
- minimum font size — Arial 9 points
- page size: A4
- margins (top, bottom, left and right): at least 15 mm (not including headers & footers).

Please abide by the formatting rules. They are NOT a target! Keep your text as concise as possible. Do not use hyperlinks to show information that is an essential part of your application.

 If you attempt to upload an application that exceeds the specified limit, you will receive an automatic warning asking you to shorten and re-upload your application. For applications that are not shortened, the excess pages will be made invisible and thus disregarded by the evaluators.

 **Please do NOT delete any instructions in the document. The overall page limit has been raised to ensure equal treatment of all applicants.**



TECHNICAL DESCRIPTION (PART B)

COVER PAGE

Part B of the Application Form must be downloaded from the Portal Submission System, completed and then assembled and re-uploaded as PDF in the system.

Note: Please read carefully the conditions set out in the Call document Programme Guide (for open calls: published on the Portal). Pay particular attention to the award criteria; they explain how the application will be evaluated.

PROJECT	
Project name:	Auto-Cove 2.0
Project acronym:	Auto-Cove 2.0
Coordinator contact:	Elina Kollanus; Omnia, the Joint Authority of Education in Espoo Region

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PROJECT SUMMARY

Project summary (in English)

See Abstract (Application Form Part A).

1. RELEVANCE

1.1 Background and general objectives

Background and general objectives

Please address all guiding points presented in the Call document/Programme Guide under the award criterion 'Relevance'.

Describe the background and rationale of the project.

How is the project relevant to the scope of the call? How does the project address the general objectives of the call? What is the project's contribution to the priorities of the call (if applicable)?

1. Background and rationale:

Auto-Cove 2.0 consortium **combats on its own behalf on climate change** by developing the European Education and Training Area in Vehicle Sector of VET towards greener innovations. Automotive Engineering field employs 14.6 million people in Europe and the whole field is in the middle of a huge change of technologies. The vehicles produced need to comply with several environmental standards and there is a huge push in the sector towards modern technologies with less environmental impact. The existing curricula in VET schools and the training provided by the VET sector in Europe does not cover the subjects necessary to keep up with the emerging technologies as far as upkeep, maintenance and repair of the vehicles already on the market and in use by the general public.

The automotive industry is constantly developing new modes of transport that use renewable energy. New innovations and fuel technologies require a new kind of expertise in the automotive industry. This also requires a reform of vocational training. There is currently an urgent need to reform vocational education and training in the automotive sector, as skills for servicing electrified (including electric and hybrid vehicles) and hydrogen vehicles are increasingly needed. There is real risk for more than one million employees or new graduates in the field in Europe to stay unemployed in case the content of vehicle sector training or upskilling of already working mechanics is not implemented.

Additionally, the current radical changes in European safety situation, has made all alternative energy sources and steps for their actual implementation even more crucial for all project countries, especially those with dependence on the traditional fuel from other countries. This concerns 5 out of seven consortium partners (Finland, Estonia, Latvia, Lithuania and Germany) in Auto-Cove 2.0 project.

According to Politico.eu Lawmakers in European parliament voted in June 2022 to mandate that all new car and van sales should be zero emissions from 2035 as part of efforts to clean up road transport. The legislation is a key part of the Fit for 55 package and mandates that carmakers should reduce their fleetwide emission averages by 100 percent from 2035, with interim steps in 2025 and 2030. These decisions accelerate car users' transition towards electrified and hydrogen vehicles.

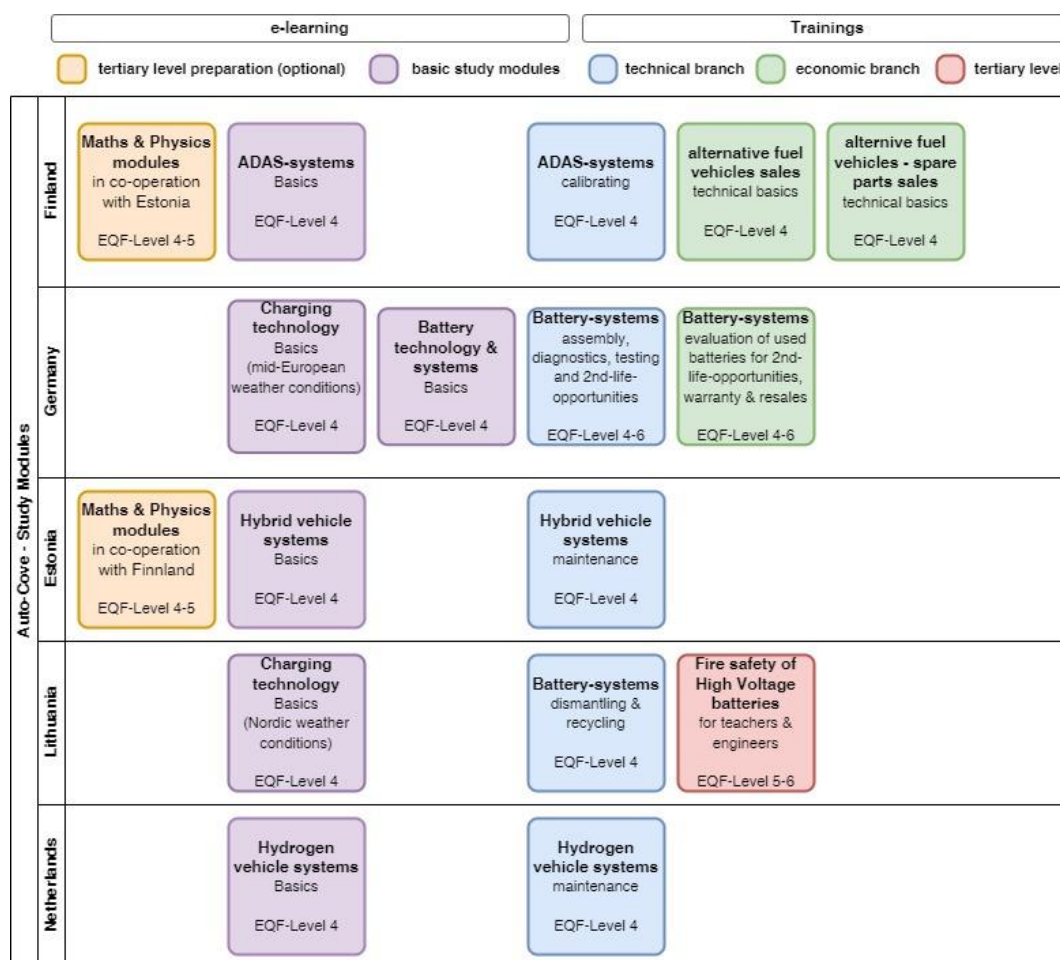
To respond this challenge, Auto-Cove 2.0 consortium develops innovative study modules and training courses of alternative fuel vehicle service and sales **on three EQF- levels in this project: 4, 5 and 6.**

- study modules for technical and business students in **EQF-level 4**
- Training courses for vehicle engineer students at tertiary level: **EQF-level 5**

- Training courses for Vehicle field teachers at vocational colleges and universities of applied sciences. The same courses will be used for upskilling already working workshop leaders, car mechanics and vehicle sales and spare parts salespersons in vehicle industry in all seven partner countries (EQF-levels 4, 5 and 6).

In the graph below there are Auto-Cove 2.0 main project outputs divided between EQF-levels and contents and on the other hand classified into country clusters, which are responsible for leading their development in collaborative development workshops. The below named country clusters lead each named project output development, but the development work is done in collaborative development method, which is enhanced with 5 one-week-workshops between developer institutes and piloting institutes in Latvia and France. **These are study modules for curriculums of students and in addition to them, the consortium will produce 10 training courses (2 days each) for teachers and company representatives about the same themes.**

Figure 1: Leaders and contents of the main project outputs



a) Link to policy:

The key objective for Auto-Cove 2.0 project is stated in the Council Recommendation on VET: "High quality and innovative vocational education and training systems provide people with skills for work, personal development and citizenship, which help them to adapt to and deliver on the twin digital and green transitions, to cope with emergency situations and economic shocks, while also supporting economic growth and social cohesion. Thereby providing them with skills that help them get or create jobs in demand on the labor market", is the key project objective, for which Auto-Cove 2.0 project replies.

Auto-Cove 2.0- project follows **Council Recommendation on VET** by upskilling presently studying vehicle mechanics, vehicle and spare parts sales students and vehicle engineering students. It will also reskill already working VET-teachers on both secondary and tertiary levels and already working vehicle mechanics, vehicle salespersons and vehicle engineers in the industry. The main principle of the project output development work is to adapt vehicle field education to meet labour market needs: to modify the curriculums of vehicle sector and even business sector students to fill skills gap in the sector. Therefore, students need to learn, how to service also alternative energy vehicles and their driver safety (ADAS-) systems. There is very little or no this kind of content in present curriculums in vehicle field in partner countries.

All the developed study modules will be developed in digital form and gamification tools will be utilized to make them easily accessible and attracting. Therefore, both: the development work of study modules and training courses will enhance **digital skills** among both teacher groups: the ones, who develop the content on the dissemination platform and the ones, who use them, after they are completed and disseminated. The new study module and training course content is based on recent research and newest clean-tech vehicles know-how, which means that each of them is truly innovative.

Auto-Cove 2.0 project is also a **green** project, because it supports the transition towards cleaner energy sources in vehicle field. Training competent specialists who have the relevant skills will provide security for the end used or the vehicles. It will provide secure feeling to ordinary car users to make the decision to start using clean-tech-vehicles, when they know, that there will also be service available, once it is needed. Now the lack of competent electric vehicle mechanics causes several months queues for instance in Finland.

The objectives of this project are in line also with the **European Green Deal Communication strategy**, because this project also focuses on strategy's central points:

- investing in environmentally friendly technology
- supporting innovation in the industry
- facilitating transition to cleaner, in the long run also cheaper and healthier private and public transportation forms.

Sustainability – a green link in VET is also one of four areas, on which **Osnabrück Declaration** focuses for the years 2021 to 2025. It is completely in line with Auto-Cove's main project objectives.

Auto-Cove –project also supports high quality and innovative vocational education and training systems, as it is recommended in **Council recommendation on VET for sustainable competitiveness, social fairness and resilience**. Osnabrück declaration "Pact for Skills" summarizes the key aspects outlined in 4 strategic documents of the EU: 1) **European Skills Agenda**; 2) **European Industrial Strategy**; 3) **the Digital Education Plan 2021-2027** and the **European Green Deal**. Auto-Cove 2.0 will address all the four key aspects outlined by the Pact for Skills:

1. Promoting a culture of lifelong learning for all: The project activities will involve both learners and professionals. There will be young people attending courses for a qualification at level EQF 4 and 5, but training courses will be directed to vocational teachers and industry representatives also on EQF-level 5 and 6. Already during the project company representatives will be invited to participate in the training courses at the VET-institutes to upgrade themselves in at least 5 of the project countries.

This project also enhances modularising Vehicle sector's VET programme and expand it to higher level of qualifications. Auto-Cove consortium also increases attractiveness of Vehicle sector's VET for learners and companies by providing up-to-date high technology education and increased internationalisation opportunities in the form of mobilities for staff members and vehicle students. With staff members we mean both: teachers of vehicle technology in partner institutes and co-operation company representatives to upskill their know-how in greener vehicle technologies in partner institutes in The Netherlands, Finland, Estonia, France, Latvia, Lithuania and Germany.

International mobilities for staff and students are an integral part of the project activities as the technology and the technological education does not know country borders. The technology is and will be used EU wide and therefore the project aims to provide relevant education opportunities to students from all consortium countries to have access to equal training opportunities. The equal opportunities in training will be reflected in equal service standards and employment opportunities for graduates in all countries.

2. Building strong skills partnerships: this principle is already well reflected by the composition of our consortium, bringing together different participants. Furthermore, the impact and sustainability activity will be strongly focused on building local networks of stakeholders, because there are several VET-institutes in seven project countries as associate partners both from secondary and tertiary levels' education for the project, which have promised their vehicle sector staff to:



- participate in the skills gap analysis
- receive the newsletters every 6 months of the project and follow the progress of the project
- participate in project output dissemination events as soon as they are arranged
- pilot the project outputs in their own institutes with their students.

3. Monitoring skills supply/demand and anticipating skills needs: the first phase of the project will consist of mapping the skills needs of the vehicle companies and VET-institutes. This will be done through a thorough study in all the participating countries at the very beginning of the project. Moreover, to ensure sustainability and have a constant feed from companies, the project has invited two representatives to the steering committee from the business life: First Steering Committee company member is the technical chief of Finnish central organisation of Motor trades and service. The Second Steering committee company member is a representative from the Dutch company Electude International. Also, the participating partner companies from vehicle field have promised to reflect the development of skills needs to the project key experts to be aware of real changes and needs of the sector.

4. Working against discrimination and for gender equality and equal opportunities: a special attention will be paid to young people with fewer opportunities such as: special educational needs and risk of marginalisation due to ethnic background. When recruiting students for project international mobilities in this project, in each student group there shall be at least one candidate from the rarer gender (in this case female) and at least one candidate from different nationality from the main nationality of the country or one candidate with some special needs due to his/her background or from a challenging socio-economic background. Whenever possible such students will be included in the project activities.

In the Council recommendation the objective is that 60 % of recent graduates from VET benefit from exposure to work-based learning during their vocational education and training and 8 % of learners will benefit from learning mobility abroad. In Auto-Cove 2.0 consortium all partners include work-based learning as an obligatory part of the vocational qualifications and there will be 54 student mobilities on secondary and tertiary level VET in Auto-Cove 2.0- project, where car mechanic and vehicle engineer students will do their internship periods at vehicle companies in 7 partner countries. The length of mobility periods will vary from four to 18 weeks according to the possibilities of the sending and hosting organisations. The internships carried out during the mobilities will focus on the electric, hybrid or hydrogen powered vehicle maintenance in line with the project objectives. Partners will confirm the gender equality among student mobility participants by choosing students from both genders for mobility periods, when it is possible.

The partner companies in this project have already promised to host those mobilities in during this project. Auto-Cove 2.0 will enhance the sustainable competitiveness by internationalising consortium's students and staff (altogether 339 staff mobilities including steering committee meetings, collaborative development workshops, international conferences and as support persons for student mobilities) during the project but also after the four years, and by hosting Erasmus+ KA1-mobilities from other international partners in all technical fields.

b) Consistency

The Auto-Cove 2.0 project will respond to a common world-wide challenge to develop and update Vehicle Sector's VET content towards cleaner technologies. This must be done to enable world to shift from polluting petrol and diesel vehicles to less polluting, more environmentally friendly vehicles.

Due to European Green Deal Communication strategy, different vehicle manufactures have started a quick and wide development and production of vehicles powered by alternative energy. The development and clean-tech-vehicle marketing have progressed at shocking speed and the results are already seen in all European countries: The sales of different clean-tech vehicles has started to raise, year after year. At the same time, it seems that very few have thought we also need to adjust the vehicle service personnel know-how and sector's VET education to meet the needs set by developing and deploying these emerging technologies.

Five years ago, most of the vehicles that had to be repaired at different workshops or bigger garages, were mainly gasoline or diesel driven vehicles. Nowadays more than 1/5 of them are already alternative energy vehicles and the amount is raising all the time. At the same time the education of vehicle mechanics and vehicle engineers has changed very little.

There is huge need for this kind of educational development work, which would be based on present needs from vehicle workshops and vehicle sales. For instance, Omnia's cooperation company



representatives at Volvo Finland have reported that 47 % of its vehicle sales already in 2020 was consisting of electrical vehicles in Finland and it means that we need more mechanics, who can service and repair their different electrical systems and technology. Present curriculum in vehicle sector focuses mainly on skills and knowledge needed for servicing traditional diesel and petrol driven cars and offer very little content of servicing vehicles with other power sources. For instance, in Finnish vehicle sector curriculum there is **only one study module of vehicle electricity, none of charging systems, ADAS systems, hybrid systems or hydrogen systems**. In Germany there are training courses for electric vehicles at different stages and even for old and experienced car mechanics. In Estonia hybrid systems in vehicles are taught as an optional study module. Required skills of a car mechanic will change gradually. Mechanic skills will become less but skills in electricity, sensor techniques and even networks will increase. Therefore, VET-educators and companies have to be prepared to educate and employ skilled modern vehicle mechanics and engineers.

The Finnish Central Organisation for Motor Trades and Repairs (AKL), an industry association representing car retailers and repair shops in Finland, is an associate partner of the project. The head of technical development in AKL expressed need of this project by saying: **“There is not becoming a huge change in technologies in the vehicle field, but we are already in the middle of it, and it means that this kind of European-wide co-development work is a pure necessity”**.

Europe needs to address the issue with concrete efforts: Instead of each European country and vehicle brand separately responding to this **educational challenge**, it will be wise and more effective to combine vehicle teachers' and company experts' and researchers' expertise and experience in a few European countries to create new content together and disseminate it as widely as possible to other VET-providers and vehicle companies' service personnel as possible.

The development work will be done in transnational cooperation of nine 4-6 EQF-levels' VET-providers, five companies and a research centre. The Auto-Cove consortium forms a big European centre of Vocational Excellence with their vehicle teachers' and business experts' and researchers'. Each organisation has development tasks of their strongest know-how-element, which they lead, but will contribute and pilot each other's work during the whole project.

c) Innovation

It seems that Auto-Cove 2.0 seems to be the first Cove focused nearly entirely on the vehicle sector education. The starting point of the whole project development work has been the emergency raised by vehicle sector companies that they do not have enough competent work force to service clean-tech vehicles nor all modern vehicles driver safety systems. Auto-Cove 2.0 European VET-institutes have heard the plead and started to design this project to respond to pronounced need.

Auto-Cove 2.0 is innovative project on many levels.

Technical Innovation will be the biggest innovation in the whole project. All developed project outputs are containing new technical know-how, which has been gathered for entities to study from internet but most importantly from the technical databases of car manufacturers, which normally are unavailable for anyone not working in the company. This new innovative approach for VET-institutes to work in close co-operation with companies and gain the essential technical specifications from their vehicle databases has become possible only because the companies have understood that educational institutes cannot develop the sector's educational content unless they do not have access to the essential technical data.

Technical innovation is enhanced by Finnish Research Institute VTT smart mobility team to participate as a partner in this project. They and the German partner, FHWS TTZ-EMO's technical research institute inside the polytechnic of applied sciences, produce also technical data, which is utilized in the study module and training course development work.

Educational Innovation of the project is that project partners will develop innovative learner-centred teaching and learning methodologies with interdisciplinarity, digitalisation and internationalisation at the centre. This has been thought to increase the attractiveness of VET, increase the value of education to learners and make links between technical and general subjects (vehicle sector vocational ones, maths, physics and business subjects).

Consortium partners will work in triangle co-operation between secondary and tertiary level VET-organisations, research institutes and 4 vehicle companies. This co-operation is not only regional in each country, but also international between different partner countries and the same level educational institutes. A significant number of project participants will have opportunity to participate in staff mobility



in the form of collaborative development workshops and encourage students for international student mobility periods during the project.

Digital innovation in Auto-Cove 2.0 will be the way of producing and disseminating project outputs. The outputs will be produced firstly on Dutch company partner Electude International's technical e-learning platform, where a special project platform will be created for Auto-Cove 2.0 project. Quote from Electude International's European Regional Director Dimitri Ogg: *"Electude's mission is to create the best didactic solutions for vocational education. We are happy and honoured to be able to participate in a project as impactful as Auto-COVE. We strive to be both conduit and catalyst for the success of the project and its dissemination."*

To achieve even wider dissemination; the project outputs will also be published and disseminated secondly via OER commons- platform in English.

Electude, which has around 3400 active technical colleges as their main customer group in more than 70 countries, **uses gaming technology to teach technical students in the ways they learn best** while providing instructors with unique, time-saving tools and detailed group and individual analytics. Electude's role in this project is to promote digitalisation of VET-teachers and students in vehicle field and they have promised to:

- support the creation and maintenance of 1) Auto-Cove **development platform** and when project outputs are completed, 2) the main **dissemination platform**,
- train VET-teachers, while they create (upload) and make their materials interactive and online available,
- align materials to be topic- or thematical packages
- manage access of participation authors, editors and try-out participants
- prepare project content and end phase of development for wider dissemination.

All project outputs will be free for any end users for five years after the projects' lifetime.

d) Regional Dimension

The Auto-Cove 2.0 -project underlines different regions' smart specialisation strategies to boost growth and jobs in Europe, by enabling each region to identify and develop its own competitive advantages. Through its partnership, Auto-Cove 2.0 partners bring together local authorities, VET-providers on two levels, business spheres and civil society, working for the implementation of long-term growth strategies supported by EU funds. There is clearly recognized need for this kind of development work, which would be based on needs from working life and vehicle education.

Auto-Cove 2.0 will have an impact at the local and regional level in each partner country. Transition towards cleaner vehicles is in progress already at fast speed in all partner countries and it is also seen in their smart specialisation strategies. For instance, project coordinator Finland, has set up the transport system of tomorrow by focusing on developing smart cities. In SOHJOA-project (EU-funded), sustainable intelligent transportation solutions with electric buses have already been implemented. Auto-Cove 2.0 project will continue SOHJOA's project by promoting private mobility solutions towards smarter vehicles.

Omnia, the project coordinator is in Espoo, the capital area of Finland. Espoo City has published an objective to become carbon neutral by 2030. Espoo acts actively to combat climate change and to confirm versatility of nature. City co-operates with universities, research actors, innovation makers and business actors, whose carbon footprint is significant and reducing it will help to solve global climate challenge. The city is drafting a road map for combating climate change and to achieve carbon neutrality. The road map is based on Sustainable Energy & Climate Action Plan, SECAP and sustainable Espoo- programme. The main principles of the road map will be published during 2022.

Omnia Vocational College, as a sustainable college, has noticed that its automotive engineering department needs a strategic update towards more sustainable technologies, both in content of curricula and also in relation to tools and premises. Omnia is planning a new campus, called Clean-Tech Garden, where Omnia's new automotive engineering department will be built in the neighbourhood of the smart mobility research centre VTT, which is also as a partner in Auto-Cove 2.0 project. The intended tighter co-operation between educational institute, research centre and local vehicle field companies will act as example of a local level Cove in Finland.



All modern vehicles, despite of their propulsion sources, contain many advanced (digital) driver assistant systems, (ADAS) which help to drive safely. The service and calibration of the systems has become more and more common task in different vehicle workshops everywhere in Europe. There is no content of this aspect in VET curriculum now either. Therefore, Auto-Cove 2.0 Finnish coordinator Omnia, has decided to create a study module of ADAS-systems, which will not only enhance vehicle students' digital skills, but also respond to the skills-gap in this sector.

Estonian State will invest 55 MEUR into hydrogen infrastructure in 2022 - 2023.

Estonian national government is at this moment compiling the Hydrogen technologies strategic roadmap and in 2024 the hydrogen taxis will be operating in Tallinn. **Tartu, where our partner college is, has been selected as one of the 100 cities to become climate neutral by 2030.** Estonian Academy of Sciences has brought out a risk that there are not enough specialists in the hydrogen technology nor systemic knowledge in the field. This means that the initiatives in Auto-Cove 2.0 to develop modules for teaching electric and hydrogen powered vehicle repair and maintenance are of utmost important for the city, its schools and work force in the region.

Estonian Government has formed a Green Policies Special Commission (headed by PM) focusing on energy resources. All these measures prepare for less CO and Co2 emitting vehicles. Public transport will be the first one to be converted to climate neutral fuel and this means also Estonians need to start training specialists, who can maintain the growing number of such vehicles (weather electric or hydrogen powered) and because there is little about this technology in vocational curricula in vehicle field in Estonia and other partner countries, the development work must be started as soon as possible.

The project also supports Estonian partner: Tartu Rakenduslik Kolledž development strategy aims to provide flexible learning opportunities to support learner individuality and needs; lifelong learning opportunities correspond to labour market needs; learning space is open and contemporary. Tartu Rakenduslik Kolledž will lead the development work of study modules about hybrid vehicle service in Auto-Cove 2.0.

Winters in Northern Europe, where half of Auto-Cove 2.0 consortium partners (Finland, Estonia, Latvia and Lithuania) are from, have been increasingly snowy and cold. This causes pressure to develop special know-how of electrified vehicles and their charging systems in cold Nordic conditions. Last winter there were several months queues to electric vehicle services in these countries because of the apparent lack of competent electric vehicle mechanics in the sector. **The transition towards clean-tech vehicles will not progress unless this bottleneck of lack of competent work force in the service side is not tackled.** Lithuanian polytechnic partner will create a training course for VET education about electric vehicle charging systems in cold Nordic conditions in Auto-Cove 2.0 project. This will really come into need.

According to consulting and engineering organisation Arcadis study, Auto-Cove 2.0 mid-European partner country: the Netherlands becomes global market leader for electric cars. Even big mid-European partner countries: Germany and France were included in this study. There are many different electric vehicle models available in the Netherlands, and the market share of electric cars is outpacing that of gasoline and diesel cars. Electric cars are relatively affordable in the Netherlands, where there are currently 183 models for sale. The market share will grow to sixty cars per thousand people by 2025, says Arcadis. This country also has the most accessible infrastructure for charging electric vehicles with great potential to continue to expand into residential areas. An accelerated transition to electric vehicles, along with clean energy and battery technology investments, is critical to reducing emissions and limiting global warming but it also brings a worry with its speed: **the lack of competent vehicle mechanics for electrified vehicles even in the Netherlands.**

More than 40 percent of all cars newly registered in Germany between January and October 2021 came with an alternative fuel engine, the country's federal energy agency Dena said in its annual monitoring report. With 41.2 % of all cars having an alternative propulsion system, their share doubled with respect to the same period last year, when 21.8 % of new cars had no regular internal combustion engine. This means that more than one fifth of all sold new vehicles already last year in Germany were other than traditional gasoline or diesel driven vehicles. The boom of electric, electrified or hydrogen vehicle sales has not yet been followed with a similar boom of educating competent service personnel, unfortunately.

Auto-Cove 2.0 German partners come from Bad Neustadt, which is one of the electric vehicles' model cities in Germany. German partner institutes are the national experts in electric mobility solutions and will lead the development work of study module with topic of electric battery charging systems. This know-how will be in real need in all partner countries now.

Auto-Cove 2.0 French partner SEPR in Lyon is located in Auvergne-Rhône-Alpes. The region aims to become a national and even international reference for hydrogen mobility. For example, 80 % of French hydrogen companies are located in the region. 119 stakeholders are currently working on this



topic here: 55 companies, 26 research labs, 8 local authorities. The region receives European funds for that, through the Connecting Europe Facility (CEF).

The region has a big project called 'Zero Emission Valley', supported by the former minister of ecology, which aims (within 5 years) to:

- Create 20 hydrogen stations
- Have a fleet of 1000 hydrogen vehicles
- Replace 4.3 million litres of diesel
- thus avoiding 13,000 tons of CO² emissions.

These regional strategical development objectives make also SEPR's participation in Auto-Cove's project work important. That's why SEPR is eager to pilot and later implement especially hydrogen-related, but also all other study modules, developed in the Auto-Cove 2.0 -project.

Due to the big soar in sales of electric and electrified vehicles, there has raised a new worry in the market: lack of lithium. Lithium is the essential and necessary raw material in production of lithium-ion-batteries for electrified vehicles. Although there is plenty of lithium in the world, the mining operation and process technology have not been able to follow the pace of the quickly raised phase. Emerging Tech Brew writes in its article that it has been estimated that annual production of lithium by 2030 will stay from 455 000 to 1 700 000 tons below the demand.

This fact causes the **need of recycling lithium**. Now the know-how of dismantling and recycling electric batteries is very little. Therefore, Auto-Cove 2.0 Lithuanian partner Kaunas Technical Vocational Education centre will lead the development of study module of this topic in the project. By recycling lithium, the transition towards clean-tech vehicles will be smoother and quicker. This also enhances Cove call's sustainability objectives.

Auto-Cove Consortium also follows the alternative raw material use in electric batteries: salt. British and Chinese Scientist have developed a QSS -battery for electric vehicles and used salt as the main ingredient to design a new kind of rechargeable battery that could expedite the transformation to a greener transport on the roads. In case something commercial appears out of this development work during Auto-Cove 2.0 project's lifetime, it would be delighting news, because of the big fire safety issue of lithium batteries. The new QSS-batteries could be charged with the same technology as lithium-ion-batteries, which could really accelerate their use in vehicle industry.

e) Cooperation and expertise in partnership:

There are seven vocational secondary level institutes, 3 universities of applied sciences (one with a research centrum), a national research centre and four vehicle field companies included in Auto-Cove 2.0 consortium in 7 European countries.

All partners are anchored at both local and international levels. This partnership shows a strong co-operation between different education level providers, a research institute and vehicle sector companies.

FHWS, a technical polytechnic in northern Bavaria, Germany, is running its research center TTZ-EMO in Bad Neustadt. It cooperates with Jakob Preh Schule on state-of the art technology teaching in the field of electric vehicles and charging systems in the Auto-Cove project. FHWS will also do research, development and trial-runs on what kind of laboratory training courses, kits and methodologies are needed and best suited for VET in this project. Finnish VTT, national appreciated research centre has a smart mobility team, which will participate in Auto-Cove 2.0 project. Both research organisations form a strong and experienced research alliance to implement Skill-gap-analysis and produce needed technical data for the development work of the project.

Project partners have been chosen according to their expertise fields in automotive engineering and in EU-project world.

Finnish Omnia is an expert in ADAS systems and has also over 15 years' experience about international development projects. Lithuanian University of Applied Sciences is an expert in High Voltage Batteries' fire safety studies and has also long-term EU-project expertise. Tartu Rakenduslik Kolledž is expert with Toyota Baltic AS in hybrid technologies and have extensive network of international partners in several EU-projects. They also have second time a VET-charter for their mobilities and will create a study module of hybrid technology in vehicle field. They work in close co-operation with Estonian Institute of Forestry and Engineering in Life Sciences university of Applied Sciences. Despite creating together hybrid technology study modules Estonian partners create together with Finnish Omnia the pathway study

modules of mathematics and physics for secondary level students, who want to continue their studies at tertiary level in technical fields.

German institutes are national experts in electric mobility solutions and due to their know-how, Bad Neustadt, where they are located, has been named as a model city of Electro Mobility in Germany. Koning Willem I College knows most of our partners about hydrogen technologies, because the Netherlands is one of Europe’s few Avant Garde-countries in Hydrogen technology (after Germany and France). Electude International is specialized in vehicle field’s e-learning solutions and support all study module development key persons to create the new study modules directly in digital form.

All partners represent different expertise areas, which all together form a wide modern technology area in sustainable and green vehicle technologies. All seven partners in development work have selected their fields of the development work and will utilize already existing and constantly updated expertise and experience from former development and project work as a solid foundation for their work. Each of them leads development work of at least one study module with enriching aspects and comments from other partners and receive access altogether to all developed study modules. With shared international expertise and co-development work we upskill and empower each other. Together we are a lot more.

Figure 2: Different country clusters and their expertise in the Auto-Cove 2.0 consortium:





The Auto-Cove project relies on already existing regional and international collaboration among the partners. Omnia and its teachers have done long-term project and/or mobility co-operation with some of the project institutes: Tartu Rakenduslik Kolledž, Kaunas Kautech, Jakob Preh Schule, Koning Willem I College and SEPR in France. At national level Omnia has also had development projects with associate partner Metropolia, the Finnish University of applied Sciences and VTT, Technical Research Centre of Finland. Tartu Rakenduslik Kolledž has earlier co-operated with Latvian VET-provider: Ventspils Technikums college. Jakob-Preh-Schule has co-operated earlier with Omnia and with regional partners; the FHWS, TTZ-EMO in Bad Neustadt and company Preh. Preh has also hosted Omnia students during their international mobilities in Germany.

What comes to company co-operation: Both German VET-providers at secondary and tertiary levels have co-operated with Preh company, Omnia has co-operated with Volvo, Tartu Rakenduslik Kolledž has cooperated with Toyota Baltic and Koning Willem I College, Omnia and Jakob Preh Schule had cooperated with Electude International.

Electude International is a special company, which supports e-learning and produces e-learning material in vehicle sector. Electude's e-learning leads the world with solutions for light vehicles, heavy vehicles and system technologies. It is the brainchild of two automotive entrepreneurs, while still at university, recognized that today's technical students are visual and kinaesthetic learners, more suited to using their hands and eyes than to reading textbooks. Headquartered in the Netherlands with offices worldwide, Electude continues to introduce new curricula to help students reach their potential. In the Auto-Cove project Electude's role is to guide vehicle sector teachers to create the developed transnational study modules directly in the digital form on Electude's e-learning platform using their technical support and e-learning tools. **In this way Electude will act not only by providing project output development platform, but also as a strong developer of consortium all partners' teachers' digital and technical skills.**

These readily existing cooperation clusters have been included in this project to guarantee co-operation's value and sustainability also in future.

In addition to full project partners, there are 14 associate partners, who have committed themselves into clearly defined roles to participate the skills gap analysis, follow the project progress, test and pilot project outputs and disseminate them in their own sectoral networks. They are described in more details later.

f) European added value:

Auto-Cove project will gain added European value by combining 15 project partners' different expertise in vehicle field and develop totally new content for vehicle sector's VET-education together. There are 14.6 million people working in automotive sector in the whole Europe and **over one million of them can lose their jobs because of technological revolution in automotive sector from traditional gasoline and petrol driven engines towards electrified and hydrogen-driven vehicles.** There are also thousands of students, studying to become car mechanics and vehicle electricians, who do not have enough up-to-date content in their curriculums to qualify as skilled mechanics as needed in working life at the end of their studies.

European added value can be described at four levels:

A) At individual level:

- Learners will gain up-to-date education in vehicle field and it would help them to receive employment after graduation.

- Vocational teachers in vehicle sector, already graduated mechanics and service managers, insurance damage controllers and vocational students in project countries will get an opportunity to upskill their expertise better to respond working life needs in vehicle sector and vehicle insurance field.

- Staff mobilities for car industry representatives and vehicle teachers in VET-sector both on secondary and tertiary levels' VET-education.

- Student mobilities: both secondary and tertiary level vehicle sector students: car mechanic students and vehicle engineer students will do pilot mobilities from each partner country during the project in project's partner companies and learn new vehicle technology there. Secondary level student mobilities will be 4 weeks' and tertiary level student mobilities 18 weeks' mobilities.

**B) At institutional level:**

This kind of high-tech development work for a new vehicle sector qualification promotes all partners institutes' profile both locally, regionally and internationally. Instead of developing new contents in vehicle sector's VET-education alone, each partner uses its strongest know-how in development work and creates different innovative content for six new curriculum modules. Sharing expertise, contributing each other and using everyone's best know-how will multiply the results of development work in comparison with every institute and country working alone. The common sustainable goal of this project is totally renewing the vehicle mechanics' qualification in partner countries by 2030. First it will include both: study modules of servicing traditional internal combustion engine vehicles and study modules of servicing new, modern clean-tech vehicles. Later, in case traditional vehicles will be totally forbidden, a totally new vocational qualification of clean-tech vehicle mechanics, will be developed.

C) At Regional level:

The overall objective of Auto-Cove project is to develop and bring together future mobility actors in regional and international ecosystem. These actors represent educational VET-providers, sectoral business representatives and research centres.

Auto-Cove 2.0 consortium has invited 2 VET-institutes from each partner country as their associate partners. 15 associate VET-partners will participate in the skills-gap analysis with their vehicle sector and vehicle sales teaching staff, follow the project progress by receiving regular newsletters and participate in dissemination events after all project outputs are completed. They have also promised to pilot the project outputs in their own institutes after having participated in the dissemination events. By participating project in this extensive way, they enhance the regional impact of Auto-Cove 2.0 significantly.

The developed transnational study modules and training courses will be created directly on the e-learning platform using e-learning tools from an international Dutch company Electude International. Electude is specialised in e-learning solutions for vehicle sector and most of its customers are vehicle field VET teachers in 70 countries. Electude has promised that access to the developed study modules will be free for all interested stakeholders also for five years after the project lifetime and Electude will host the platform for these study modules altogether nine years (four years during the project + 5 years after the project is finished). Developed study modules will also be published on OER-commons, an open resource library for learning and teaching materials and also on national OER-platforms, if applicable. One such repositories is Finnish aou.fi; the Library of Open Educational Resources, which was created in 2019. When contacted, the Finnish representant promised to publish vehicle field's study modules in their public digital library when completed, because there is no new content from modern vehicle technology education yet.

D) At systematic level

To ensure the **systemic level** of impact in the project, Auto-Cove 2.0 consortium invites national VET-policy makers and curriculum developer's (either National agencies or ministries of education) as associate partners for the project. Their role would be to follow the progress of the project via newsletters and stay aware of the development work, done in the project. **By including them as associate partners would enable to effect directly into the contents of national vehicle field's curriculum, its content and structure with newly developed study modules and training courses at the end phase of the project.**

g) Internationalisation:

The Auto-Cove partners aims at structuring a solid international collaboration among 10 VET-providers (7 secondary level ones and 3 tertiary level ones) and their 4 partner companies to create research tool to make a skills gap analysis by listening to the educational needs for vehicle sector from

- a) the industry representative in vehicle sector and
- b) vocational vehicle teachers on both secondary and tertiary level VET.

With skills-gap analysis the Finnish VTT and German Polytechnic FHWS research institute TTZ-EMO provide needed data for the basis of study module development work. Project outputs will be developed in solid co-operation with all educational VET-institutes in the project, but each topic will have one responsible institute leading its implementation.

After each larger output is completed, its content is piloted by both: 2 vocational teachers and 2 industry representatives from each corresponding partner (=28 staff members in the consortium). Piloting events



will be altogether 5 teaching and training weeks; around once a project year in five project countries to pilot developed different contents of modern sustainable vehicle technologies, meaning 5 times 28 one-week-staff-mobilities= around 121 staff mobilities for piloting events.

International dissemination for project outputs will be assured via Dutch Electude, which is a full partner company in the Auto-Cove project. It has an international e-learning platform with content of light vehicles, heavy vehicles and system technologies. The platform has vehicle field's VET teachers as customers from 70 countries worldwide.

Auto-Cove's project results will be disseminated also via two international conferences, which will be held in Latvia and Germany during two last project years (in 2026 and in 2027). To attract as many interested specialists in vehicle sector as possible, these conferences will be held in connection of two big annual vehicle field trade fairs: Riga International Motorshow and one of Germany's big trade fairs, maybe Automechanica Frankfurt, which is world's leading trade fair in vehicle sector.

h) Digital skills:

The most direct part of digital skills will be in technical WP3 and WP4, where we develop transnational study modules and training courses. All project outputs will be developed by using digital tools, provided by partner company Electude (specialised in e-learning solutions) and in the guidance and with support with Electude's e-tutoring specialist. Electude platform, where all project outputs will be developed, published and disseminated, **uses gaming technology to teach technical students in the ways they learn best**, while providing instructors with unique, time-saving tools and detailed group and individual analytics. This way the chosen developed method and platform will enhance target groups' digital skills:

- developer teachers' skills, when they learn how to produce learning and teaching material by using digital gaming technology tools
- vehicle field students, who utilize the platform with their teachers after the project outputs are completed
- all external target groups, vehicle teachers and students in who will gain free access to all project's outputs on Electude's platform still 5 years after the project is completed. Electude solutions are available in dozens of languages and over 70 countries, which means that external target groups will be extensive.

Digital skills will also be developed among key experts: vocational teachers and polytechnic teachers, while they share their expertise and questions to each other during the project on Teams-platform, which will be created just for their communication.

All the electrical systems in vehicles, which belong for instance to WP 3: Advanced Driver Assistant Systems, are computer-programmed systems, and participants (both students and VET-teachers) developing and piloting ADAS- study module must learn, how to calibrate these systems to service and repair them.

All partners will use digital meeting tools for project's administrative communication. The consortium will have most of its meetings online via the Teams-meeting tool. There will also be created a project team in Teams, and important files of the project will be saved in the Auto-Cove's project Teams files.

i) Green skills:

Green skills are directly developed within the project activities, because all project results will directly support greener globe by developing automotive engineering and engineer students' education towards cleaner vehicle technology. This project would support greener vehicle technology education in future in all participating VET-centres and other secondary and tertiary level VET-centres, who will utilize this project's development work as foundation of the future national curriculum work in vehicle mechanic education European-wide.

Two study modules in Auto-Cove 2.0 project will especially emphasis sustainability of battery production and use of raw materials. One of them is about Battery-systems, where intention is to teach students and car mechanics to evaluate used batteries for their 2nd-life-opportunities, warranty and resales. Another study module will concentrate to teach students, how to dismantle and recycle electric batteries from cars.



Electric car manufacturers acknowledge that some degradation of batteries exists and that, even after all the performance recommendations are followed, the battery capacity is reduced by 20-30% in about a decade, so the maximum distance per charge significantly limits the car's usability and attractiveness.

During the 2–3-year warranty period for electric cars, it is necessary to change electric car battery cells from 8 % up to 13 % for various reasons. Typically, a battery pack for a modern electric car consists of 240 to 300 cells. If at least one or two defective cells occur in the block, the entire system stops functioning properly. When such defects are found, the entire element is replaced.

As a rule, batteries should be replaced after 7-10 years of use for smaller electric vehicles and after about 3 or 4 years for larger electric vehicles such as buses and vans. **Currently, only about 5 percent of lithium-ion batteries mounted in various electronics and other equipment (digital cameras, smartphones, remote control toys, etc.) in the world is recycled.** With the continued popularity of electric vehicles, waste from lithium-ion batteries installed in these cars will also accumulate. It is estimated that by 2030, there could be 11 million tons of used lithium-ion batteries.

Given the fact that the European Union has announced a green course strategy, the search for technological solutions for the recycling, recovery or refurbishment of hybrid and electric car batteries and their cells is particularly relevant in today's climate change context. This is an issue not only for all EU members, but also internationally. Efforts are being made in all countries to find solutions and implement technological solutions to minimize environmental impact and promote sustainable production and consumption. The maintenance, disposal and renewal of batteries and cells for electric and hybrid cars is one of the key issues for sustainable production and the reduction of environmental impact. Therefore, know-how about this issue is essential content of Auto-Cove output development work.

As already mentioned, Omnia is also planning a new campus, which main idea would be to support sustainability. Its name will be Cleantech Garden. According to the recent plans there will be a growing Future mobility ecosystem with focus on Future Auto House services, smooth mobility/transportation chains, new near-by logistics solutions/services, autonomous and shared vehicles, new fuels and their distribution network, electrification of heavy-duty vehicles, parking area for 200+ vehicles and related services. All in all, Cleantech Garden will bring together education, RDI and businesses in flagship sectors of Future Mobility services, Carbon Neutral Energy, Sustainable Food services, and Biomass based Circular Economy services.

Sustainability is well presented also in Auto-Cove project's Dutch partner institute: Koning Willem I College. It is one of the leaders in innovation, in promoting creative thinking and sustainability in the Netherlands. Last year (2020), the college was declared to be the most sustainable VET-institute of the Netherlands. As no other institute the Koning Willem I College facilitated experts in the field of sustainable development, world citizenship, international affairs, creativity, and culture to support teaching, learning and modelling the learning environment. There is a hotspot for Innovation called the School of the Future at Koning Willem I College.

At KW1C more and more sustainable development goals are incorporated into the training programs. Due to European projects on renewable energy, environmental ethics, cradle to grave, integral care systems, green canteens and greening of the curricula now the KWIC college provides the most sustainable trainings of the Netherlands (for instance in hospitality and in techniques). More and more other institutes follow. The European projects really helped to facilitate the implementation and the college shows the effect was tremendous not only in the college but also at other institutes in the Netherlands. At the college the website www.duurzaambo.nl is hosted and taken care of. This website contains a huge amount of information about sustainable development in VET, the SDG's, the whole school approach, sustainable school management etc. Also, the site provides a free course on this issue which is used a lot in the Netherlands. The site now has more than one million hits.

Other Auto-Cove project partners will learn to benchmark each other's best sustainable solutions, not only while developing new study modules for vehicle sector, but also while networking with each other and visiting in each other's institutes and seeing and hearing the best practices in each institute.

j) **Social dimension:**

The Auto-Cove project will prevent any vehicle field student drop out, because of old-fashioned education, which does not any more respond to needs of working life. It will also reskill vehicle teachers at secondary and tertiary levels to be able to educate and equip their students with modern technology skills and thus prevent their unemployment.

Auto-Cove 2.0 project will add the attractiveness of Vehicle sector education in VET by supporting the transition for servicing alternative energy vehicles. It means **big concrete changes in the physical work**, the mechanics and engineers will do: In electric or hydrogen vehicles there will not anymore be need for

oil or oil filter changes or greasy and oily parts in the engine, which will need service or replacing. Electrical batteries will replace the gasoline tank and e-motor replaces the traditional combustion engine in electric vehicles and their understanding and servicing demand more and more IT-skills (like calibrating vehicles' advanced driver assistant systems, diagnosing and servicing faults with computers and learning different charging systems and technologies). This change will support also **gender equality to encourage even female applicants to apply to the sector**, which will guarantee sure employment for all competent mechanics and engineers, because they would be needed a lot more than they are available presently.

Student mobilities in the project will be implemented in 3 students' groups with and accompanying teacher at the beginning of the mobilities **to enable participation also for students with special needs**. Teachers ensure at the beginning of the periods that hosting company is aware of the special conditions of the students, who need extra care and observation and make sure that they will not be left alone, if there is need for assistance from safe adults. Students will help each other in their free time and during the weekends to cope with and relax after having spent their working days in exciting environments by speaking foreign language. Hosting partner's vehicle teachers and international staff make sure that students receive help and can travel back to their home countries safely in the end of their internships.

Students will be recruited for mobilities also from other ethnical backgrounds than the major nationality of the country is. To balance strong male share of the field and promote gender equality, at least one female student will be recruited in each mobility group of 3 students, if only applicable.

To enable vehicle field students' further studies in tertiary level, Auto-Cove 2.0 consortium will create acutely needed free extra coaching courses as pathway study modules also in physics and maths. According to polytechnic technical teachers in Finland, Germany and Estonia, secondary vocational students' skills in maths and physics are so weak that these skills often either cause them to interrupt their further studies at tertiary level or lengthen their study time in vain. This is because vocational qualifications contain only a few courses of these subjects while in theoretical upper secondary colleges there are provided in max 15-20 courses of the same subjects. To fill the skills gap and to ease vocational technical field students' studies at tertiary level, this kind of contribution is essential. Commercial coaching courses are available, but they cost from 300 to 600 euros and many students cannot afford them. This project output is especially directed for all technical students, who come from low-income families. Auto-Cove project's courses will be produced in digital form and translated in partner languages and will **act as useful tools and encourage any technical field secondary level students**, who want to go on their studies on technical tertiary level in any partner countries.

This project is inclusive, because all project products (study modules, teaching sessions and tutorial videos) will be created and published not in English but also in all seven project partner languages + in English. In this way the results of the project can be wider utilized in many European countries with the translated language versions to become a part of vocational training provision and qualifications. German and French versions alone have the potential to reach many students and teachers in vehicle sector in Europe. English versions also enable students with immigrant background to participate in teaching because English is often the first foreign language they learn and master when moving abroad and some of them have English as first or second language.

In addition to already mentioned participants, this project will meet working life's up- and reskilling needs in seven European countries and offer the developed curriculum modules and teaching videos for this target group, too.

1.2 Needs analysis and specific objectives

Needs analysis and specific objectives

Please address the specific conditions/objectives set out in the Call document/ Programme Guide, if applicable.

Describe how the objectives of the project are based on a sound needs analysis in line with the specific objectives of the call.

What issue/challenge/gap does the project aim to address? The objectives should be clear, measurable, realistic and achievable within the duration of the project. For each objective, define appropriate indicators for measuring achievement (including a unit of measurement, baseline value and target value).

There are 14.6 million people in Europe working in vehicle sector, including sales of vehicles, repair, and maintenance. For instance, vehicle sector employs 55.000 people in small Finland and 840.000 people in Germany. According to Reuters (which is referring to a study conducted in Germany by Fraunhofer Institute of Industrial Engineering in 2018), transition to electrified vehicles threatens loss of jobs from 75.000 workers alone in Germany. If the percentage is the same in all European automotive workers, this would mean **over one million job losses in European-wide scale**.

Job losses will be due the qualitative changes of the work. There will also be quantitative changes in the work, because the assembly and service of electric vehicles requires less work than vehicles powered by internal combustion engine. By some estimates, electric vehicles typically have fewer than half as many parts as vehicles powered by internal combustion engine and require 30 % fewer hours to build. Assembly of the components they do feature is more highly automated and electric vehicles require less maintenance. Electric vehicles don't need oil changes, meaning even less hours of maintenance.

Two years later, in 2020, Fraunhofer Institute published another study, where they concluded that digitalisation has a far bigger impact on job security in the automotive industry. **"The technology-driven qualitative changes in work will probably prove to be a greater challenge than the quantitative loss of work volume. While the quantitative changes can be managed in a socially acceptable way with foresighted planning, also due to the demographic development, the qualitative changes require a partly massive build-up of skills".**

The transition to electric vehicles also brings potential for new jobs: in electric battery assembly and software engineering, for example and yet-to-be-imagined opportunities that will come with the development of self-driving electric vehicles. **One big challenge is the quick digitalization of the field and the need of digital skills for the employees. Companies and educational institutes need now quickly react by reskilling their personnel to have enough vehicle field professionals to manufacture, service and sell electrified (meaning electric and hybrid) and hydrogen vehicles with complicated digital safety systems.**

"These exemplary findings can probably be applied to a large extent to the entire automotive industry in Germany and whole Europe. By way of example, the results of this study also suggest that the foreseeable qualitative employment effects of digitalisation - especially about the necessary development of skills in fields previously outside the industry - will necessitate a profound change in corporate cultures. Because due to the increasing share of networked IT services both in vehicles and in the context of mobility ecosystems, the entire automotive industry will be increasingly dependent on hiring interdisciplinary thinking and acting employees with the appropriate qualifications to meet customer requirements and secure its own competitiveness." (Fraunhofer, 2020, p. 11)

"The automotive industry is therefore challenged to test and establish new forms of intersectoral cooperation. It needs more open knowledge ecosystems and faster knowledge circulation. In a world characterised by increasing VUCA: volatility, uncertainty, complexity and ambiguity, innovative formats of cooperation between business, science and politics are also needed to secure jobs in the automotive industry. Another format that emerges indirectly from the findings of this study would be a National Transformation Centre for Sustainable Employment in the Automotive Industry, which would ensure that intersectoral cooperation along the value chain is strengthened, that forecast-based navigation through the transformation process is facilitated, and that a high-performance continuing education system is established" (Fraunhofer, 2020, p. 12).

Due to European Green Deal Communication strategy, different vehicle manufactures have started a quick and wide development and production of alternative fuel vehicles. The development and alternative fuel vehicle marketing have progressed at shocking speed and the results are already seen in all European countries: **The sales of different electrified and hydrogen vehicles have started to raise, year after year. At the same time, it seems that very few have thought we also need to adjust the vehicle service and sales personnel know-how and sector's VET into the new situation. One apparent reason for the lack of interest to invest in educational development in the field might be hard competition between different vehicle brands about market shares of modern vehicles. It has been an apparent technical challenge to develop well-working and cost-effective clean-tech vehicles to respond to the market's quick change, and the fact that somebody should be able to service and sell these vehicles and do periodical maintenances for them, has not raised up until this.**

Five years ago, most of the vehicles that had to be repaired at different workshops or bigger garages, were mainly gasoline or diesel driven vehicles. Nowadays more than 1/5 of them are already alternative fuel vehicles and the amount is raising all the time. At the same time the education of vehicle mechanics and vehicle engineers has changed very little. This means that very soon already every fourth vehicle, brought to the garage for service, uses different technology and safety systems than traditional fuel driven vehicles. It means that 25 % of vehicle mechanics should already now know, how to repair them and calibrate their safety systems. And the share will be increased every year.

To sum up needs; vehicle mechanics, engineers, salespersons, teachers and students in the fields need:

- more digital skills to calibrate and service different safety systems of modern vehicles
- skills to work with electrified vehicles, their e-batteries and e-motors
- skills and know-how of charging technology and different charging systems



- know-how of the fire safety of electrified vehicles
- know-how of the essential technology of alternative fuel vehicles and their spare parts to inform customers about technical facts of modern vehicles in vehicle sales

Auto-Cove 2.0 consortium will contribute these needs by:

- training interdisciplinarity
- IT-skills for services
- doing intersectoral co-operation and co-operation between secondary and tertiary educational levels
- establishing an open knowledge ecosystem (OER) for new educational content in automotive industry
- acting as an international transformation center for sustainable Employment in the Automotive industry and sales.

Auto-Cove 2.0 main objectives are to promote **sustainability, employability and digital skills** development among VET- staff and learners. Measurable project objectives are:

1. making skills-gap-analysis in vehicle field in 7 partner countries among industry representatives (both at vehicle maintenance and sales departments) and VET-teachers in vehicle field and including external VET-institutes as associate partners in the project to gather wider knowledge for skill-gap-analysis,
2. developing technical innovative transnational study modules and training courses for secondary and tertiary level vehicle field education in co-operation between VET-institutes, research centres and vehicles companies,
3. upskilling vehicle field teachers' and already working company representatives' know-how about clean-tech-vehicles, their technical specifications and safety systems and via them update the curriculums of the fields in Europe
4. including different countries VET-policy makers and curriculum legislative bodies into the project as associate partners that developed outputs will end up as parts of vehicle field curriculum as partially obligatory and partially optional study modules after the project ends.
5. producing and publishing all main project outputs on readily existing international platform, (which target group are vehicle teachers and the field's students) **to multiply the number of institutes, utilizing project outputs after they are completed.** This is an e-learning platform at company called Electude and it has customers already in 70 countries. There are over 3000 vocational colleges in automotive field as their customers worldwide. Its content is translated into 26 different languages. This platform will offer all interested target groups Auto-Cove 2.0 project outputs in digital form for 5 years after the project has been completed. Project outputs will also be disseminated on OER commons platform for learning and teaching materials in English. Therefore, they must be produced under Open licence.
6. Internationalising consortium's staff and students in the form of staff and student mobilities.
7. Attending two vehicle field international conferences and disseminate project outputs there (in Germany and Latvia) + organising two dissemination events in each project country for associate sister VET-providers and regional company representatives.

Expected results and indicators of achievement:		
Objective	Indicator for measuring	Target Value
Extensive skills-gap-analysis in the vehicle sector: participants from two target groups: Industry representatives (from vehicle maintenance and sales sector) and teachers in VET-institutes in vehicle sector	Number of participating institutes + number of participants + number of countries, where participants come from	Participants for the skills-gap-analysis: 140 industry representatives (20 /country; 4 companies from each country: 28 companies; 5 participants from each company) + 120 vocational teachers (20 / country) from VET-institutes on secondary and tertiary levels in 7 countries; <u>altogether 280 participants</u>
Innovative study modules and training courses for secondary and tertiary level VET-education for car mechanic and engineer students	Number and scope of study modules and training courses	11 technical study modules, 2 business-related study modules, one training module of maths and one of physics as pathway study modules, 5 Study modules for tertiary level students, Target scope of each study module or a training course: 15- to 30 ECVET-points
Innovative training courses, meant for vocational teachers and industry representatives	Number and volume of produced courses	10 training two-days-courses for teachers and industry representatives
VET-policy makers as associate partners for the project to enable VET-policy reform in vehicle field after the end of the project.	Number of partner countries, where VET-policy makers agree to change the content of vehicle field curriculums	All partner countries' VET-policy makers: 7. The objective: changes in vehicle field national curriculum in all project countries after this project is completed.
Effective dissemination of project outputs via Electude International's e-learning platform; multiply the institutes, which profit from the project	Number of institutions, who pilot and start using Auto-Cove 2.0 outputs on Electude's platform during year 2027-2028	Project partners: 9 VET-institutes: target value: 10 times 9 = 90 VET-institutes in European countries
International staff and student mobilities in the project	Number of staff and students, who participate either on piloting events (staff) or international mobilities during the project	125 travelling participants to collaborative development workshops and 150 travelling to steering committee meetings, 40 participants for international conferences + 18 accompanying teachers, altogether 331 staff mobilities 60 students, from secondary and tertiary levels
Participation in two vehicle field international conferences and present project outputs there	2 conferences, 2 participants attending from each VET-partner, 40 participants altogether	objective is to gain at least 200 vehicle field experts from VET-sector to listen to project outputs in each conference

1.3 Complementarity with other actions and innovation — European added value

Complementarity with other actions and innovation



Explain how the project builds on the results of past activities carried out in the field, and describe its innovative aspects (if any).

Explain how the activities are complementary to other activities carried out by other organisations (if applicable). Illustrate the trans-national dimension of the project; its impact/interest in the EU area; possibility to use the results in other countries, potential to develop /cross-border cooperation among Programme countries and Partner countries, if applicable, etc.

If your proposal is based on the results of one or more previous or ongoing projects, please provide precise references to these projects.

There are a few background projects, on which this project has been planned.

One of them is a national Finnish project called **CLEMET- Cleantech Mobility Education for Tomorrow**. In Clemet project Omnia, as partner of CLEMET project and the coordinator of Auto-Cove project, developed a new optional vocational module for car mechanics curriculum. The starting point for the development work were three meetings with public Vehicle Field Advisory Board, where service managers from different garages and workshops described the biggest needs for car mechanic education in Finland. It appeared that the biggest need for already working and future car mechanics was to learn more about how to service and fix advanced driver assistant systems (ADAS -systems). They are electronic systems in a vehicle that use advanced technologies to assist the driver. They include many active safety features.

During the Clemet-project Omnia's two teachers searched a lot of information on the internet from different brands' pages and got access to the database of Omnia's co-operation company Volvo's database for technical specifications. ADAS- study module was created, and it was piloted nationally in three different towns in Finland in 12 different teaching sessions. Participants in the sessions were Vocational Vehicle teachers, Automotive teachers from the University of Applied Sciences, vehicle damage controllers and vehicle field students. The package was well received by participants.

ADAS study module development work succeeded so well in national CLEMET-project that its success gave an initial idea to widen this kind of needs basis curriculum development work into a bigger international Auto-Cove project with a lot of wider expertise area and influence.

Kaunas technical vocational education centre is participating in the project "**Inclusion and employability through electric vehicles technology**" along with partners from Croatia, Italy, Portugal, Romania, and Spain. The aims of the project are improving the quality and efficiency of sustainable investment, education, training and youth systems; promoting open education and innovative practices in the digital age; promoting social inclusion; improving new technologies and digital skills. The objective of the project is to design 14 task modules on electronic vehicles for students of initial VET programs in the field of auto mechanics. The modules are designed using a work-based learning methodology, animations and 3D designs that can be printed by the students in the classroom with the help of 3D printers. Another important innovation in the module will be providing the content part of each unit with a text-to-speech player integrated.

VTT Technical Research Centre of Finland was one of the partners in CLEMET. VTT is also involved in Auto Cove and conducting the research part of the project in WP2 with German FHWS Polytechnic's research centre TTZ-EMO in WP2.

VTT has carried out some related **studies** in vehicle field. They are listed in the attachment, but the most relevant it SKILLFUL; (Skills and competences development of future transportation professionals at all levels, H2020. The expertise and know-how VTT has gained in the studies listed above will be used in the research and development work to be carried out in the Auto-Cove project.

Latvian Ventspils Tehnikums has related projects, from which they have gained know-how, they are going to utilize in Auto-Cove project. In 2018, Ventspils Tehnikums started to participate in the "Next Generation Microcities of Europe" project, which focuses on testing and deploying innovation, in activities directly in the field of education technologies

French SEPR is a partner in IDiVET (2020-1-FR01-KA226-VET-095619)- project, which is led by the French Association for Automotive Trainings. Its objective is to provide teachers and trainers with insights from transnational examples and to enable them to capitalize on their COVID-19 experience to develop innovative digital practice. The jointly developed session of automotive IVET will be easily transferable and will also be a concrete illustration of the principles behind quality digital and distance learning. Since this ERASMUS+ K2 Auto-CoVe project also focus on bringing innovation through education as a starting stage, the relevance of previously mentioned projects is significant.

Auto-Cove project aims also at developing automotive teachers' and students' both technical and pedagogical digital skills and that is why all study modules will be produced in digital form. Electude International as e-learning specialist in vehicle sector will guide and support all VET-providers in the digitalization work during the whole project.

**European added value:**

By 2050, Europe aims to become world's first climate-neutral continent. And it is already on track to meet its greenhouse gas emissions reduction target for 2020, and has put forward a plan to further cut emissions by at least 55 % by 2030. This is the reason, why most vehicle manufactures in Europe have decided to quit manufacturing of traditional gasoline and petrol driven cars by 2030 and stop selling them by 2035. New and more ambitious targets have also been set for average CO2 emissions of new cars sold in the EU area, and deployment of fully electric, hybrid and hydrogen vehicles will be important measures for achieving the objectives. The deployment of these clean-tech vehicles can be greatly eased by the skills, knowledge and incentives of car salespersons selling new cars to consumers.

Auto-Cove 2.0 consortium has invited 2 secondary or tertiary level VET-institutes from each partner country to attend the project as associate members. Many of them have agreed on: participating into the skills-gap-analysis in the field by their vehicle field teachers, receiving newsletters of the progress of the project, participating in dissemination event of the project and piloting later the project outputs in their teaching. By counting all VET-institutes, for which Auto-Cove Project has a direct influence, will be European 23 VET-institutes.

Auto-Cove 2.0 consortium invited also VET-policy makers in different partner countries to attend this project as associate members. Their role would be to follow the progress of the project output development work and after the outputs are completed, make adjustments and changes for vehicle field curriculums in each partner country to update both obligatory and optional study module content in all project countries by including also clean-tech-vehicle and modern vehicle safety system maintenance content in them.

To guarantee commitment of external European educational and VET-policy level partners (including sectoral associations and chambers of commerce, crafts and industry), Auto-Cove 2.0 consortium has collected 21 signed Letters of Interest from Associate partners in consortium partner countries already at the application phase of the project. 14 of these partners do also have a pic code and have been fed as associate partners in this application. They all have committed into clearly defined roles in this project.

When the project outputs will be disseminated via already existing and used E-learning platform of Electude International (a full company partner in the project), which already reaches vehicle field teachers and colleges in 3400 active organisations in 70 countries, the dissemination will go far beyond normal project dissemination scale.

Nature Energy- magazine published an article about research (by Rubens, Noel and Sovacool) called: "Dismissive and deceptive car dealerships create barriers to electric vehicle adoption and the point of sale". In the research it became obvious that vehicle salespersons' know-how or lack of know-how on modern technology vehicles affect a lot on purchase decision of customers. To combat barriers of acceptance of fully electric, hybrid or hydrogen vehicles is an important enabler for the transition to greener vehicles.

Auto-Cove project's one objective is to create **one study module for vehicle salespersons and another for vehicle spare parts salespersons vocational qualifications**. So far only Finland (of Auto-Cove's project countries) is educating vehicle salespersons at a vocational college **as one of vehicle field Vocational Qualifications**. Therefore, Finnish VET-center Omnia will carry responsibility of this development work. The need for such qualification has been recognized also elsewhere in Europe. Material for one new study module's development work will be gathered with a big study, which will also be directed to vehicle and spare parts salespersons.

This kind of salespersons' know-how is important, because car users' acceptance of fully electric, hybrid or hydrogen vehicles is an essential enabler for the transition to greener vehicle propulsion sources. Car users' acceptance can likely be increased if the staff involved in the sales of new vehicles is able to provide correct and up to date information on the vehicle, has the skills and knowledge to address the potential concerns of the car user related to new technology and is able to recommend a solution addressing the needs of the car user. The results of the survey will be used to identify skills and knowledge requirements for staff working in sales of new vehicles and their managers and to provide recommendations for development of vocational and tertiary education in vehicle sector. The developed study module on modern vehicle sales will be provided also for co-operation companies sales personnel during and after the project.

2. QUALITY

2.1 PROJECT DESIGN AND IMPLEMENTATION

2.1.1 Concept and methodology

Concept and methodology

Please address all guiding points presented in the Call document/Programme Guide under the award criterion 'Quality of the project design and implementation'.

Outline the approach and methodology behind the project. Explain why they are the most suitable for achieving the project's objectives.

1. COHERENCE:

Auto-Cove's main project objective is developing vehicle and sales sector education by listening and responding to the needs from working life and VET-teachers in the fields and supporting carbon neutrality objectives in the vehicle sector. Intention is to fill the skills-gap in **three target groups: among presently studying vehicle mechanics, mechanics and VET teachers in vehicle field.**

Another big objective is to gather information from **car salespersons and spare parts salespersons** to map demands of know-how, needed in the sales of alternative energy source vehicles. The results of the study will be used to identify skills and knowledge requirements for staff working in sales of new vehicles and their managers and to provide recommendations for development of a study module for Vocation Qualification in vehicle sales.

a) Preparation

Auto-Cove consortium started strong co-operation already at the application preparation phase.

Omnia, as project coordinator, contacted several already existing co-operation colleges in Europe, where we knew that vehicle education in one of their strongest education fields. With many of them Omnia had done mobility co-operation in many technical fields, but especially in vehicle field, already for years. It appeared that need for this kind of big common development project is real and acute and it was relatively easy to find suitable VET-provider partners from Omnia's extensive international partner network. Such already known trustworthy long-term co-operation partners for Omnia in Auto-Cove project are Tartu Rakenduslik Kolledž, Jakob Preh Schule, Koning Willem I College, Kaunas Kautech and SEPR. Only Latvian Ventpils Tehnikums from secondary level VET-partners was not familiar to Omnia beforehand, but they had had an intention to write their own KA2-partnership application about development of vehicle technology and asked their long-term partner, Tartu Rakenduslik Kolledž as their partner. Then they hear about Auto-Cove project intention and asked in case they could join the consortium.

When secondary level VET-providers were selected, each of them checked their already existing company partners and tertiary level VET-provider partners. German Jakob Preh Schule has a long co-operation tradition with this project's German polytechnic partner: FHWS and they recommended Omnia to ask also FHWS in this project. Omnia agreed eagerly, because FHWS research know-how in electric vehicle sector is exactly, what we needed into this Auto-Cove project. In this way soon also business life and higher education VET-providers were selected. It was also easy to attract Finnish research centre VTT into the consortium because VTT was already partner in Finnish National CLEMET-project, from which Omnia received the idea to expand its efforts to this European-wide Auto-Cove development project.

When mutual trust was already existing fact between VET-providers on both, secondary and tertiary levels and they selected business partners, with whom they had already worked for a long time,

negotiations about specialisations and contributions for Auto-Cove project were easy to start.

Very delighting aspect is the intended co-operation between two very experienced research companies in Finland and Germany. They decided to plan in co-operation two focus areas for research in Auto-Cove project. In first of them they intend to find out, what **is needed for vocational education** and in seven European countries and **how to transfer technological facts via innovative future-oriented vocational laboratory-training courses and kits.**

Contents for these courses and kits would be battery charging technologies (conductive & inductive charging, fast charging), battery technologies (monitoring, ageing characteristic, low- and high-temperature features), fire safety of High Voltage batteries in electric vehicles, power electronics (used in traction drives, chargers and DC/DC converters), vehicle to grid technologies (using EVs as home-storage) and modern simulation technologies.

Each partner considered carefully, what their strongest expertise is (both in vehicle field and project administration) and who the key persons in their staff are the most suitable and valuable for this project. Based on this information we shared the responsibility areas for each partner in this project. In co-operation we planned **a tray of 17 study modules for students and 10 training courses for teachers**, where all topics are different but belong tightly to the topic: modern vehicle technology and servicing vehicles equipped with it. At the same time, we shared responsibilities of Work packages: Management, R & D, Study modules and Training courses, Quality and Risk Assessment, Impact and dissemination and mobilities.

It was also decided at the preparation phase that we need to commit an influence study from pedagogical aspect in this project. An independent researcher was identified for this task from Omnia. She promised to commit influence study among the staff: Vehicle teachers and company representatives in the end of each study module piloting week (= 5 times in the project). Also, the students, who will take part in student mobilities in this project, will take part in the same influence study after their mobility periods.

To be able to find out needs from working life, we have planned to utilize two very appreciated and experienced research institutes; VTT, in Finland and FHWS TTZ-EMO in Germany. In this way we cover the present situation in both: Nordic (Finland and Baltic countries) and Mid-European (Germany, France and The Netherlands) countries. Also, the expertise of two research institute is different: VTT is specialised in all kind of smart mobilities, Germany especially in Electric vehicle technology studies. Both expertise areas are essential to draft a qualified skills-gap-analysis for the foundation of project study modules and training course development work.

To enable effective information collection in all seven partner countries from vehicle sector service and repair side, a study plan and questions and target groups have profoundly been considered. The study is focused on company representatives and vehicle teachers in VET-sector. **The first target group talks about skills-gap need at vehicle workshops and in modern vehicle and spare parts sales and the second target group: Vehicle sector teachers, talks about the skills-gap in vehicle teachers but also about vehicle field curriculums for students.** Collected and analyzed data will be provided to project's VET-institutes to act as a foundation for the vehicle technology curriculum development work in Finland, Estonia, Lithuania, the Netherlands, and Germany.

b) Implementation

At the very beginning of the project a precise Work Plan will be done. It would be completed by M6.

Very first step of the project implementation will be implementing the **skills-gap-analysis** in 7 project countries. This will be done during the **first six months** of the first project year. The results will be analysed and informed for each partner. They would act as foundation to kick off transnational study module development process in those countries.

While the study is created and implemented, all partners will already start their own development work. In the first phase VET-teachers in all partner countries will receive free access to Electude International's e-learning platform, which contains nearly 2000 modules of technical exercises. From them each partner VET- teachers study the thematic, which is linked with their development area (driver safety, electric batteries, hydrogen or hybrid vehicles...). This will be done, not to re-invent the wheel. It will be wise to **map, what kind of content is already available on Electude's e-learning platform**, study it and start the development work using already existing information and modules as foundation of the developed modules and courses.

In first phase of the project also the first versions of the Communication plan, and webpage for the project will be created. In addition to them, Quality Assurance plan, Risk Management plan and Sustainability plan will be done during the first project year and updated through the project, when needed.

Project's **internal communication** will be carried out **via Teams-platform**, and all administrative files will be saved in Auto Cove's Teams team files. The Auto-Cove consortium will create two teams in Teams: one for administration for the steering committee and another for project's technical key persons' communication to share their expertise and experience with each other, when all VET-providers contribute each other's development work.

Transnational study modules and training courses will be created during 3 first years of the project. They will also be presented and piloted during the project.

Seven partners have selected their topics of the development work and will utilize their already existing expertise and experience in automotive engineering field from former development work and project work

as a solid foundation for their work. Every partner contributes the development work in each study module via the key expert Teams platform regularly, but also during the **pilot event weeks once a year during the project.**

By utilizing mobilities in this project, 2 vehicle sector teachers from each VET-provider and 2 company representatives from co-operation companies will be invited to present, reflect and pilot contents of each collaborative study module development event in five different mobility weeks during the project. Altogether 125 travelling experts (+ 63 hosts); both vehicle VET-teachers and industry representatives, will pilot the study modules during Auto-Cove project by travelling to participate in Collaborative development workshops.

To confirm all technical field secondary students' skills in mathematics and physics, a digital study module of each subject will be created in this project. This, because just lack of enough knowledge in these theoretical subjects cause difficulties for VET-background students on tertiary level studies during their first study years.

These pathway study modules enable VET-students an easier and smoother pathway from secondary level to tertiary level studies and thus add attractiveness of VET- qualification in comparison with theoretical studies at general upper secondary studies.

c) Monitoring

Project work plan will include a detailed schedule of implementation phases (roughly mentioned also above) for all four years of the project. It would include schedule and costs for each monitored action. Every 6 months French SEPR as Quality Assurance and Risk management organisation in this project, will do an internal monitoring about what we have done and what still needs to be done in the becoming months in relation to project's Work Plan. The collected data of monitoring will be submitted to the steering committee, which reviews the feedback and decides possibly needed further actions. Then the steering committee informs the partners of the necessity and schedule of the needed actions.

Examples of concrete actions, which will be listed on the Work plan:

- Steering Committee meetings and their schedule; every 6 months but 2-4 Teams- meetings in each year (depending on the need). There would be a project coordinator and technical WP leaders from each VET- organisation participating in Steering committee. In addition to them there will be the leader of the financial unit and a member from one member of a vehicle company (Electude) + one member of the Finnish AKL (associate partner),
- A background study as the foundation of the development work by research centres,
- study module and training Course development work + VET policy recommendation formulation work by each partner in every partner country,
- VET-policy recommendations' dissemination to national VET-policy makers (who are as systematic level associate partners in this project)
- staff mobilities, their planning between VET-teachers and company representatives at the same time as collaborative development piloting events
- student mobilities for hosting companies with learning objectives of servicing modern technology vehicles and doing periodical maintenance for them.
- with international conferences/events twice during the project's lifetime during the third and fourth project year, in connection with vehicle sector trade fairs in Latvia and Germany
- pedagogical influence study for piloting staff, during WP 3 and 4 development work, data gathering at the end phase of each piloting week (= five times during four years) and one overall influence study for students, who participate in student mobilities in this project in the second and third project years.

All the study modules and training courses will be translated into all seven project languages + in English and published both: on Electude International's e-learning platform and European OER commons platform. They will also be published on national digital open resource libraries for teaching and learning materials (like Finnish aoe.fi), if applicable, for further use of other VET institutes and Polytechnics but



also for later company dissemination purposes. The translation process of them will also be started shortly after they are completed (subcontracted).

d) Exploitation

Results of the research will be exploited as foundation of curriculum development work as soon as they will be available in the seven partner countries.

New study modules will be taken into piloting use in all seven partner colleges and partially also at polytechnics and provided as optional vocational modules for vehicle field students as soon after they are completed and as it is technically possible.

Six months before the project ends, all products; (study modules, training courses and pathway study modules) of this project will be disseminated via Electude International's e-learning platform and national digital open resource learning and teaching material libraries, on which there is continuous free access for all users. This guarantees sustainability and effectiveness of dissemination.

Each partner country with its VET-organisations will arrange two dissemination events during the last 6 months of the project. First of them will be directed to project's associate VET-partners' staff in vehicle field. Another one will be directed to company representatives from the vehicle field companies, who have not been project partners. **The recommended number of participants for each event is 20 persons.** This would make 40 external direct sectoral target participants in each 7 countries, meaning 280 participants altogether. These events will multiply regional influence of this project.

Project outputs will also be presented in connection with two international vehicle field conferences, in Latvia in 2026 and in Germany (most probably in connection Automechanika Frankfurt in 2027, and in Riga international Motor show, or the correspondent event available at that time), when most project outputs are already developed.

VET-policy makers as associate partners in this project in each country will follow the project progress during the whole project time with regular newsletters. They will receive in this way all essential information of the developed contents of outputs and will be aware of the change of the need in vehicle field education in VET-sector as the result of this dissemination. Therefore, they can consult each national VET-provider at the end of the project and start the national vehicle field curriculum development work based on the results, achieved in Auto-Cove 2.0 project.

National, regional and vehicle sectoral associations, which act **as associate partners in this project**, will also disseminate and exploit Auto- Cove's project results. These sectoral Associate partners, who contribute project's wider dissemination and exploitation will be sectoral and regional stakeholders. **There is a list of them in the attachments as well as the letters of interest from each of them.** They are already at application phase asked to contribute with development and dissemination work and because many Auto-Cove's project partners already belong into these networks, their contribution in dissemination would be available.

e) Evaluation

Participants will reflect and evaluate the content of study modules/training courses in the collaborative study modules development events. These events act as peer-review-events, because of their collaborative working method. In addition to that they will participate in an influence study (implemented by Omnia researcher) and gathered data will be used as basis of further development work.

Project's associate VET-partners (15 VET-institutes in 7 countries) will follow the progress of the project with regular newsletters and by participating in the dissemination event they pilot all project outputs, designed in the project for VET-teachers and give feedback of their experiences to the consortium.

WP 6 will contain quality assurance for the whole project period. Under lead of French SEPR, evaluation of the project will be done regularly during the whole project time.

Students, participating in student mobilities in Auto-Cove 2.0 project, will be interviewed in the end of their mobilities and they also give feedback of their study periods, which will be utilized, when planning to send the next flow of students in the project abroad. Each VET-organisation sends students in two flows, during the second and third project years, to do their internships in the partner countries at the companies the hosting partners have arranged.



An external evaluator will be named at the beginning of the project. S/he will follow the project progress and draft an interim report of the project progress and a final report of the whole length of the project. This will be funded as subcontracted item in the project budget.

f) Dissemination

Digital study modules and training courses will be developed directly on Electude International's e-learning platform and will be published and disseminated by Electude International six months before the project ends. We will utilize the platform during the final dissemination events and its outputs must be completed and published before any dissemination event will take place.

Already existing Electude international e-learning platform is designed for vehicle field's VET-teachers, and it has presently around 3400 technical colleges as active customers in 70 countries. Therefore, it is very cost-effective and directly to the correct target group directed dissemination platform and guarantees wide dissemination of project outputs in far more than project countries. Electude International, has promised to maintain the Auto-Cove 2.0 dissemination platform and keep it free for all visitors for nine years, meaning 4 years as a project output development platform and 5 years as the dissemination platform. The project outputs will be published on Electude's platform in English and in all project languages.

To guarantee even larger dissemination, the same outputs will be published on European OER commons platform. The condition the hosts of the platform pronounced for publishing is that project outputs will be **produced under an open licence like Creative Commons License**. Sectoral networks and networks for VET-providers on secondary and tertiary levels are the most important networks for dissemination information of Auto-Cove project outputs' existence, content, accessibility and cost-free nature.

Project outputs will be presented in two international conferences, which will be arranged in connection with vehicle field's commercial fairs in Latvia and Germany (most probably in connection with Riga international Motorshow and Automechanika Frankfurt) in 2026 and 2027, when most project outputs are already developed. National regional and vehicle sectoral associates (listed above), which act as associate partners in this project, will also disseminate and exploit Auto-Cove's project results.

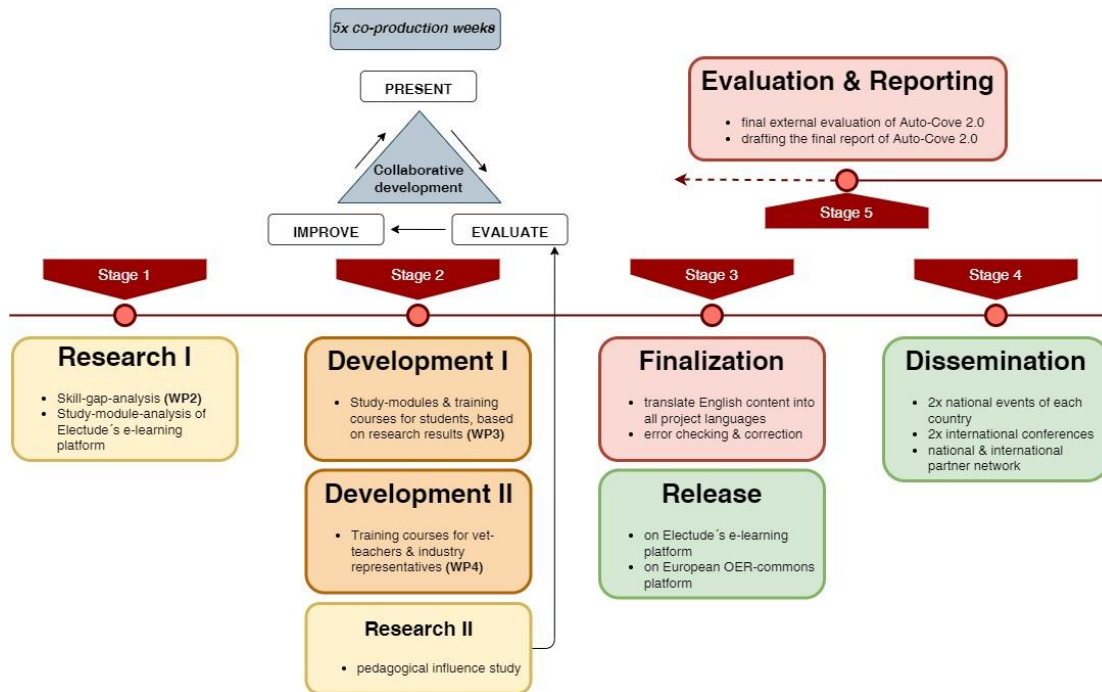
2. METHODOLOGY

Auto-Cove 2.0 will develop all project WPs using "waterfall methodology" and WP 3 by using **collaborative development workshops**. The tasks are organised in a chronological order that will lead to the publishing of the final deliverables with stages that are consequential. Each phase will begin at the end of the previous one. Concerning operational WPs: (2, 3 and 4) they have been planned in chronological order in three stages. There will be 7 Work packages in the Auto-Cove 2.0 project. Three of them will be transversal: **Management (WP1), Quality Assurance and Risk Management (WP 5) and Impact and dissemination (WP7)**. They will be implemented on a regular basis throughout the whole length of the project. The activities in these WPs are cyclical and will be repeated regardless of the stage of the project. The rest four work packages: **R & D (WP2), Innovative study modules and training courses for students, teachers and company employees (WP 3 and 4) and student and staff mobilities (WP6)** will be operational Work packages and they will last only certain period of the project.

The triangle co-operation is implemented mainly in operational Work packages 2,3 and 4, where the actual project output development work is done. Co-operation between companies, researching institutes (VTT + two polytechnics with their research operators,) secondary and tertiary level education providers and business partners is implemented.

Figure 3: Project’s work plan in methodological way:

Auto-Cove 2.0 - Work Plan



The whole project work can be divided in 5 stages:

Stage 1: Skills-Gap-Analysis

Skills-gap-analysis (WP2) to gather data from industry representatives and vocational teachers about skills-gaps among vehicle field employees, students and their VET-teachers. This analysis will be carried out in co-operation of two partners in Germany and Finland.

To guarantee an effective start for the project development work, at the same time, all technical key-teachers, who do the output development work in this project, will be delivered free access to already existing vehicle field training modules on Electude’s e-learning platform. Intention is to study, what content (in the 2000 already existing modules) is already available and what is still needed. This is very important preparation work phase for the development work, not to re-invent the wheel and that no development group will start their work from the zero but building on the already existing materials.

Stage 2: Collaborative development workshops

The second stage will consist of developing the study modules and training courses for students in WP3 and after they are completed the development work goes on by developing training courses for VET-teachers and industry representatives in WP4. The partners will study the information gathered in the skills-gap-analysis in their development work and use their expertise to develop all above-described project outputs in co-operation with each other and the partner companies.

On stage 2 all VET-partners and company partners use **Collaborative development- method**. It means that although each organisation has chosen a certain topic for their study module or training course development work, they do not do the development work alone with just their national partners. We arrange five collaborative one-week-piloting events, approximately every 5. or 6.th months, where all study module/training course development teams (including members from VET-institutes and company partners) present the work, which is done so far in their development work and during and after each presentation, **the other partners members reflect the topic according to their own experiences, make questions and give feedback of the topic to help fruitful further development of the outputs.**



In this way all the partners know exactly, in which phase each partner is with its development work and can both: **reflect and benchmark each other's' work**. Project outputs can be completed at different times, and after each student-directed study module is completed, the development work of training modules for VET- teachers and Industry representative will be started. The whole WP3 and WP4 development work lasts from January 2024 to end of April 2026, meaning 28 effective months and the development teams will meet 5 times physically during this period and are in contact with each other in between via emails and have Teams-meetings whenever it is needed.

In the end of each development event, **a pedagogical influence study** will be made to gather information for the further development and finalising work of the project output. All information, gathered in pedagogical influence study will be distributed for each output development group to be utilized directly in the refining work of the deliverables

Stage 3: Translation and publication of the outputs

After all study modules are developed and completed, they will be translated into all project languages (they will be produced in English originally) and this work is subtracted. All partners technical key persons proofread the suggested translations to make their complex technical content correct and accurate. The translation and proofreading period will last six months.

Stage 4: Dissemination

After all project outputs' translations are available, they will be shared to Electude International, which will turn the project development platform into project output dissemination platform and publish the study modules there. The project outputs' English versions will also be published on European OER-commons platform to reach such target groups, who do not yet know Electude and its role in vehicle field e-learning materials in the world.

During the 6 months of the last project year all partners will arrange two national dissemination events: one of the directed to VET-teachers in vehicle field and another for Industry representatives in Vehicle sector. In the dissemination events they **will present project outputs, how to find them from Electude's platform and how to utilize them**. Dissemination events are directed to both: VET-teachers in national sister colleges and polytechnics and industry representatives. The consortium intends also to utilize two vehicle field international conferences during the last project year and disseminate the project outputs in them in Germany and Latvia. During the Stage 4 the project outputs will also be presented for vehicle field VET-policy makers in each project country. This will be done to achieve real changes for each country's vehicle field curriculums according to national needs.

Stage 5: Evaluation and reporting

Final external evaluation of the project + drafting the final report of the project

Auto-Cove's Work Plan will be defined at the very beginning of the project. Project objectives and their implementation schedule will be clearly defined in Work Plan as well as all essential project phases (see below chapter Work Plan) WP1.

3. MANAGEMENT

The management will happen on three levels:

Level 1.

STEERING COMMITTEE composed by 1 project coordinator per educational institute or research partner and the leader of financial unit also in steering committee (=11 members). There will also be two sectoral business representatives in steering committee to monitor and reflect project. They have promised to regularly attend Teams -meetings of the project: 2-4 times (depending on the need) in a project year. The first business representative comes from projects German full partner company: a big German international vehicle field company Preh, which educates apprentices regularly. The second one comes from Finnish Central Organisation for Motor Trads and Repairs (AKL).

The steering committee defines the main strategies for the implementation of the project and coordinates overall project implementation. It will gather every 6th month physically and go through project progress and documentation, every second time by annual quality reports, drafted by SEPR, but every time with financial documents, work plan and mobility plan to update progress of the project. In between physical meetings it will have 1-2 Teams video meetings to keep in mind all major duties to be carried out in the becoming months. Steering Committee's work will be included in WP1.

**Level 2:**

Financial Unit and Communication unit work, where each consortium educational and research institute has one member, will be selected in the beginning of the project.

Omnia will lead financial unit and its work will be part of WP1. The leader of financial unit will participate in the steering Committee's project meetings and act as a link between steering committee and project assistants in each institute.

Communication unit will be led by Latvian Ventspils Tehnikums, which is relatively small, but very experienced and active project actor and especially strong national actor in vehicle technology in Latvia. Ventspils Tehnikums' key experts, participating in Auto- Cove project, have long-term expertise in international communication management and communication activities implementation. Each participant has a member also in Communication unit and it will be selected in the first kick off -meeting of the project. Its work will be included in WP7.

Level 3: Actual project work will be implemented in Work Packages WP1-WP7

Project Management strategy:

The management strategy is shared into 5 activities, which represent the main efforts of the partnership to ensure high quality implementation for whole project duration (48 months):

a) project administration (WP1)

Project administration contains the control and management of the budget. Omnia, as the coordinating institute is responsible for it. Other project administration tasks are: setting up of internal rules for financial reporting; drafting and signing partnership agreements, supporting to partners in reporting the project expenses, financial monitoring, controlling cash-flows, reporting to the partners on the financial situation every half year, ensuring a fair allocation of resources according to the budget; communication with EACEA; transferring the grant to each partner according to partnership agreements and grant agreement, preparing the intermediate and final reports, etc. Omnia will lead the financial unit and the Head of financial unit participates in Steering Committee meetings as one member of Steering committee to guarantee seamless communication between the financial unit and Steering Committee. There will be a representative in each partner in the financial unit. All partners will have to comply with the reporting procedures and report their expenses every 6 months, to have an updated overview of **the budget and to verify the correct use and administration of the received funding.**

b) project coordination (WP1)

Omnia will coordinate the project with the support of all the partners. After the notification of approval, a steering committee will be formally set up; every **partner will appoint its own project manager and one technical key person**, who will sit at the committee and must comply with two criterias:

- his/her competences and experience are in line with the role assigned

-s/he can ensure continuity in the coordination role, (=has a stable contract/working position and is able to participate in the project from its beginning to its end). However, the second member for each organisation will be regularly involved in the activities and updated about the state of play, to enable a prompt substitution of the main coordinator in case of impossibility to continue.

The tasks related to this activity include internal communication, online and offline coordination meetings, monitoring that partner complete their tasks, monitoring the selection of participants in transnational activities (meetings, piloting events and student mobilities); monitoring and supervising the designing and development of WP and deliverables.

Each organisation will set up an internal work team that will have the task to implement the assigned activities and prepare for the transnational coordination meetings. Omnia will also be responsible for coordinating communication among partners that will be organised according to the following basic rules:

- regular communication among partners will be carried out via email. Different thematic mailing lists will be created with staff members involved in certain topics, operational fields and work packages,
- a project calendar will be shared. Here all events, activities and deadlines will be displayed, with automatic reminders sent to all members.
- transnational steering committee meetings: the coordination group will gather in 8 physical meetings



to be organised in the partner organisations headquarters for the duration of 2 days + 2 travelling days each.

- Microsoft Teams will also be used to store archive all project administrative materials in Transversal Work Packages (Management, Quality control and Impact + Dissemination) and working documents. Electude's e-learning platform for Auto-Cove 2.0 will act as project output development platform and after all project outputs are completed as an international project output dissemination platform.

Thanks to Teams and Electude's platforms, all project partners will be able to consult the documents at any moment and work together at the same time on the development of the project's outputs through the sharing feature of this platform.

The tools adopted will ensure the correct and timely communication at all levels among the partner organisations, which will be at the basis of high-quality cooperation. During the Kick of Meeting, Omnia will introduce to the partner all necessary instructions for project communication.

c) Quality Management (WP6)

This specific activity will start from the preparation phase with the drafting of the quality plan outlined above and the presentation for its approval to the partnership in occasion of the first transnational meeting (kick-off meeting). SEPR will be responsible for the quality management and will carry out the following tasks: drafting, distribution and collection of the evaluation forms and questionnaires from all partners for the quality assessment; coordinating and supporting the partners in the collection of the indicators: prompt signalling whenever a corrective measure is required; drafting and presenting to the partnership yearly quality reports. **Collaborative development workshops act as both: development tools, but also as project output quality monitoring tools, because there the project outputs are discussed, reflected, fertilized and planned further with two actual target groups: VET-teachers and industry representatives.**

In case this project will be selected, Omnia will also actively participate in the monthly meetings of Cove community to benchmark and share its experiences in Cove projects (we are included in two: Give and MOSAIC) and benchmark good practises in coordination.

d) Dissemination (WP7)

External communication and dissemination activities will be coordinated by Ventspils Tehnikums, under the supervision of Omnia. All partners will participate in development activities under lead of Ventspils tehnikums. The dissemination strategy foresees four main activities:

- 1) the drafting of the dissemination plan, which will define the combination of online and offline tools and channels to deliver news, information and updates about the project, including activities, results, publications, deliverables and impact to the widest possible audience.
- 2) the implementation of the activities outlined in the dissemination plan by all partners throughout the entire length of the project.
- 3) the creation of networks of local stakeholders to involve in the project. This means also informing all associate members of project results and remind their role in the project implementation. Many of them have promised to participate in skills-gap-analysis at the beginning of the project, follow the progress of the project with regular newsletters and pilot project outputs once they are completed. on deliverables and products). The stakeholders consist also of VET-policy makers in all project countries. Majority of them are already associate partners in this project.
- 4) Arranging project output dissemination in connection two sector-related international conferences in Germany and Latvia during the last project year

e) Sustainability

Sustainable development and environmental friendliness are horizontal themes in the whole project, because the project supports EU parliament's decisions to help EU countries transmission towards more eco-friendly and zero emission traffic. What comes to the project results sustainability and dissemination, all partners will be included in the task to actively first develop sustainable practises in the fields of vehicle maintenance and service and turn them as study modules for students and pedagogical courses for teachers, and secondly, after the project outputs are completed, share information about the project outputs and where to find them for all national and international partners in technical fields.

Responsible for this activity will be Electude International, Ventspils Tehnikums and Omnia. Instead of being addressed only at the end of the project lifetime, **sustainability will be a topic on the agenda ever since the kick-off meeting.** The key element for sustainability will be the network of stakeholders that all

partners will create at local, national and European levels. Omnia has decided to invest 5000 euros to follow the project output use during five years after the project is completed. Sustainability actions are presented in detail in Section 3. Impact under the title Sustainability.

4. BUDGET

The budget of Auto-Cove 2.0 is composed of 4 main categories of costs:

- **staff costs** in the form of working hours in all Work Packages.
- **purchase costs** related to technical equipment necessary for project output development work,
- **mobility grants** for students and staff mobilities and
- **subcontracting**: Translations of project outputs: 15 study modules (volume: 15-30 credits each) will be produced in English and translated in 7 partner languages and 2 study modules (pathway study modules) into 2 languages (Finnish and Estonian): estimated cost 405 000 €.

The proposed **staff budget** is built upon identification of each partner's most appropriate staff-type costs against working days in each activity, like preparation and participation for Collaborative Development Workshops, meetings of project management, dissemination and exploitation actions, quality control and pedagogical influence study (among VET-teachers, company representatives and students).

Mobility costs for both students and staff have been calculated by using the grant categories in Erasmus+ KA1- project (2021). This method ensures that they will not be either under- or overestimated. **There will be 339 staff mobilities and 60 student mobilities in the project.**

One big budgetary thing is enabling developing **Learning Experience journey** in e-mobility for students (visual graph about it on next page.)

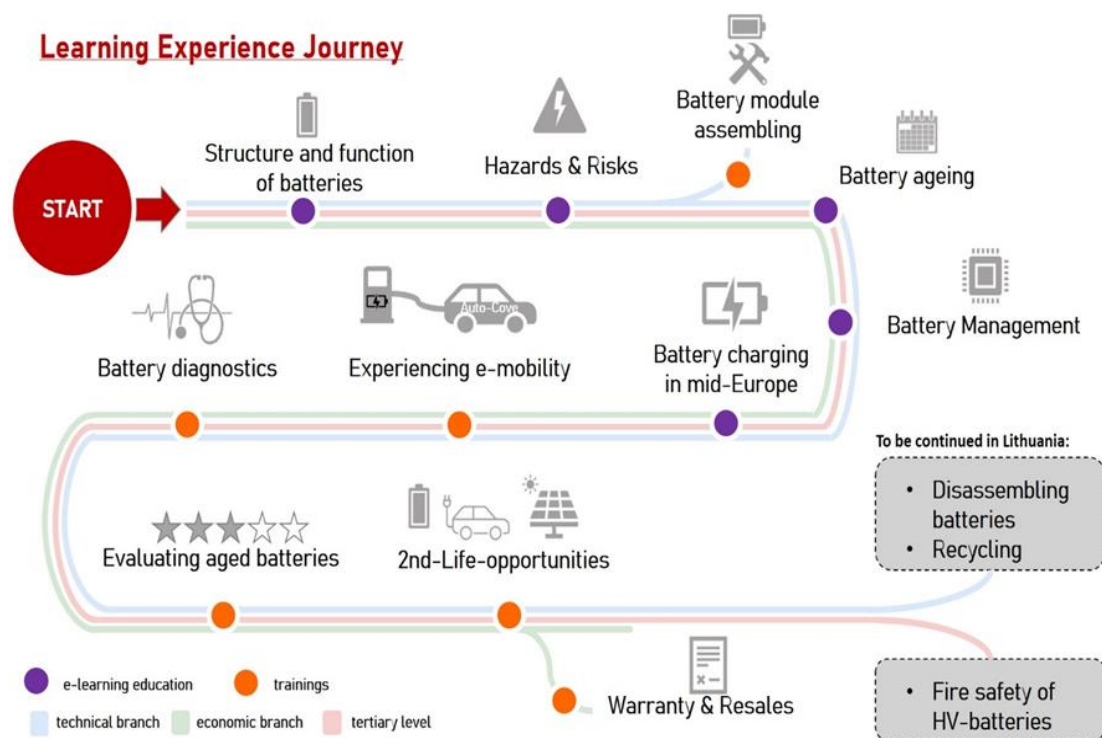
German partners FHWS and Jakob Preh Schule will pass on their knowledge and skills about simulation techniques, real hardware tests, working in the laboratory, technical analysis, programming to future professionals, engineers and vocational schoolteachers. Thereby they make an essential contribution to education and training within the battery sector, which actively creates awareness for battery technology. This awareness is necessary to establish a circular economy in the battery sector in the coming years.

To raise up future sustainability FHWS and Jakob Preh Schule developed the idea, that the built learning stations could be relocated into a truck or trailer for driving them around. Thereby a very high flexibility and utilisation will be ensured, as the stations could be used in different types of school or companies in area of Franconia.

They would like to offer participants a learning journey in which they learn to understand the battery from the cradle to the grave (see Fig. below). This includes both theoretical and practical skills such as building battery modules, experience and feel e-mobility, analysing aged batteries, evaluating them and their possible secondary uses. The Lithuanian project partners with the study modules of Battery Disassembly, Recycling and Fire safety of high voltage batteries complement this experience. **The FHWS has the skills to develop such a learning journey, but not the necessary infrastructure.**

The whole Learning Experience Journey will be developed in co-operation with four partners: German FHWS, JPS and Lithuanian KTK and Kauno TVEC.

Figure 4: Battery Learning Experience Journey- from cradle to grave (will be implemented by four partners: FHWS, JPS, KTK and KVEC)



Auto-Cove consortium has agreed to budget around 9 % out of budget for purchases of necessary device and material in Auto-Cove project. For most organisations the necessary equipment for this development work is a hybrid or fully electric vehicle. This is justified, because it is impossible to teach, how to diagnose faults in electric batteries or hybrid engines in case You do not have the vehicle, with which You demonstrate the work. One of the developed study modules is about servicing and calibrating modern vehicles **Advanced Driver Assistant Systems**. They are electronic systems in a vehicle that use advanced technologies to assist the driver to drive safely. They are for instance front camera, rear view camera, parking radars, driver monitoring systems, surround view systems etc. **To enable partner colleges and universities of applied sciences to test, pilot and later teach diagnosing faults, servicing then and calibrating these systems, they need vehicles with as many ADAS-accessories as possible. This request makes the purchases more expensive, but it is so essential content of the modern vehicle service (all modern vehicles contain these systems), that it cannot be ignored.**

The intended materials, which enable the study module development work /organisation are for instance the following ones:

- **Omnia:** Volkswagen ID 4 with all ADAS-assecories; 62 000 €, but we try to find a second-hand one, if only available and have budgeted for it **49 600 euros** (we have depreciated 20 % of the new one's price).
- **Latvia Ventspils tehnikums:** used Volkswagen ID 3; 25 000€, Electronic stand ro operations with electronics: 10 000 €, other accessories like Digital multimeter, Oscilloscope, Insulation resistance meter, 5 measuring probes, 5 test leads; 15 000 euros; altogether: **50 000 €**.
- **Kaunas Vocational Education Centre:** VW ID3 with all ADAS-accessories: **40 000 euros** + Electric vehicle testing and diagnostics kit PicoScope 4425A with PicoBNC: 5000 Eur, Battery diagnostic device Autel MaxiBAS BT609 - 900 eur, SUNKKO 797DH Battery Spot Welder 3.8kw with Current Parameters Display - 800 eur, Multimeter Fluke 8808A - 1000 eur, Resisantce measuring digital CA6525 Chauvin Arnoux - 700 eur, Current measuring tool Fluke 325 :400 eur; altogether: **48 800 €**
- **Kauno Tehnikos Kolegija** develops a study module about electric battery charging systems in cold Nordic conditions and another study module about Fire Safety of High Voltage Batteries. For that work they will need second-hand electric BMW 12: 30 000 euros, EV batteries: 3000 €,

heater: 1500 €, Two different kind of diagnostic equipment: 7800 €, A Charging station: 1200 €+ a possibility to visit at a cooling laboratory to carry tests and research activities once a month (7 days; each 250 euros), 10 tests per year, 2500 euros. The whole development time will be 33 months, which would demand visits tests worth 7250 euros. The whole budget for KTK equals to **50 750 euros**.

- **Tartu Rakenduslik Kolledž:** A Training simulation CarTrain “Hybrid and Electric Vehicles”; cost estimate: **49 600 €**
- **Koning Willem 1 College:** H2 hybrid-fuel cell automotive trainer set fcat-30set+Digital anemometer DA-100, H2AC challenge package; altogether **47 800 €**,
- **SEPR:** Hybrid Peugeot 308 with all the ADAS accessories: 61 835 € would be the new one and we budget the second-hand price with 20 % depreciation: **49 468 €**.
- **Jakob Preh Schule:** Tools, technical gadgets and equipment for 6 learning stations: 3000 €, Measure instruments: 3000 €, Control Panels 2400 €; Consumables; 2500 €, Part of an electric car 7000 €, Workstation infrastructure: 32 000 €; everything: **49 900 €**
- **Institute of Forestry and Engineering in Estonian life Sciences University of Applied Sciences:** Test Bench construction: **10 500 euros**
- **FHWS:** Infrastructure for the construction of battery modules: 9,840 €, battery diagnostic station for 6 groups: 10,360, Components for the assembly of the battery modules: 8,000 € (2,000 €/p.a.), consumable and wear materias: 4,000 € (1,000 €/p.a.), demonstration and promotional **second-hand** vehicle/s: 27,800 €; altogether: **60 000 €**.

All equipment for all project partners: 466 418 € = 9,3 % of the whole budget

Translations of the 15 project outputs into 7 languages and two of them into 2 languages is a big investment in the project, but it multiplies the dissemination and impact of project outputs, therefore it is a justified cost. Project outputs will be produced into English and then each secondary level VET-centre subcontracts their translation into their own language by some cost-effective business partner in their country. Because the content of study modules is highly technical, technical staff of each VET-provider will proof-read the content each translation package to ensure high quality of translations. We budget money for partners for this in WP 7.

Electude International is the company partner, to whom we have budgeted much more for than for the other company partners. Their costs consist of creation and maintenance of two project platforms: project development platform for 4 years of the project and project output dissemination platform for 5 years after the project is completed. Electude International will also create and implement webinar courses for VET-teachers to teach them, how to use the digital tools on the platform and create content using gamification elements in their development work. Because Electude's role is essential both during and after the project and the platform maintenance work needed on both phases, the consortium will budget enough resources for Electude for this work. Electude's e-learning solutions' platform acts as one of the two platforms, via which we intend to effectively disseminate all our project outputs for the wide audience.

5. WORK PLAN

The visual graph of the work plan is in figure 3 above.

The project Work Plan will be designed by the Steering Committee with consultation of all Work Package leaders at the beginning of the project and signed off by all partners. As explained above and shown on the GANTT chart, the work plan has been organised to ensure the delivery of high-quality project outputs on time. This document displays all the activities and tasks which are foreseen by the project, which partner is assigned to each activity and/or task and when the tasks are supposed to be completed. The project work plan follows the above represented 5 stages and serves as a tool to keep track of the project and prevent delays.

For this reason, the operational Work Packages: 2 and the combination of 3 and 4 have been planned in a consequential way, not to overlap with each other. The only operational Work Package, which overlaps other operational Work Packages, is mobilities. The student mobilities are scheduled to be carried out during the first and second project years and the staff mobilities during all project years.

In terms of resources, the workload of each WP has been calculated to ensure the right share of time to produce the planned deliverables (see the attachment of “staff effort per participant”). As seen in the budget Excel, the WPs with most working days allocated are WP3 and WP4. They consist of the



development work of Innovative study modules and training courses for all three target groups: VET-students, VET- teachers and company representatives in vehicle maintenance and sales sectors. Partners will invest a lot of time in creating training modules and courses, piloting and further developing them. All these activities are time-consuming. There will also be a significant amount of mobilities in this project, therefore also mobility WP has heavy budget share.

Project Work Plan will contain:

- A description on the operational objectives of the project (skills-gap analysis, transnational study modules, training courses, pathway study modules, VET -policy recommendations and staff and student mobilities).
- A list of all technical equipment, which will be purchased for the project.
- A breakdown of all the specific project tasks.
- A timeline, which would contain the start and end date of each task. (GANTT)
- A projected budget for all project tasks. It will be drafted in English as the targets are only project partners and associates.
- List of all deliverables, developed in Transversal Work packages (WP1, WP6, WP7)

6. FINANCIAL AND QUALITY CONTROL

Quality control will be an ongoing process that will accompany Auto-Cove 2.0 throughout its whole duration: for the reason quality control Work Package is transversal. Quality control will be performed using a plan, which will define actions and timing of the assessment activities and tools. The evaluation activities will take place on different occasions, for example in the end of each collaborative development piloting events (qualitative peer reviews by expert key persons to each other's output development work) or after the mobility experiences of students. After each study module and training course piloting event, a pedagogical influence study will be committed to map all reflected experiences and development suggestions to the participants. They will be shared to the output developers to be taken into consideration in the further development work.

Project structural quality will be evaluated in the lead of SEPR with formal documents, and every partner will participate in quality evaluation by using these tools. SEPR will draft a quality report seven times during the whole project and it will be gone through in all but the Steering Committee kick-off-meeting.

An external evaluator will be subcontracted at the beginning of the project to provide objective assessment of the project's quality. The external evaluator will be selected among experienced experts, who already have experience on quality issues in Cove-projects. Two evaluation reports will be produced by the external evaluator. The first of them will be done in the middle of the project period and the second at the end phase of the project. To assess the quality of the project activities, the external evaluator will participate in some transnational events. The budget for subcontracting the external evaluator includes the allowance for the participation in these events, two times during the project.

Concerning financial control, SEPR will work together with Omnia to prepare a set of financial reporting tools with instructions, which will be used to regulate and standards the reporting procedures for an organised collection of supporting documents from all partners. The project economic progress will be checked every 3 months. The persons in the financial unit will work for this under lead of the Financial Manager from Omnia. SEPR and project coordinator Omnia will update the overall budget on basis of the reports collected from the partners on a shared spreadsheet. The budget will be distributed to partners in 3 instalments and progressively after the completion of the tasks assigned to them in QPs, three during the implementation phase and one at the end. Details of Financial management are described below in the section of cost-effectiveness and financial management 2.1.4.

Project synergy will also be utilised: Omnia is one partner in GIVE-Cove project and is responsible for Quality Assurance and Risk Management issues in GIVE. Omnia's Quality Expert has promised to consult Auto-Cove Consortium about Quality Issues and let us benchmark their best practises. SEPR on its own behalf is coordinating another Cove: Mosaic. They will also utilize project synergies also in quality control issues while working in Auto-Cove 2.0.

A pedagogical influence study will be conducted by an independent research manager Dr. Tarja Lang from Omnia after each staff mobility week (directed to participating vehicle teachers and companies' service personnel) and at the final phase of this project (directed to students, who pilot the study modules

in partner companies). It will be carried out to map experiences and development proposals from participants, who have practised practical tasks at the sales or maintenance of modern vehicles.

In the project, technical research data in the automotive sector will be linked to research of practical vocational training in the automotive sector and the work of a teacher. In addition, the project combines technical research in the automotive sector with behavioural science research in vocational education to promote the development of education and digital learning environments.

7. MOBILITY ACTIVITIES

The Auto-Cove project will implement internationalisation strategies by carrying out 339 transnational mobilities of vehicle field's teachers, companies' service personnel and 42 car mechanic and 18 vehicle engineer students. There are the following mobility types in this project:

- Staff mobilities for Steering Committee members, a'4 days: 150 persons,
- Staff mobilities for participants of Collaborative Development workshops, a' 5 days: 125 persons,
- Staff mobilities for participating international conferences, to disseminate information about developed project outputs in connection with sectoral trade fair Automechanica Frankfurt and a corresponding conference Auto 23 trade fair in Latvia: a' 2 days: 40 persons,
- Accompanying teachers to support student mobilities; a' 5 days: 20 persons (one for each student flow)
- secondary level student mobilities, a'4 weeks: 42 students
- tertiary level mobilities a' 18 weeks: 18 students

Student mobilities will take place at project's co-operation companies or partially at the VET-institute and partially at the companies (this will be confirmed institute by institute when the project starts) and will concentrate to produce additional value of newer technologies for students in their studies. Student mobilities will be planned in detail during the staff mobilities (= collaborative development piloting events), where co-operation companies' representatives and VET-providers' teacher network with each other. Student mobilities will be carried out during the second and third project years.

Five mobility flows for project full partners' staff members to collaborative study module development events:

8. First flow in Finland by 5/2024
9. Second flow in Estonia by 11/ 2024
10. Third flow in the Netherlands by 5/ 2025
11. Fourth flow in Germany by 11 /2025
12. Fifth flow in Lithuania by 4/26

Selection of the participants

Each partner organisation will select its participants for each mobility activity. The participants will be selected based on various criteria, e.g., they must be available to participate in the project activities when requested; and share their experience once they returned to their country. All participants need to have a B1 English level to communicate independently with other participants. The project management team in each country will guarantee a transparent selection process, a balance in race and age.

Preparation

In preparation of the mobility activities, participants will be coached in their home institutes by the international coordinators and eventual doubts and questions will be replied. If necessary, before departure, partners prepare their participating employees with linguistic and intercultural support. The host organization will suggest reasonable priced accommodation for participants during the training and will provide partners with useful travel information. They are advised to use different linguistic tools as AutoLingo (in France) and Duolingo (for instance in Germany, France and Finland) to practise both the practical, everyday language and the vocational vocabulary from the vehicle field.

Support

During the mobility activities, sending and hosting partners will support participants. The host organization is responsible for certifying the participants' attendance and the acquired competences.

Safety

Each partner secures that their own participants have enough insurance during the participation in the project. Partners will stipulate for all participants an INSURANCE POLICY that covers both accidents and liability insurance towards third parties.

Recognition and validation of learning outcomes

Partners will use the following three documents during the training abroad: Europass Mobility or correspondent certificate of mobility (for students), Mobility grant agreement (for staff members and students) and Attendance certificate with content of mobility (for staff members).

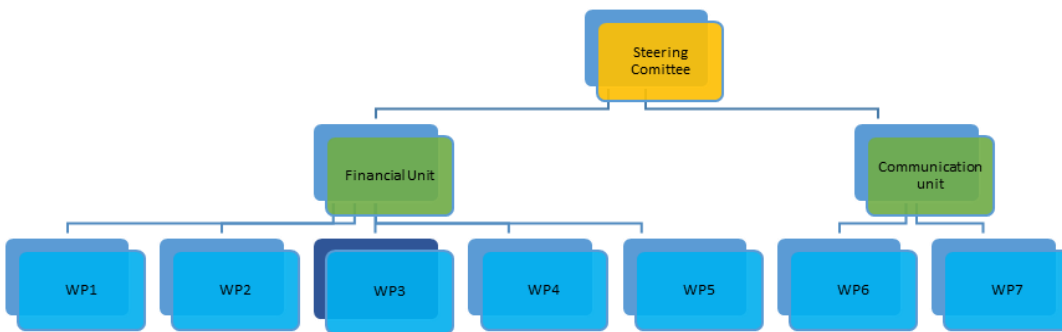
2.1.2 Project management, quality assurance and monitoring and evaluation strategy

Project management, quality assurance and monitoring and evaluation strategy

*Describe the measures foreseen to ensure that the project implementation is of high quality and completed in time.
Describe the methods to ensure good quality, monitoring, planning and control.
Describe the evaluation methods and indicators (quantitative and qualitative) to monitor and verify the outreach and coverage of the activities and results (including unit of measurement, baseline and target values). The indicators proposed to measure progress should be relevant, realistic and measurable.*

As described above, Auto-Cove 2.0 management is divided on three levels: Steering Committee level, Financial and Communication unit-level and Work Package-level. Steering Committee is consisting of one project manager/partner and the technical key development person of the organisation. From the coordinator (Omnia) also the head of financial unit, participates Steering Committee meetings.

Figure 5: Project Management on three levels:



Auto-Cove Consortium aims for high quality project implementation and project outputs by listing several success factors already at project planning phase. They act as framework for the project work.

- The starting point of the project is an extensive skills-gap analysis, which is directed to sectoral keypersons (industry representatives + vehicle field VET-teachers), which guarantees essential up-to-date information for the foundation of project output development work. Two research centres (VTT and FHWS TTZ-EMO, with different expertise profiles in smart mobility sector) will prepare the analysis and interpret and share its results. 7 vocational colleges create the project



stakeholder pool and choose the most suitable institutes and their sectoral experts to reply for the analysis.

- project development work will be done by very committed and specialised VET-institutes on two different educational levels. The specialisation areas are chosen by each institute itself according to its strongest expertise and know-how. This adds commitment and motivation towards the development work.
- The development work will be done in collaborative development method, where all partners know, which partner leads the development work of each project output. The work share is done already at the planning phase. **All partners (including partner companies) participate in the development work by sending two experts five times during the project to participate in one-week-collaborative development-workshop. Each developer team presents there for the other experts, what has been developed so far, where are the challenges, what are the future plans and reflect and receive feedback and contribute and fertilize each other's' work.**
- continuous co-operation between researchers, VET-providers and business representatives during the whole project at national level; also, industry representatives fertilize the development work by participants in collaborative development workshops. Their presence ensures the up-to-date skills-needs recognition and feedback from the business world.
- genuine international collaborative development work, which is enabled by development workshops and continuous communication via emails and Teams-platform between the physical events.
- Consortium companies are committed to the project and their role in it. They have agreed on participating in the skills-gap analysis and contributing the VET-institutes with essential technical data, which is needed for project output development work. In addition to these, they are committed to host students in student mobilities and take part in staff mobilities, when project outputs are piloted and further developed.
- **The roles of the partners are clear and shared already in the application phase, and everyone knows exactly, to what they are committed, when the project starts.**
- Consortium is strong and every partner is enthusiastic about starting the development work because they know that it will really be needed and used also after the project.
- We have received several meaningful associate partners. Two partner groups ensure project outputs effective delivery and implementation on regional and national levels: sister VET-institutes and VET-policy makers in all project countries.
- Electude International's e-learning platform as Auto-Cove 2.0 most important international dissemination platform ensures that the special target group: VET- teachers in vehicle field and their students, will profit from this project in company's all 70 customer countries in more than 3400 active VET-schools, who already use the platform worldwide. Most used language of Electude's study modules is English and therefore all project outputs will be delivered not only in the seven project languages, but also in English on the project platform.
- Project outputs will also be disseminated in English on European OER-commons platform in English to reach such VET-institutes, who do not know about Electude and its platform.
- Student and staff mobilities ensure the concrete internationalisation of the project participants.
- Transversal Work Package leaders are very experienced project actors in European Erasmus+ projects. Omnia, as the leader of Management WP1, has done international development project for more than 15 years and is already included as a partner in two Cove-projects (Give and Mosaic). Sepr, who will act as quality control and risk management institute in Auto-Cove 2.0, also leads one big cove (Mosaic) and utilizes synergies in quality and risk issues between two Cove-projects. Latvian Ventspils Technikums has committed several smaller-scale international projects and has an experienced and enthusiastic international team, who will lead the impact and dissemination Work Package. They will work in tight co-operation with Dutch Electude, but because we did not want to leave Work Package leading role for any companies in this project, Ventspils Tehnikums leads this very significant Work Package.

Quality assurance, monitoring and evaluation strategy

As explained above, quality management will play a critical role in the project strategy to determine if

Auto-Cove 2.0 is reaching its objectives and expected results. The following objectives will be listed in Quality Assurance Plan:

- Establishing effective internal evaluation and monitoring objectives and tools;
 - Assessing the coherence between expected results and effective results;
 - Ensuring that the results reached by the project are in compliance with the project objectives
 - Correcting possible problematic elements;
 - Assessing structural quality of the work in different WPs: activities, outputs and impact.
- Providing developing feedback for partners, not only pointing out weak points but suggesting, how to improve the implementation to achieve more qualified results, if necessary.
- Content quality of the outputs is evaluated in Collaborative Development Workshops between the key experts of the project. Pedagogical quality of the outputs will be reflected also in the pedagogical influence study.
 - Providing suggestions in order to maximise the long-term impact of the project and its sustainability.

The quality management and monitoring plan will consist of the following parts:

1. Quality Objectives,
2. List of people responsible for quality management,
3. Set of qualitative and quantitative indicators of achievement with target values, to find out to what extent the project activities led to the achievements of the planned results,
4. Set of activities to be undertaken by all partners during the project,
5. Assessment tools,
6. Reporting timing and modalities.

Data on performance indicators will be collected by all partners in shared documents on Microsoft Teams and will be processed by SEPR, which will report to the partners about the general progress of the project twice every year (once during the first project year). Omnia will draw from the quality reports to draft the intermediate and final evaluation reports which will be delivered to the EACEA. The partners will work together under the supervision of SEPR and Omnia to create evaluation tools for the collection of data, such as evaluation questionnaires, interviews of participants. Pedagogical influence studies will act as one essential quality tool for the data collection from the participants (in collaborative development workshops and among students, participating in mobilities). The values collected by partners through the evaluation tools will be reported on an online “indicators grid” (spreadsheet).

Quantitative and qualitative indicators that will be adopted to monitor and verify the outreach and coverage of the activities and results have been listed below. During the Kick-Off Meeting, the identified indicators will be presented by SEPR, and eventually adjusted by the partners, to improve the quality management and monitoring plan.

Qualitative and quantitative indicators

Quantitative indicators will be used to measure the achievement of the project objectives and expected results by recording the numbers related to the activities into an “indicators grid”, meaning a spreadsheet (shared on Microsoft Teams) regularly updated by project partners (e.g.number of learners testing the training modules produced, number of participants involved in mobilities).

As far as the qualitative indicators are concerned (e.g. outputs developed, results of influence studies) the achieved results will be assessed through interviews and focus groups, but mostly questionnaires that will be distributed to all the participants (learners, VET staff and stakeholders).

We will use two sets of indicators: the first one is to measure the expected results which are short term oriented, while the second set will measure the long-term impact. The table below shows the quality indicators for the project’s expected results, which are connected to the specific objectives (as described in section 1.2).

Specific objectives	Expected results	Qualitative/Quantitative indicators
1. To increase and improve genuine collaboration between VET-centres, tertiary level VET-providers, companies and researching institutes, to reach a state of mutual fertilisation	1.1 Creation actively working consortium composed by VET-providers, business actors, associate sectoral partners, research centres and national VET-policy makers	-130 stakeholders participating in the local networks established by partners; indicator: lists of participants in meetings and collaborative development events



both nationally and internationally.	1.2 Establishment of a feedback loop between VET-providers and business actors and research centres to gather data for skills-gap- analysis.	-140 answers from industry representatives and 140 answers from VET-teachers on secondary or tertiary levels of vehicle education
2. To update and upgrade curriculums in vehicle maintenance and sales field in secondary and tertiary levels of VET-education	<p>2.1. New training modules on the technical and sales-related target sectors in VET-education</p> <p>2.2. New training modules on technical sectors on tertiary level of VET-education</p> <p>2.3. Training courses for VET-teachers and industry representatives</p> <p>2.4. Improved professional competences in learners and professionals</p> <p>2.5. Increased skills in digitalisation among developer teachers and students); both when implementing the project outputs using gamification tools and when using them to learn new contents.</p> <p>2.6. Upgraded know-how of environmental clean traffic topics among vehicle mechanics/engineers and clean-tech-vehicle salespersons</p> <p>2.7. Improved understanding of life-long learning opportunities among target groups</p>	<p>-13 study modules for secondary level VET – education in technical field (two of them as pathway study modules)</p> <p>-at least 5 study modules for tertiary level VET-education in vehicle field</p> <p>105 students (15/country) participating in the testing phase and giving feedback of their experiences on each study modules on secondary level and 45 on tertiary level.</p> <p>-70 % of the positive feedback from learners about the quality and attractiveness of the training modules</p> <p>-at least 10 training courses for VET-teachers and company representatives is developed</p> <p>-at least 140 persons from business sector and another 140 VET-teachers participating project dissemination events and give feedback of the courses</p> <p>-60 % of positive feedback from professional participating piloting the programs during the dissemination events</p>
3. To foster internationalisation among learners, VET-teachers and industry representatives on both technical and sales-related sectors	3.1. Improved level of internationalisation among all participants participating in mobilities in the project.	<p>- 339 staff mobilities and 60 student mobilities,</p> <p>-14 students with fewer opportunities participating in student mobilities</p>
4.To build a forward-looking VET through the integration of digital methodologies and environmental sustainability	<p>4.1. Increased knowledge on the digital tools applied on the project output development work among VET-teachers</p> <p>4.2. Increased knowledge on digital tools among project output piloting participants: VET-teachers, learners and industry representatives</p>	<p>-40 VET-teachers testing and using the digital tools on the Electude dissemination platform when piloting the project outputs</p> <p>-70 industry representatives using the digital tools on project output platform during the dissemination events</p> <p>-analysis indicator on platform produced by Electude</p>
5.To renew curriculums in vehicle field of VET-sector at national levels in co-operation	5.1. New content on both secondary and tertiary level	-8 curriculums on international level, on which the project outputs make changes.



with national VET-policy makers	curriculums in each partner country in vehicle field	
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2.1.3 Project teams, staff and experts

Project teams and staff: 1. Omnia, The Joint Authority of Education in Espoo Region, Finland			
<p><i>Describe the project teams and how they will work together to implement the project.</i></p> <p><i>List the staff included in the project budget (budget category A) by function/profile (e.g. project manager, senior expert/advisor/researcher, junior expert/advisor/researcher, trainers/teachers, technical personnel, administrative personnel etc. and describe shortly their tasks. If required by the call, provide CVs of all key actors. If required by the Call document/Programme Guide.</i></p>			
Name and function	Organisation	Role/tasks	Professional profile and expertise
Ms Tuula Antola	Omnia	Legal Representative, signing authority	General Director of Omnia, The Joint Authority of Education in Espoo Region, former Business Director of Espoo City
Elina Kollanus	Omnia	Project Manager	International coordinator at Omnia, The Joint Authority of Education in Espoo Region, 13 years' experience of international projects, 20 years' teaching experience, MAT and BA in English philology and in Nordic languages
Sahar Bouhafis	Omnia	Financial Manager of the project	Master of Financial management; several years' experience as project coordinator and financial associate in research and development projects and other administrative tasks in different organizations.
Antti Järvenpää	Omnia	ADAS-module specialist in Omnia	Automotive Engineer, 20 years' experience in teaching automotive electronics and testing technology. An experienced project teacher.
Matti Rämö	Omnia	ADAS-module and pathway study module specialist	Master of engineering, orientation in Technology management, working experience in automotive engineering field, both at vehicle service side and in teaching tasks for more than 20 years.
Sari Rehell	Omnia	Consultant in Quality and Risk Issues in Auto-Cove	Master of Administrative Sciences (282/300 ECTS accomplished), Acts as leading expert on behalf of Omnia in GIVE- project 27 years of experience in international affairs in the field of education, training and youth both at national and at European levels.
Kenneth Nordström	Omnia	Head of Automotive dep.	Master of engineering, over 17 years' experience at service workshops as mechanics and service manager, 14 years as vehicle technology teacher and 10 years as Head of vehicle department
Tarja Lang	Omnia	Researcher of the two influence studies for	Dr Tarja Lang, also a Master of Science in education from the University of Helsinki, a MBA-degree from the Swansea Metropolitan University 17 years' experience as a principal in adult education institute. Nowadays she

		study module piloting	is involved in the activities of the Future Research Society TUTU.
Terhi Kokkonen	Omnia	Developer of the pathway study module	Licentiate of Technology, 8 years' working experience both in business and educational world
Mathematics teacher at Omnia	Omnia	Developer of the pathway study module	Master of Technology, working experience for 20 years both in business and educational world
Anna Nuuja	Omnia	Developer of a study module for vehicle salespersons	Master of Trades, orientation in business management and entrepreneurship, 13 years work experience in a big vehicle company Autokeskus; upskilling vehicle salespersons and developing sales systems
Jari Alatalo	Omnia	Developer of a study module for vehicle salespersons	Long experience as after-sales marketing manager
2 AV- experts from Omnia communication team	Omnia	Filming and editing responsibility of study module tutorials	Vocational qualification in audio-visual communication

Michael Seefried	FHWS, TTZ-EMO	Project manager and main coordinator of FHWS, TTZ - Emo	Researcher with master's degree Electric vehicle and EV technologies Expertise: battery and charging technologies for electric vehicles, user-centred development, agile approaches
David Oester	FHWS, TTZ-EMO	local university partner of Preh-School	Bachelor of Engineering and Master of Engineering in Electrical Engineering Expertise: battery and charging technologies for electric vehicles, user-centred development, agile approaches
Prof. Dr. Ansgar Ackva	FHWS, TTZ-EMO	Head of institute TTZ-EMO	University Professor with teaching and research activities in electric vehicle technologies Expertise: electric vehicle technology transfer through in-lab testing, analysis, simulation, prototyping
Dr. Simone Heimpel	FHWS, CAF	EU-funding	official FHWS coordinator for EU project management
Prof. Dr. Robert Grebner	FHWS	President signatures	President of the University of Applied Sciences
Luz Thron	FHWS	project consultant, link between JPS and FHWS	Trained vocational teacher for metal technology and English, International coordinator for Erasmus+ KA1 projects ,Head of Quality Management for vocational schools (from 2010 to 2018)

Elvis Binders-Čoders, Project manager	Ventspils Tehnikums	To lead a WP 7 and supervise our project activities	Elvis has bachelor's degree in international communication management. Main skills: flexibility, target-oriented, problem-solving and digital skills.
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Ieva Krūmiņa, project assistant	Ventspils Tehnikums	Project manager. To participate in meetings.	Bachelor's degree in external relations of organisation. Project manager experience 4 years in Erasmus+ projects: EVS, Youth Exchange, Mobility projects, KA2 projects.
Alberts Kozlovs	Ventspils Tehnikums	Teaching/ Training/ Researching	Leading teacher of Electricity field and also, he is a head of Methodological department in our college
Kaido Pobuss, Financial manager	Ventspils Tehnikums	Conducting and supervising financial operations	Bachelor's degree in Business Administration with a specialization in finance and accounting and Master of Business Administration
Communication Assistant	Ventspils Tehnikums	Implementing Communication activities	Daily tasks cover necessary processes of communication activities' designing and coordination.

Dr. Arne Kūūt	Tartu Rakenduslik Koledz	Head of department/ integrating the module into curricula	PhD in Engineering in production technology. Certified Car engineer EQF level 8, head of automotive department
Ismail Mirzajev	Tartu Rakenduslik Koledz	Senior Teacher Module creation	Teacher of Vocational Education EQF level 6, car diagnostics specialist EQF level 5, car technician EQF level 4,
Timo Marjamägi	Tartu Rakenduslik Koledz	Curriculum specialist Module creation	Teacher of Vocational Education EQF level 5, Toyota certified technician, certified service and warranty advisor.
Mihkel Niitla	Tartu Rakenduslik Koledz	VET teacher and mentor; Module creation	Teacher of Vocational Education EQF level 5, car diagnostics specialist EQF level 5, car technician EQF level 4,
Sigrid Ester Tani	Tartu Rakenduslik Koledz	Project Manager	Head of Tartu Rakenduslik Kolledž project management unit, over 10 years experience in international projects, BA in Political Science
Raini Jõks	Tartu RK	Director/legal representative	School management
Andrei Atškasov	Tartu Rakenduslik Koledz	International relations coordinator/mobilities	Tartu VEC International relations coordinator, over 10 years experience in international projects, over 10 years experience in international projects

Claire CHALLANDE- OSUNA	SEPR	Head of International department	Master's degree in Economics and management, with a master's degree in European law, bilingual. She pilots 7 collaborators within SEPR International office and is used to European Commission projects: Erasmus+ projects: KA1, KA2, VET pilot projects.
Cécile AILLERIE	SEPR	European project manager	Master's degree in international relations and is passionate about foreign cultures. Today, she manages and/or collaborates on Erasmus KA2 and pilot projects at SEPR.
Sylvain ZENARO	SEPR	Ed. Coordinator and trainer - automotive sector	Professional qualification certificate of Automotive Electronic and Electric Technician (EQF level 5). 10 years' work experience

Dr. Chafik MAAZOUZI	SEPR	Educational coordinator and trainer - digital & electricity sector	PhD in Biology (passed with distinction). He has carried out several post-doctoral studies.
Gérard MARTHOURET	SEPR	Head of Automotive department	Bachelor's degree in Educational Sciences. He joined the educational world 30 years ago.
Marik CHAMPEIMONT	SEPR	Head of apprentice training center	Master's degree in Business management and administration. Has worked at SEPR for 15 years. Leads SEPR apprenticeship training center.
Delphine GICQUEL	SEPR	Erasmus+ Coordinator	Bachelor's degree in foreign languages, Mobility coordinator at SEPR since 2011.
Jerome SCAVENNEC	SEPR	Car Mechanics teachers	Experienced competent car mechanic teacher, fluent English, experience in KA2-projects
Laurent GASCOU	SEPR	Manager of quality in pedagogy	Master's degree in Educational management, 24 work experience at SEPR in many positions, Since 2018 as Quality Manager
Aurelien BOULARD	SEPR	Multimedia pedagogy expert	Engineer Diploma, 20 years' work experience in industry sector with LEAN methodology.
Laure DELATTRE	SEPR	Head of communication	Graduated from a business school and work experience from several companies. Marketing team leader at SEPR.
Benjamin Niesner, VET- teacher	JPS, metal department	participates development work of study module 4	Master of Engineering in Electrical Engineering Software Engineer for automotive radar applications (2016-2019) Teacher of Electrical engineering since 2019
Sebastian Tomm, VET teacher	JPS, department of electrical engineering	Technical and administrative support	Bachelor of engineering and Master of engineering in Mechanics Voc. metal technology teacher since 2013
Martin Eirich, VET teacher	JPS, department of economics and business administration	administrative support (budgeting and financial control)	Bachelor of Arts in Business Studies and Master of Science in Business Education. Teacher of economics and business administration (2011 -
Clemens Rauch, VET teacher	JPS, department of electrical engineering	Responsible for curriculum design, piloting, monitoring	Bachelor of Science and Master of Education in Electrical Engineering research assistant at Friedrich-Alexander-Universität, Department of Electronics Engineering (2016 - 2018), teacher of electrical engineering (2018 -present)
Christina Ziegler, VET teacher	JPS, department of economics and business admin	administrative support;	Bachelor of Arts in Business Studies and Master of Science in Business Education, teacher of economics and business administration. Member of Quality Management team.
Andy Schelletter,	JPS, department of economics	administrative and language support	Bachelor of Arts in Business Studies and Master of Science in Business Education, teacher of

VET teacher	and business administration		economics and business administration (2018 - present)
Mireen Küsel VET teacher	JPS, metal tech teacher	Project coordination	Trained vocational teacher for metal technology and physics Member of Erasmus-Team

Olga Liivapuu teacher	Estonian University of Life Sciences	Project Management, Teaching	PhD in Mathematics, 15 years' experience in teaching applied mathematics for the students of engineering specialities.
Tormi Lillerand	Estonian university of life sciences	Mechanical design and training	PhD student, Junior Research Fellow, Graduated in Production Engineering and Technotronics, qualified mechanical and mechatronics engineer. Research focus on smart farming machines, agrorobotics, electrified and hybridized agricultural machinery.
Roland Allmägi	Estonian university of Life sciences	Quality control and training	PhD student. Graduated in Production Engineering and qualified mechanical engineer. Main field of research is motors and propulsion systems, specifically motor vehicles, combustion engines and genset development.
Marek Metslaid director	Estonian University of Life Sciences	signatory	director

Markus Hejl	Preh	administrative personal	Head of HR management and development
Johannes Vierheilg	Preh	trainer/teacher	Trainer at the company's own apprentice centre with 80 students
Felix Katzenberger	Preh	trainer/teacher	Trainer at the company's own apprentice centre with 80 students

Judita Štreimikienė	Kauno technikos Kolegija	Project Manager	International coordinator at KTK, 8 years' experience of international project, 20 years' experience as Teacher of English and Lithuanian philology
Marius Mažeika	KTK	Senior researcher, supervising of R & D activities and module work	PhD of Technological sciences, 9 years' experience as teacher in automobile electrical and electronic equipment and 6 years as Head of Automotive engineering study programme
Darius Juodvalkis	KTK	R & D, Teaching and training	PhD of Technological sciences, 12 years' experience as a teacher in automotive engineering field at KTK and Kaunas University of Technology
Martynas Skulskis	KTK	R & D, Teaching and Training	BA of Transport engineering, 9 years' experience as a teacher in Automotive engineering field at KTK and VET schools

Tomas Mickevičius	KTK	R & D, Teaching and training	PhD of Transport engineering, 12 years' experience as a teacher in Automotive engineering field at KTK and Vytautas Magnus University
Gediminas Jonynas	KTK	Financial administrative person	An accountant at KTK, 13 years' experience in the accounting of projects of different programmes

Dr. Risto Öörni, senior researcher	VTT	research and development	Dr. Risto Öörni has a long expertise with intelligent transport systems. He received his D.Sc. in Communications Engineering in Aalto University in 2019. His research topics include evaluation of impacts and technical functioning of ITS systems.
Ms. Merja Penttinen, senior researcher	VTT	research and development	Research Manager, M.Sc. She has over 20 years of experience in research of ITS, user needs and acceptance, UX-design, and impact evaluation methodology.
Ms Anu Tuominen	VTT	Research and development	Dr. Anu Tuominen (D.Sc.Tech.) has 25 years of experience in the fields of policy analysis. Her most recent international projects include REGSMART, SKILLFUL, Mobility4EU, SINTRAS and TOP-NEST
Ms Anne Hätelä	VTT	Financial admin	Specialist EU project finance at VTT

Renée Frommé Head International Office	Kw1C	Project manager (For now, I've put the question to our board for another project manager.)	Head International Office; responsible for international activities. Renée is also responsible for co-developing our international strategic agenda and objectives. Since June 2021 a member of the Dutch Board of EfVET. Also a member of our college-wide sustainability expertise group.
Toon Bertens Technical specialist	Kw1C	Teacher/trainer, the leader of Dutch development team	Vehicle technology teacher since 1992. Taught EQF-level 4. He also taught becoming teachers of automotive engineering. Strong involvement with electronic measurements and analyzing data on vehicles. 15 years' work experience at testing automotive technology of future.
Yvonne van den Dungen	Kw1C	Administrative person	an employee of international office and is used to support in international projects
Rob Josten	Kw1C	Vehicle technology teacher, piloting study module	Vehicle technology teacher and department coordinator.
Dirk Roijers	Kw1C	Vehicle technology teacher, piloting study module	Vehicle Technology teachers with 25 years' teaching experience, experienced in electric vehicles and ADAS-systems.
Hennie Bekkers	Kw1C	Vehicle technology teacher, piloting study module	Vehicle Technology teacher, expert about hydrogen and associated fuel cells.
Daniel Roestenburg	Kw1C	Vehicle technology teacher, piloting study module	Vehicle tech. teacher with experience on technical training course e.g. on Toyota Mirai, fuel cell car, Mitsubishi training EV & PHEV technique and diagnosis, EV and Hybrid training.

Eva Ainsoo	Toyota Baltic	Enterprise partner representative	Toyota official representation training manager
Aleksei Kazakov	Toyota Baltic AS	Training Specialist	Toyota hybrid engine and technical training specialist and training module creation consultant in this project

Dimitri Ogg	Electude Int.	Regional Director EMEA	Studies at Technical University Delft, Rotterdam School of Management, Bocconi Milan, Wharton Pennsylvania and Harvard Business School. In Electude Dimitri heads the Europe, Middle East and Africa regions.
Bert Jonker	Electude International	Managing Director at Electude International	With Electude since 2005. He has always sought ways to make life of technical teachers and trainers easier and students' study with more motivation and better learning effect. First doing so for vocational schools in BeNeLux, now heads a motivated team to integrate Electude in learning programs at vocational schools in German speaking countries.
Rami Abu-Issa	Electude International	Customer Success Manager	Expert in hosting e-learning platform and supporting VET-teachers to learn to use e-platforms tools and already existing content.
Thomas van Rijnsoever	Electude Development	International Product Manager	14 years technical teacher and senior teacher at Graafschap College, Education modernizer from concept to lesson materials.
Dan Jankens	Electude Int.	In Auto-Cove the contact person from Electude's side; Customer Success Manager	With Electude since 2013. Senior teacher with more than 20 years teaching experience in automotivesector at the vocational institute of Optima in Finland. Promoter of Electude's didactic tools to the other teachers.

Jaana Kuivalainen	Volvo Car Finland	Business Development and CX Director	Business Development and after sales
Petri Salo	Volvo Car Finland	Technical production manager	Technical Support, training

Tuomo Kuuluvainen	Bilia Oy AB	technical expertise	Development Manager
A leading mechanic	Bilia Oy Ab	technical expertise	Team leader, Expert fault tracing, diagnostic technician

Aida Gruzinskiene	Kaunas TVEC	Project Manager	Project manager at Kaunas TVEC. Has been the coordinator and manager of different types of EU-projects for over the last 19 years. Experienced in the accounting of projects, cash flows monitoring and general financial management.
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Rolandas Sertytytis	Kaunas TVEC	To lead a WP4; main coordinator responsible for organisation and communication	<p>Teacher at Transport department of Kaunas TVEC. Experience in participation in different projects (Nordplus, Erasmus+). Master's degree in and continue studying PhD in experimental mechanics. The teaching fields are vehicles electrical components and control systems, electric and hybrid vehicles.</p> <p>The lecturer in Kaunas Technikos Kolegija The teaching fields are mechatronics and electrical control systems.</p>
Vytautas Jotautis	Kaunas TVEC	Development teacher of automotive engineering	<p>Vocational teacher at Transport department of Kaunas TVEC. He has experience in participation in different projects (Erasmus+; etc.).</p> <p>Master's degree. Worked 16 years in a mechanical engineering design company, in the field of commercial vehicle maintenance, incl. 12 years in the Mercedes Benz official dealer, in the field of trucks and buses.</p> <p>The teaching fields at Transport department of Kaunas TVEC are vehicle chassis and transmission, and their electromechanical components for auto electricians / repairers.</p>
Arvydas Sirtautas	Kaunas TVEC	Teaching / Training / Researching	Teacher at Transport department of Kaunas TVEC. The teaching fields Maintenance and repair of electrical equipment for motor vehicles and diagnostic of motor vehicles.
Valdas Džiaugys	Kaunas TVEC	Teaching/ Researching	Vocational teacher at Transport department of Kaunas TVEC. The teaching fields at Transport department of Kaunas TVEC are vehicle chassis and transmission, and their electromechanical components for auto electricians / repairers.
Indrė Adomaitienė	Kaunas TVEC	Teaching/Training	Vocational teacher at Transport department of Kaunas TVEC. The teaching fields at Transport department of Kaunas TVEC are vehicle chassis and transmission, and their electromechanical components for auto electricians / repairers.
Aida Deivike	Kaunas TVEC	Technician	English teacher at Transport department of Kaunas TVEC. Has extensive experience in participating and running different projects for 3 years.
Nijole Mickeviciene	Kaunas TVEC	Conducting and supervising	An accountant at Kaunas TVEC. Has more than 20 years of experience in the accounting of projects of different programmes. She has successfully worked in more than 50 projects financial operations.
Jurgita Urb	Kaunas TVEC	Teaching,	English teacher at Transport department of Kaunas TVEC. Has more than experience in participating and running different projects (Nordplus, Erasmus+) in the transport department and works with international projects in the Centre help for teachers and students.

Outside resources (subcontracting, seconded staff, etc)

If you do not have all skills/resources in-house, describe how you intend to get them (contributions of members, partner organisations, subcontracting, etc).

If there is subcontracting, please also complete the table in section 4.

By subcontracting:

- a) Study modules content will be produced into English and translated by subcontractors to other partner country languages (n=7): French, German, Latvian, Lithuanian, Estonian, Dutch and Finnish; around 405 000 €.
- b) External evaluator to do objective project quality control and draft interim report + final report of the project quality: 12 000
- c) High quality graphical dissemination material of the project: 10 000 €.

Purchases:

- d) Technical device and equipment, necessary for study module development work, from 50 000 to 60 000 euros to each/developing institute; altogether 466 418 €, described in details in the budget section above.

2.1.4 Cost effectiveness and financial management

Cost effectiveness and financial management *(n/a for prefixed Lump Sum Grants)*

Describe the measures adopted to ensure that the proposed results and objectives will be achieved in the most cost-effective way.

Indicate the arrangements adopted for the financial management of the project and, in particular, how the financial resources will be allocated and managed within the consortium.

 *Do NOT compare and justify the costs of each work package but summarize briefly why your budget is cost effective.*

The following measures are taken to ensure cost-effectiveness of Auto-Cove 2.0 – project.

1. Auto-Cove's development work will be done following the specialisation of each VET-provider. Every one of them are leading the development of study modules, which represents their strongest know-how in the vehicle field, and the other partners are reflecting and contributing them. In the end of the project each partner will benefit from 17 transnational study modules, although they have mainly concentrated on developing a few of them. It is extensive work to produce totally new modern vehicle technology study modules for both secondary and tertiary education levels and even modify them to act as training courses for VET-teachers and industry representatives. It demands a lot of expertise, working hours, special equipment, device and devotion. Now the work will be done together, recognizing each partner's expertise and utilising it in the best possible way.
2. One big cost-effectiveness factor is that although all VET-institutes need some high-tech equipment or vehicle to enable their development work, the whole consortium is committed to search and purchase good quality second-hand vehicles. In case a hybrid or fully electric vehicle is one to three years old, it is still totally beneficial for our project development purposes and its value has already been depreciated at least 30-40 % in comparison with the value of a new modern vehicle.
3. In addition to that; the Auto-Project's dissemination company: Electude International has promised all developer teachers free access to already developed vehicle technology-related modules (altogether about 2000 modules in vehicle field) on their e-learning platform to study, what material already exists. This acts as an essential effectiveness factor, because in this way the teachers avoid reinventing the wheel, and produce genuinely new content, which is acutely needed.



4. Another Electude-related cost-effectiveness factor is that partners in the Auto-Cove project are not intending to create any new, separate digital platforms for sharing this project outputs, but will utilize already existing high-quality platforms. Electude International has promised to create a domain on their e-learning platform first for project development work (for project's lifetime) and later change it as a project output dissemination platform. Project outputs will be published at Electude platform in 8 language versions and English versions will also be published at OER Commons platform. By utilizing these two platforms and disseminating information about project content on them we avoid paying for the development of the new platforms but can still effectively share and disseminate project outputs.
5. New digital tools like Teams will be in effective use in project's internal communication. It is easy to save, share and edit and update materials there together and organise video meetings via Teams. All information will be transparent and easily accessible for every partner via Teams. Teams -meetings will also guarantee easier access for all partners and they are very time and cost -effective.
6. Only 1/3 of Steering Committee's meetings (8 meetings in 4 years) are physical meetings and 2/3 (16 meetings in 4 years) will be implemented online via Teams. Teams -meetings will also guarantee easier access for all partners and they are very time and cost effective. Digital meeting tools guarantee cost effectiveness of the management, because e-mails and Teams will be in active use of partners and the coordinator in Auto Cove-project.
7. 125 of project staff mobilities will be project's collaborative study module development mobilities, which cannot be implemented online. Direct reflection, contribution and further development feedback is possible only in face-to-face events. Every VET-providers' key development experts will make sure that study modules will be shared also to the other vehicle teachers and mechanics in home institutions. In this way by sending two participants to each collaborative development workshops, each partner institute will share the achieved know-how between all sectoral teachers at their home institute and let several classes of car mechanic students utilize it.
8. Wide associate partners' network ensures effective project output dissemination and the fact that we have selected national, sectoral (sister VET-colleges and polytechnics' technical departments), very interested associate partners from vehicle sector in partner countries, will help us to share Auto-Cove's content to the exact target group, which will most benefit of learning the project outputs.

Financial management

The aim of the financial management is to ensure that the administrative procedures, expenditures, and financial supporting documents follow the EU Commission procurement requirements as well as COVE Erasmus+ rules and regulations. The aim is also to provide timely and accurate reporting within the consortium and to the EU Commission.

Omnia will produce and distribute project rules and work plan with task lists together with all partners, establish deadlines and solve possible issues. A Teams platform will be established to facilitate communication and sharing documents. During the kick-off meeting, financial, human resources and other issues will be discussed. In terms of financial management, the project will be given an own cost center in Omnia's financial system and all partners will be asked to do so. Omnia's Project Services Office and its Finance Office take the lead in managing this project.

An Excel spreadsheet will be used with linked individual partner budgets. Budget control and finances will be given an own folder accessible to all partners in the Teams- platform together with instructions, timesheets, invoicing procedure, timetable, minutes, memos, agendas, etc. Omnia will make written instructions on how the finances should be handled in the project. The instructions and all templates will be provided and carefully explained in the kick-off meeting. In terms of the partners' financial management, Omnia will follow all COVE Erasmus+ procedures for reporting and explain requirements, when necessary, at each partner meeting. If necessary, Omnia's Financial Manager can also schedule individual meetings with the partners.

Omnia will oversee financially monitoring all expenses every three months. This will be done by requesting a Financial Progress Report and supporting documentation, such as work contracts, payslips/payroll, timesheets (according to the demands of EC), calculation of daily rates, as well as

proof of payments. The Financial Manager of Omnia will also provide feedback on the report and its supporting documents. Each Financial Unit meeting will include an individual review of progress against both the work plan and the budget with any actions required, identified, and assigned.

Omnia's Financial Manager will participate in Steering Committee's meetings and act as the main link between the steering committee and the Financial Unit team composed of the financial and administrative staff of all partners.

2.1.5 Risk management

Critical risks and risk management strategy			
<p><i>Describe critical risks, uncertainties or difficulties related to the implementation of your project, and your measures/strategy for addressing them.</i></p> <p><i>Indicate for each risk (in the description) the impact and the likelihood that the risk will materialise (high, medium, low), even after taking account the mitigating measures.</i></p> <p>Note: <i>Uncertainties and unexpected events occur in all organisations, even if very well-run. The risk analysis will help you to predict issues that could delay or hinder project activities. A good risk management strategy is essential for good project management.</i></p>			
Risk No	Description	Work package No	Proposed risk-mitigation measures
1	<p>Delay of activities and work plan: low probability</p> <p>Despite the drafting of work plan and the balanced workload distribution, some of the project activities can be delayed or not completed, due to reasons that can be external (war or new pandemic) or internal to each partner organisation.</p>	all WPs 1-7	The regular control of the work plan will be crossed with the quality control plan and discussed in every Steering Committee meeting (every 6 month). Project's collaborative output development events 5-6 months also act as concrete checkpoints for project progress as scheduled.
2	<p>Weak commitment in project activities by business partners: medium probability</p> <p>Business realities regulate the pact of work in companies and project work is not normal everyday-life-activity in them. It might easily be forgotten in case regular communication is not done with the companies during the project.</p>	all WPs: 1-7	<p>Companies are involved in the project activities throughout the project, and their role has been clearly defined and agreed already in the application phase.</p> <p>They will attend skills-gap-analysis, contribute project output development work with technical data and experienced knowledge. Project representatives will participate in collaborative project output development events every 6th month and host student mobilities in two flows, during the second and third project years. They will also participate in the national project output dissemination events.</p>
3	<p>Project duration is long and vehicle technologies develop very quickly all the time: medium probability</p> <p>For instance, the main raw material of electric batteries might change in few years from</p>	WP3 and WP4	<p>Consortium partners' triangle co-operation is the tool to enable quick reaction for changing conditions in the technical development work.</p> <p>VET-teachers and industry + research representatives will continuously update their know-how</p>

	lithium-ions into salt, which has far less fire risks and is more environmentally friendly material in batteries, although at the moment there is no commercial ones for sale yet. It might happen that some output is soon outdated after the project ends.		<p>about becoming changes in the field and help each other.</p> <p>Project outputs will be developed in digital mode and changes in details can be easily made throughout the project on the project output development platform.</p>
4	<p>A lot of essential technical information is protected and confidential at different vehicle brands' databases, medium Risk</p> <p>It might be challenging to gain access to all needed information for the study module development work. For instance, hydrogen technology is in its infancy phase, which means that development steps are highly protected by vehicle companies from each other and competition between them is hard. The protection of essential data might hit also in co-operation with VET-providers.</p>	WP3 and 4	<p>We emphasize our company partners about VET-providers intention to collaborate, not compete with companies and are non-profit organisations. Project is implemented to help companies by developing project outputs, which serve companies present employees and guarantee them skilled employees in future.</p> <p>By including companies into project activities throughout the project, the consortium makes sure they are aware of project progress and value for them and want to support the project work rather than of prohibiting it.</p>
5	<p>Difficult to find financial sustainability after the end of the project: Low probability</p>	WP7	<p>1. Omnia, as the coordinator of the project, will commit in investing 5000 euros to guarantee the sustainability of Auto-Cove 2.0 project even after it has been completed.</p> <p>2. Project's VET-providers will arrange dissemination events for external companies and VET-providers even after the project lifetime and charge of them, to make these stakeholders aware of project outputs and where to find and use them for free. This guarantees the financial sustainability of the project. (Partners have experience that these kinds of courses are demanded by work life and it is not difficult to attract participants in them).</p> <p>3. Electude International, which creates and maintains the project development (and after it is completed,) and dissemination platforms, has committed to maintain and update the project platform for five years after the project ends. This guarantees the access for project outputs for five years after the project is completed.</p>



6	<p>Staff turnover: medium probability</p> <p>This risk must not be underestimated, especially for the long duration of the project. Staff turnover could affect the quality of the project, in terms of continuity, time management and knowledge transfer.</p>	All WP's 1-7	<p>Each organisation names project teams, whose members have a stable position in the organisation. The steering committee consists of administrative project managers and development team manager from each organisation to guarantee the sustainability of knowledge transfer and update of project progress all the time at all levels.</p> <p>In general, all organisation members that are taking part in the project will be updated about project progress and are able to replace absent colleagues in a timely manner, without wasting too much time on handovers.</p>
7	<p>Poor administrative and financial management: Low probability</p> <p>Report submissions, regular financial control, quality monitoring and control activities will help the coordinator to detect inadequate budget management by one or more partners.</p>	All WPs: 1-7	<p>Financial controls and partners' report on the expenditures are asked every 6th month. If some partner cannot perform according to the budget received, the coordinating partner will propose a redistribution of budget to be approved by the majority of partners.</p>
8	<p>Withdrawal of a Consortium partner: low probability</p> <p>Due to internal reorganisation of external factors a partner could find itself in the position of abandoning the project.</p>	All WP:s 1-7	<p>The consortium is composed of very reliable and committed partners. All of them have already led Erasmus+ projects. If one of them was forced to withdraw for case of force majeure, we would then use all partners already existing international networks to find a new one. Each VET-provider has several technical partners also outside Auto-Cove 2.0 consortium.</p>

2.2 PARTNERSHIP AND COOPERATION ARRANGEMENTS

2.2.1 Consortium set-up

Consortium cooperation and division of roles (if applicable)

Please address all guiding points presented in the Call document/Programme Guide under the award criterion 'Quality of the partnership and the cooperation arrangements'.

Describe the participants (Beneficiaries, Affiliated Entities, Associated Partners and others, if any) and explain how they will work together to implement the project. How will they bring together the necessary expertise? How will they complement each other?

In what way does each of the participants contribute to the project? Show that each has a valid role and adequate resources to fulfil that role.

Auto-Cove's consortium forms a big, **European wide co-operation triangle between 7 VET-schools, 3 Universities of Applied Sciences, four vehicle field companies and one national research centre.** Here their expertise and their possible contribution for Auto-Cove 2.0 project is presented.

Figure 6: Project partners in country clusters



1. Configuration

Omnia, the project coordinator, has worked over 15 years with European development projects. Omnia also participates in one of the first selected COVE-consortiums, GIVE and carries responsibility of project monitoring, quality assurance and risk management of the project. Auto-Cove consortium can via this link directly benchmark GIVE-consortium's good practises in quality assurance and risk management issues.

Omnia is the only vocational college, who educates a Vocational Qualification in Vehicle Sales, and spare parts sales. Therefore, it will develop new study modules for these Vocational Qualifications. The study module will contain objectives, raised from the skills-gap-analysis, with which future vehicle salespersons and spare parts salespersons will be able to provide factual and detailed information for customers also about clean-tech vehicles and their significance in combating climate change in Europe. The same study



module will be provided to Auto-Cove partners' co-operation companies to upskill their sales representatives with needed know-how of modern technology and greener values in vehicle field.

Omnia and other Finnish partners of Auto-Cove 2.0; **VTT (Research centrum) + Volvo car Finland and its dealer Bilia and project's associate partner: Metropolia; The university of Applied Sciences** and have co-operated already for many years on National level and in a CLEMET (Cleantech mobility Education for tomorrow)-project, which acted as a starting point for planning Auto-COVE project.

EstonianTartu Rakenduslik Kolledž has an Erasmus + mobility Charter and more than 50 partner schools in Europe. The college's automotive technology department has close international cooperation with 20 schools in 14 countries. The department is active in one Erasmus+ KA2 cooperation projects in the field of digital learning material development and have previously completed 2 international cooperation projects. Tartu Rakenduslik Kolledž and Institute of Forestry and Engineering in Estonian Life Sciences University of Applied Sciences **and Toyota** Baltic also have already existing partnership in Estonia and both educational institutes are very experienced participants in international development projects. Tartu Rakenduslik Kolledž has a long-term co-operation with both Latvian **Ventspils Technikums** and Omnia

Estonian Life Sciences University of Applied Sciences will create a pathway study module of maths and physics for Estonian technical students with Tartu Rakenduslik Kolledz. The Engine Test Laboratory at the Institute of Forestry and Engineering has the facilities and know-how to conduct vehicle and combustion engine research, development and testing. Previous projects (e.g. "Impact of biofuels on pollutant emissions from internal combustion engines 2017- 2018" T170043TIBT, Environmental Investment Centre) have been linked to research on alternative fuels and fuel additives to improve engine characteristics and reduce emissions. Participation in Auto-Cove project allows to install a mild hybrid drive to combustion engine in the Engine Test Laboratory. Laboratory staff will focus on the reverse engineering and mechanical design as well as on implementation of NCM battery pack and its telemetry to mild hybrid system. The engine could be used to develop, test and optimize various drive control algorithms. Constructed mild hybrid system can be used not only by students of Tartu Rakenduslik Kolledž in the framework of training simulation car train "Hybrid and Electric vehicles", but also by other partners of Auto Cove project.

Dutch **Koning Willem I College** is an experienced multi-sector VET-provider and developer of Vehicle Technology education. Their Hydrogen vehicle technology know-how would be an asset for the car mechanic education development work. They also brought their already existing company partner: Electude International with them in this project as an international specialist of digitalization of learning material in vehicle field for VET-teachers' use. **Electude** will support all VET-providers in digitalizing the developed study modules with their already existing e-learning tools on a readily existing e-learning platform.

German cluster, consisting of Jakob-Preh-Schule, a technical vocational college and FHWS-polytechnics + Preh-company, are also already co-operating cluster, who has a deep know-how in education development work, tight company co-operation in dual apprenticeship system and project work. Preh-company has even its own apprentice-training center and it will therefore bring substantial additional value to this project by letting other companies benchmark their way of education apprentices at the company. For instance, Volvo Finland is interested in developing a corresponding system of vehicle students' apprentice training in their company.

French **SEPR** and Latvian **Ventspils Tehnikums** are both also educating car mechanics and have long experience of Erasmus+ project work. They will not develop a curriculum module in this project, but will pilot each module, produced by other VET-providers and take part in research 2 and share its recommendation results in Latvia and France. To be able to pilot modern technology study modules, also they will need new equipment or device to enable the piloting and testing. **Ventspils Tehnikums** will lead WP7 about Impact and Dissemination. Its key experts have long and wide experience specially about digital communication and social media tools. They also own wide experience at communication activities implementation. Omnia will lead the mobilities of the project. Mobilities are a big part of the project and there will be 379 mobilities in Auto Cove 2.0, which means a significant amount of work for the responsible institute in WP5.

SEPR is one of the biggest Vocational Education Centre in France and collaborates with more than 35 training centres and 100 companies all around the world, inside and even outside European boundaries. SEPR has been awarded the Erasmus+ VET charter (2015), the Erasmus+ charter for higher education (2007) and the "Good Practice" label from the Erasmus+ French National Agency (2019). French VET-centre SEPR as a very experienced VET- institute of EU-projects, will lead WP6: Quality Assurance and



Risk Management. SEPR received funding for another Cove: Mosaic, this year and they will be able to use synergies between two Coves in their Quality work in Auto-Cove 2.0.

Lithuanian VET-centre: **Kaunas Technical vocational education centre** is a forerunner of vehicle education in Europe. It already acted as coordinating and applicant organisation of many of EU-projects. It is participating in the project "Inclusion and employability through electric vehicles technology" along with partners from Croatia, Italy, Portugal, Romania, and Spain. The aims of the project are improving the quality and efficiency of sustainable investment, education, training and youth systems; promoting open education and innovative practices in the digital age; promoting social inclusion; improving new technologies and digital skills. The objective of the project is to design 14 modules on electronic vehicles for students of initial VET programs in the field of auto mechanics. The modules are designed using a work-based learning methodology, animations and 3D designs that can be printed by the students in the classroom with the help of 3D printers. Another important innovation in the module will be providing the content part of each unit with a text-to-speech player integrated. They will lead WP4, Training Courses for VET-teachers and industry representatives in this project.

Lithuanian university of applied Engineering Sciences: **Kauno Technikos Kolegija**, as a leader in engineering studies in the Baltic region, shares actively knowledge and contributes to the advanced development of society and industry. Its main international cooperation priorities are internationalization and modernization of study programmes, introduction of innovations, realization, dissemination and multiplication of applied research results, guarantee of graduates' competitiveness in the international labour market and development of staff competences. Kauno Technikos Kolegija will develop study modules about charging systems in Nordic conditions and about fire safety of High voltage batteries in electric vehicles in WP3.

In addition to the 16 full partners, the Auto-Cove 2.0 has already at the application phase attracted 21 sectoral associate partners with clearly defined roles in the project. They all have signed a letter of interests to guarantee their commitment to the project. 14 of them have pic codes and are listed in part A in this application. In addition to them, also the following sectoral partners have committed to contribute Auto Cove project outputs' dissemination:

- Finnish Central organisation for Motor Trades and Repairs (AKL),
- German chamber of crafts and industry in Lower Franconia
- CNPA as a French VET-policy maker in automotive field
- Association of Transport engineering Educators in Lithuania
- BAS truck company in the Netherlands

2. Upward convergence

Auto-Cove project partners from 6 European countries represent different stages of development of vocational excellence approaches, but all of them have already recognized the need of working tightly with world of work and sectoral representatives.

Omnia, the project coordinator, has been included as an innovative multisector education centre in the European Commission report of Mapping of Centres of Vocational Excellence (2019). Omnia represents an excellent example of collaboration with local policy and research makers and companies in Finnish capital area. Omnia has partnership agreements with more than 3000 companies around it and Finnish model of letting students gather part of their vocational expertise in companies of their own field has led to expand that development direction all the time.

Unlike other consortium partners, Finnish VET-providers educate vehicle salespersons within Vocational Colleges in the automotive engineering departments. Students there are educated to study a Vocational Qualification in Vehicle Sales. **This is the reason, why Omnia decided to develop one study module concerning modern vehicle sales skills in the study module WP3**, because consortium company partners also consider this kind of qualification being in need and its updating need real. One cannot sell electrified vehicle with the same skills one sells for instance apartments.

Omnia has decided to build and is already planning a new campus for Vehicle sector and a few other fields, and this project would on its own behalf support Omnia's objective to create there a modern auto-house with clean-tech-technology solutions. The first concrete result of Clean-tech-solutions is ADAS-package (about advanced driver assistant system maintenance), which was developed and piloted in Finnish in Clemet-project and will be further widened, updated, translated and internationally piloted in



this project. This ADAS- package has been taught during this year in three Finnish cities in 14 different teaching sessions, whose participants have been consisting of VET-teachers from vehicle sector both from secondary and tertiary levels, vehicle damage insurance controllers from insurance companies, service managers from different garages and workshops and VET-students in vehicle sector. The feedback from these educational sessions have been very encouraging and positive and has been one reason to develop a well succeeded national project even to a bigger and wider international project with partially corresponding methodology.

Estonian Tartu Rakenduslik Kolledž and Institute of Forestry and Engineering in Estonian Life Sciences University of Applied Sciences of Estonia have also decided to build a pathway study module for their vehicle sector students. It will consist of contents of Physics and Mathematics together with Finnish Omnia.

Latvian and French VET-providers have not yet started a systematic development work of their vehicle education but have recognized need to do it in near future. Therefore, joining into the partnership in this project was self-evident profit for their plans.

Auto-Cove 2.0 Lithuanian VET-college partner: Kaunas technical vocational education centre with 1500 students with 127 teachers and offers lower/upper secondary and post-secondary non-tertiary education. There are also in-service training and retraining courses for adults.

The Centre seeks to train highly qualified specialists who strive for self-improvement, are oriented to changes in the labour market and the development strategy of Lithuania. International cooperation is one of the school's underlying principles and they already have cooperation partnerships with many European countries. The international strategy of The Centre for the 2021-2027 is the guideline for the team of international relations. The Centre excels at professional training of car mechanics, car electro mechanics, car body repairers, welders, plumbers, joiners and furniture makers with newly equipped and one of the most modern workshops in Lithuania. The Centre is awarded by Erasmus accreditation for 2021-2027.

Kaunas technical vocational education centre already acted as coordinating and applicant organisation of many of EU-projects, the project team is familiar with requirements and structures of EU-projects. Projects team has implemented numerous Erasmus+ projects aimed to educate the teachers on the issue of tackling youth unemployment, encourage leadership and entrepreneurship among young people as well as promoting voluntary activities. The VET-centre co-operates actively with Kauno Technikos Kolegija and even has some teachers, who work in both institutes.

Estonia cluster will bring Hybrid-expertise and their EU- project expertise in this project. They are very experienced Erasmus+ project workers and developers of VET-curriculums.

German cluster's main power is also an existing and sustainable co-operation between their VET-providers and Preh-company as well their devotion in developing electricity vehicle technology both at Vocational and university levels. **They will contribute this project with their combined know-how of electricity vehicle and HV battery charging technology and have planned an extensive Learning Experience Journey, which was presented on page: 34.** Bad Neustadt, where they are located, is chosen as a model town of electric mobility in Germany and that is why they are the correct organisations to build a study module of different charging technologies of electricity vehicles in Mid-European conditions.

Auto-Cove project consortium has prepared to produce all 17 study modules in digitalized form. For this big challenge consortium has received an excellent partner from the Netherlands. Electude International as a Dutch full partner is specialised in e-learning solutions in vehicle field and most of their customers in dozens of languages in 70 countries are VET-teachers from vehicle field. Electude has promised to support all study module development institutes' key persons in the digitalization work with their already existing expertise and e-learning tools and platform. **They will also contribute the development work from its very start by guaranteeing an access for all project partners into the theoretical content of their platform in respective themes. This means that no organisation has to start the development work from zero but can fully utilize all already developed theoretical materials on Electude e-learning platform.**

3. Geographical dimension

The Auto-Cove consortium matches 3 different geographical criteria.

a) Geographical tout-court:

The consortium includes partner from the Nordic area (Finland), Continental Europe (Germany and the Netherlands), Mediterranean Europe (France) and Eastern Europe (Latvia, Lithuania and Estonia).

b) Geo-cultural VET-dimensions: the selection of partners ensures the representation of different cultural tradition of VET systems.

The Nordic Finnish model, recognized as an excellence in the EU, with its individual learning pathways, the German and France dual work-based learning approach.

In Dutch VET-system there are two different VET-pathways:

One is School-based pathway with min 20% and max 60% work-based learning and another with at least 60 % work-based learning. Both lines educate same qualifications.

Although not a VET partners: German, Lithuanian and Estonian universities of Applied Sciences and Estonian, they all are educating innovative VET leaders in the German, Lithuanian and Estonian educational systems.

c) Auto-Cove consortium includes five qualified and solid clusters of Cove triangle model: In Finland, Estonia, the Netherlands, Lithuania and Germany. All these clusters include both secondary and tertiary level VET-providers and already existing co-operation company partners. Finnish partners are working with good co-operation with VTT research institute, which has a crucial role in project implementation in all project countries. German FHWS has its own research institute, which is implementing this project's research part with Finnish VTT**4. Involvement of Partner Countries:**

Every VET-provider has its own responsibility area in this project and every educational and research institute has committed to lead one of more Work Packages alone and with some other partners. The work is shared evenly to all full partners.

The responsibility area has been chosen by the specialization of the institute in certain theme already before this Auto-Cove project. The essential strength of Auto Cove project is in updating and developing further partially already existing know-how and sharing it with other partners during the project, but also guaranteeing free access on the project result platform **for everyone** after the project has been finished.

These expertise strengths are:

Koning Willem I College: specialization in hydrogen vehicles and their technology was chosen from the Netherlands, because Holland is one of the world's leading hydrogen technology country. Dutch partner is also very good at ADAS-systems-related issues. Dutch full partner company Electude is specialized in e-learning solutions especially in vehicle education and will support all study module developing institute in the digitalization work of the study module contents with their readily existing expertise, tools and platform. Electude will, for the duration of the project, make all already existing learning materials available to authors, trainers and learners in the program. This enables the developers to refrain from needing to integrate basic knowledge and skills transfer as far as Electude covers these. It also creates synchronised entry-knowledge level for participating students. Thus, reducing the risk of frustrations when the students rotate the programs at the different schools.

Omnia: already created and piloted Finnish version of ADAS- (Advanced Driver Assistant Systems, contributing safety of driving) package for vehicle field staff members and students. It will now be widened, updated and translated in this project and piloted first time internationally.

VET – sector in Finland is being developed in tight discussion with business life and because this is the clue of COVE-project, it is natural to let Finland and Omnia as a Finnish VET-provider lead this project.

French SEPR is the institute, who leads Quality Assurance and Risk Management Work Package in this project. SEPR applied and received funding in 2022 for a big artisan field COVE-project called MOSIC. While doing quality control in Auto-Cove 2.0, SEPR will utilize synergies with Mosaic-project and co-



operate with Auto-Cove 2.0 coordinator Omnia, who leads Quality Control Work Package in Cove- project called GIVE (funded in 2021).

Jakob Preh Schule: specialization in electric vehicles' charging technologies: German vehicle sector has long traditions and Germany is a leading vehicle manufacturing country in Europe. Bad Neustadt, where Jakob Preh Schule and FHWS, the German Polytechnic- partner in Auto-Cove, are located, is German model city for electric Vehicles. And because consortium wanted to include a devoted German VET-college in this project, and it is natural that Jakob Preh Schule is our choice.

Tartu Rakenduslik Kolledž will do its development work in Auto-Cove project in close co-operation with Estonian University of Life Sciences and Toyota Baltic. In Auto-Cove project they develop two pathway study modules of maths and physics for technical students in co-operation with Tartu Rakenduslik Kolledž and Finnish Omnia.

VTT, research institute: specialization in high quality researches in the field of technology and especially in the vehicle sector, very experienced research institute also with international consumer-oriented researches with big number of participants.

FHWS, German polytechnic with its own research institute TTZ-EMO has wide know-how on electric vehicle- related researches, especially in battery technology, power electronics, motor drives and control systems. Their contribution is to co-operate with Finnish VTT and implement this project's research part. They also offer simulation technologies, real hardware testing in-lab-working technical analysis and programming.

Kaunas Vocational Education Centre works in close co-operation with Lithuanian university of Applied Sciences: **Kauno Tehnikos Kolegija** and they both are active and proficient educators of vehicle field professionals on secondary and tertiary levels. They both have plenty of experience of Erasmus+ KA-projects and especially of projects in automotive sector. They are strong developers of the field in Lithuania. Project coordinators and school staff would be able to lead Work Package 4 in Auto-Cove 2.0: "Transnational training courses for VET-teachers and industry representatives.

By involving these forerunner institutes Auto-Cove combines and covers different institute's expertise and experience from different angles of modern, sustainable vehicle technology and partners bring additional value for each other's curriculum development work.

Roles and responsibilities of the partner companies have been clearly defined to the company representatives already at the application phase and would consist of the following things in this project:

- Continue co-operation with the VET-centre partner, they have co-operated also earlier (Tartu Rakenduslik Kolledž, Omnia, Jakob-Preh Schule and Koning Willem I College)
- Participating in the skills-gap-analysis with service managers/leading mechanics, to find out the most hectic educational needs for your mechanics now and in future
- Participating five times during the project in one-week study module piloting session with two employees (5 days including travel days) = altogether 10 employees piloting different study modules and training courses during 5 annual weeks and giving feedback on study module content to improve the development work.
- Hosting the consortium staff visits once during project time
- Contributing co-operation VET-center with their expertise and technical data, which is needed to develop a new innovative study module for future car mechanics and vehicle sales personnel to educate skilled mechanics and salespersons also to respond to partner company needs.
- Hosting a few students from vehicle field: car mechanic and vehicle sales students for 4 weeks mobilities and/or vehicle engineer students for 18 weeks mobilities.
- In addition to these; Dutch company partner: Electude International will have an essential role in this project to support all study module developing VET-providers to develop the content of their study modules directly in a digitalized form on their readily existing e-learning platforms. Electude has promised to provide not only the support and guidance to use the e-learning

platform tools, but also access to their already existing learning and teaching materials (on their e-learning platform), which is related to the development themes of transnational study modules.

Auto-Cove project offers to companies:

- More skilled mechanics and vehicle salespersons with modern technology know-how in future,
- **know-how about sustainable element: how to dismantle and recycle e-batteries to save raw materials and nature**
- courses for already working mechanics, work leaders and vehicle and spare parts salespersons about new technology vehicles and their maintenance and sales, and via them **opportunity to up- and reskill the already working mechanics with missing know-how in vehicle sector; both in repair and maintenance tasks, but also in sales task of modern vehicles.**
- Funding for partner company employee's piloting weeks for travelling and subsistence + salary for their working time during those five weeks
- Home internationalization opportunities with foreign secondary and tertiary level students when company partners host them during this project (from 4 to 18 weeks each).

5. Commitment

To commit partners evenly into the project work, the leadership of Work Packages is shared. For a smooth and clear development of the project, at the design stage, it was agreed among the partners to keep tasks responsibilities at WPs level, assigning the tasks leadership to the to the respective WP leader. The intention is to utilize each partner specific expertise both in the design of each work package and in its deployment.

Expertise profiles of partners/Work Packages:

WP1: Omnia

Omnia is Finland's 3rd biggest and most international Vocational Colleges with 10 000 students. More than 15 years OMNIA has been deeply involved in international projects both as leading and partner organisation. OMNIA has a great number of approved projects under the Erasmus+ Programme (Strategic partnerships, development projects and mobility projects.) Omnia has had mobility Charter since 2015 and was second time accredited in autumn 2020. Regionally Omnia works in close co-operation with more than 3000 companies in the capital area of Finland, educating their work instructors and placing Omnia's vocational students for work-based training in them. Omnia works in many national and international networks including Unesco-Unevoc and Xarxa-networks. International team of five full-time coordinators and a few project assistants is working with international projects at Omnia under guidance of a project development director. Omnia has enough resources and know-how to coordinate this kind of project.

WP2: VTT and FHWS, TTZ-EMO

Finnish government owned research centre VTT and it has a smart mobility team and a long experience of different studies in vehicle sector. VTT has a long track record of research in transport systems and vehicle powertrains as well as intelligent transport systems and vehicle automation. VTT has been active in numerous European projects related to connected and automated driving and sustainable transport. The main tasks of VTT involve supporting Finnish industry in applying and developing novel innovations and developing new businesses as well as supporting the Finnish government and other public sector with its technological expertise. Due to its research work, VTT has extensive collaboration networks among stakeholders working on connected and automated driving. VTT is also a member of European level networks and associations in the field such as ERTICO – ITS Europe and European Conference of Transport Research Institutes (ECTRI).

- **R & D WP is shared between Finnish VTT and German FHWS TTZ-EMO, because they have different expertise and profiles in this project:**



In co-operation with German FHWS and its research unit of electric vehicles, VTT will make a skills-gap-analysis for industry representatives and VET-teachers in vehicle sector. The results of the study will be used to identify skills and knowledge requirements for future and already working staff and their managers in sales of new vehicles, but also for automotive engineering students and vehicle servicing staff. Vehicle teachers will also be one target group in skills-gap-analysis, because they know best, what content exists already in vehicle field curriculums and what will be needed in future. VTT and FHWS will also provide recommendations for development of vocational education in vehicle sales sector.

German FHWS, TTZ-EMO is an experienced research centre in the field of technical research, especially in electric vehicle automotive sector. TTZ-EMO teaches on several levels, co-operates with industry and makes research work in the field of electric vehicle technology, especially in battery technology, power electronics, motor drives and control systems. They can offer simulation technologies, real hardware testing, in-lab working, technical analysis and programming. TTZ-EMO has many years of experience in doing research as well as education.

- **They would not only participate the creating and implementing the skills-gap-analysis with VTT, but actively also participate in the technical study module development work with VET college: Jakob Preh Schule.** The study module and teacher training course, they will develop will be about electric battery charging systems and technologies. This means that FHWS has a double role in this project: as maker of skills-gap analysis but also as a technical developer of study module and training courses. Both research organisations form a strong research alliance to implement research and development part of this project together.

WP3: Technical and business-related study modules and training courses:

Tartu Rakenduslik Kolledž will lead the WP, but all VET-providers will participate in the development work equally.

1. Tartu Rakenduslik Kolledž is very experienced and internationally active VET-provider. Its automotive department has close international cooperation with 20 schools in 14 countries. The department is active in one Erasmus+ KA2 partnership projects in the field of digital learning material development and has previously completed 2 international co-operation projects. It is responsible for the development work in second study module consisting of hybrid vehicle technologies. Tartu Rakenduslik Kolledž does its development work in close co-operation with Toyota Baltic and the Institute of Technology in Estonian Institute of Forestry and Engineering in Estonian Life Sciences University of Applied Sciences

2. Omnia will enlarge, update, translate and pilot the nationally developed ADAS-module in this project. ADAS-module's first version was developed in Finnish CLEMET-project prior to this project, and it was the starting point for the whole Auto-CoVE project. Omnia will also create two study modules about modern technology vehicle and spare parts sales. In addition to them, Omnia will also create two pathway study modules in co-operation with Estonian partners of maths and physics for all technical students, who aim to go on their vocational studies on any technical fields at the polytechnic.

3. Koning Willem College is a model college of sustainability, very experienced college in international projects and actively develops vehicle education in the Netherlands. It has special expertise as well about hydrogen technology as ADAS-systems and is locally very well anchored with vehicle companies. Its development work will be done in close co-operation with companies, including Dutch Electude International. They have co-operated for 5 years within VET-sector between each other. **Electude International** will play a necessary role in WP3 as a professional supporter of each study module **content digitalization and dissemination**.

4. Jakob Preh Schule is responsible for the vocational education of over 1,500 apprentices of various trades and professions such as mechatronics technicians, electricians, state-certified electronics technicians and technician of automotive and electric vehicle technology. They co-operate closely with FHWS polytechnics and company Preh. All these three institutions contribute development work in study module 3 about electricity vehicles' battery systems and charging technologies.

5. Kaunas Kautech works in close co-operation with Lithuanian university of Applied Sciences and they both are active and proficient educators of vehicle field professionals on secondary and tertiary levels. They both have plenty of experience of Erasmus+ KA-projects and especially of projects in automotive sector. They are strong developers of the field in Lithuania. They develop a secondary level study module of electric battery dismantling and recycling and tertiary level training courses of the fire safety of electric batteries and about electric battery charging systems in Nordic conditions.

**WP4: Training courses for VET-teachers and company employees on technical and business**

sectors: Kaunas Kautech will lead the WP, but all the VET-providers (except French and Latvian ones) will participate equally in the development work.

WP5: Mobilities

Omnia will lead the student mobilities of the project. Mobilities are a big part of the project and there will be 60 student mobilities in the project and more than 339 staff mobilities in Auto Cove 2.0, which means a significant amount of work for the responsible institute in WP5. Work Package 5 is mainly about scheduling and documentation of mobilities.

WP6: Quality Assurance and Risk Management

French SEPR is the institute, who leads Quality Assurance and Risk Management Work Package in this project. They are one of the biggest Vocational Education Centre in France. SEPR applied and received funding in 2022 for a big art field COVE-project called MOSIC. While doing quality control in Auto-Cove 2.0, SEPR will utilize synergies with Mosaic-project and co-operate with Auto-Cove 2.0 coordinator Omnia, who leads Quality Control Work Package in Cove- project called GIVE (funded in 2021).

WP7: Impact and Dissemination

Ventspils Tehnikums will lead WP7 about Impact and Dissemination. Its key experts have long and wide experience specially about digital communication and social media tools. They also own wide experience at communication activities implementation. It will work in close co-operation with Electude International, who provides two very essential elements for the project: Project output development and dissemination platform.

To secure a sustainable and realistic involvement of companies and their representation, it was agreed at a partnership level in the project design phase, not to assign them a WP leadership. Nevertheless, as it is clear in the budget and activities allocation scheme, the companies will be actively participating in many activities like skills-gap-analysis, contributing and piloting study modules by their staff and host staff visits and student mobilities.

6. Collaboration

Having participated in numerous EU projects of different sizes and content fields, OMNIA understands that internal communication is the key to effective project delivery. Communication will happen regularly throughout the duration of the 4-year project, providing plenty of opportunities for all partners to come together to report, discuss, plan and progress project activities. As Lead Partner, OMNIA will use Teams (web-based tool) to support project communication and cooperation between partners. Teams is a tried and tested system that is suitable for this type of project and partnership.

The 8 planned Steering Committee meetings and 16 virtual meetings (important to progress project activities) will enable effective project coordination and management and enables communication between partners on a regular basis. These meetings are spread throughout the project duration to coincide with key deliverables milestones. The number of meetings, and the balance between face-to-face and virtual meetings, is considered appropriate for a project of 48 months in terms of both deliverability and value for money. Throughout the duration of the project, day-to-day communication will be via Teams and emails.

Three key documents that support the delivery of the project and will enable effective cooperation are:

- the Project Work Plan (WP1), that will set out the roles and responsibilities of all partners, the project objectives, the time plan for delivery and the expected results and outputs
- the Grant Agreement.
- the Consortium Partner Agreements that will be regulate the payment terms, roles and responsibilities, budget, conflict resolution mechanisms between each partner and OMNIA

The project will have formal structures (see WP1) to support delivery, through which communications and cooperation will occur. The Study Module WP3, made up of representation from each partner, will provide



input, all key decisions will be made at this level and at the level of the steering committee, along with progress monitoring and reporting.

Communication and cooperation with external stakeholders will be of critical importance, not only in shaping the outputs, but in ensuring their sustained use post-project. This will be mostly carried out in two ways. Firstly, each Partner will communicate with their own established networks, including target participants, VET training providers, academics, SME representatives, etc. Secondly, the project will engage with these same stakeholders directly through the dissemination events detailed in the WP Communication and Dissemination. Two-way communications will seek feedback, ideas, and opinions of these important actors.

2.2.2 Consortium management and decision-making

Consortium management and decision-making (if applicable)

Explain the management structures and decision-making mechanisms within the consortium. Describe how decisions will be taken and how regular and effective communication will be ensured. Describe methods to ensure planning and control.

Note: *The concept (including organisational structure and decision-making mechanisms) must be adapted to the complexity and scale of the project.*

As described already above: in Figure 5, The Auto-Cove 2.0 management will happen on three levels

Level 1.

STEERING COMMITTEE composed by 1 project coordinator per educational institute or research partner and the leader of financial unit also in steering committee. There will also be two sectoral business representatives in steering committee to monitor and reflect project. They have promised to regularly attend Teams -meetings of the project: 2-4 times (depending on the need) in a project year. The first business representative comes from projects German full partner company: a big German international vehicle field company Preh, which educates apprentices regularly. The second one comes from Finnish Central Organisation for Motor Trades and Repairs (AKL).

The steering committee defines the main strategies for the implementation of the project and coordinates overall project implementation. It will gather every 6th month physically and go through reports, drafted by Quality Assurance and Risk Management partner, SEPR to update progress of the project. In between physical meetings it will have two Teams video meetings to keep in mind all major duties to be carried out in the becoming months. Steering Committee's work will be included in WP1

Level 2:

Financial Unit and Communication unit work, where each consortium educational and research institute has one member, will be selected in the beginning of the project.

Omnia will lead financial unit and its work will be part of WP1. The leader of financial unit will participate in the steering Committee's project meetings and act as a link between steering committee and project assistants in each institute.

Communication unit will be led by Latvian Ventspils Tehnikums, which is relatively small, but very experienced and active project partner and especially strong national partner in vehicle technology in Latvia. Ventspils Tehnikums' key experts, participating in Auto- Cove project, have long-term expertise in international communication management and communication activities implementation. Each participant has a member also in Communication unit and it will be selected in the first kick off -meeting of the project. Its work will be included in WP7.

Level 3:

Actual project work will be implemented in Work Packages.

Leading responsibility share of Work Packages:

WP	Lead Partner	Participant partners
1 Management	OMNIA	all
2 R & D Creation, Implementing Skills-gap-analysis	VTT and FHWS	all
3 Transnational Study modules and training courses for secondary and tertiary level students	Tartu Rakenduslik Kolledž	all
4 Transnational training courses for VET- teachers and company representatives	Kaunas Technical Vocational Education Centre	all
5 Mobilities	Omnia	all
6 Quality Assurance and Risk Management	SEPR	all
7. Impact and Dissemination	Ventspils Tehnikums	all

Management strategy is described in more details above in section 2.1.2

3. IMPACT

3.1 Impact and ambition

Impact and ambition

Please address each guiding points presented in the Call document/Programme Guide under the award criterion 'Impact'.

Define the expected short, medium and long-term effects of the project. Who are the target groups? How will the target groups benefit concretely from the project and what would change for them?

Exploitation and dissemination

All Auto-Cove 2.0 project outputs will be developed directly on Electude International's e-learning platform, on a database there, designed for this project and its dissemination. This method will add and guarantee greatly the exploitability and effective dissemination of the project outputs. All project outputs will be produced in English /in one partner language and translated into all partners languages (+ in English in case produced in some other language originally). Translations support wide exploitation and dissemination of the project outputs.

Electude IT-expert team will educate all key-developer teachers from partner institutes to use the needed digital and gamification tools and teach them the structure of the study modules on their platform. The first

practical workshop, arranged by Electude, will be hold in connection of the first Steering Committee meeting (the technical key development persons will attend to it from the Steering committee). One purpose of the first practical workshop by Electude is to make all partners aware, how to receive access and study all relevant already created vehicle field study modules on Electude International platform. The meaning is, that before the actual development work starts, all technical development teachers are well aware, what content has already been created on Electude's e-learning platform and will start their own development work based on already existing material. After that a video workshop will be hold by Electude for all technical development teachers to kick effectively off the development work at early stage of the project.

Electude IT-persons guarantee the regular IT-support for technical key development persons by attending each collaborative development workshop. They will use one of the workshop days to help key development teachers in their possible challenges, occurred when creating material on the e-solutions platform. In this way all development teachers will have opportunity to study and update their digital skills 6 days under direct guidance of relevant experts during the whole project.

Auto-Cove project outputs will be exploited by its direct target groups (below) but will make change also indirectly to the associate partners. The most effective exploitation is ensured by carefully planned target groups and their roles in the project.

The project output exploitation and dissemination will be implemented by the following target groups:

- Technical VET-colleges' and polytechnics' students, especially in the vehicle maintenance and sales fields; on both: secondary and tertiary level VET-education,
- VET-teachers at VET-institutes in Europe in vehicle and sales fields (EQF-level 6),
- Industry representatives in vehicle industry in the sales and vehicle maintenance sectors, both on EQF-level 4 (employees) and 5 (work leaders).
- VET-policy makers in 7 partner countries
- Sectoral associate partners in all partner countries: Vehicle maintenance and sales related associations, chambers of crafts and industry and technical sister colleges or polytechnics, who are also educating vehicle field students

Each VET-provider partner will utilize the developed study modules in their own institutes as obligatory or optional study modules. In the last project year, the content of new innovative study modules, will be published in digital versions on e-learning solutions for vehicle sector -platform: Electude International. Electude's e-learning platform for technical field VET-teachers and students has already existing tens of thousands active users round the world and normally institutes buy a licence to use its 2000 already existing study modules, but access for Auto-Cove 2.0 project products have been agreed to be free the next five years for everyone. **Because Electude reaches vehicle field VET-teachers and via them students in 70 countries, the exploitation of project outputs will be effective and guaranteed.**

All project outputs will also be published and disseminated also **via European OER Commons platform**. When the hosts of the platform were contacted, they agreed on publishing the project outputs under condition that they have been produced using Creative commons licence.

All VET-providers intend to **educate external industry representatives with developed training courses to upskill their already working mechanics**. The companies workshop leaders have openly told that this kind of education is acutely needed. Therefore, these courses will be charged from the participant institutions, which guarantees **financial sustainability** for the project impact long after the project ends.

Sustainability is a key issue in the whole Auto-Cove project. The whole project is designed to support sustainable development and clean energy transition in Europe. Therefore, we need employees, who are able to service and sell clean-tech vehicles. Project output sustainability is described in details in section 3.3.

Impact

Short- and medium-term effects: impact on participants and participating organizations during the project lifetime:

-160 (including hosting staff) directly participating **vehicle teachers and managers in automotive field and partner companies** will participate both in development work and piloting of the technical and business-related transnational study modules and training courses. Participants receive opportunity to upskill themselves and network with their colleagues both regionally and internationally.

- Together done development work of modern vehicle technology study modules will empower technical teaching personnel in all partner institutes and create feeling of meaningfulness and importance, because every partner knows necessity of this development work. Now they do it together, instead of working alone, with combined expertise and experience. Each of them leading the development work of a few study modules and sharing it to other partner institutes will be allowed to utilize all other study modules created by their partner organizations. During development work they can learn from each other and network with each other. They will also network stronger than earlier with project company service personnel and strengthen co-operation at technical, institutional and student internship level between each other.

-technical students and vehicle sales students in all VET-institutes, who participate in this project will act as study module piloting target groups and benefit directly from all project outputs in WP3 and 4 during the project in all 7 partner countries.

-National pathway study modules in math and physics for technical students between secondary and tertiary level VET-schools in Finland and Estonia **will increase attractiveness of VET-education** in comparison with theoretical upper secondary education. This means that VET-centers will attract more motivated and study-oriented students than earlier, because they could provide students opportunity to go on their studies more easily than before also on tertiary level after the vocational college graduation.

- **60 directly participating vehicle sector students from secondary and tertiary VET-levels** will do their international internships at partner companies during the project and learn even more modern vehicle technology and cultural skills at partner companies during their mobility periods in this project. They receive a genuine internationalization experience and network with people in another European country in their field.

Long-term impact:

National VET-policy makers as associate partners in this project have promised to make changes in vehicle and vehicle sales fields curriculums after the project output development work is completed. Therefore, this project will have direct impact on vehicle field VET-education in all partner countries.

There will be developed **abilities in automotive industry and sales to meet increasing volatility, uncertainty, complexity and ambiguity and to create innovative formats of co-operation between business, science and politics to secure jobs in the automotive industry.**

Project outputs, meaning study modules (in literal form) and tutorial videos, will be disseminated **on two online platforms: Electude International Platform and OER commons platforms (described in more details below in 3.2 point 4)**. These platforms maintain the project outputs for five years after the project is completed and guarantee free access for all interested participants to learn from the developed outputs. Information about existence, content and its cost-free nature is shared via national and sectoral networks like:

- Finnish national agency's mail channel for all VET-providers: Erasmus.ammatillinen@oph.fi
- The Finnish association for the development of Vocational Education and Training AMKE, promoting VET in Finland
- MBO raad; Netherlands Association for VET-colleges as Dutch VET-policy maker
- HARNO; Estonian Education Agency, coordinating curricula creation and vocational teacher network
- French CNPA, the national council representing automotive professionals in France as French VET-policy maker
- German Chamber of Crafts in Lower Franconia

- Association of Transport Engineering Educators in Lithuania

a) Project outputs and their content will be presented in 2 national dissemination events in each partner country for external VET-providers' vehicle teachers and for external vehicle company representatives in 7 countries; 14 national events, from with 7 are directed to VET-teachers (direct target group 140 vehicle field CET-teachers) and rest 7 for vehicle field maintenance employees (140 direct participants, too in this target group in all seven partner countries).

b) Teacher and industry representative training courses with similar content as in above-described dissemination events, will be hold even after the project, but they will be charged from the participant institutes/companies. In this way we guarantee external financial capacity of project output dissemination even after the project has been completed.

c) VET Policy recommendations in Vehicle sector, formulated by each VET-provider during the last project year, based on the development work, done, will be disseminated to seven countries' VET policy makers via project partners.

d) Indirectly thousands of vehicle experts: students, teachers, already graduated mechanics, service managers and vehicle insurance damage controllers in every partner country will benefit from this project by either participating in dissemination events or by studying the project output content from online platforms. For instance, German JPS and FHWS are planning to sell the mobility learning experience journey for schools and companies in the field and Omnia is planning to sell the courses of servicing ADAS-systems and upgrading sales personnel's know-how on modern vehicles technology after the Auto-Cove 2.0 project to guarantee financial sustainability of the project outputs.

Project coordinator Omnia has committed to budget 5000 euros for the concrete follow-up for the project impact two years after the project is completed. The follow-up-activities contains data gathering of the following indicators:

- Number of VET institutions that adopt innovative curriculum modules developed in Auto-Cove 2.0, (data available from Electude International's platforms),
- Number of garages/workshops, who utilize project products for their service personnel upskilling purposes, (information gathered from project partner institutes),
- Number of contents, which VET-policy makers utilize to modify the national curriculums in vehicle sector within two years of project's end, (information gathered from project partner institutes),
- Number of overall visits on the Electude's and OER Commons platforms for this material,
- Number of training courses for external stakeholders in each country after the project is completed (information gathered from partner institutes of the project).

3.2 Communication, dissemination and visibility

Communication, dissemination and visibility of funding

Describe the communication and dissemination activities which are planned in order to promote the activities/results and maximise the impact (to whom, which format, how many, etc.). Clarify how you will reach the target groups, relevant stakeholders, policymakers and the general public and explain the choice of the dissemination channels.

Describe how the visibility of EU funding will be ensured.

Project internal communication plans are described in the management strategy above.

During the project start, 6 first months, Latvian Ventspils Tehnikums will draft a dissemination plan in collaboration with Omnia, which will describe objectives, activities, timetable, target groups, key messages, channels, partners' roles and monitoring procedure. The preparation phase of the project will be used to create a brand of project, logos, graphics and the website. The Project communication and dissemination are divided in three clusters:

1. Internal communication and dissemination:



Auto-Cove's internal communication will happen mainly via traditional emails and video meetings. One face to face- Steering Committee meeting will be held in every six months after the kick-off meeting. Every project year, the steering committee has also two virtual video meetings on Teams- platform.

Key development persons will also communicate via e-mails and Teams-meetings. There will also be five collaborate development workshops, where communication and co-development happens from face to face during one working week each time. Also Work Package key teams will meet virtually twice a year, once between each the physical workshops.

Teams as the primary digital platform will also be used for project's internal communication and it has shown to work with all partners and video meetings- tool has already been used when together planning the project idea, responsibility sharing and co-operation. Project's steering committee will form one team in Teams and project's technical key experts will form another Auto-Cove Teams-team to share and benchmark each other's' experience and expertise during the study module development work

Communication unit will be composed by one representative from each VET-provider (secondary or tertiary levels) and led by Latvian Ventspils Tehnikums, Ventspils technicum will create and update project's dissemination plan and webpage (in WP7) and coordinate the production and delivery of project' Newsletters twice a project year, 8 times during the whole project time. **All project's 21 sectoral associate partners have already committed to follow project's progress via the newsletters.**

2. Medias

Latvian Ventspils Tehnikums will also produce a project website that will contain all information regarding the Auto-Cove 2.0 project as well as the deliverables of WP3 and WP4. In particular, the Website will have a dedicates section for the catalogue of operational project deliverables in WP3 and WP4.

Articles, posts, brief project presentation and description of project outputs will be published on the following media.

- The official Auto-Cove 2.0 website
- Auto-Cove social media accounts (Facebook and Instagram)
- Partner's websites and blogs
- You Tube channel containing video tutorials of the basic study modules
- Press releases will be published on local newspapers
- Upload of the project's results on School education Gateway and Erasmus+ Project Results Platform if its use is enabled by the European Commission.

3. Events:

There will be:

- 8 physical Steering Committee Meetings in Auto-Cove 2.0 project and
- 5 collaborative development workshops during the project. Each workshop contains IT-help for technical key development persons to create digital material effectively on the dissemination platform by Electude International.
- In the last phase of the project there will be organised 2 dissemination events by each partner country, directed to a) external VET-provider technical staff and b) external industry representatives, 20 participants in each; altogether 14 events in 7 partner countries with 280 direct target group participants
- Dissemination in connection with 2 vehicle field international conferences during 3rd and 4th project years in Latvia and Germany. **Project outputs will also be published in two international conferences**



during 3rd and 4th project years, in Latvia and in Germany. The origin of funding (Auto-Cove- project and EU) will clearly be mentioned in all electrical and as well literal public publications and channels.

The existence of the new developed study modules and information about their content will be shared via national and international networks of vocational education and tertiary education providers as described in the previous section in this application.

Visibility of all public results will be granted via the project website, social channels and newsletters and on the EU portal. Links to the materials in partners' channels will also be introduced. **Two online platforms: a sectoral platform: Electude International's e-learning module platform and another more general: European OER commons platform have committed to publish and disseminate all project outputs from WP3 and WP4 at least five years after the project is completed.**

Here some more details about Electude platform:

Once completed, the literal teaching packages of innovative transnational study modules will be published on Electude International's e-learning platform in English +7 partner language versions. Electude International is a Dutch vehicle field company, which is specialised in e-learning materials for vehicle sector. Their main customer group is VET-teachers and VET-institutes in vehicle field and the platform has customers in more than 70 countries, where they have more than 3000 VET-providers as their active customers and the material is provided in dozens of languages. **Electude International, as a full company partner in this project,** will support the transnational study module development work directly on their e-learning platform and has promised to host and distribute the content on the platform altogether for 9 years; 4 years during the project and 5 years after the project will be finished. The access to developed study modules will be free and this dissemination channel will be very effective distributing tool not only in Auto-Cove's partner countries, but also European widely. New transnational study modules will act as foundation for further development work of whole Vocational qualifications in vehicle technology in longer term in Europe.

The same content will be published in English in European OER commons platform (OER). This has already been ensured at the project application phase with OER platform hosts. The purpose is that customers, who do not necessarily know anything about Electude International, will find the material also from some other big dissemination platform and we have chosen OER commons to be the one for this purpose.

With these two platforms we intend to reach two different target groups:

Electude platform is already widely known among technical, especially vehicle field education providers (3400 active technical customer institutes on the platform) and OER commons among other educational institutes. By using two different dissemination, which both already have a lot of customers in project's target groups, we ensure the effective dissemination, once each partner disseminates the needed information about existence, content, cost-free-status and accessibility of the platforms via its national and international networks.

3.3 Sustainability and continuation

Sustainability, long-term impact and continuation

Describe the follow-up of the project after the EU funding ends. How will the project impact be ensured and sustained? What will need to be done? Which parts of the project should be continued or maintained? How will this be achieved? Which resources will be necessary to continue the project? How will the results be used?

Are there any possible synergies/complementarities with other (EU funded) activities that can build on the project results?

The WP7 is a transversal Work Package, where a sustainability strategy will be drafted by partners at the beginning of the project.

The project main outputs to be maintained and disseminated after the project is completed are **study modules and training courses in technical and business fields** in EQF-level 4-6 have been designed, implemented, tested and evaluated by 7 VET providers, 4 companies, and 3 polytechnics, thus they might be transferred to other European contexts. These project outputs will be disseminated widely after they are completed and published on two online platforms described before.

1. Project sustainability at Auto-Cove2.0 consortium-level and global dissemination after the project:

Sustainability and further exploitation of project outputs will be ensured by the following ways:

- by creating the sister college and polytechnic network as associate members to actively participate in the project in the form of skills-gap-analysis, following the project progress via Newsletters and by participating in the project output dissemination events during the last project year. This is a way to make regional stakeholders aware of project progress, Auto-Cove 2.0 outputs and their usability for stakeholders' educational purposes.
- by attracting partner countries VET-policy makers as associate partners to enable real changes in vehicle field curriculums after the project outputs are completed.
- Project Output dissemination platform, which Electude International creates as soon as all project outputs are completed on project development platform, will be maintained for 5 years after the project has ended to ensure sustainability and further dissemination of project outputs.
- Project outputs are published also on OER commons platform that also stakeholders, who do not know Electude, will find them.
- Project coordinator Omnia budgets 5000 euros for the follow-up of the project after the EU funding ends. This will contain the questionnaire for all project partners one and two years after the project ends about how many of the developed study modules or training courses are still in use among project partner VET-Providers and associate partner VET-providers and gathering data on both Electude's and OER common platforms of the number of visits on project output dissemination platform and time spent there.
- Information of existence of these two dissemination platforms and the content of project outputs will be shared via all partners national and international networks.
- During the last project year, each country consortium will arrange two dissemination events to include both, VET-staff and industry representatives (20 +20 in each country, meaning 280 participants) in the target group of dissemination.
- During the last project year project outputs from WP3 and 4 will be presented in connection to two sectoral **international conferences** in Germany and Latvia.

2. Project sustainability at regional stakeholder level and VET-policy making level:

Project's associate partners can be classified in three groups: a) external national VET-providers, b) external companies and sectoral associates and c) national VET-policy makers. They all have signed a letter of interest, where their role in the project has been described.

Associate VET-institutes (7 in partner countries) have committed to the following activities:

- participating in skills-gap-analysis of the project
- receiving project newsletters about project progress
- participation in the project's national dissemination event during the last project year to pilot project outputs to become aware of the outputs' existence and where to utilize them in their education.

VET-policy makers in each project countries have committed to:

- receiving project newsletters around every half a year throughout the project about its progress.

- receiving invitation to national project output dissemination event

-receiving opportunity to have access to all project outputs, which they are free to utilize to make concrete changes in technical and business field students' curriculums at national levels.

Sectoral associate partners (chambers of crafts and industry and sectoral associations) have committed in sharing information about the project outputs' existence and where to find them in their own networks after the project is completed.

3. Private and public funding:

Project VET-providers receive private funding in the form of equipment and knowledge from their co-operation companies, which contribute Vehicle sector teaching in partner countries in different ways. For instance, Volvo car Finland's dealer: Bilia, donated an electric vehicle to Omnia a few years ago to enable studying of electricity technology at College's garage. And they also guaranteed access for Omnia vehicle teachers for their protected technical database, Toyota Baltic is contributing Tartu Rakenduslik Kolledž with many equipment and know-how, Preh contributes German apprentices a lot by educating them in dual apprentice model at their company, in its independent apprentice training centre. They are educating over 80 apprentices now for 4 different qualifications, including vehicle mechanics, electricians and IT-specialists at Preh GMBH.

Public funding: some partners can also count on specific or general funding from national Government (for instance Finnish VET providers can also budget their own money to international activities in addition to EU project money).

Direct and European indirect funds: The project outputs will be used as the starting point of the presentation of new project ideas for direct funds. An extension project for Auto-Cove could be a technical multi-disciplinary KA2- partnership project.

4. Future plans:

Project outputs are in digital form on both dissemination platforms. In case needed, it is possible to update them according to the vehicle and vehicle sales technology development in future. Electude International has promised to host and technically maintain the platform for 5 years after the project is completed.

Auto-Cove 2.0 VET-partners have know-how also in other technical fields like IT and electricity. The consortium intends to widen Auto-Cove's theme into wider multidisciplinary technical field development work. This will include updating IT-field's and electricity field's education to better correspond demands from working life and especially modern vehicle maintenance after the project's lifetime. It is predicted that future vehicles will consist of several independent computers and their programming know-how could be an essential skill that needs to be developed as soon as possible. There will also become need to teach solar and wind energy appliance installations for electrical engineering students in future to a lot bigger scale than it is done now. Therefore, challenges to change also housing technology students' curriculums has already been recognized.

The consortium will go on its co-operation even after the project because most of these educational institutes had co-operated already before this project. Co-operation model between consortium partner institutes is sustainable as well as co-operation with regional companies and research institutes. Vehicle field's but also other technical fields' development will be a real topic for each institute also after the project's lifetime and co-development work will benefit everyone.

German partners (FHWS and JPS) plan to offer a mobile Learning Experience journey via a truck or some other transportable vehicle to disseminate their concept also regionally as widely as possible.

4. WORK PLAN, WORK PACKAGES, TIMING AND SUBCONTRACTING

4.1 Work plan

Work plan

Provide a brief description of the overall structure of the work plan (list of work packages or graphical presentation (Pert chart or similar)).

Auto-Cove 2.0 work plan will unfold in 7 work packages, three of them will be dedicated to transversal activities: Project management, Quality Management and Dissemination + Impact. The other 4 WPs are operational and last during certain part of the project. A visual graph of leading responsibility share between different WPs is in above section: 2.2.2.

WP1 Management:

Management work package will include all aspects related to project coordination, such as project's internal communication, coordination of Steering Committee meetings, administration of the grant, communication with European Commission, and reporting.

WP2 R & D:

Research is the operational WP, where two partners will create, implement and report the skills-gap-analysis in vehicle maintenance and sales sectors.

Both R & D partners will also produce technical data for the study module and training course development work on modern technology vehicles. The skills-gap analysis will be implemented in the very first phase of the project, during 8 first months of project implementation but research activities last until WP3 outputs are completed.

WP3 and WP4: Innovative Study modules and training courses:

Starting from the data collected through the skills-gap-analysis, these WPs will focus on core activities of Auto-Cove 2.0: developing innovative study modules and training courses for technical and business field students, teachers and industry representatives. The activities of these WPs will take place from month 1 until end of May in 2026 (altogether 29 months).

These WPs will be shared into five sets of activities:

- a) Development of study modules and training courses for vehicle field education on secondary and tertiary levels
- b) Development of two pathway study modules of maths and physics
- c) Development of two study modules in the sales sector: the first for the vehicle sales and the second for the vehicle spare parts sales
- d) Development of training courses for VET-teachers and industry representatives
- e) Development of national recommendations on changes of vehicle and sales sector curriculums for national Policy Makers

WP 5 Mobilities

Coordinating project's numerous mobilities will demand an own WP. There will be four kinds of mobilities in the project, more precisely described in section 2.1.2.

Omnia will coordinate the project mobilities and produce a mobility schedule + qualitative indicators for student and staff mobilities for the project.

WP6: Quality assurance and Risk Management:

This WP will be implemented during the whole project length. All partners will participate in its activities. It will consist in setting up procedures and tools to evaluate the quality of the project implementation and progress.

WP7: Dissemination and Impact:

The final WP will focus on spreading information about the project and its developed outputs. This will be one the key transversal WPs , which will be carried out during the whole length of the project. The main activities will be communication toward the general audience through online and offline channels and creating a local network of stakeholders in each country to ensure the sustainability of Auto-Cove 2.0 and the widest possible adoption of its results.

4.2 Work packages and activities


WORK PACKAGES

This section concerns a detailed description of the project activities.

*Group your activities into work packages. A **work package means a major sub-division of the project**. For each work package, enter an objective (expected outcome) and list the activities, milestones and deliverables that belong to it. The grouping should be logical and guided by identifiable deliverables/outputs.*

Projects should normally have a minimum of 2 work packages. WP1 should cover the management and coordination activities (meetings, coordination, project monitoring and evaluation, financial management, progress reports, etc.) and all the activities which are cross-cutting and therefore difficult to assign to another specific work package (do not try splitting these activities across different work packages). WP2 and further WPs should be used for the other project activities. You can create as many work packages as needed by copying WP1. The last WP should be dedicated to Impact and dissemination

Please refer to the Call document/Programme Guide for specific requirements concerning the number and the typology of work packages.

Work packages covering financial support to third parties ( only allowed if authorised in the Call document/Programme Guide) must describe the conditions for implementing the support (for grants: max amounts per third party; criteria for calculating the exact amounts, types of activity that qualify (closed list), persons/categories of persons to be supported and criteria and procedures for giving support; for prizes: eligibility and award criteria, amount of the prize and payment arrangements).

 *Enter each activity/milestone/output/outcome/deliverable only once (under one work package).*

Work Package 1

Work Package 1: Project management and coordination					
Duration:	M1 – M48	Lead Beneficiary:	Omnia		
Objectives					
<i>List the specific objectives to which this work package is linked.</i>					
<p>This WP brings together a set of transversal activities required to steer the project in a way to achieve all the objectives presented in the first section of application.</p> <p>Specific objectives:</p> <ul style="list-style-type: none"> a) To ensure good communication among all partners, b) To coordinate the activities of all WPs, c) To make sure that the work plan and deadlines for delivering the project's outputs are respected, d) To ensure proper budget control system and transfer of budget among the partners. 					
Activities (what, how, where) and division of work					
<i>Provide a concise overview of the work (planned tasks). Be specific and give a short name and number for each task.</i>					
<i>Show who is participating in each task: Coordinator (COO), and if applicable Beneficiaries (BEN), Affiliated Entities (AE), Associated Partners (AP) and others, indicating in bold the task leader.</i>					
<i>Add information on other participants' involvement in the project e.g. subcontractors, in-kind contributions.</i>					
Note:					
<i>In-kind contributions: In-kind contributions for free are cost-neutral, i.e. cannot be declared as cost. Please indicate the in-kind contributions that are provided in the context of this work package.</i>					
<i>The coordinator remains fully responsible for the coordination tasks, even if they are delegated to someone else. Coordinator tasks cannot be subcontracted. If there is subcontracting, please also complete the table below.</i>					
Task No (continuous numbering linked to WP)	Task Name	Description	Participants		In-kind Contributions and Subcontracting (Yes/No and which)
			Name	Role (COO, BEN, AE, AP, OTHER)	

T1.1	Drafting and signing of partnership agreements	M1-M4: Partnership grant agreements with roles and responsibilities of each partner	Omnia	COO	NO
T1.2	Steering Committee Meetings in presence	8 coordination meetings in presence; 2/ project year	All partners (excluding companies)	COO, BEN	NO
T1.3	Online Steering Committee Meetings	8 online meetings, twice a year	All partners	COO.BEN	NO
T1.4	Internal communication	Mails, video and physical meetings to evaluate and plan the activities	all partners	COO, BEN	NO
T1.5	Administrative checks and financial reporting	Analysis of cash flows based on the expenses reported from partners. The financial checks are made with the partners every 3 months.	All partners	COO, BEN	NO
T1.6	Intermediate and final reporting to EC	Preparing requested reports to the EC to evaluate the progress of the project	Omnia	COO	NO
T1.7	Budget transfers	Sharing budget to partners	Omnia	COO	NO
T1.8	Communication with EC	Communication via mail or calls with the EC in case of questions, doubts or requests for support	Omnia	COO	NO

Milestones and deliverables (outputs/outcomes)

Milestones are control points in the project that help to chart progress. Use them only for major outputs in complicated projects. Otherwise leave the section on milestones empty.

Means of verification are how you intend to prove that a milestone has been reached. If appropriate, you can also refer to indicators.

Deliverables are project outputs which are submitted to show project progress (any format). Refer only to major outputs. Do not include minor sub-items, internal working papers, meeting minutes, etc.

It is recommended to limit the number of deliverables to max 10-15 for the entire project. You may be asked to further reduce the number during grant preparation.

For deliverables such as meetings, events, seminars, trainings, workshops, webinars, conferences, etc., enter each deliverable separately and provide the following in the 'Description' field: invitation, agenda, signed presence list, target group, number of estimated participants, duration of the event, report of the event, training material package, presentations, evaluation report, feedback questionnaire.

For deliverables such as manuals, toolkits, guides, reports, leaflets, brochures, training materials etc., add in the 'Description' field: format (electronic or printed), language(s), approximate number of pages and estimated number of copies of publications (if any).

For each deliverable you will have to indicate a due month by when you commit to upload it in the Portal. The due month of the deliverable cannot be outside the duration of the work package and must be in line with the timeline provided below. Month 1 marks the start of the project and all deadlines should be related to this starting date.

The labels used mean:

Public — fully open (🚩 automatically posted online on the Project Results platforms)

Sensitive — limited under the conditions of the Grant Agreement

EU classified — RESTREINT-UE/EU-RESTRICTED, CONFIDENTIEL-UE/EU-CONFIDENTIAL, SECRET-UE/EU-SECRET under Decision 2015/444.

Milestone No (continuous numbering not linked to WP)	Milestone Name	Work Package No	Lead Beneficiary	Description	Due Date	Means of Verification
MS1	1st Steering Committee meeting, including one-day-workshop for technical persons by Electude Int.	1	Omnia	Kick off meeting, presentation of project work plan and strategy (incl. dissemination plan and quality management plan). Definition of activities concerning the WP2 and WP3	M4	Participants list and agenda
MS2	2 nd ST meeting	1	Tartu Rakenduslik Kolledž	Update concerning WP2 skills-gap-analysis, and WP3 study module development work, update on quality management and dissemination	M10	Participants list and agenda
MS3	3rd ST meeting	1	Kaunas Kautech	Update concerning WP3 tasks, update on quality management and dissemination	M16	Participants list and agenda
MS4	4th ST meeting	1	SEPR	Update concerning WP3 tasks, Student mobility planning, update on quality management and dissemination	M22	Participants list and agenda
MS5	5th ST meeting	1	Koning Willem I College	Updates of WP3 and wp4 + student mobilities, Update concerning WP3 tasks, update on quality management and dissemination	M28	Participants list and agenda

MS6	6th ST meeting	1	Ventspils tehnikums	Definition of steps to finalise WP3 and WP4, project output translation process planning, Update concerning WP3 tasks, update on quality management and dissemination	M33	Participants list and agenda	
MS7	7th ST meeting	1	Jakob Preh Schule	Update of project output translation and proofreading process, + publication of project outputs, planning Int. conferences + national dissemination events	M39	Participants list and agenda	
MS8	8th ST meeting	1	Omnia	Update on dissemination events and their documentations and reflection for project final report , update on project quality management	M45	Participants list and agenda	
Deliverable No	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date	Description (including format and language)
D1.1	Management Strategy Including international communication strategy)	1	Omnia	R — Document, report	PU — Public	M4	Internal rules of the partnership, including communication and <u>financial reporting</u>
D1.2	Project Work Plan	1	Omnia	R — Document, report	PU — Public	M4	Schedule of the project progress

Estimated budget — Resources (n/a for prefixed Lump Sum Grants) WP1

Participant	Costs									
	A. Personnel	B. Subcontracting	C.1a Travel	C.1b Accommodation	C.1c Subsistence	C.2 Equipment	C.3 Other goods, works and services	D.1 Financial support to third parties	E. Indirect costs	Total costs

Omnia	44.38 person months	212.384 EUR		18 travels	3 persons travelling	5 099 EUR	7 020 EUR	4 536 EUR		3240			16.259 EUR	248.537 EUR
VTT	3.57	33.424		6	1	1.704	2.340	1.512		0			2729	41.709
TRK	6.24	16.481		14	2	3.586	5.460	3.728		1.710			2.168	33.133
Eesti Maulikool	6	16.778		7	1	1.793	2.730	1.864					1.622	24.787
JPS	5.52	33.121		14	2	4.026	5.460	3.664		1.620			3.352	51.243
THWS	4.52	31.636		14	2	4.026	5.460	3.664					3.135	47.921
Ventspils Tehnikums	6.24	8.909		14	2	3.399	5.460	3.736		1.800			1.631	24.935
Kaunas TVEC	6.62	17.978		14	2	3.817	5.460	3.752					2.171	33.178
KTK	6.52	14.297		14	2	3.817	5.460	3.752		1.620			2.026	30.972
KW1C	4.52	31.350		14	2	4.026	5.460	3.616		1.710			3.231	49.393
Electude	0.86	6.802		7	1	2.013	2.730	1.808					935	14.288
SEPR	5.05	28.885		14	2	4.796	5.460	3.632		1.800			3.120	47.693

Total	95.62	452.045		150 travels	22 persons	42.101	58.500	39.264		13.500	0	0	42.379	647.790
For certain Lump Sum Grants, see detailed budget table/calculator (annex 1 to Part B; see Portal Reference Documents).														

Work Package 2: R &D					
Duration:	M1 – M32	Lead Beneficiary:	1-VTT and FHWS		
Objectives					
<i>List the specific objectives to which this work package is linked.</i>					
<ul style="list-style-type: none"> ▪ listing stakeholders, who participate in skills-gap-analysis and requesting them to reply to the analysis. Gathering the information for VTT and FHWS to be analysed. ▪ Drafting and implementing a skills-gap-analysis for two target groups: a) VET-teachers and b) Company representatives in vehicle maintenance and sales fields, ▪ Analysis and classification of the research data and disseminating it to the partners for the foundation of the development work in WP3 and WP 4 by month 7. ▪ Research data contribution for study module development teams 					
Activities (what, how, where) and division of work					
<i>Provide a concise overview of the work (planned tasks). Be specific and give a short name and number for each task.</i>					
<i>Show who is participating in each task: Coordinator (COO), and if applicable Beneficiaries (BEN), Affiliated Entities (AE), Associated Partners (AP) and others, indicating in bold the task leader.</i>					
<i>Add information on other participants' involvement in the project e.g. subcontractors, in-kind contributions.</i>					
Note:					
<i>In-kind contributions: In-kind contributions for free are cost-neutral, i.e. cannot be declared as cost. Please indicate the in-kind contributions that are provided in the context of this work package.</i>					
<i>The coordinator remains fully responsible for the coordination tasks, even if they are delegated to someone else. Coordinator tasks cannot be subcontracted. If there is subcontracting, please also complete the table below.</i>					
Task No (continuous numbering)	Task Name	Description	Participants		In-kind Contributions and Subcontracting (Yes/No and which)
			Name	Role	

linked to WP)				(COO, BEN, AE, AP, OTHER)	
T2.1	Development trends in vehicle fleet, vehicle sales and maintenance services	Development trends in vehicle fleet, vehicle sales and maintenance services will be summarised based on a literature study and interviews of industry stakeholders. Building a complete picture of the ongoing development trends and developments expected in near future (e.g. development of vehicle technology, recent and expected regulation of vehicles, existing vehicle fleet and expected developments etc) will contribute to planning of the skills gap analysis.	VTT	BEN	No
T2.2	Preparation and implementation of skills-gap-analysis in seven countries.	Two target groups: VET-teachers (20 /country) + industry representatives (20/country) will respond to the analysis (N=280).	FHWS and VTT	BEN	No
T.2.3	Creating stakeholder pool for skill-gap-analysis and collection of survey responses	Vocational colleges create stakeholder pool of sectoral companies and sister educational institutes for skills-gap-analysis and share the questionnaires + gather the info from them for the analysis for research institutes.	Omnia, Tartu RK, Ventspils Tehnikums, Kaunas TVEC, JPS, KW1C, SEPR	Ben,Coo	No
T2.4	Analysis of the skills gap	Results of the literature study and two surveys carried out in previous tasks will be analysed to identify the skills gaps. The identified skills gaps will be classified in thematic areas and shared with WP3 and WP4 to provide a basis for collaborative development work in the project.	FHWS and VTT	BEN	No
T2.5	Research data contribution for study module developers	Research organisations involved in the project (FHWS and VTT) will collect and share research data with developers of study modules. The up-to-date research results and technical data provided by SHWS and VTT will	FHWS and VTT	BEN	No

			provide solid basis for development of the study modules.				
<p>Milestones and deliverables (outputs/outcomes)</p> <p><i>Milestones are control points in the project that help to chart progress. Use them only for major outputs in complicated projects. Otherwise leave the section on milestones empty.</i></p> <p><i>Means of verification are how you intend to prove that a milestone has been reached. If appropriate, you can also refer to indicators.</i></p> <p>Deliverables are project outputs which are submitted to show project progress (any format). Refer only to major outputs. Do not include minor sub-items, internal working papers, meeting minutes, etc.</p> <p><i>It is recommended to limit the number of deliverables to max 10-15 for the entire project. You may be asked to further reduce the number during grant preparation.</i></p> <p><i>For deliverables such as meetings, events, seminars, trainings, workshops, webinars, conferences, etc., enter each deliverable separately and provide the following in the 'Description' field: invitation, agenda, signed presence list, target group, number of estimated participants, duration of the event, report of the event, training material package, presentations, evaluation report, feedback questionnaire.</i></p> <p><i>For deliverables such as manuals, toolkits, guides, reports, leaflets, brochures, training materials etc., add in the 'Description' field: format (electronic or printed), language(s), approximate number of pages and estimated number of copies of publications (if any).</i></p> <p><i>For each deliverable you will have to indicate a due month by when you commit to upload it in the Portal. The due month of the deliverable cannot be outside the duration of the work package and must be in line with the timeline provided below. Month 1 marks the start of the project and all deadlines should be related to this starting date.</i></p> <p><i>The labels used mean:</i></p> <p><i>Public — fully open (🚩 automatically posted online on the Project Results platforms)</i></p> <p><i>Sensitive — limited under the conditions of the Grant Agreement</i></p> <p><i>EU classified —RESTREINT-UE/EU-RESTRICTED, CONFIDENTIEL-UE/EU-CONFIDENTIAL, SECRET-UE/EU-SECRET under Decision 2015/444.</i></p>							
Milestone No (continuous numbering not linked to WP)	Milestone Name	Work Package No	Lead Beneficiary	Description		Due Date (month number)	Means of Verification
MS 9	Development trends in vehicle fleet, vehcile sales and maintenance services	2	VTT	Results on development trends in vehicle fleet, vehicle sales and maintenance services have been summarised.		M3	Report
MS10	Skills-gap analysis completed	2	VTT-FHWS	Sharing data gathered with skill-gap-analysis for the partners of the collaborative development teams		M7	Report
Deliverable No	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date	Description

(continuous numbering linked to WP)						(month number)	(including format and language)
D2.1	Development trends in vehicle fleet, vehicle sales and maintenance services	2	VTT	R	PU	M3	Report
D2.2	Results of the skills-gap-analysis	2		R	PU	M7	Summary on Vehicle maintenance and sales sector + VET-teachers replies for the skills-gap-analysis; English

Estimated budget — Resources (n/a for prefixed Lump Sum Grants) WP2

Participant	Costs												
	A. Personnel		B. Subcontracting	C.1a Travel			C.1b Accommodation	C.1c Subsistence	C.2 Equipment	C.3 Other goods, works and services	D.1 Financial support to third parties	E. Indirect costs	Total costs
VTT	12 person months	111.724 EUR										7.821 EUR	119.545 EUR
THWS	12	97.713										6.840 EUR	104.553 EUR
Omnia	0,48	2.934										205	3.139
Tartu Rk	0,48	1.384										97	1.481
Ventspils T	0,48	748										52	800

Kaunas TVEC	0,48	1.271											89	1.360
JPS	0,48	3.141											220	3.361
KW1C	0,48	3.960											277	4.237
SEPR	0,48	3.300											231	3.531
Total	27.34 months	226.174 EUR											15.832 EUR	242.006

For certain Lump Sum Grants, see detailed budget table/calculator (annex 1 to Part B; see [Portal Reference Documents](#)).

Work Package 3: Innovative Study modules and training courses for VET-students on EQF-levels 4 and 5

Duration: M3 – M42 **Lead Beneficiary:** Tartu Rakenduslik Kolledž Tartu KHK

Objectives

List the specific objectives to which this work package is linked.

- studying already existing automotive sector-related modules in each partners' topic area from Electude International's e-learning platform
- Receiving and studying data from Skills-gap-analysis and planning the study module development framework
- Developing respective study modules/training courses for students on EQF-levels 4-6 (Vocational college personnel produce content for EQF-level 4, Polytechnics for levels 5 and 6, Research units and company representatives contribute the development work).
- Participating in Collaborative development workshops + reflecting and fertilizing each other's development work, when presented there at the phase, they are every 6th month, until completed.

Activities (what, how, where) and division of work

Provide a concise overview of the work (planned tasks). Be specific and give a short name and number for each task.

Show who is participating in each task: Coordinator (COO), and if applicable Beneficiaries (BEN), Affiliated Entities (AE), Associated Partners (AP) and others, indicating **in bold** the task leader. Add information on other participants' involvement in the project e.g. subcontractors, in-kind contributions.

Note:

In-kind contributions: In-kind contributions for free are cost-neutral, i.e. cannot be declared as cost. Please indicate the in-kind contributions that are provided in the context of this work package.

The coordinator remains fully responsible for the coordination tasks, even if they are delegated to someone else. Coordinator tasks cannot be subcontracted. If there is subcontracting, please also complete the table below.

Task No (continuous numbering linked to WP)	Task Name	Description	Participants		In-kind Contributions and Subcontracting (Yes/No and which)
			Name	Role (COO, BEN, AE, AP, OTHER)	
T3.1.	Studying the background data on Electude's e-learning platform for the basis of the development work	Learning, the content that has already been made in modern Vehicle maintenance and sales sector and build on the already existing information.	All partners, excluding SEPR and VT	BEN, COO	No
T3.2	Learning the content of Skills-gap-analysis	Planning the study module development work based on the data from Skills-gap-analysis	VET-providers excluding SEPR and VT	BEN, COO	No
T3.3	Study module and training course development work	Development of study modules at local level, fertilizing each other's work in collaborative development workshops	All partners	BEN, COO	No
T. 3.4.	Purchasing necessary technical equipment for study module development work	Purchasing necessary equipment in a cost-effective way by looking for the best price-quality relationship	All partners except VTT in WP3	BEN, CoO	Yes, the list of the equipment in the section of 2.1.1 Budget
T3.5.	Arranging collaborative development workshops, 5 times during the project	2 VET-teachers from each 10 VET-provider and 2 industry representatives participate in each workshop 5 times during the project (also SEPR and Ventspils tehnikums pilot these events),	Omnia, Tartu RK, Kaunas TVEC, Jakob Preh	BEN, COO	No

			Schule, KWIC		
T3.6.	Development teams' online meetings, in min. twice a school year.	Reflection and feedback, benchmarking and sharing the development work, in regular meetings between the workshops to contribute each other and to ask help, if needed.	Omnia, Tartu RK, Kaunas TVEC, Jakob Preh Schule, KWIC, VT, SEPR	BEN, COO	No
T3.7.	Pedagogical influence study for experts in each collaborative development workshops	In connection of each workshop, a pedagogical influence study is done for the participants to receive valuable information for study module's pedagogical aspects for WP4	Omnia	Ben, COO	No

Milestones and deliverables (outputs/outcomes)

Milestones are control points in the project that help to chart progress. Use them only for major outputs in complicated projects. Otherwise leave the section on milestones empty.

Means of verification are how you intend to prove that a milestone has been reached. If appropriate, you can also refer to indicators.

Deliverables are project outputs which are submitted to show project progress (any format). Refer only to major outputs. Do not include minor sub-items, internal working papers, meeting minutes, etc.

It is recommended to limit the number of deliverables to max 10-15 for the entire project. You may be asked to further reduce the number during grant preparation.

For deliverables such as meetings, events, seminars, trainings, workshops, webinars, conferences, etc., enter each deliverable separately and provide the following in the 'Description' field: invitation, agenda, signed presence list, target group, number of estimated participants, duration of the event, report of the event, training material package, presentations, evaluation report, feedback questionnaire.

For deliverables such as manuals, toolkits, guides, reports, leaflets, brochures, training materials etc., add in the 'Description' field: format (electronic or printed), language(s), approximate number of pages and estimated number of copies of publications (if any).

For each deliverable you will have to indicate a due month by when you commit to upload it in the Portal. The due month of the deliverable cannot be outside the duration of the work package and must be in line with the timeline provided below. Month 1 marks the start of the project and all deadlines should be related to this starting date.

The labels used mean:

Public — fully open  automatically posted online on the Project Results platforms)

Sensitive — limited under the conditions of the Grant Agreement

EU classified —RESTREINT-UE/EU-RESTRICTED, CONFIDENTIEL-UE/EU-CONFIDENTIAL, SECRET-UE/EU-SECRET under Decision 2015/444.

Milestone No (continuous numbering not linked to WP)	Milestone Name	Work Package No	Lead Beneficiary	Description	Due Date	Means of Verification
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					(month number)	
MS11	Replies to skills-gap-analysis gathered	3	Tartu KHK	Replies to skills-gap-analysis gathered and delivered to R & D makers	M4	List of all participating stakeholder institutes: both VET-providers and companies
MS12	Background data for development work studied	3	Tartu KHK	Development topic-related study of the modules, already existing on Electude's platform	M6	Summary of topic-related content, what already exists
MS13	Development plans for different study modules and training courses	3	Tartu KHK	In the plan each team summarises MS8 and Skills-gap-analysis results and objectives for their development work	M8	Document; study module/training course development plans
M14	The 1st Collaborative development workshop with influence study	3	Omnia	One-week-workshop to present the development plans and what has been done so far in each development team, fertilizing each other's devel. work	M 12	Participant list, Agenda and documentation of pedagogical influence study
M15	The 2 nd Workshop with influence study	3	Tartu KHK	One-week-workshop to present the development plans and what has been done so far in each development team, fertilizing each other's devel. work	M18	Participant list, Agenda and documentation of pedagogical influence study
M16	The 3rd Workshop with influence study	3	Kaunas Kautech	One-week-workshop to present the development plans and what has been done so far in each development team, fertilizing each other's devel. work	M23	Participant list, Agenda and documentation of pedagogical influence study

M17	The 4th Workshop with influence study	3	Koning Willem I College	One-week-workshop to present the development plans and what has been done so far in each development team, fertilizing each other's devel. work	M29	Participant list, Agenda and documentation of pedagogical influence study	
M18	The 5th Workshop with influence study	3	Jakob Preh Schule and FHWS	One-week-workshop to present the development plans and what has been done so far in each development team, fertilizing each other's devel. work	M34	Participant list, Agenda and documentation of pedagogical influence study	
M19	Finalizing the English versions of the study modules	3	All VET-providers	Refining each study module /training course content, completing them and letting them to be translated by subcontractors (WP7)	M35	Document; List of all produced outputs and description of their content and target group levels	
Deliverable No (continuous numbering linked to WP)	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date (month number)	Description (including format and language)
D3.1	2 Study modules of ADAS-systems; EQF-level 4	3	Omnia	OTHER	PU	M35	e-learning format; Study module with volume 15-30 credits about servicing and calibrating Advanced Driver assistant systems in modern vehicles, languages: EN, FI,ES,DE, FR, LT, LI, NL
D3.2	2 Study modules of Hybrid systems, EQF-level 4	3	Tartu KHK	Other	PU	M35	e-learning format; volume 15-30 credits about servicing hybrid vehicles, languages: EN, FI,ES,DE, FR, LT, LI, NL

D3.3	Study module of Dismantling and recycling e-batteries; EQF-level 4	3	Kaunas Kautech	Other	PU	M35	e-learning format; volume 15-30 credits about dismantling and recycling electric batteries, languages: EN, FI,ES,DE, FR, LT, LI, NL
D3.4	Study Module of Fire Safety of HV batteries, EQF-level 5	3	Kauno Technicos Kolegija	Other	PU	M35	e-learning format; Study module with volume 15-30 credits about fire safety of High voltage batteries, languages: EN, FI,ES,DE, FR, LT, LI, NL
D3.5	5 Study modules of electric battery systems and charging technologies. EQF-levels 4-6	3	JPS and FHWS, contributed by KTK (charging systems in Nordic conditions.)	OTHER	PU	M35	e-learning format + Video tutorials; volume 15-30 credits about, languages: EN, FI,ES,DE, FR, LT, LI, NL
D3.6	2 Study modules of Hydrogen technology in vehicle maintenance; EQF-level 4	3	Koning Willem I College	OTHER	PU	M35	e-learning format; Study module with volume 15-30 credits about servicing hydrogen-driven vehicles: EN, FI,ES,DE, FR, LT, LI, NL
D3.7	Study module about alternative fuel vehicle sales, EQF-level 4	3	Omnia	OTHER	PU	M35	e-learning format; volume 15-30 credits about servicing Advanced Driver assistant system, languages: EN, FI,ES,DE, FR, LT, LI, NL
D3.8	Study module about alternative fuel vehicle spare parts sales	3	Omnia	OTHER	PU	M35	e-learning format; volume 15-30 credits about servicing Advanced Driver assistant system, languages: EN, FI,ES,DE, FR, LT, LI, NL

Estimated budget — Resources (n/a for prefixed Lump Sum Grants) WP3

Participant	Costs													
	A. Personnel		B. Sub contracting	C.travel			C.1b Accomodation	C.1c Subsistence	C.2 Equipm ent	C.3 Other goods, works and services	D.1 Financial support to third parties		E. Indirect costs	Total costs
Omnia	51,14 person months	301.107 EUR	0	9 travels	3 persons	2.520 EUR	4.680 EUR	2.790EUR	0	2.760 EUR	0	0	21.970 EUR	335.827 EUR
VTT	5,46	49.839	0	0	0	0	0	0	0	0	0	0	3.489	53.328
Tartu RK	43,68	107.709	0	8	2	2.002	4.160	2.660	0	2.880	0	0	8.359	127.770
Eesti Maulikool	4,5	12.517	0	8	2	2.002	4.160	2.660	0	0	0	0	1.494	22.833
JPS	22,70	136.198	0	8	2	2.211	4.160	2.580	0	3.000	0	0	10.370	158.519
THWS	50,45	408.922	0	8	2	2.211	4.160	2.580	0	0	0	0	29.251	447.124
Ventspils Tehnikums	15	21.488	0	10	2	2.398	5.200	3.240	0	0	0	0	2.263	34.589
Kaunas TVEC	20,67	39.355	0	8	2	2.211	4.160	2.690	0	2.760	0	0	3.582	54.758
KTK	10,33	18.520	0	8	2	2.211	4.160	2.690	0	0	0	0	1.931	29.512

KW1C	22,89	165.545	0	8	2	2.211	4.160	2.520	0	2.760	0	0	12.404	189.600
Electude	11,37	77.340	0	8	2	2.211	4.160	2.520	0	0	0	0	6.036	92.267
SEPR	15	57.628	0	10	2	3.399	5.200	3.240	0	0	0	0	4.863	74.330
Volvo Finland	1,38	12.000	0	8	2	2.211	4.160	2.510	0	0	0	0	1.462	22.343
Bilia	1,38	13.500	0	8	2	2.211	4.160	2.510	0	0	0	0	1.567	23.948
Toyota Baltic	1,38	5.815	0	8	2	2.002	4.160	2.660	0	0	0	0	1.025	15.662
Preh.	1,38	6.765	0	8	2	2.211	4.160	2.580	0	0	0	0	1.100	16.816
Total	278,71 months	1 434.247	0	125 travels	31 persons	34.222	65.000	40430	0	14.160	0	0	111.166	1 699.225
For certain Lump Sum Grants, see detailed budget table/calculator (annex 1 to Part B; see <i>Portal Reference Documents</i>).														

To insert work packages, copy WP1 as many times as necessary

Work Package 4: Innovative training courses for VET-teachers and industry representatives; EQF-levels 5 and 6			
Duration:	M6– M40	Lead Beneficiary: Kaunas technical Vocational Education centre	Kautech
Objectives			

List the specific objectives to which this work package is linked.

- purchasing the necessary technical equipment for the study module development work (during the first project year)
- summarising student-oriented study module content for teacher training and enriching them with pedagogical aspects (starting from month 24)
- reskilling already working car mechanics and work leaders as well as modern vehicle sales and spare parts sales personnel
- Updating vehicle field VET-teachers' skills about modern vehicle technologies on both secondary and tertiary levels.

Activities (what, how, where) and division of work

Provide a concise overview of the work (planned tasks). Be specific and give a short name and number for each task.
 Show who is participating in each task: Coordinator (COO), and if applicable Beneficiaries (BEN), Affiliated Entities (AE), Associated Partners (AP) and others, indicating **in bold** the task leader.
 Add information on other participants' involvement in the project e.g. subcontractors, in-kind contributions.

Note:

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Task No (continuous numbering linked to WP)	Task Name	Description	Participants		In-kind Contributions and Subcontracting (Yes/No and which)
			Name	Role (COO, BEN, AE, AP, OTHER)	
T4.1	Drafting teacher and industry representative education courses in technical study modules (excluding pathway study modules)	Training courses on ADAS-systems, hybrid technology, hydrogen technology, battery charging systems and batter technologies, dismantling and recycling e-batteries, fire safety of HB-batteries	Jakob Preh Schule, FHWS, Kautech, Tartu KHK, KWIC, Omnia	COO, BEN	No

Milestones and deliverables (outputs/outcomes)

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 Means of verification are how you intend to prove that a milestone has been reached. If appropriate, you can also refer to indicators.
Deliverables are project outputs which are submitted to show project progress (any format). Refer only to major outputs. Do not include minor sub-items, internal working papers, meeting minutes, etc.
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For deliverables such as manuals, toolkits, guides, reports, leaflets, brochures, training materials etc., add in the 'Description' field: format (electronic or printed), language(s), approximate number of pages and estimated number of copies of publications (if any).

For each deliverable you will have to indicate a due month by when you commit to upload it in the Portal. The due month of the deliverable cannot be outside the duration of the work package and must be in line with the timeline provided below. Month 1 marks the start of the project and all deadlines should be related to this starting date.

The labels used mean:

Milestone No (continuous numbering not linked to WP)	Milestone Name	Work Package No	Lead Beneficiary	Description		Due Date (month number)	Means of Verification
MS20	Training courses completed	4	Kaunas Kautech	7 teacher or industry representative training courses completed		M38	e-learning courses on Electudes output development platform
Deliverable No (continuous numbering linked to WP)	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date (month number)	Description (including format and language)
D4.1	Training course about dismantling and recycling of electric batteries	4	Kaunas Kautech	OTHER	PU — Public	M42	E-learning material, produced in English
D4.2	Training course about ADAS - systems	4	Omnia	OTHER	PU	M42	E-learning material, produced in English
D4.3	Training course about Hybrid technologies	4	Tartu KHK	OTHER	PU	M42	E-learning material, produced in English
D4.4	Training Course of Hydrogen technologies	4	Koning Willem I College	OTHER	PU	M42	E-learning material, produced in English

D4.5	Training Course of Fire Safety of HV batteries	4	Kauno Technikos Kolegija	OTHER	PU	M42	E-learning material, produced in English
D4.6	Training course of charging systems	4	Jakob Preh Schule and FHWS	OTHER	PU	M42	E-learning material, produced in English
D4.7	Training Course of charging technologies	4	Jakob Preh Schule and FHWS	OTHER	PU	M42	E-learning material, produced in English
D4.8	Training course of clean-tech vehicle sales	4	Omnia	OTHER	PU	M42	E-learning material, produced in English
D4.9	Training course of Clean-tech vehicle spare parts sales	4	Omnia	OTHER	PU	M42	E-learning material, produced in English
D4.10	Training course or aged batteries and their sustainable use	4	Jakob Preh Schule and FHWS	OTHER	PU	M42	E-learning material, produced in English

Estimated budget — Resources (n/a for prefixed Lump Sum Grants) WP4

Participant	Costs									
	A. Personnel	B. Subcontracting	C.1a Travel	C.1b Accommodation	C.1c Subsistence	C.2 Equipment	C.3 Other goods, works and services	D.1 Financial support to third parties	E. Indirect costs	Total costs

Omnia	20.0	141.176							49.600				13.354	204.130
SEPR	0.24	1.650							49.468				3.578	54.696
Ventspils T	0.24	340							50.000				3.524	53.864
Tartu RK	12,2	30.720							49.600				5.622	85.942
JPS	6,5	39.118							49.900				6.231	95.249
FHWS	13,86	112.835							60.00				12.098	184.933
Kaunas TVEC	14,13	23.711							48.800				5.076	77.587
KTK	2,07	3.423							50.750				3.792	57.965
KW1C	4,16	30.624							47.800				5.490	83.914
Electude Int.	2,95	22.143							0				1.550	23.693
Eesti Maulikool	1,24	3.462							10.500				977	14.939
Total	77.48	409.202							466.418				61.292	936.912

For certain Lump Sum Grants, see detailed budget table/calculator (annex 1 to Part B; see [Portal Reference Documents](#)).

Work Package 5: Student Mobilities (includes accompanying teachers and pathway study module development teachers)

Duration: M12 – M36 **Lead Beneficiary:** Omnia

Objectives

List the specific objectives to which this work package is linked.

- Implementing the Mobility Plan, where all staff (339 staff members) and 60 student mobilities and mobilities are scheduled and instructions about sending and receiving students have drafted
- Organising Student mobilities in flows of 3 students + accompanying persons (due to students with special needs) at a time during the 2nd and 3rd project years.
- Organising 5 pathway study module development mobilities for Estonian and Finnish teachers/researchers.
- Coaching participants for mobilities, making travel and accommodation arrangements
- Ensuring the content of each mobility to support students' modern vehicle technology content learning objective with hosting companies already prior the mobility implementation
- Implementing pedagogical influence study of participants' experiences

Activities (what, how, where) and division of work

Provide a concise overview of the work (planned tasks). Be specific and give a short name and number for each task.

Show who is participating in each task: Coordinator (COO), and if applicable Beneficiaries (BEN), Affiliated Entities (AE), Associated Partners (AP) and others, indicating **in bold** the task leader.

Add information on other participants' involvement in the project e.g. subcontractors, in-kind contributions.

Note:

In-kind contributions: In-kind contributions for free are cost-neutral, i.e. cannot be declared as cost. Please indicate the in-kind contributions that are provided in the context of this work package.

The coordinator remains fully responsible for the coordination tasks, even if they are delegated to someone else. Coordinator tasks cannot be subcontracted. If there is subcontracting, please also complete the table below.

Task No (continuous numbering linked to WP)	Task Name	Description	Participants		In-kind Contributions and Subcontracting (Yes/No and which)
			Name	Role (COO, BEN, AE, AP, OTHER)	
T5.1	Drafting a mobility Plan	Mobility plan with all project's mobilities	Omnia	COO	No

T5.2	Organising both secondary and tertiary level students mobilities to vehicle companies	Participants: 6 secondary level students from each VET-provider; 42 four-week-mobilities; 6 tertiary level students from three Polytechnics; 18 students for 18 week mobilities	All VET-providers and companies	COO, BEN	NO
T5.3	Pedagogical influence study for students	Gathering feedback from students participating in student mobilities, Quality analysis	Omnia	COO	NO

Milestones and deliverables (outputs/outcomes)

Milestones are control points in the project that help to chart progress. Use them only for major outputs in complicated projects. Otherwise leave the section on milestones empty.

Means of verification are how you intend to prove that a milestone has been reached. If appropriate, you can also refer to indicators.

Deliverables are project outputs which are submitted to show project progress (any format). Refer only to major outputs. Do not include minor sub-items, internal working papers, meeting minutes, etc.

It is recommended to limit the number of deliverables to max 10-15 for the entire project. You may be asked to further reduce the number during grant preparation.

For deliverables such as meetings, events, seminars, trainings, workshops, webinars, conferences, etc., enter each deliverable separately and provide the following in the 'Description' field: invitation, agenda, signed presence list, target group, number of estimated participants, duration of the event, report of the event, training material package, presentations, evaluation report, feedback questionnaire.

For deliverables such as manuals, toolkits, guides, reports, leaflets, brochures, training materials etc., add in the 'Description' field: format (electronic or printed), language(s), approximate number of pages and estimated number of copies of publications (if any).

For each deliverable you will have to indicate a due month by when you commit to upload it in the Portal. The due month of the deliverable cannot be outside the duration of the work package and must be in line with the timeline provided below. Month 1 marks the start of the project and all deadlines should be related to this starting date.

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Milestone No (continuous numbering not linked to WP)	Milestone Name	Work Package No	Lead Beneficiary	Description	Due Date (month number)	Means of Verification
MS21	kick-off for pathway study module development	5	Omnia and Tartu RK	Starting together development of pathway study modules of maths and physics for secondary level technical students	M17	Certificates of participation of kick-off meeting in Estonia

MS22	intermediate meeting for pathway study module development	5	Omnia and Tartu RK	Checking the phase of development work from both sides, reflecting, contributing and fertilizing each others' work		M23	Certificates of Kick off meeting
MS23	Each organisation has completed first mobility flows of students	5	Omnia	Each VET-provider arranges 3 student mobilities as sending organisation and 3 student mobilities as a receiving country with all needed obligations		M24	Grant Agreements, Training Agreements and certificates of the completed mobilities
MS24	Each organisation has completed the second mobility flows of students	5	Omnia	Each VET-provider arranges 3 student mobilities as sending organisation and 3 student mobilities as a receiving country with all needed obligations		M36	Grant Agreements, Training Agreements and certificates of the completed mobilities
MS25	Pedagogical influence study for all participating students	5	Omnia	Students' expériences about mobilities are mapped and the feedback shared to each institute to develop mobility practises		M37	Questionnaires and Feedback in them
Deliverable No (continuous numbering linked to WP)	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date (month number)	Description (including format and language)
D5.1	Mobility Plan with all staff and student mobilities	5	Omnia	R	SEN	M11	Document, in English, which contains schedules of different mobility flows, their appropriate certification criterias
D5.2	Summary of student feedback in the pedagogical influence study	5	Omnia	R	SEN	M38	Document, in English, gives consortium valuable info about coordination of student mobilities between each other

D5.3	Pathway study module of Math	5	Omnia, Tartu RK and Eesti Maulikool	Other	PU	M35	e-learning format, volume 15 credits, En, Fi and EE
D5.4	Pathway study module of Physics	5	Omnia, Tartu RK and Eesti Maulikool	Other	PU		e-learning format, volume 15 credits, En, Fi and EE

Estimated budget — Resources (n/a for prefixed Lump Sum Grants) WP5

Participant	Costs												
	A. Personnel		B. Subcontracting	C.1a Travel		C.1b Accommodation	C.1c Subsidence	C.2 Equipment	C.3 Other goods, works and services	D.1 Financial support to third parties		E. Indirect costs	Total costs
Omnia	0.48	2.934		10 travels	10 persons travelling	2.772 EUR	6.960 EUR	3.072 EUR				1102 EUR	16.840 EUR
Tartu RK	0.48	1.258		9	9	2.992	6.570	3.260				986	15.066
VT	0.48	680		8	8	1.584	6.180	2.920				795	12.159
Kaunas TVEC	0.48	1.210		8	8	2.002	6.180	2.260				816	12.468
KTK	0.48	1.020		8	8	2.002	25.080	9.946				2.663	40.711
JPS	0.48	2.855		8	8	2.002	6.180	2.616				956	14.609

THWS	0.48	3.878		8	8	2.420	25.080	8.552					2.795	42.725
KW1C	0.48	3.600		8	8	2.002	6.180	2.596					1006	15.384
SEPR	0.48	3.300		8	8	2.794	6.180	2.912					1.063	16.249
Eesti Maulikool	0.48	1.332		9	9	2.200	25.470	10.226					2.746	41.974
Total	4.80	2.206		74	74	22.770	120.060	48.360					14.928	228.184

For certain Lump Sum Grants, see detailed budget table/calculator (annex 1 to Part B; see [Portal Reference Documents](#)).

Work Package 6: Quality Assurance and Risk Management

Duration:

M1 – M48

Lead Beneficiary:

SEPR

Objectives

List the specific objectives to which this work package is linked.

- Establishing an effective internal evaluation and monitoring framework;
- Assessing the coherence between expected results and effective results

- Verifying that the results reached by the project follow the objectives outlined in the application form:
- Avoiding pitfalls and correcting possible problematic elements;
- Evaluating effectiveness and quality of the implementation process set out by the partnership, delivered activities, outputs and impact;
- Providing suggestions
- to maximise the long-term impact of the project and its sustainability

Monitoring reports will be produced twice a year to resume all the information collected by the partners through quality assessment tools like:

- Evaluation questionnaires and interviews of participants in collaborative development workshops (pedagogical influence study=,
- Minutes of the TPM, where possible problems linked to the project implementation are discussed.
- Reports of the influence study parts

Activities (what, how, where) and division of work

Provide a concise overview of the work (planned tasks). Be specific and give a short name and number for each task.

*Show who is participating in each task: Coordinator (COO), and if applicable Beneficiaries (BEN), Affiliated Entities (AE), Associated Partners (AP) and others, indicating **in bold** the task leader.*

Add information on other participants' involvement in the project e.g. subcontractors, in-kind contributions.

Note:

In-kind contributions: In-kind contributions for free are cost-neutral, i.e. cannot be declared as cost. Please indicate the in-kind contributions that are provided in the context of this work package.

The coordinator remains fully responsible for the coordination tasks, even if they are delegated to someone else. Coordinator tasks cannot be subcontracted. If there is subcontracting, please also complete the table below.

Task No	Task Name	Description	Participants		In-kind Contributions and Subcontracting
			Name	Role (COO, BEN, AE, AP, OTHER)	
T6.1	Drafting Quality Management Plan	Writing The quality Management plan to define the rules to be followed by partners for evaluation the quality of the project. It will be drafted during the 4 first months of the project and presented in the first transversal Steering Committee meeting to the partners.	SEPR	BEN	No

T6.2	Drafting Risk Management Plan	It started from the risks identified in this application and will be completed with more risks that partners signal during the implementation phase with solutions to anticipate and tackle the problems.	SEPR	BEN	No
T6.3	Development of assessment tools	Set of tools, created by SEPR with other partners. Tools will be presented to the coordination group and feedback collected and revised, if needed.	All partners	BEN, COO	No
T6.4	Selection and monitoring of the external evaluator	An expert outside the project consortium will be selected to provide an evaluation of the project from an objective point of view.	SEPR and Omnia	COO, BEN	Yes: External evaluator
T6.5	Assessment of project activities	Measurement of the quantitative and qualitative indicators through the evaluation tools set out by the partnership. This will be an ongoing activity implemented during the whole project.	All partners	BEN, CoO	No
T6.6	Drafting quality reports every 6 th month	Summary of all results collected through evaluation tools	SEPR	BEN	No

Milestones and deliverables (outputs/outcomes)

Milestones are control points in the project that help to chart progress. Use them only for major outputs in complicated projects. Otherwise leave the section on milestones empty.

Means of verification are how you intend to prove that a milestone has been reached. If appropriate, you can also refer to indicators.

Deliverables are project outputs which are submitted to show project progress (any format). Refer only to major outputs. Do not include minor sub-items, internal working papers, meeting minutes, etc.

It is recommended to limit the number of deliverables to max 10-15 for the entire project. You may be asked to further reduce the number during grant preparation.

For deliverables such as meetings, events, seminars, trainings, workshops, webinars, conferences, etc., enter each deliverable separately and provide the following in the 'Description' field: invitation, agenda, signed presence list, target group, number of estimated participants, duration of the event, report of the event, training material package, presentations, evaluation report, feedback questionnaire.

For deliverables such as manuals, toolkits, guides, reports, leaflets, brochures, training materials etc., add in the 'Description' field: format (electronic or printed), language(s), approximate number of pages and estimated number of copies of publications (if any).

For each deliverable you will have to indicate a due month by when you commit to upload it in the Portal. The due month of the deliverable cannot be outside the duration of the work package and must be in line with the timeline provided below. Month 1 marks the start of the project, and all deadlines should be related to this starting date.

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Milestone No	Milestone Name	Work Package No	Lead Beneficiary	Description			Due Date	Means of Verification
MS26	First Quality Report	6	SEPR	Document which will resume the data from quality management tools collected during the first 9 months			M9	Production of the report
MS27	Second quality Report	6	SEPR	Document, which will resume the date from M9 to M15			M16	Production of the report
MS28	First External evaluator report	6	Omnia and SEPR	Report from the external evaluator, which will provide an objective overview of the activities and products			M24	Production of the report
MS29	Third quality report	6	SEPR	Document which will resume the data from quality management tools collected between M15 to M21			M22	Production of the report
MS30	Fourth quality report	6	SEPR	Document which will resume the data from quality management tools collected between M 21 and M 27			M28	Production of the report
MS31	Fifth quality report	6	SEPR	Document which will resume the data from quality management tools collected between M27 and M33			M34	Production of the report
MS32	Sixth quality report	6	SEPR	Document which will resume the data from quality management tools collected between M33 and M 39			M 40	Production of the report
MS33	Seventh quality report	6	SEPR	Document which will resume the data from quality management tools collected between M40-M46			M 47	Production of the report
MS34	Second external evaluator's report	6	Omnia and SEPR	Report from the external evaluator, which will provide an objective overview of the activities and products			M48	Production of the report
Deliverable No (continuous numbering linked to WP)	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date	Description (including format and language)	

D6.1	Quality Management Plan	6	SEPR	R	SEN	M4	Document containing all the internal rules for assessing the quality of the project.
D6.2	Internal Quality Reports	6	SEPR	R	SEN	M13; M24; M25; M37;M47	7 reports drafted by SEPR summarising the results of the assessments carried out during implementation phase. They will measure the progress of the project against the target indicators for expected results and impact.
D6.3 D6.3	Reports from External Evaluator	6	SEPR	R	SEN	M24, M48	2 reports that present the findings and assessment of the project activities

Estimated budget — Resources (n/a for prefixed Lump Sum Grants) WP6

Participant	Costs													
	A. Personnel		B. Subcontracting	C.1a Travel			C.1b Accommodation	C.1c Subsistence	C.2 Equipment	C.3 Other goods, works and services	D.1 Financial support to third parties		E. Indirect costs	Total costs
SEPR	35	157.320											11.012	168.332
Omnia	8	47.436	12.000										4.160	63.596
Tartu RK	4	10.256											718	10.974
Ventspils Tehnikums	4	5.712											400	6.112

Kaunas TVEC	4	9.044											633	9.677
KTK	4	7.798											546	8.344
JPS	4	23.985											1.679	25.664
THWS	4	29.048											2.023	31.081
KW1C	4	27.909											1.954	29.863
Eesti Maulikool	1	2.796											196	2.992
Electude	4	28.258											1.978	30.235
VTT	4	34.566											2.420	36.986
Total	80	384.128	12000										27.729	423.857
For certain Lump Sum Grants, see detailed budget table/calculator (annex 1 to Part B; see Portal Reference Documents).														

Work Package 7: Dissemination and Impact**Duration:**

M1 – M48

Lead Beneficiary:

Ventspils Tehnikums (and Electude International)

Objectives

List the specific objectives to which this work package is linked.

Together with WP1 and WP6, this is the third WP containing the transversal activities needed to implement the project and ensure the achievement of all objectives. The objectives are:

- arranging the translation of each study module into partner languages by subcontractors in each partner country and proofreading and correcting them in relation to technical languages by the VET-institutes' technical teachers.
- developing strategy for widest dissemination of project outputs (deliverables in WP3 and WP4),
- Identifying stakeholders, end users and networks; to whom and how the results should be disseminated.
- Creating Newsletters for stakeholders every 6th month to inform about project progress,
- Promoting vehicle field education among learners, VET-teachers and in industry, by using each partner's national and international networks
- Creating Auto-Cove 2.0 platforms for project output development work at Electude International's e-learning platform
- a) for project development (for internal project work) and b) for project output dissemination **in 8 language versions**
- publishing the project outputs from WP3 and 4 on European OER commons platform **in English**
- arranging dissemination events in two international conferences for automotive sector in Germany and Latvia
- Arranging national dissemination events for national stakeholders (External VET-teachers in vehicle maintenance and sales sector and one event for industry representatives (two events in each partner country).

Activities (what, how, where) and division of work

Provide a concise overview of the work (planned tasks). Be specific and give a short name and number for each task.

Show who is participating in each task: Coordinator (COO), and if applicable Beneficiaries (BEN), Affiliated Entities (AE), Associated Partners (AP) and others, indicating **in bold** the task leader.

Add information on other participants' involvement in the project e.g. subcontractors, in-kind contributions.

Note:

In-kind contributions: In-kind contributions for free are cost-neutral, i.e. cannot be declared as cost. Please indicate the in-kind contributions that are provided in the context of this work package.

The coordinator remains fully responsible for the coordination tasks, even if they are delegated to someone else. Coordinator tasks cannot be subcontracted. If there is subcontracting, please also complete the table below.

Task No (continuous numbering linked to WP)	Task Name	Description	Participants		In-kind Contributions and Subcontracting
			Name	Role	

				(COO, BEN, AE, AP, OTHER)	(Yes/No and which)
T7.1	Drafting the dissemination plan	The dissemination plan will contain project's internal communication plan, schedule and method of sharing Newsletter-work and plans to disseminate information about project outputs via two online platforms utilizing each partner's national and international sectoral networks	Ventspils Tehnikums in co-operation with Electude and Omnia	BEN, CoO	No
T7.2	Creating network of regional stakeholders in each country and international stakeholders in Europe	Identifying and listing all stakeholders, to whom we inform about project progress: sister VET-colleges, polytechnics, business partners and VET-policy makers in each country/region	All partners	COO, BEN	NO
T7.3	Drafting and disseminating Newsletters every 6 th month	Informing project stakeholders about project progress	All VET-partners under lead of VT	CoO, BEN	No
T 7.4	Organising study module translations	Organising study module translations into partner languages by subcontractors in each partner country from English+ proofreading and correcting the translations in relation to technical language in the VET-institutes in each partner country	All VET-partners	COO, BEN	Yes, the translations will be subcontracted
T7.5	Publishing WP3 and 4 outputs on Electude International's platform in 8 language versions	Once project outputs are completed, translated, proofread and refined, they will be published on Electude International's dissemination platform	Electude International	COO, BEN	NO
T7.6	Publishing WP3 and 4 outputs on European OER commons platform in English	Once project outputs are completed in English, they will be published on European OER commons platform	All VET-providers excluding SEPR and VT	COO	NO
T7.7	Piloting the dissemination platforms with stakeholders in 2 national	Arranging two national dissemination events during the last half year of the project for a)	All partners excluding VTT	COO, BEN	NO

	dissemination events in each project country (= 14 events)	VET-teachers and VET-policy makers in vehicle field and b) business stakeholders			
T7.8	Disseminating information of project outputs' content and usability via national and international networks, especially sectoral ones.	External dissemination outside consortium for wider public, each VET-provider will disseminate information about developed project outputs in their national and international networks.	All VET-providers	COO, BEN	NO
T7.9	Arranging dissemination events in connection with two automotive field trade fairs in Germany and Latvia	Disseminating info of project outputs for business actors in connection with two automotive field trade fair in Germany and Latvia	JPS, FHWS and Ventspils Tehnikums	COO, BEN	No
T7.10	Drafting a sustainability strategy to guarantee project outputs' impact even after the project lifetime	Making a plan, how to maintain usability of project outputs and their widest possible use including updating suggestions, when needed	Ventspils tehnikums	BEN	No
T7.11	Follow-up of project impact 2 years after the project ends	Following the number of end users of project outputs on two online platforms and number or modules, still utilized after two years of project's lifetime by the consortium's VET-providers	Omnia and other VET-providers	COO, BEN	Omnia finances this with 5000 euros.

Milestones and deliverables (outputs/outcomes)

Milestones are control points in the project that help to chart progress. Use them only for major outputs in complicated projects. Otherwise leave the section on milestones empty.

Means of verification are how you intend to prove that a milestone has been reached. If appropriate, you can also refer to indicators.

Deliverables are project outputs which are submitted to show project progress (any format). Refer only to major outputs. Do not include minor sub-items, internal working papers, meeting minutes, etc.


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For deliverables such as manuals, toolkits, guides, reports, leaflets, brochures, training materials etc., add in the 'Description' field: format (electronic or printed), language(s), approximate number of pages and estimated number of copies of publications (if any).

For each deliverable you will have to indicate a due month by when you commit to upload it in the Portal. The due month of the deliverable cannot be outside the duration of the work package and must be in line with the timeline provided below. Month 1 marks the start of the project and all deadlines should be related to this starting date.

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Milestone No (continuous numbering not linked to WP)	Milestone Name	Work Package No	Lead Beneficiary	Description		Due Date (month number)	Means of Verification
MS35	Setting up local networks of stakeholders for dissemination purposes	7	All partners	15 sectoral stakeholder institutes from each country ; including VET-colleges and polytechnics + business partners		M12	Newsletters for stakeholders every 6th month
MS36	National dissemination events	7	All VET-providers	40 participants in two dissemination events (20 + 20) in each project country learning about project's outputs and their usability in VET-education and in reskilling business employees		M40- M46	Participant lists
Deliverable No (continuous numbering linked to WP)	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date (month number)	Description (including format and language)
D7.1	Dissemination Plan	7	Ventspils tehnikums	R	SEN	M5	Document containing the strategy for internal communication and strategy for spreading informaton on the projects results for external stakeholders
D7.2	Sustainability Strategy	7	Ventspils tehnikums	R	PU	M40	Document explaining the partnership strategy to continue the activities of Auto-Cove 2.0 after the termination of the funding period

D 7.3	8 Newsletters /Project progress updates on the project webpage every 6 th month	7	Ventspils Tehnikums	R	PU	M6, 12,18,24,30, 36,42,48	Information for all associate partners and external stakeholders about project progress; e-format, either electrical newsletter or update of project's webpage at regular basis informing the progres of the project
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Estimated budget — Resources (n/a for prefixed Lump Sum Grants) WP7														
Participant	Costs													
	A. Personnel		B. Sub contracting	C.1a Travel			C.1b Accomodation	C.1c Subsistence	C.2 Equipme nt	C.3 Other goods, works and services	D.1 Financial support to third parties		E. Indirect costs	Total costs
Omnia	6 person months	35.886			4 travels	4 persons travelling					1.001 €	520		
Tartu RK	4	9.856		4	4	1.001	520	492		48.714			4.241	64.824
Eesti Maulikool	4	11.186		0	0	0	0	0		0			783	11.969
JPS	4	23.985		4	4	1.001	520	492		59.714			6000	91.712
THWS	4	29.048		4	4	1.001	520	492		10.396			2.902	44.359

Ventspils Tehnikums	15	21.488		4	4	1.001	520	492		54.789		5.480	83.770
Kaunas TVEC	4	8.942		4	4	1.001	520	492		48.714		4.177	63.847
KTK	4	8.169		4	4	1.001	520	492		0		713	10.895
KW1C	4	27.237		4	4	1.001	520	492		59.714		6.228	95.192
SEPR	4	17.514		4	4	1.210	520	492		59.714		5.562	85.012
Electude	13,3	95.806		4	4	1.001	520	492	12.500	0		7.722	118.041
VTT	4	35.675										2.357	36.032
Total	70,28	322.791		40	40	10.219	5.200	4920	12.500	411.471		53.698	820.799

For certain Lump Sum Grants, see detailed budget table/calculator (annex 1 to Part B; see [Portal Reference Documents](#)).

Events meetings and mobility

Events meetings and mobility

This table is to be completed for events meetings and mobility that have been mentioned as part of the activities in the work packages above
Give more details on the type, location, number of persons attending, etc.

Event No	Description	Attendees
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(continuous numbering linked to WP)	Participant	Name	Type	Area	Location	Duration (days)	Total
E1.1	All partners	1 st Steering Committee meeting	Coordination Event	Project Management	Espoo, Finland	3 days + 2 travel days	26
E1.2	All VET-partners + VTT	2 nd Steering Committee meeting	Coordination Event	Project Management	Tartu, Estonia	3 days + 2 travel days	21
E1.3	All VET-partners + VTT	3 rd Steering Committee meeting	Coordination Event	Project Management	Kaunas, Lithuania	3 days + 2 travel days	22
E1.4	All VET-partners + VTT	4 th Steering Committee meeting	Coordination Event	Project Management	Lyon, France	3 days + 2 travel days	22
E1.5	All VET-partners + VTT	5 th Steering Committee meeting	Coordination Event	Project Management	S' Hertogen-Bosch, the Netherlands	3 days + 2 travel days	22
E1.6	All VET-partners + VTT	6 th Steering Committee meeting	Coordination Event	Project Management	Ventspils, Latvia	3 days + 2 travel days	22
E1.7	All VET-partners + VTT	7 th Steering Committee meeting	Coordination Event	Project Management	Bad Neustadt, Germany	3 days + 2 travel days	22
E1.8	All VET-partners + VTT	8 th Steering Committee meeting	Coordination Event	Project Management	Espoo, Finland	3 days + 2 travel days	26
E3.1	All partners, excluding VTT	1 st Collaborative Development workshop	WP3 and WP4 peer-development work; quality control among key-developers	Check-point in Study module co-development; peer reviews, reflections	Espoo, Finland	3 days + 2 travel days	32
E3.2	All partners, excluding VTT	2 nd Collaborative Development workshop	WP3 and WP4 peer-development work; quality control among key-developers	Check-point in Study module co-development; peer reviews, reflections	Tartu, Estonia	3 days + 2 travel days	31

E3.3	All partners, excluding VTT	3 rd Collaborative Development workshop	WP3 and WP4 peer-development work; quality control among key-developers	Check-point in Study module co-development; peer reviews, reflections	Kaunas, Lithuania	3 days + 2 travel days	31
E4.1	All partners, excluding VTT	4 th Collaborative Development workshop	WP3 and WP4 peer-development work; quality control among key-developers	Check-point in Study module co-development; peer reviews, reflections	Bad Neustadt, Germany	3 days + 2 travel days	31
E4.2	All partners, excluding VTT	5 th Collaborative Development workshop	WP3 and WP4 peer-development work; quality control among key-developers	Check-point in Study module co-development; peer reviews, reflections	S' Hertogen-Bosch, The Netherlands	3 days + 2 travel days	31
E5.1	All VET-partners	Short-term-mobility-flows of secondary level- VET-learners	Work-based- learning periods in partner countries	Student internationalisation	Multiple locations	30 days (incl. travel days)	42+ 14 acc. teachers, (one in each flow); 6 learners/institute
E5.2	All polytechnic partners	Long-term mobility of students	Work-based-learning periods for tertiary students	Student Internationalisation	Germany, Estonia and Lithuania	5 months	18; 6 students/institute; + 1 teacher in the beginning of each flows 2 flows from each Polytechnic
E7.1	All VET-partners	Dissemination event in connection of sectoral international conference	Dissemination Event	External dissemination	Frankfurt, Germany	2 days incl. travelling	20
E7.2	All VET-partners	Dissemination event in connection of sectoral international	Dissemination Event	External Dissemination	Riga, Latvia	2 days, incl. travelling	20
E7.3	All VET-partners	National Dissemination event	National dissemination event for external VET-providers	External Dissemination	in all partner countries	2 days	20 x 7 = 140+ hosts
E7.4	All VET-partners	National Dissemination event	National Dissemination event for external companies	External Dissemination	in all partner countries	2 days	20 x 7 = 140 + hosts

4.3 Timetable

ACTIVITY	YEAR 1				YEAR 2				YEAR 3				YEAR 4					
	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4		
Project Management and coordination																		
Task 1.1 Drafting and signing of partnership agreements																		
Task 1.2 Steering Committee meetings in presence																		
Task 1.3 Online Steering Committee meetings																		
Task 1.4 Internal Communication																		
Task 1.5 Administrative checks and financial reporting																		
Task 1.6 Intermediate and final reporting to EC																		
Task1.7 Budget Transfers																		
Task1.8. Communication with EC																		
WP2																		
Task 2.1 Development trends in vehicle fleet, vehicle sales and maintenance services																		

Task 2.2 Preparation and implementation of skills-gap-analysis in 7 countries; 2 target groups																		
Task 2.3 Creating stakeholder pool for skills-gap-analysis																		
Task 2.4 Analysis of the results and drafting the Skills-gap-analysis																		
Task2.5 Research data contribution for study module developers in partner countries																		
WP3																		
Task 3.1 Studying the background data on Electude’s e-learning platform for the basis of the development work in each development theme																		
Task 3.2 Learning the content of Skills-gap-analysis																		
Task 3.3. Study module and training course development work																		
Task 3.4. Purchase of the necessary equipment for institutes for technical development work (budgeted in WP4)																		
Task 3.5 Arranging Collaborative development workshops, 5 times during the project in different countries																		
Task 3.6 Development group’s online meetings																		

Task 3.7. Pedagogical influence study for experts in each workshop																		
WP4																		
Task 4.1 Drafting teacher and industry representative education courses in technical study modules																		
WP5																		
Task 5.1 Drafting a Mobility Plan																		
Task 5.2 Organising both secondary and tertiary level students' mobilities																		
Task 5.3 Pedagogical influence study for students																		
WP6																		
Task 6.1 Drafting the Quality Management Plan																		
Task 6.2. Drafting the Risk Management Plan																		
Task 6.3 Development of assessment tools																		
Task 6.4 Selection and monitoring of the external evaluator																		
Task 6.5 Assessment of Project activities																		
Task 6.6. Drafting annual quality reports																		
WP7																		

Task 7.1. Drafting the dissemination plan																		
Task 7.2 Creating network of regional stakeholders in each country																		
Task 7.3 Drafting Newsletters every 6th month																		
Task 7.4 Organising output translations and proofreading + correcting official translations																		
Task 7.5 Publishing WP3 and WP4 outputs on Electude International platform in 8 versions																		
Task 7.6 Publishing the WP3 and WP4 outputs on European OER commons platform																		
Task 7.7 Piloting the dissemination platforms with stakeholders in 2 national dissemination events (=14 events)																		
Task 7.8 Disseminating information of project outputs via sectoral networks																		
Task 7.9 Arranging 2 international dissemination events in Germany and Latvia																		
Task 7.10 Drafting and implementing a sustainability strategy to guarantee project outputs impact even after the project lifetime																		
Task 7.11 Follow-up of project impact 2 years after the project ends																		

4.4 Subcontracting

Subcontracting

Give details on subcontracted project tasks (if any) and explain the reasons why (as opposed to direct implementation by the Beneficiaries/Affiliated Entities).

Subcontracting — Subcontracting means the implementation of ‘action tasks’, i.e. specific tasks which are part of the EU grant and are described in Annex 1 of the Grant Agreement.

Note: Subcontracting concerns the outsourcing of a part of the project to a party outside the consortium. It is not simply about purchasing goods or services. We normally expect that the participants to have sufficient operational capacity to implement the project activities themselves. Subcontracting should therefore be exceptional.

Include only subcontracts that comply with the rules (i.e. best value for money and no conflict of interest; no subcontracting of project coordination tasks).

Work Package No	Subcontract No (continuous numbering linked to WP)	Subcontract Name (subcontracted action tasks)	Description (including task number and BEN to which it is linked)	Estimated Costs (EUR)	Justification (why is subcontracting necessary?)	Best-Value-for-Money (how do you intend to ensure it?)
WP6	S1.2	External Evaluator	T 6.4 BEN; SEPR; Experienced External evaluators work to follow the project progress and give feedback to align the project when needed	12 000	For the quality of the project	By selecting a very experienced evaluator, we have already asked Ms Päivi Korhonen for this.
WP7	S1.3	Translations of the project outputs from English into project languages	T 7.4 All VET-providers choose the most suitable translation company into their own language and do the proofreading and correction by their vehicle teachers to confirm the quality of the technical content of the translations.	405 000	For the dissemination of the project outputs as widely in Europe as possible	Each partner country chooses the best and most cost-effective translator of their language and to make sure of the quality of translations, the technical teachers proofread the translations to correct technical content before publishing the outputs.
Other issues: <i>If subcontracting for the project goes beyond 30% of the total eligible costs, give specific reasons.</i>			Insert text			



5. OTHER

5.1 Ethics

Ethics (if applicable)

If the Call document/Programme Guide contains a section on ethics, describe ethics issues that may arise during the project implementation and the measures you intend to take to solve/avoid them.

Describe how you will ensure gender mainstreaming and children's rights in the project activities.

5.2 Security


Security

Not applicable.

6. DECLARATIONS

Double funding

Information concerning other EU grants for this project

 Please note that there is a strict prohibition of double funding from the EU budget (except under EU Synergies actions).

YES/NO

We confirm that to our best knowledge neither the project as a whole nor any parts of it have benefitted from any other EU grant (including EU funding managed by authorities in EU Member States or other funding bodies, e.g. Erasmus, EU Regional Funds, EU Agricultural Funds, European Investment Bank, etc). If NO, explain and provide details.

Yes

We confirm that to our best knowledge neither the project as a whole nor any parts of it are (nor will be) submitted for any other EU grant (including EU funding managed by authorities in EU Member States or other funding bodies, e.g. Erasmus, EU Regional Funds, EU Agricultural Funds, European Investment Bank, etc). If NO, explain and provide details.

Yes

Financial support to third parties (if applicable)

If your project requires a higher maximum amount per third party than the threshold amount set in the Call document/Programme Guide, justify and explain why this is necessary in order to fulfil your project's objectives.

ANNEXES

LIST OF ANNEXES

Standard

Detailed budget table/Calculator (annex 1 to Part B) — mandatory for certain Lump Sum Grants (see [Portal Reference Documents](#))

CVs (annex 2 to Part B) — mandatory, if required in the Call document/Programme Guide

Annual activity reports (annex 3 to Part B) — not applicable

List of previous projects (annex 4 to Part B) — mandatory, if required in the Call document/Programme Guide

Special

Other annexes — mandatory, if required in the Call document/Programme G

LIST OF PREVIOUS PROJECTS

List of previous projects

Please provide a list of your previous projects for the last 4 years.

Participant	Project Reference No and Title, Funding programme	Period (start and end date)	Role (COO, BEN, AE, OTHER)	Amount (EUR)	Website (if any)
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Omnia	(2020)3977800 - 28/07/2020 GIVE - Governance for Inclusive Vocational Excellence; VET-COVE	01.11.2020 - 31.10.2024	BEN	3 928 250	
Omnia	2021 - 101055648 MOSAIC- Mastering job-Oriented Skills in Arts and Crafts thanks to Inclusive Centres of Vocational Excellence. VET-CoVE	1.6.2022- 31.5.2026	BEN	4 982 647	
FHWS	BattForLife Battery test facility for simulation of first use and non-invasive classification of traction batteries for second-life applications.	01.01.2022 30.06.2023	COO and BEN	748 000	
FHWS	SysInd System optimization of active and passive components of inductive transmission systems for electromobility	01.10.2018 30.06.2022	COO and BEN	603 000	
FHWS	GaN4AP: Gallium-Nitrite for Application, new semiconductor materials for EV (Electric vehicle) applications	01.06.2021 - 30.05.2024	COO and BEN	460 000	
SEPR	1-FR01-KA226-VET-095619 IDiVET, Erasmus+ 2020-	01.06.2021 - 30.11.2022	BEN	159 491,00	IDiVET
VTT	724106, CAPITAL -- Societal Challenges, Smart, Green and Integrated Transport	01.10.16 – 30.09.2019	BEN	211 750	https://capital-project.its-elearning.eu/
VTT	Grant agreement ID: 723989, SKILLFUL -- Smart, Green And Integrated Transport	01.10.16 – 30.09.2019	BEN	127 500	https://skillfulproject.eu/
VTT	Study on exploring the possible employment implications of connected and automated driving	03.06.19 – 30.09.2020	BEN	131 940	
Tartu VEC Lead HBC	612656-EPP-1-2019-1-FI-EPPKA2-SSA-P Digital Innovation Hub for Cloud Based Services (DIHUB) Erasmus+	01.11.2019 - 31.10.2021	BEN	100 000	https://dihubcloud.eu
Tartu TVEC	2019-1-DE02-KA202-006549 Shaping digitally supported and sustainability oriented vet centers of excellence in EU (DUNE-BB-EU) Erasmus+	01.10.2019 - 30.09.2021	BEN	30 030	
Tartu VEC – lead Careeria	2019-1-FI01-KA202-060841 Digital Vocational Education and Training for All (DIGIVET4ALL) Erasmus+	01.09.2019 - 31.08.2021	BEN	20 211	

Ventspil tehnikums	UIA03-250 Next Generation Microcities of Europe	2018-2021	BEN	6,246,405.15 EUR 438 000 (for VVTS)	
Ventspils tehnikums	LLI-415 Deployment of high standards of knowledge, practical skills and understanding required for better employment in the regions	2018-2021	BEN	221 490.30 EUR	
Eesti Maulikool	V200070TIBT (843723), Integrating torrefaction of pulp and paper industry sludge with microbial conversion: A new approach to produce bioenergy carriers and biochemicals in a view of bio and circular economy. Horisont 2020 programm	2020-2022	COO	154 193	
Eesti Maulikool	(RESTA7), Conversion of lignocellulose into monomers and polymerization into high-performance polymers, Estonian Research Council	2020-2023	BEN	519 180	
Koning Willem 1 college	621355-EPP-1-2020-1-EPPKA3-IPI-SOC-INEchanges of Practices in Education for Climate Targets (Expect)	2020-2022	BEN	119 080	
Kaunas TVEC	09.4.1-ESFA-T-736-02-0022 Improving Practical Skills in Motor Vehicle Repair SPMC, European regional development funds	24-11-2020–24-05-2022	COO	100 000	
Kaunas TVEC	2019-1-ES01-KA202-064075 Inclusion and employability through electric vehicles technology, Erasmus+	01.09.2019 – 31.08.2022	BEN	156 159	
Kaunas TVEC	2018-1-DK01-KA202-047070 Developing the digital competences of VET teachers, Erasmus+	01.10.2018 – 31.03.2021	BEN	192 820	
Kaunas TVEC	09.1.2-CPVA-V-721-04-0001 Development of practical training centre of repair services for motor vehicles, European regional development funds	03-07-2018–30-04-2023	COO	5 063 326	

HISTORY OF CHANGES

VERSION	PUBLICATION DATE	CHANGE
1.0	25.02.2021	Initial version (new MFF).

ANNEX 2

ESTIMATED BUDGET (LUMP SUM BREAKDOWN) FOR THE ACTION

Estimated EU contribution								
Estimated eligible lump sum contributions (per work package)								Maximum grant amount ¹
WP1 Project Management and Coordination	WP2 R & D	WP3 Innovative Study modules and training courses for VET-students and EQF-levels 4 and 5	WP4 Innovative training courses for VET-teachers and industry representatives; EQF-levels 5 and 6	WP5 Student Mobilities (includes accompanying teachers and pathway study module development teachers)	WP6 Quality Assurance and Risk Management	WP7 Dissemination and Impact		
Lump sum contribution	Lump sum contribution	Lump sum contribution	Lump sum contribution	Lump sum contribution	Lump sum contribution	Lump sum contribution	Lump sum contribution	
Forms of funding	a	b	c	d	e	f	g	h = a + b + c + d + e + f + g
1 - OMNIA	198 830.00	2 511.00	268 661.00	163 304.00	13 472.00	50 877.00	92 118.00	789 773.00
2 - TARTU CITY	26 506.00	1 185.00	102 216.00	68 754.00	12 053.00	8 779.00	51 859.00	271 352.00
3 - VT	19 948.00	640.00	27 671.00	43 091.00	9 727.00	4 890.00	67 016.00	172 983.00
4 - SEPR	38 155.00	2 825.00	59 464.00	43 757.00	12 999.00	134 666.00	68 010.00	359 876.00
5 - JPS	40 995.00	2 689.00	126 815.00	76 199.00	11 687.00	20 531.00	73 369.00	352 285.00
6 - THWS	38 337.00	83 642.00	357 699.00	147 947.00	34 180.00	24 865.00	35 487.00	722 157.00
7 - KWIC	39 514.00	3 390.00	151 680.00	67 131.00	12 307.00	23 890.00	76 154.00	374 066.00
8 - VTT	33 367.00	95 636.00	42 662.00	0.00	0.00	29 589.00	28 825.00	230 079.00
9 - Preh GmbH	0.00	0.00	13 453.00	0.00	0.00	0.00	0.00	13 453.00
10 - Eesti Maulikool	19 830.00	0.00	18 266.00	11 951.00	33 579.00	2 394.00	9 575.00	95 595.00
11 - Bilia Oy Ab	0.00	0.00	19 158.00	0.00	0.00	0.00	0.00	19 158.00
12 - Volvo Finland	0.00	0.00	17 874.00	0.00	0.00	0.00	0.00	17 874.00
13 - Electude	11 430.00	0.00	73 813.00	18 954.00	0.00	24 189.00	94 433.00	222 819.00
14 - Toyota Baltic	0.00	0.00	12 529.00	0.00	0.00	0.00	0.00	12 529.00
15 - Kauno technikos	26 543.00	1 088.00	43 807.00	62 069.00	9 974.00	7 741.00	51 077.00	202 299.00
16 - KTK	24 778.00	0.00	23 609.00	46 372.00	32 568.00	6 675.00	8 716.00	142 718.00
17 - CITY OF ESPOO								
18 - Kaunas CCIC								
19 - ISTAIGU								
20 - VAVM								
21 - RTK								
22 - Optima								
23 - OPH Finland								
24 - Unterfranken								
25 - Main-Spessart								
26 - METROPOLIA								
27 - VOLVO Group NL								
28 - Pletros								
29 - Stadin AO								
30 - PIKC LVT								
Σ consortium	518 233.00	193 606.00	1 359 377.00	749 529.00	182 546.00	339 086.00	656 639.00	3 999 016.00

¹ The 'maximum grant amount' is the maximum grant amount fixed in the grant agreement (on the basis of the sum of the beneficiaries' lump sum shares for the work packages).

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

TARTU LINN (TARTU CITY), PIC 996380024, established in RAEKODA, TARTU 50089, Estonia,

hereby agrees

to become beneficiary

in Agreement No 101102844 — Auto-Cove 2.0 ('the Agreement')

between ESPOON SEUDUN KOULUTUSKUNTAYHTYMA OMNIA (OMNIA) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

VENTSPILS TEHNIKUMS (VT), PIC 946960076, established in SAULES IELA 15, VENTSPILI LV-3601, Latvia,

hereby agrees

to become beneficiary

in Agreement No 101102844 — Auto-Cove 2.0 ('the Agreement')

between ESPOON SEUDUN KOULUTUSKUNTAYHTYMA OMNIA (OMNIA) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

SOCIETE D'ENSEIGNEMENT PROFESSIONNEL DU RHONE (SEPR), PIC 947427422,
established in 46 RUE PROFESSEUR ROCHAIX, LYON 69424, France,

hereby agrees

to become beneficiary

in Agreement No 101102844 — Auto-Cove 2.0 ('the Agreement')

between ESPOON SEUDUN KOULUTUSKUNTAYHTYMA OMNIA (OMNIA) **and** the **European Education and Culture Executive Agency (EACEA)** ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

JAKOB-PREH-SCHULE STAATLICHE BERUFSSCHULE BAD NEUSTADT AD SAALE (JPS), PIC 910049345, established in POSTSTRASSE 31, BAD NEUSTADT AD SAALE 97616, Germany,

hereby agrees

to become beneficiary

in Agreement No 101102844 — Auto-Cove 2.0 ('the Agreement')

between ESPOON SEUDUN KOULUTUSKUNTAYHTYMA OMNIA (OMNIA) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

TECHNISCHE HOCHSCHULE WUERZBURG-SCHWEINFURT (THWS), PIC 972534223,
established in MUNZSTRASSE 12, WURZBURG 97070, Germany,

hereby agrees

to become beneficiary

in Agreement No 101102844 — Auto-Cove 2.0 ('the Agreement')

between ESPOON SEUDUN KOULUTUSKUNTAYHTYMA OMNIA (OMNIA) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

STICHTING REGIONAAL ONDERWIJS CENTRUM NOORDOOST-BRABANT (KW1C),
PIC 948240282, established in VLIJMENSEWEG 2, 'S HERTOGENBOSCH 5223 GW, Netherlands,

hereby agrees

to become beneficiary

in Agreement No 101102844 — Auto-Cove 2.0 ('the Agreement')

between ESPOON SEUDUN KOULUTUSKUNTAYHTYMA OMNIA (OMNIA) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

TEKNOLOGIAN TUTKIMUSKESKUS VTT OY (VTT), PIC 932760440, established in
TEKNIKANTIE 21, ESPOO 02150, Finland,

hereby agrees

to become beneficiary

in Agreement No 101102844 — Auto-Cove 2.0 ('the Agreement')

between ESPOON SEUDUN KOULUTUSKUNTAYHTYMA OMNIA (OMNIA) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

PREH GMBH (Preh GmbH), PIC 890227783, established in SCHWEINFURTER STRASSE 5-9, BAD NEUSTADT A.D. SAALE 97616, Germany,

hereby agrees

to become beneficiary

in Agreement No 101102844 — Auto-Cove 2.0 ('the Agreement')

between ESPOON SEUDUN KOULUTUSKUNTAYHTYMA OMNIA (OMNIA) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

EESTI MAULIKOOL (Eesti Maulikool), PIC 999857280, established in KREUTZWALDI 1, TARTU 51014, Estonia,

hereby agrees

to become beneficiary

in Agreement No 101102844 — Auto-Cove 2.0 ('the Agreement')

between ESPOON SEUDUN KOULUTUSKUNTAYHTYMA OMNIA (OMNIA) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

BILIA OY AB (Bilia Oy Ab), PIC 889639866, established in VANTAANLAAKSONTIE 6 C, VANTAA 01610, Finland,

hereby agrees

to become beneficiary

in Agreement No 101102844 — Auto-Cove 2.0 ('the Agreement')

between ESPOON SEUDUN KOULUTUSKUNTAYHTYMA OMNIA (OMNIA) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

VOLVO CAR FINLAND OY AB (Volvo Finland), PIC 889642000, established in TAIVALTIE 1, VANTAA 01610, Finland,

hereby agrees

to become beneficiary

in Agreement No 101102844 — Auto-Cove 2.0 ('the Agreement')

between ESPOON SEUDUN KOULUTUSKUNTAYHTYMA OMNIA (OMNIA) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

ELECTUDE INTERNATIONAL BV (Electude), PIC 882578654, established in COLLSEWEG 30, NUENEN 5674 TR, Netherlands,

hereby agrees

to become beneficiary

in Agreement No 101102844 — Auto-Cove 2.0 ('the Agreement')

between ESPOON SEUDUN KOULUTUSKUNTAYHTYMA OMNIA (OMNIA) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

TOYOTA BALTIC AKTSIASELTS (Toyota Baltic), PIC 889540053, established in JARVEVANA TEE 7B, TALLINN 10112, Estonia,

hereby agrees

to become beneficiary

in Agreement No 101102844 — Auto-Cove 2.0 ('the Agreement')

between ESPOON SEUDUN KOULUTUSKUNTAYHTYMA OMNIA (OMNIA) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

KAUNO TECHNOLOGIJU MOKYMO CENTRAS (Kauno technikos), PIC 882880033, established in V KREVES PR 114, KAUNAS 50315, Lithuania,

hereby agrees

to become beneficiary

in Agreement No 101102844 — Auto-Cove 2.0 ('the Agreement')

between ESPOON SEUDUN KOULUTUSKUNTAYHTYMA OMNIA (OMNIA) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

ANNEX 3

ACCESSION FORM FOR BENEFICIARIES

KAUNO TECHNIKOS KOLEGIJA (KTK), PIC 882647621, established in TVIRTOVES AL 35, KAUNAS 50155, Lithuania,

hereby agrees

to become beneficiary

in Agreement No 101102844 — Auto-Cove 2.0 ('the Agreement')

between ESPOON SEUDUN KOULUTUSKUNTAYHTYMA OMNIA (OMNIA) and the European Education and Culture Executive Agency (EACEA) ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

and mandates

the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

FINANCIAL STATEMENT FOR THE ACTION FOR REPORTING PERIOD [NUMBER]

EU contribution												
Eligible lump sum contributions (per work package)												Requested EU contribution
WP1 [name]	WP2 [name]	WP3 [name]	WP4 [name]	WP5 [name]	WP6 [name]	WP7 [name]	WP8 [name]	WP9 [name]	WP10 [name]	WP [XX]		
[Lump sum contribution// Financing not linked to costs]	[Lump sum contribution// Financing not linked to costs]	[Lump sum contribution// Financing not linked to costs]	[Lump sum contribution// Financing not linked to costs]	[Lump sum contribution// Financing not linked to costs]	[Lump sum contribution// Financing not linked to costs]	[Lump sum contribution// Financing not linked to costs]	[Lump sum contribution// Financing not linked to costs]	[Lump sum contribution// Financing not linked to costs]	[Lump sum contribution// Financing not linked to costs]	[Lump sum contribution// Financing not linked to costs]	[Lump sum contribution// Financing not linked to costs]	
Forms of funding												
Status of completion	COMPLETED	COMPLETED	COMPLETED	COMPLETED	COMPLETED	COMPLETED	COMPLETED	PARTIALLY COMPLETED	PARTIALLY COMPLETED	COMPLETED	NOT COMPLETED	
	a	b	c	d	e	f	g	h	i	j	k	$l = a + b + c + d + e + f + g + h + i + j + k$
1 – [short name beneficiary]												
1.1 – [short name affiliated entity]												
2 – [short name beneficiary]												
2.1 – [short name affiliated entity]												
X – [short name associated partner]												
Total consortium												

The consortium hereby confirms that:

The information provided is complete, reliable and true.

The lump sum contributions declared are eligible (in particular, the work packages have been completed and the work has been properly implemented and/or the results were achieved; see Article 6).

The proper implementation of the action/achievement of the results can be substantiated by adequate records and supporting documentation that will be produced upon request or in the context of checks, reviews, audits and investigations (see Articles 19, 21 and 25).

ANNEX 5

SPECIFIC RULES

INTELLECTUAL PROPERTY RIGHTS (IPR) — BACKGROUND AND RESULTS — ACCESS RIGHTS AND RIGHTS OF USE (— ARTICLE 16)

Rights of use of the granting authority on results for information, communication, publicity and dissemination purposes

The granting authority also has the right to exploit non-sensitive results of the action for information, communication, dissemination and publicity purposes, using any of the following modes:

- **use for its own purposes** (in particular, making them available to persons working for the granting authority or any other EU service (including institutions, bodies, offices, agencies, etc.) or EU Member State institution or body; copying or reproducing them in whole or in part, in unlimited numbers; and communication through press information services)
- **distribution to the public** in hard copies, in electronic or digital format, on the internet including social networks, as a downloadable or non-downloadable file
- **editing** or **redrafting** (including shortening, summarising, changing, correcting, cutting, inserting elements (e.g. meta-data, legends or other graphic, visual, audio or text elements extracting parts (e.g. audio or video files), dividing into parts or use in a compilation
- **translation** (including inserting subtitles/dubbing) in all official languages of EU
- **storage** in paper, electronic or other form
- **archiving** in line with applicable document-management rules
- the right to authorise **third parties** to act on its behalf or sub-license to third parties, including if there is licensed background, any of the rights or modes of exploitation set out in this provision
- **processing**, analysing, aggregating the results and **producing derivative works**
- **disseminating** the results in widely accessible databases or indexes (such as through ‘open access’ or ‘open data’ portals or similar repositories, whether free of charge or not.

The beneficiaries must ensure these rights of use for the whole duration they are protected by industrial or intellectual property rights.

If results are subject to moral rights or third party rights (including intellectual property rights or rights of natural persons on their image and voice), the beneficiaries must ensure that they

comply with their obligations under this Agreement (in particular, by obtaining the necessary licences and authorisations from the rights holders concerned).

Access rights for the granting authority, EU institutions, bodies, offices or agencies and national authorities to results for policy purposes

The beneficiaries must grant access to their results — on a royalty-free basis — to the granting authority, other EU institutions, bodies, offices or agencies, for developing, implementing and monitoring EU policies or programmes.

Such access rights are limited to non-commercial and non-competitive use.

The access rights also extend to national authorities of EU Member States or associated countries, for developing, implementing and monitoring their policies or programmes in this area. In this case, access is subject to a bilateral agreement to define specific conditions ensuring that:

- the access will be used only for the intended purpose and
- appropriate confidentiality obligations are in place.

Moreover, the requesting national authority or EU institution, body, office or agency (including the granting authority) must inform all other national authorities of such a request.

Access rights for third parties to ensure continuity and interoperability

Where the call conditions impose continuity or interoperability obligations, the beneficiaries must make the materials, documents and information and results produced in the framework of the action available to the public (freely accessible on the Internet under open licences or open source licences).

COMMUNICATION, DISSEMINATION AND VISIBILITY (— ARTICLE 17)

Additional communication and dissemination activities

The beneficiaries must engage in the following additional communication and dissemination activities:

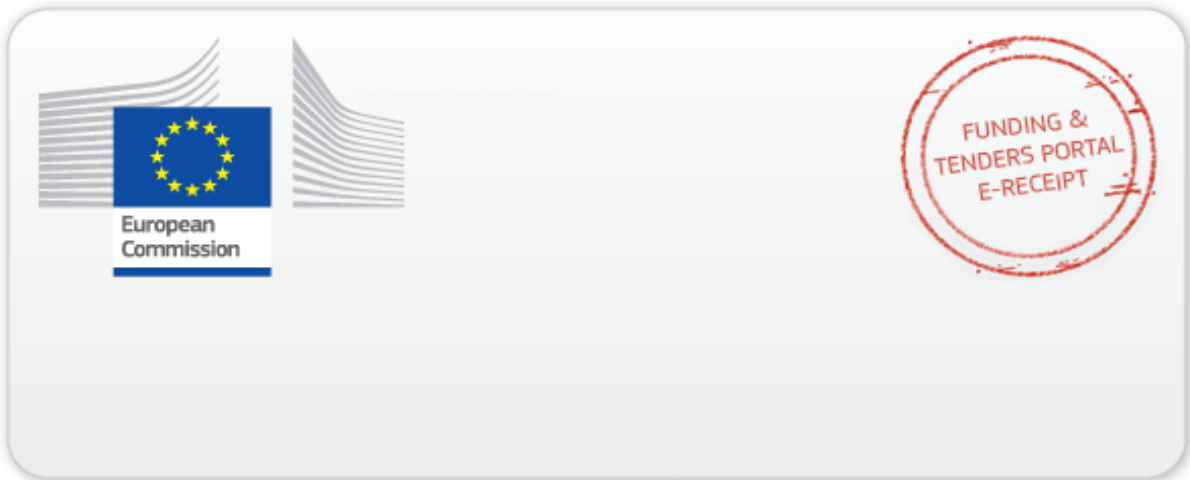
- **present the project** (including project summary, coordinator contact details, list of participants, European flag and funding statement and project results) on the beneficiaries' **websites** or **social media accounts**
- for actions involving public **events**, display signs and posters mentioning the action and the European flag and funding statement
- upload the public **project results** to the Erasmus+ Project Results platform, available through the Funding & Tenders Portal.

SPECIFIC RULES FOR CARRYING OUT THE ACTION (— ARTICLE 18)

EU restrictive measures

The beneficiaries must ensure that the EU grant does not benefit any affiliated entities, associated partners, subcontractors or recipients of financial support to third parties that are

subject to restrictive measures adopted under Article 29 of the Treaty on the European Union or Article 215 of the Treaty on the Functioning of the EU (TFEU).



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