ESA Contract No. 4000145896/24/I-KE

with

Charles University

TRAINING ACADEMY FOR EO EDUCATION SUPPORT - EXPRO +

CONTRACT

Between:

The EUROPEAN SPACE AGENCY,

(hereinafter called the "Agency" or "ESA"),

having its seat at: 8-10 rue Mario Nikis, CS 45741, 75738 Paris CEDEX 15, France, represented by its Director General, Mr Josef Aschbacher,

acting through its establishment:

The European Space Research Institute (ESRIN),

located at: Largo Galileo Galilei 1,

00044 Frascati (RM),

Italy,

of the one part,

and:

Charles University,

(hereinafter called the "Contractor" or "CUNI"),

whose registered office is at:

Ovocný trh 560/5, Prague 1, 116 36, Czech Republic

represented by its Dean of the Faculty of Science, Prof. Jiri Zima,

of the other part,

the following has been agreed between the Agency and the Contractor, hereinafter also referred to individually as "Party" and collectively as the "Parties":

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DEFINITIONS

"Advance Payment"	means a payment foreseen in the Contract intended to provide the Contractor with liquidity to allow the initiation of the contractual works.
"Agency's Own Requirements"	means the activities and programmes undertaken by the Agency in the field of space research and technology and space applications in accordance with Article V 1(a) and (b) of the European Space Agency Convention.
"Contract"	means an agreement established in writing the subject of which is any activity carried out to- or for the Agency in exchange of a price or another consideration, including any amendment to such agreement via a Contract Change Notice ("CCN").
"Day"	means calendar day.
"Force Majeure"	means an event which is, unforeseeable, unavoidable and external at the time of Contract signature, occurs beyond the control of the affected Party and renders the performance of the Contract impossible for the affected Party, including but not limited to: Acts of God, Governmental Administrative Acts or omissions, consequences of natural disasters, epidemics, war hostilities, terrorist attacks.
"Intellectual Property Rights"	means all Registered Intellectual Property Rights, and all unregistered intellectual property rights granted by law without the need for registration with an authority or office including all rights in information, data, blueprints, plans, diagrams, models, formulae and specifications together with all copyright, unregistered trademarks, design rights, data base rights, topography rights, know-how and trade secrets or equivalent rights or rights of action anywhere in the world.
"Legitimate Commercial Interests"	means an interest the Contractor can demonstrate which is important to its ability to commercially exploit Intellectual Property Rights arising from work performed under the Contract for a defined period of time which includes but is not limited to an economic position vis-à-vis a competitor, loss of profits or survival of an undertaking.
"Member State"	means a State which is Party to the Convention of the European Space Agency in accordance with Articles XX and XXII of the said Convention.
"Participating States"	means a Member or non-Member State participating in a given Agency programme according to Article V.1 (a) and (b) of the European Space Agency Convention.
"Participating State's Own Public Requirements"	means a public programme in the field of space research and technology and their space applications fully funded or funded to a substantial extent by the Participating State.
"Persons and Bodies"	means any individual, partnership, company, research organisation or legal entity under the jurisdiction of a Participating State which, when relevant, meets the criteria set out in Article II (3) of Annex V to the European Space Agency Convention.
"Progress Payment"	means a payment that is made against: (a) successful achievement, certified in writing by the Agency's representatives, of a milestone defined in the milestone payment plan of a fixed price contract; (b) cost reports approved by the Agency in a cost reimbursement contract for a period agreed in the Contract.
"Registered Intellectual Property Rights"	means all rights granted by law through registration with an authority or office (whether actually registered or in the form of applications) including all registered patents, utility models, designs, topography rights, domain names and trademarks or equivalent rights and rights of action anywhere in the world.
"Subcontractor"	means the economic operator who is under contract to a Contractor of the Agency to provide supplies or services in support of a Contract placed by the Agency.
"Third Party"	means a natural or legal person not having signed the Contract.

ARTICLE 1. SUBJECT OF THE CONTRACT; GENERAL TERMS OF EXECUTION

- 1.1 The Contractor, as further described in the Statement of Work in APPENDIX 1 hereto, undertakes to perform training activities (all hereafter referred to as the "Work") and to deliver all the items listed in ARTICLE 2 of this Contract.
- 1.2 The Work shall be performed in accordance with the provisions stated in the following documents, listed in order of precedence in case of conflict:
 - a) The specific Articles of this Contract with its PDP Annex Personal Data Processing (the "PDP") of the European Space Agency ("ESA" or the "Agency")
 - b) APPENDIX 1 hereto: the Agency's Statement of Work, reference ESA-EOP-SG-SOW-0512, issue 1, revision 0, dated 6 February 2024;
 - c) The Contractor's Proposal, without specific reference, issue 1, revision 0, dated 5 April 2024, not attached hereto but known to both Parties.
- 1.3 General Terms of Execution
- 1.3.1 The Contractor's own sales conditions shall not apply.
- 1.3.2 The language of this Contract and of all communications hereunder shall be English. The substantive law according to which this Contract shall be construed is Czech law.
- 1.3.3 The Parties shall use their best endeavours to amicably settle any dispute arising out of the Contract. Failing an attempt towards an amicable settlement, all disputes shall be finally settled in accordance with the Rules of Arbitration of the International Chamber of Commerce by one (1) or three (3) arbitrators designated in conformity with such Rules. The Arbitration Tribunal shall sit in Prague, Czech Republic. The Tribunal's award shall be final, binding on the Parties and no appeal shall lie against it. The enforcement of the award shall be governed by the rules of procedure in force in the state/country in which the award is to be executed.
- 1.3.4 The Contractor shall be fully responsible towards the Agency for the proper execution of the Work, including any subcontract agreed hereunder. Subcontracts other than those specified in Article 3.1 below are expressly excluded.

The conditions of the subcontracts shall secure for the Agency any rights granted to it under the terms of this Contract.

The Subcontractor shall have the same rights and obligations in relation to the work to be performed under the subcontract that the Contractor has agreed in relation to the Work performed under the present Contract.

Notwithstanding the normal communication lines within the consortium, and the overall responsibility of the Contractor to ensure proper and timely placing of subcontracts and processing of payments throughout the consortium, the Contractor shall ensure that the below provisions are duly reflected in all subcontracts entered into for the purpose of this Contract:

Should any Subcontractor encounter serious difficulties in the process leading to:

timely payment of due invoices (i.e. related to a milestone already achieved) to be made by the Subcontractor's direct customer (i.e. not ESA), or

contractual coverage of activities already kicked-off, the said Subcontractor may directly contact the Agency at: indirectpayments@esa.int

In doing so, such Subcontractor shall attach the Standard Contact Form, available at: https://esastar-publication.sso.esa.int/supportingDocumentation properly filled in or provide the same information in the body of the email.

In case any Subcontractor has SME status, as per the definition of SMEs given by the European Commission: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32003H0361&from=EN, the Contractor shall ensure that the relevant subcontract foresees an automatic grant of a 35% Advance Payment.

The Contractor shall have the responsibility of obtaining the self-certification of the Subcontractor('s)(s') SME status as per certification model provided in the tender documentation.

- 1.3.5 Any publicity material prepared by the Contractor related to an activity performed by the Contractor in the context of this Contract shall acknowledge that the activity is/was carried out "under a programme of, and funded by, the European Space Agency". It shall display the ESA logo if the Agency so requires. It shall also carry a disclaimer stating that the view expressed in such publications can in no way be taken to reflect the official opinion of the European Space Agency.
- 1.3.6 The Contractor shall, in accordance with the Agency's Policy on the Prevention, Detection and Investigation of Fraud, to the extent allowed by applicable national law, cooperate with the Agency's investigation team in any investigation of fraud initiated by the Agency and inform its personnel of their obligation to cooperate accordingly. The Contractor shall ensure that this provision is duly reflected in all subcontracts entered into for the purpose of this Contract.

ARTICLE 2. DELIVERY REQUIREMENTS; PLACE AND DATE OF DELIVERY

2.1 General

- 2.1.1 Delivery shall be considered as effected only when the relevant deliverable items are in the Agency's possession.
- 2.1.2 Should it seem likely that the originally specified delivery date(s) may be exceeded, the Contractor shall immediately notify the Agency in writing and provide a detailed justification for the delay.
- 2.1.3 No price adjustment in favour of the Contractor will be applicable for the period of delay in delivery.

Penalties for late delivery do not apply, and similarly they will not apply in the subcontract(s) that may be placed by the Contractor.

Should the Agency conclude that the delays in delivery have impaired the intended objectives of the Work, the provisions of Article 5.6 below shall apply.

2.1.4 The Contractor shall be responsible for the appropriate marking, packing, package labelling, insurance, freight, carriage and delivery relative to all deliverable items due hereunder and shall bear any cost relative to all of the above. Deliverable items shall furthermore be packed to guard against loss, damage or deterioration during transport and delivery. If found damaged or defective upon delivery, the Agency reserves the right to return the affected items at the Contractor's expenses.

Should in the execution of this Contract a need arise to provide the Agency with information which is subject to export control laws and regulations, the Contractor shall be responsible to ensure in all cases that such information is passed on to the Agency in strict compliance with the provisions of such export control laws and regulations.

2.1.5 In the event of an alleged delay in delivery due to Force Majeure, the Contractor shall report to the Agency the Force Majeure event and its immediate consequences within one (1) week after its occurrence. The Contractor shall bear the burden of proof for the existence, duration and consequences of Force Majeure, such proof to be provided within one (1) month from the occurrence of the Force Majeure event.

In case of Force Majeure, the Contractor shall not be considered at default and its obligations under the Contract shall be suspended during the Force Majeure event. The Contractor shall make reasonable efforts to mitigate the impact on the schedule and the performance of its contractual obligations.

Force Majeure event at Subcontractor's level shall be considered a case of Force Majeure for the performance of the Contractor's obligations, if the Contractor proves that the delay in the delivery of the equipment or works covered by the subcontract due to the Force Majeure event had an unavoidable impact on the final delivery dates stipulated in the Contract.

In case of Force Majeure, an extension of the time-limit for execution or a postponement of delivery dates shall be granted in writing by the Agency.

If the delay due to the Force Majeure exceeds three (3) months, the Parties are entitled to terminate the Contract by giving not less than two (2) months' written notice to the other Party, unless the Parties agree to modify the Contract in order to take into account the effects of the Force Majeure.

In case of termination due to Force Majeure, the amount to be paid shall be calculated as per Articles 5.7.2 and 5.7.4. No other payments, compensation or indemnities shall be due by the Agency to the Contractor.

2.2 <u>Acceptance and Rejection</u>

The acceptance by the Agency of the deliverables shall be declared upon verification, by the Agency, that the Work has been performed in compliance with the Agency's requirements and that the required results have been achieved. The said deliverables shall be considered as accepted in the absence of an explicit reaction in respect to the same, by the Agency, within one (1) calendar month counting from the time of submission for acceptance. The provisions of Article 5.7 below shall apply in this respect.

2.3 <u>Deliverable Documents</u>

The Contractor shall, during the performance of this Contract, deliver all documentation and reports specified in APPENDIX 1, in the format and quantities specified therein.

These shall be sent to the Agency's Technical Officer mentioned in Article 5.1 unless otherwise specified, in accordance with the following specific provisions:

2.3.1 The draft versions of the final documents as defined in section 4.4 of APPENDIX 1 shall be submitted for approval, in electronic format, to the Agency's Technical Officer specified herein, as specified in APPENDIX 1.

The finalised versions thereof shall be issued not later than four (4) weeks after the approval of the draft versions, as specified in APPENDIX 1.

2.3.2 The acceptance of the Final Report shall constitute the basis for contract closure.

ARTICLE 3. PRICE

- 3.1 The price types of this contract are:
 - Firm Fixed Prices as described in article 3.2;
 - o for the Online Course Portal as described in article 3.2.1;
 - o for Management costs as described in article 3.2.2;
 - Ceiling Price for Additional Activities to be consumed through Work Orders, on the basis of Fixed Unit Prices, as
 described in article 3.3.
- 3.2 Firm Fixed Price
- 3.2.1 The Firm Fixed Price, as defined in Annex II: Section 2.1 to the GCCs, applicable for the Online Course Portal amounts to:

50,000 EUR (Fifty thousand Euro),

broken down per Contractor and Subcontractor(s) as follows:

Company Name	ESA Entity Code	Type P/Prime; SI/Subco Indirect	Country (ISO Code)	Total Amount in Euro
CHARLES UNIVERSITY - CUNI	1000005287	Р	CZ	0
University of Ljubljana, Faculty of Civil and Geodetic Engineering - UL FGG	1000026842	SI	SI	0
UNIV BOCHUM	100000785	SI	DE	0
ignite education	1000040314	SI	DE	50,000
ASSOCIATION EURISY	1000009527	SI	FR	0

The abovementioned price is hereby defined as a Firm Fixed Price and, as such, it shall not be subject to any adjustment or revision by reason of the actual costs incurred by the Contractor in the performance of this Contract.

The Agency may decide that certain items produced or purchased under the Contract during its implementation (see ARTICLE 7 below) shall become ESA Fixed Assets. Such items shall be identified as becoming ESA Fixed Assets by means of a Contract Change Notice.

The abovementioned price is hereby defined as a Firm Fixed Price and, as such, it shall not be subject to any adjustment or revision by reason of the actual costs incurred by the Contractor in the performance of this Contract.

3.2.2 The Firm Fixed Price, as defined in Annex II: Section 2.1 to the GCCs, applicable for the Management costs:

240,572 EUR

(Two hundred and forty thousand five hundred seventy-two Euro),

broken down per Contractor and Subcontractor(s) as follows:

Company Name	ESA Entity Code	Type P/Prime; SI/Subco Indirect	Country (ISO Code)	Total Amount in Euro
CHARLES UNIVERSITY - CUNI	1000005287	Р	CZ	110,004
University of Ljubljana, Faculty	1000026842	SI	SI	
of Civil and Geodetic				39,986
Engineering - UL FGG				
UNIV BOCHUM	1000000785	SI	DE	12,000
ignite education	1000040314	SI	DE	43,000
ASSOCIATION EURISY	1000009527	SI	FR	35,582

The abovementioned price is hereby defined as a Firm Fixed Price and, as such, it shall not be subject to any adjustment or revision by reason of the actual costs incurred by the Contractor in the performance of this Contract.

The Agency may decide that certain items produced or purchased under the Contract during its implementation (see ARTICLE 7 below) shall become ESA Fixed Assets. Such items shall be identified as becoming ESA Fixed Assets by means of a Contract Change Notice.

The abovementioned price is hereby defined as a Firm Fixed Price and, as such, it shall not be subject to any adjustment or revision by reason of the actual costs incurred by the Contractor in the performance of this Contract.

3.3 The Ceiling Price to be converted in Fixed Price, as defined in Annex II: Section 3 to the GCCs, applicable for Additional Activities amounts to:

509,428 EUR

(Five hundred and nine thousand four hundred twenty-eight Euro),

The Ceiling Price is the maximum amount to which the Agency is committed to and can only be increased by means of a CCN signed by the representatives of the Agency. The Agency shall not be obliged to reimburse the Contractor for costs incurred in excess of the Ceiling Price.

The Ceiling Price will be incrementally converted into Fixed Price via Work Orders following the procedure defined in APPENDIX 4.

Within the Ceiling Price, the Agency shall only pay for the Additional Activities that have been commissioned, delivered and accepted by the Agency. The Agency shall pay the Contractor at the completion of each six-month period for all Additional Activities for which a Firm Fixed Price was agreed by the Parties prior to the start of the Additional Activities, as per the procedure of APPENDIX 4.

The Agency will commission the Contractor to implement Additional Activities, via the issue of Work Orders, on a need basis at a Firm Fixed Price agreed by the Parties according to the procedure mentioned in APPENDIX 4 and within the limit of the Ceiling Price established at Art. 3.3.

The Firm Fixed Price to be quoted by the Contractor for each Additional Activity proposal shall be established in application of Fixed Unit Prices applicable to labour, travel and subsistence as defined in Article 4.2.

Labour Fixed Unit Prices

Manpower costs are established as Fixed Unit Prices (FUP) for the activities which the Agency is entitled to commission in application of the procedure in APPENDIX 4 of this Contract. The Labour FUPs applicable to such activities are listed at article 4.2 below. These Labour FUPs include all other charges and costs (including, but not limited to, personal and company taxation and overheads, salary, social charges, transport, housing, expatriation, sick leave, communication costs, travel time etc.) which the Contractor incurs in performing one hour of work, per category of staff and in the relevant year. The FUP includes profit.

In no case shall the Labour FUP be higher than those which may be annually agreed by the Agency's Procurement Audit Division or that are offered to any other customer of the Contractor or of its subcontractors for comparable work. These Labour FUPs may be audited by the Agency's Procurement Auditing Division and the EU bodies and in case it turns out as a result of this audit that the Labour FUPs are higher than the Labour rates accepted by the Agency's Procurement Division, the lowest labour rates shall apply, with retroactive effect. Any amounts paid by the Agency in excess of the applicable labour rates shall be deducted from the following invoices of the Contractor.

Travel costs

If travels are required for the purpose of Contributions of Additional Activities, the Agency may only accept Travels costs which comply with the conditions set out below.

a) Transportation Costs

FUPs are established for the transportation costs which the Contractor incurs in carrying out the requested travels. These FUPs are set out at article 4.2. The Agency shall only pay for the following categories of travel cost: economy class air ticket for journeys for which the train travel time would be greater than 3 hours; 1st class train ticket; taxi or public transport to/from airport or train station. Rental of an economy class car shall be allowed only if the total rental or travel cost (including petrol) is less than the total of public transport (including taxi fares) to and from the destination.

Any travel costs in excess of the mentioned FUP shall not be accepted by the Agency.

b) Subsistence costs

FUPs are established for the subsistence costs which the Contractor incurs in carrying out the requested travels. These FUPs are set out at article 4.2 and shall only apply for travels which require an overnight stay. The rates apply per full working day, include any profit/handling fee and shall cover all travel costs other than the transportation costs described under a) above.

- 3.4 Any amount stated above does not include any value added taxes ("VAT") or import duties in the Member States of the Agency.
- 3.5 The price is stated as being "Delivered Duty Paid" ("DDP") for all deliverables, exclusive of import duties and VAT in accordance with the Incoterms[®] 2020, to the addressees mentioned, or referred to, in ARTICLE 5 of this Contract. Reference to the Incoterms[®] in this provision is exclusively for the purpose of price definition. The price furthermore includes all costs relative to the Contractor's obligations under Article 2.1.4 above.
- 3.6 For the avoidance of doubt, agreement on the final price of this Contract does not constitute an approval of the applied hourly labour rates, facility rates or overhead rates (as far as they have not been audited by ESA) for any other Agency contract.

ARTICLE 4. PAYMENTS AND INVOICING

4.1 Payments

Payments shall be made within thirty (30) Days of submission via esa-p to ESA of the required documents and fulfilment of the requirements specified in Articles 4.1.1 - 4.1.3 below¹. Only upon fulfilment of these requirements shall the Agency regard the invoice as due.

Requirements to be fulfilled:

4.1.1 Advance Payment:

• Advance Payment Request ("APR") (if any): to be submitted after signature of this Contract by both Parties. The Advance Payment constitutes a debt of the Contractor to the Agency until it has been set-off against subsequent milestone(s) as shown in Article 4.2 here below.

4.1.2 Progress Payment(s)²:

- Milestone Achievement Confirmation ("MAC") (hereinafter referred to as "confirmation") with supporting documentation, as necessary, submitted by the Contractor and attached in esa-p. The supporting documentation shall justify the actual achievement of the milestone(s) as defined in the Payment Plan specified in Article 4.2 here below; and
- Invoice.

4.1.3 Final Settlement:

- Confirmation submitted by the Contractor with supporting documentation as necessary attached in esa-p. The supporting documentation shall justify the actual achievement of the milestone(s) as defined in the Payment Plan specified in Article 4.2 here below; and
- Invoice; and
- Delivery, and acceptance by the Agency, of all due items and fulfilment of all other obligations in accordance with the terms of this Contract; and
- Accepted Final Report

Payments shall be made according to the provisions hereunder:

4.1.4 The Agency shall credit the account of the Contractor to the Contractor's benefit and to the benefit of the Contractor's Subcontractor(s). The Contractor shall be responsible for approving or rejecting, within ten (10) Days of receipt, the relevant Subcontractor('s)(s') invoice(s) and related supporting documents (e.g. MACs, Cost Reports). The Contractor shall also be responsible for paying the accounts of its Subcontractor(s), for this Contract, in accordance with the applicable law and normal commercial practice. The Contractor shall indemnify the Agency against any claims arising from such Subcontractor(s), caused by the Contractor's failure to pay the Subcontractor(s). The Contractor shall supply to the Agency, upon request, evidence of the payment(s) made to its Subcontractor(s).

The Agency shall be afforded all the necessary visibility, whether remotely or by means of inspection of the Contractor's and Subcontractor('s)(s') premises, in order to ascertain the progress of the Work prior to authorising the relevant payment.

- 4.1.5 In the event that the achievement of a milestone is delayed but the milestone is partially met at the milestone planning date foreseen, the Agency may, as an exception, effect a payment against an approved confirmation of the partially achieved milestone, not exceeding the value of the Work performed at the date of payment.
- 4.1.6 When releasing the payment for a given milestone, if applicable, the Agency's payment shall be made after due deduction of the corresponding off-set of the Advance Payment(s) as per the conditions of Article 4.2 here below.

In case of partial payment(s), the Agency shall deduct from the corresponding invoice(s) relative to the same milestone any outstanding amount of the Advance Payment(s) still to be off-set.

This is reflected in esa-p as "30 days upon receipt by ESA, in esa-p, of <u>both</u> the confirmation and the invoice", see in esa-p GUIDE Frequently Asked Questions & Answers for Suppliers at: http://esa-p-help.sso.esa.int/FAQ for Suppliers.pdf.

For detailed information on how to submit and approve confirmations, invoices and APR in esa-p, you may consult the following two Quick Guides:

- 4.1.7 All invoices shall be submitted to the Agency in electronic form through the esa-p on-line system.
 - a) The Contractor shall ensure that the APR (if any), all confirmations and all invoices are submitted for payment exclusively through the Agency's esa-p system. If the Contractor has no access to the Agency's esa-p system at the time of signature of this Contract, an immediate request for an esa-p user account shall be made by the Contractor to the ESA Helpdesk (mail to: esait.Service.Desk@esa.int), specifying a contact name, the company name and the ESA Contract Number.
 - b) In cases where the Agency's esa-p system is inoperative at the moment of submission of the confirmation, the Contractor may submit the confirmation by email to the Agency's Technical Officer mentioned in Article 5.1.1a) of this Contract. A template confirmation form can be obtained upon request to esait.Service.Desk@esa.int.
 - c) The Contractor undertakes to complete confirmations and invoices, and to strictly adhere to the instructions (including those for billing taxes and duties, where applicable) contained in esa-p.

If applicable, invoices shall separately show all due taxes or duties.

In the case of invoices submitted by the Contractor which are free of VAT, reference shall be made to the number indicated on the VAT Exemption Form which the Agency provided to the Contractor when forwarding the present Contract for signature. On invoices submitted via esa-p, the number shall be put in the respective field "VAT Exemption Number".

- 4.1.8 Payments shall be made by the Agency in EURO to the account specified by the Contractor. Such account information shall clearly indicate the IBAN (International Bank Account Number) and BIC/SWIFT (Bank Identification Code). The Parties agree that payments shall be considered as effected by the Agency on time if the Agency's orders of payment reach the Agency's bank within the payment period stipulated in Article 4.1 above.
- 4.1.9 Any special charges related to the execution of payments shall be borne by the Contractor.
- 4.1.10 Any questions concerning the operation of esa-p shall be addressed to the ESA Helpdesk (mail to: esait.Service.Desk@esa.int).
- 4.1.11 Any questions concerning the latest status of due invoices can be addressed to the ESA Payment Officer (mail to: esa.payment.officer@esa.int).
- 4.1.12 The Contractor, on its behalf and on the behalf of its subcontractor(s), shall be entitled to submit the invoices, according to the procedure for payment set forth in APPENDIX 4, for each authorized Additional Activities Work Order which has been fully completed and which deliverables have been accepted in writing by the Agency during the concerned six-months period. Partial acceptance of an authorized Additional Activity shall not trigger any authorization to request a payment (be it total or partial).

The Contractor shall provide to the Agency, as an attachment to its Confirmation an excel spreadsheet detailing the number and title of Additional Activities implemented, overall budget consumed and the signed Work Order associated with the Additional Activities to be paid.

4.2 The following Payment Plan is agreed for this Contract:

For the Firm Fixed Price:

Milestone (MS) Description	Schedule Date	Payments from ESA to (Prime) Contractor (in Euro)	Country (ISO code)
Progress (MS 1): Upon approval of first issue of OCP and Training and Promotion Plan, acceptance of all related deliverable items.	15 December 2024	55,000	
Progress (MS 2): Upon successful completion of first yearly review and acceptance of all related deliverable items.	15 September 2025	68,000	
Progress (MS 3): Upon successful completion of second yearly review and acceptance of all related deliverable items.	15 September 2026	130,000	CZ
Final Settlement (MS 4): Upon the Agency's acceptance of all deliverable items due under the Contract and the Contractor's fulfilment of all other contractual obligations including acceptance of Final Report.	15 September 2027	37,572	
TOTAL	290,572		

Advance Payment(s) and other Financial Conditions:

Prime (P)	Company Name	ESA Entity Code	Country (ISO code)	Advance Payment (in Euro)	Offset against ³	Offset by Euro	Condition for release of the Advance Payment
Р	CHARLES UNIVERSITY - CUNI	1000005287	CZ	73,000	MS 3	73,000	Upon signature of the Contract by both Parties

For information purposes only, distribution by the Prime Contractor of ESA's payments between the Prime Contractor and the Subcontractor(s):

For information purposes: Amounts in Euro for Contractor and Subcontractor(s)							
Milestone	CHARLES UNIVERSITY - CUNI	cz	University of Ljubljana, Faculty of Civil and Geodetic Engineering - UL FGG	SI	UNIV BOCHUM	DE	
MS 1	20,823		7,569		2,271		
MS 2	25,743		9,357		2,808		
MS 3	49,215		9,215 17,889		5,370		
MS 4	14,223		5,171		1,551		
TOTAL	110,004		39,986		12,000		

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An SME has the right to request offset of the 35% advance at the end of the Contract, i.e. the last two milestones (ideally 25% at the last milestone and 10% at the preceding milestone), if this can be justified in view of the economic progress in the Contract.

Milestone	ignite education	DE	ASSOCIATION EURISY	FR	
MS 1	17,603		6,734		
MS 2	21,765		8,327		
MS 3	41,607		15,919		
MS 4	12,025		4,602		
TOTAL	93,000		35,582		

For information purposes only, distribution by the Prime Contractor of ESA's Advance Payments between the Prime Contractor and the Subcontractor(s):

	For information purposes only: Amounts in Euro for Contractor and Subcontractor(s)							
Prime (P) or (SI)	Company Name	ESA Entity Code	Country (ISO code)	Advance Payment (in Euro)	Offset against ⁴	Offset by Euro	Condition for release of the Advance Payment	
Р	CHARLES UNIVERSITY - CUNI	1000005287	CZ	27,637	MS 3	27,637	Upon signature of the Contract by both Parties	
SI	University of Ljubljana, Faculty of Civil and Geodetic Engineering - UL FGG	1000026842	SI	10,045	MS 3	10,045	Upon signature of the Contract by both Parties	
SI	UNIV BOCHUM	1000000785	DE	3,015	MS 3	3,015	Upon signature of the Contract by both Parties	
SI	ignite education	1000040314	DE	23,364	MS 3	23,364	Upon signature of the Contract by both Parties	
SI	ASSOCIATION EURISY	1000009527	FR	8,939	MS 3	8,939	Upon signature of the Contract by both Parties	

An SME has the right to request offset of the 35% advance at the end of the Contract, i.e. the last two milestones (ideally 25% at the last milestone and 10% at the preceding milestone), if this can be justified in view of the economic progress in the Contract.

Fixed Unit Prices

Fixed Unit Prices	2024 (in EUR)	2025 (in EUR)	2026 (in EUR)
Price for 5-day in-person training:			
Host Costs = logistics + social event and coffees + local and informatics support).	18,000	18,000	18,000
Price for 5-day in-person training:			
Lectures and practicals Video recording and post-processing.	2,000	2,000	2,000
Price for 5-day in-person training:			
travel & accommodation costs of lecturers and course organizers.	17,500	17,500	17,500
Price for 5-day in-person training:			
Compensation to the EO lecturers (based on a teaching hourly rate per EO expert that takes into account also the effort for the preparation of the teaching material).	8,500	8,500	8,500
Price for 2-day online training webinar:			
Compensation to the EO lecturers (based on a teaching hourly rate per EO expert that takes into account also the effort for the preparation of the teaching material).	2,400	2,400	2,400
Price for 2-day online training webinar:			
Lectures and practicals Video recording and post-processing (expected to be much lower than for in-person courses).	350	350	350
Price for 3-day online training webinar:			
Compensation to the EO lecturers (based on a teaching hourly rate per EO expert that takes into account also the effort for the preparation of the teaching material).	4,200	4,200	4,200
Price for 3-day online training webinar:			
Lectures and practicals Video recording and post-processing (expected to be much lower than for in-person courses).	500	500	500
Price of one EO Challenge online			
(including related lectures, preparation of exercises, interaction and student support and Compensation to the EO lecturers).	10,000	10,000	10,000

ARTICLE 5. SPECIFIC PROVISIONS

5.1 Approval/Representatives of the Parties during Contract Execution

For the purpose of this Contract, the authorised representative of the Agency's Director General is Mr Rune Floberghagen, Head of The Climate Action, Sustainability and Science Department.

5.1.1 The Agency's representatives are:

a) Mr Francesco Sarti (EOP-SGS) for technical matters or a person duly authorised by him (the "Technical Officer").

All correspondence for technical matters shall be addressed as follows:

	To:	With copy to:
Name	Francesco Sarti	Katrien Espagnet
Telephone No.	+393316136102	+39 06 941 80237
Email Address	Francesco.sarti@esa.int	Katrien.Espagnet@esa.int
Mail address	ESRIN	ESRIN

b) Ms Katrien Espagnet (CIC-COE) for contractual and administrative matters or a person duly authorised by him/her (the "Contracts Officer").

All correspondence for contractual and administrative matters (with the exception of invoices as mentioned in ARTICLE 4 above) shall be addressed as follows:

	То:	With copy to:
Name	Katrien Espagnet	Francesco Sarti
Telephone No.	+39 06 941 80237	+393316136102
Email Address	Katrien.Espagnet@esa.int	Francesco.sarti@esa.int
Mail address	ESRIN	ESRIN

Personal Data Protection matters shall be addressed to the ESA Data Protection Officer at the following email address:
 dpo@esa.int

5.1.2 Contractor's Representatives:

All correspondence for the Contractor shall be addressed as follows: Charles University,
Ovocný trh 560/5,
116 36 Prague 1,

Czech Republic

a) for technical matters as follows:

	То:	With copy to:
Name	Antonios Mouratidis	Přemysl Štych
Telephone No. (+ 420) 775 352 377 (+420) 221 951 408		(+420) 221 951 408
Email Address	mouratia@natur.cuni.cz	stych@natur.cuni.cz

b) for contractual and administrative matters as follows:

	То:	With copy to:
Name Přemysl Štych Antonios Mouratidis		Antonios Mouratidis
Telephone No.	Telephone No. (+420) 221 951 408 (+ 420) 775 352 377	
Email Address stych@natur.cuni.cz mouratia@natur.cuni.cz		mouratia@natur.cuni.cz

c) Personal Data Protection matters shall be addressed to the Data Protection contact point as follows:

	То:
Name	Petra Kubáčová
Telephone No.	+420 771 232 578
Email Address	gdpr@cuni.cz
Mail Address	Charles University, Ovocný trh 560/5, 116 36 Prague 1, Czech Republic

5.1.3 Communications related to the Contract affecting its terms and conditions shall only bind the Parties, if signed by the Agency's and the Contractor's duly Authorised Representatives.

The Parties agree that electronic signature of this Contract shall have the same force and effect as hand-signed originals and shall be binding on both Parties to this Contract.

- 5.2 <u>Infringement of the Law Infringement of Third-Party Rights</u>
- 5.2.1 The Agency shall not be responsible if the Contractor infringes the laws or statutes of its country or of any other country whatsoever.
- 5.2.2 In the event of a reasonable suspicion of infringement of any patent rights and other Intellectual Property Rights of a Third Party, the Work being performed under this Contract shall be stopped immediately. Assessment of the suspicion shall be performed by the Contractor and, if confirmed, both Parties shall agree on a new approach to achieve the objectives of this Contract, either by obtaining the applicable licence(s) from the Third Party by the Contractor and/or by signing a Contract Change Notice (CCN) agreed upon between both Parties, in order to avoid the infringement. The purpose of the CCN shall be either to (i) restart the Work, if plausible, due under the changed circumstances; or (ii) terminate the Contract, in accordance with Article 5.6.4 hereunder, if the infringement cannot be avoided.

Notwithstanding the above, the Contractor shall indemnify the Agency from and against all claims, proceedings, damages, costs and expenses arising from infringement or alleged infringement of any patent rights and other Intellectual Property Rights of a Third Party with respect to the Work under this Contract. This obligation does not extend to infringements resulting from the use of documents, patterns, drawings or items supplied by the Agency or from a modification or combination of the deliverables due hereunder made by the Agency after their acceptance.

5.3 Liabilities

- 5.3.1 Claims between the Parties in respect of damages to staff and goods occurring during the execution of the Contract shall be settled in the following manner:
- 5.3.1.1 Claims for injuries, including death, sustained by the Parties' representatives or employees (staff) by virtue of their involvement in the Contract shall be settled in accordance with the Law governing the Contract.
- 5.3.1.2 Claims for damage caused by one of the Parties to goods owned by the other Party shall be settled in accordance with the Law governing the Contract. Except in case of gross negligence or wilful misconduct, the total aggregate liability of either Party for damage to goods owned by the other Party shall not exceed the amount which is quoted in the Contract as the total Contract price.
- 5.3.2 Except in case of gross negligence and wilful misconduct, the Parties shall not be liable towards each other for consequential damages sustained by the Parties, arising from and during the execution of the Contract. For the sake of clarity and as an example, consequential damages include, but are not limited to: loss of contract, income or revenue; loss of profit or interests; loss of financing; loss of customer; loss of availability and use of facilities; loss of availability and use of employees' productivity or loss of services of such persons; loss of opportunity; loss of rental expenses.

5.4 <u>Customer Furnished Items (CFI)</u>

It is not foreseen that the Agency will provide any items to the Contractor.

5.5 Items Made Available by the Agency

The Agency will make available to the Contractor the item(s) listed below:

Category	Description	Quantity	Delivery Date
Access to paid ESA platforms to run training activities.	Access to ESA platforms (Earth-CODE and related resources: OpenEO Platform, ESDL), or if necessary VMs to run training practicals. See for inspiration/dimensioning about use of platforms/services, Annex G to the Statement of Work (AD1) for (nonexhaustive) examples.	As needed. See Annex G to the Statement of Work (AD1) for possible dimensioning	As needed
ESA materials from past training activities	Access to materials used and published as part of past ESA training materials, which may be used with credit to the corresponding authors. All materials available are on https://eo4society.esa.int/training-education/ , and for many, ESA also have the original format (i.e., ppt instead of pdf)	As needed	As needed

The Contractor shall confirm to the Agency its decision to use the item(s).

The Contractor shall take responsibility for the item(s) and their proper use, handling, and storage with the level of care expected from an expert professional.

The Contractor is liable and bears the risk for the items from the time the items are physically delivered to the Contractor until the end of the Contract.

The items listed above shall be made available to the Contractor through an appropriate legal agreement. In any case, the said legal agreement shall be entered into only for the purpose of achieving the objectives of this Contract and only for the duration of this Contract.

The ownership of the items remains with the Agency.

5.6 Agency's Rights in Case of Contractor's Under-Performance

- 5.6.1 Should any of the results of the Work fail to meet the agreed requirements and/or specifications, the Agency reserves the right to reject such results and require their resubmission following an iteration of the relevant Work by the Contractor at no additional charge.
- 5.6.2 Should any of the results of the Work fail to meet any of the agreed requirements and/or specifications to such an extent as to seriously jeopardise the performance of this Contract and/or to defeat its objectives, the Agency reserves the right to terminate this Contract by giving written notice by registered mail.
- 5.6.3 Should the Contractor fail to obtain an export authorisation from the competent national authority, the Agency shall have the right to terminate this Contract without further notice.
- 5.6.4 Termination of this Contract as specified above shall entail no compensation being due to the Contractor other than the amounts corresponding to the milestone payments already made hereunder at the time of serving the termination notice. Any amounts corresponding to Advance Payments not entirely offset hereunder shall remain payable to the Agency.

5.7 <u>Termination without fault of the Contractor</u>

- 5.7.1 The Agency shall have the right at any time to terminate this Contract either wholly or in part by giving written notice by registered mail. In the case of termination of a Contract by the Agency without fault of the Contractor, the Contractor shall, on receipt of the Agency's instructions, forthwith take the necessary steps to implement them. The Parties shall use their best efforts to mitigate the consequences of the termination. The period to be allowed to implement them shall be agreed between the Parties but shall not exceed three (3) months.
- 5.7.2 Subject to the Contractor conforming with the instructions referred in Article 5.7.1, the Agency shall take over from the Contractor at a fair and reasonable price all finished parts not yet delivered to the Agency, all unused and undamaged material, bought-out components and items in the course of manufacture in the possession of the Contractor and properly obtained by or supplied to the Contractor for the performance of the Contract, except such materials, bought-out components and items in the course of manufacture as the Contractor shall, with the agreement of the Agency, elect to retain.

5.7.3

- a) The Agency shall indemnify the Contractor against such part of any loss of profit as is attributable to the termination of the Contract and against any damage resulting from the termination of the Contract, in particular against any commitments, liabilities or expenditure which are reasonably and properly chargeable by the Contractor and are related to the Contract, in so far as the said commitments, liabilities or expenditure would otherwise, subject to the conditions stated in Article 5.6.1, represent a loss by the Contractor by reason of the termination of the Contract.
- b) The amount of compensation payable under Article 5.7.3a) shall be fixed on the basis of evidence produced by the Contractor and accepted by the Agency. It shall take account of the proportion of the Contract completed and shall be consistent with the provisions of Article 5.7.4
- 5.7.4 The Agency shall in no circumstances be liable to pay any sum which, when added to the other sums paid, due or becoming due to the Contractor under the Contract, exceeds the total price for the Work set forth in the Contract.

5.8 Changes to this Contract

- 5.8.1 The Agency reserves the right at any time to request a change to the requirements covered by this Contract. The Agency may also accept changes proposed by the Contractor. The requesting Party shall communicate all change requests to the other Party in writing through the Parties' Representatives indicated in Article 5.1 above.
- 5.8.2 The cost impact relative to any change resulting from a request, by the Agency, to modify the requirements covered by this Contract shall be borne by the Agency. The Contractor shall be responsible for the consequences and shall bear the cost of any other change.
- 5.8.3 When responding to a change request issued by the Agency or as a means to propose changes to the Agency, the Contractor shall submit a committing change proposal including a detailed quotation of the effects of the change on the contractual Work, price, schedule, deliverable items and any other contractual terms and conditions.
- 5.8.4 Upon evaluation and acceptance by the Agency of a change proposal, any amendment to this Contract shall be introduced in the form of a Contract Change Notice (CCN) according to the CCN form attached in **APPENDIX 2**. In case of rejection, the Agency shall inform the Contractor accordingly, together with the reasons for the rejection.

ARTICLE 6. INTELLECTUAL PROPERTY RIGHTS

- 6.1 <u>Information to be provided by the Contractor Protection of information.</u>
- 6.1.1 Information, data, reports and results arising from Work performed under this Contract shall be delivered to the Agency. The Agency shall have the right to make such information, data, reports and results available to the Participating States and any Persons and Bodies under their jurisdiction, to use on the terms set forth in the following clauses.
- 6.1.2 For the purpose of this Contract, "Proprietary Sensitive Information" shall mean information corresponding to business related information (e.g., business plans) and/or Intellectual Property Rights vesting in an entity, the uncontrolled dissemination of which is likely to impair the entity's long-term ability to use and exploit the aforesaid and/or to maintain a competitive advantage.

The Contractor shall not mark any (electronic) documentation as Proprietary Sensitive Information, unless agreed in advance with the Agency in writing. Any request from the Contractor shall be submitted in writing and accompanied by an appropriate justification.

- 6.1.3 Neither Party shall disclose any documentation obtained from the other Party, and which both Parties recognise as being Proprietary Sensitive Information without the other Party's previous written authorisation. Without prejudice to the foregoing and limited to the purpose and scope of this Contract, both Parties may circulate such documentation to their employees or collaborators that require the said documentation for the sole purpose of complying with, or inspecting the progress of, this Contract.
- 6.1.4 The obligations provided in Articles 6.1.2 and 6.1.3 shall not apply to (electronic) documentation which:
 - at the time of circulation has already entered in public domain or which after circulation enter in public domain other than through a breach of the Contract;
 - at the time of circulation is already known by the receiving Party and is not hindered by any obligation not to circulate:
 - is later acquired by the receiving Party from another source and is not hindered by any obligation not to circulate; or
 - is required to be circulated by law or order of a court of competent jurisdiction.
- 6.2 Ownership and Use of Intellectual Property Rights
- 6.2.1 Ownership of Intellectual Property Rights

The Contractor shall own all Intellectual Property Rights and have the right to apply for, and to own, any Registered Intellectual Property Rights arising from Work performed under this Contract. The Contractor shall as soon as possible report to the Agency any results arising from such a Work which may in its opinion be protected as Registered Intellectual Property Rights and state whether it intends to apply for such protection. At the Contractor's specific request in order to allow for filing of patent applications, the Agency shall not disclose any relevant information and results for a period of twelve (12) months from the date it was reported to the Agency.

The Contractor shall subsequently inform the Agency of any application to register such results arising from Work performed under this Contract and, within two (2) months of the date of filing, provide the Agency with all details on that application. The Agency shall have an irrevocable right to use the information used in that application, for its own requirements on the terms set out in Article 6.2.2 below but, unless agreed otherwise with the Contractor, the Agency shall not disclose such information until publication of the registration application.

6.2.2 Use of Intellectual Property Rights

All Intellectual Property Rights arising from Work performed under the Contract shall be available to:

a) the Agency, Participating States and Persons and Bodies, to use on a free of charge, worldwide licence, with the right to disseminate and/or to grant sub-licences, for the Agency's Own Requirements.

For the avoidance of doubt, the term "use" for the purposes of software and/or hardware (design) shall include, but not be limited to, use to operate, integrate, validate, maintain, modify and upgrade items developed under the Contract.

If source code is to be used for the creation of the e-Learning training material, the Contractor shall deliver directly to the Agency the software in source code form.

In view of the objectives of this activity, the Agency explicitly reserves the right to widely disseminate any output of the activity, partial or otherwise, both during the execution of this Contract or after its end, without any restriction. In addition, the Agency has the right to sublicense to any current or future contractors for non-profit educational purposes.

- b) Participating States as well as any Persons and Bodies under their jurisdiction, to use on "favourable conditions" (i.e. more favourable for the purchaser than market conditions but still allowing reasonable profit for the seller) for the Participating States' Own Public Requirements.
- c) Academic and research institutions within the Participating States to use on a free licence without the right to grant sub-licences, for their own scientific research purposes, excluding commercial purposes.

6.3 Background Intellectual Property.

6.3.1 Background Intellectual Property - Definition

For the purpose of this Contract, "Background Intellectual Property" means all Intellectual Property, belonging to the Contractor or to a Third Party, which:

- a) has not been generated under contract with the Agency either prior to or during execution of this Contract, and
- b) is relevant to the Work carried out under this Contract, and
- c) the Contractor uses to achieve the objectives of this Contract, and
- d) is delivered to the Agency to enable it to use, operate, copy, distribute and sublicense the deliverable items due under this Contract as specified in the Agency's requirements, and
- e) is duly identified as such in this Contract.

Conversely, "Foreground Intellectual Property" means all Intellectual Property generated through Work carried out under, or directly or indirectly funded through, this Contract.

6.3.2 Use of Background Intellectual Property

The Contractor has confirmed that all results of this Contract (or any part thereof) shall be deemed and treated as not containing any Background Intellectual Property.

Nevertheless, should the Contractor unilaterally decide to use existing Intellectual Property to achieve the objectives of this Contract, all results of this Contract (or any part thereof) shall be deemed and treated as Foreground Intellectual Property not containing any Background Intellectual Property. The Contractor shall grant to the Agency, and/or ensure that the Agency be granted, all the necessary rights in this respect.

6.4 The free licences provided for the benefit of ESA

The free licences provided on Intellectual Property arising from Work performed under this Contract and/or Background Intellectual Property indicated in Article 6.3 for the benefit of ESA shall be deemed granted through signature of the present Contract and without the need to implement a separate licence.

6.5 <u>Transfer outside the ESA Member States</u>

Any transfer of Intellectual Property Rights or any product, process, application or result arising from Work performed under the Contract by the Contractor to any entity in a non-Member State or any international organisation shall comply with all applicable laws including all export control laws, regulations, rules and procedures and any relevant international agreements relating to the export of goods and services.

ARTICLE 7. MANAGEMENT AND CONTROL OF INVENTORY ITEMS/FIXED ASSETS UNDER THE CONTRACT

The following provisions apply to any items other than those items which fall within the scope of ARTICLE 2 of the Contract.

The Contractor shall specify, record, manage and control any and all customer items and ESA Fixed Assets under construction (reference is made to Article 3.1 above) that are subject to this Contract. Such items are:

- i. items produced or purchased under the Contract, including electronic components, special jigs, tools, test equipment, which are paid for under the Contract with an individual or batch value (value of group of items) in the national currency equivalent to or above five thousand (5,000) Euro:
- ii. if any, items identified as becoming ESA Fixed Assets in ARTICLE 3 above or in a subsequent CCN;
- iii. Items Made Available by the Agency, if any (see Article 5.4 of the Contract).

The Contractor shall operate an inventory control system ("Inventory Control System") of all the above-mentioned items and shall mark them as falling under this Article of the Contract.

The Inventory Control System shall:

- record the existence, location, operational status and condition of all inventory items, and
- record the value and estimated life duration of all inventory items, and
- record changes in inventory value, and
- enable financial reconciliation to be made and status reports to be prepared for incorporation of the relevant data into the Agency's annual financial accounts.

The Contractor shall, as part of the Inventory Control System, maintain an Inventory/Fixed Asset Record (in an electronic tool of its choice) which shall, as a minimum, contain the information as shown in **APPENDIX 3** to this Contract.

The Inventory/Fixed Asset Record shall be kept updated by the Contractor. It shall be made available to the Agency upon request but as a minimum yearly during the execution of the Contract (and at completion of each Project Phase as per ECSS-M-ST-10 if applicable). A final consolidated record shall be submitted with the final contractual deliverables as foreseen in **APPENDIX 2** to this Contract.

If the Inventory/Fixed Asset Record also includes any of those items which fall within the scope of ARTICLE 2 of the Contract, these items are to be clearly set apart.

Items, for which no place of delivery has been identified in ARTICLE 2 of this Contract, are subject to the following provisions:

Upon completion of the Work specified in the Contract, the Agency shall take decisions regarding the final destination and final ownership of each item listed in the Inventory/Fixed Asset Record. The Agency shall be free to choose amongst the following options with respect to the final destination and final ownership of such items:

- a) the right to claim delivery to the Agency and transfer of ownership (the latter if applicable) with issue of appropriate instructions concerning packing and shipment (at the Contractor's expense);
- b) the right to claim or retain ownership and to negotiate with the Contractor a loan agreement if the Contractor is interested in keeping and using an item, with loan conditions making the Contractor responsible for the custody, the delayed delivery and the risks involved (at the Contractor's expenses).
- c) the right to extend the custody of an item to the Contractor and to postpone its delivery to the Agency and the associated transfer of ownership on conditions to be negotiated;
- d) the renunciation of any rights to claim delivery and to claim transfer of ownership, leaving the item definitively in the possession and in the ownership of the Contractor, with or without financial compensation for the Agency (e.g., repurchase by the Contractor) and with or without special instruction,
- e) the right to request the Contractor to dispose of an item on conditions to be negotiated.

Should the Agency decide to transfer an ESA Fixed Asset to a Third Party or to dispose of the Fixed Asset, the Contractor shall provide the full inventory information of the Fixed Asset to the Agency and complete the transfer or disposal forms to be provided by the Agency upon request by the Contractor. The information to be given by the Contractor in the forms shall be agreed with the Agency.

The decisions taken by the Agency shall lead to instructions or negotiations, as the case may be, and the results shall be recorded.

Electronically signed by the Parties to this Contract,	
In:	In:
On:	On:
For	For the European Space Agency (ESA)
Prof Jiri Zima Dean of the Faculty of Science	Head of The Climate Action, Sustainability and Science

Annex - Personal Data Processing (the "PDP") of the European Space Agency ("ESA" or the "Agency")

This "Personal Data Processing" Annex governs:

- the processing of the Personal Data identified in Article 3.1, entrusted to the Contractor under the Contract, whereby the Contractor acts as Data Processor on behalf of the Agency and the Agency acts as Data Controller;
- the processing of the Personal Data identified in Article 3.2, exchanged by the Parties, acting as separate Controllers.

Such Annex forms an integral part of the Contract. In case of conflict between the terms and conditions of the Contract and the terms and conditions of this Annex, the terms and conditions of this Annex shall prevail.

This Annex survives the expiration or termination of the Contract for as long as the Personal Data are protected by the Data Privacy Regulations.

1. **DEFINITIONS**

The following specific definitions apply:

- (i) "Agreed Territory" (of Processing) means:
 - a) ESA Member States, as they are listed in the ESA website at URL: https://www.esa.int/About_Us/Corporate_news/Member-States
 Cooperating States
 - b) European Union;
 - c) countries recognized by the European Commission as ensuring an Adequate Level of Protection of Personal Data under the European Union's legal framework.
- (ii) "Data Privacy Regulations" means respectively:
 - a) ESA PDP Framework, i.e. the Personal Data Protection Framework applicable to ESA and available on ESA website at URL:

 http://www.esa.int/About_Us/Law_at_ESA/Highlights of ESA rules and regulations
 - b) the Personal Data protection laws and regulations applicable to the Contractor in the Agreed Territory of Processing which provide an Adequate Level of Protection under the ESA PDP Framework (e.g. EU Regulations in the field of personal data protection, including but not limited to the General Data Protection Regulation (Regulation (EU) nr. 2016/679) (hereinafter "GDPR").
- (iii) "Personnel" means:
 - a) with respect to the Contractor: any employee, agent or representative acting under the responsibility of the Contractor or, if subcontracting is permitted, of Contractor's subcontractors;
 - b) with respect to ESA: any employee, agent or representative acting under the responsibility of ESA (e.g. staff members and seconded agents, consultants experts or employees of third parties).

With respect to terms used with capitals in this Annex (e.g. "Controller", "Personal Data" etc.) but not defined

above, reference is made to the definitions set forth in the Data Privacy Regulations applicable according to Article 2 below.

2. GENERAL

- 2.1 Each Party is responsible for complying with the level of protection resulting from its Data Privacy Regulations in relation to Personal Data, being recognised that:
 - a) the Contractor is governed by the Personal Data protection laws and regulations applicable to the Contractor in the Agreed Territory of Processing, which provide an Adequate Level of Protection under the ESA PDP Framework (e.g. EU Regulations in the field of personal data protection, including but not limited to the GDPR.
 - b) ESA is governed by PDP Framework, i.e. the Personal Data Protection Framework applicable to ESA and available on ESA website at the URL: http://www.esa.int/About_Us/Law_at_ESA/Highlights of ESA rules and regulations
- 2.2 With respect to the processing of the Personal Data identified in Article 3.1 below, entrusted to the Contractor as part of the work under the Contract, the Contractor acts as Data Processor on behalf of the Agency, who acts as Data controller.
- 2.3 With respect to the processing of the Personal Data identified in Article 3.2 below, the Parties are considered separate Data Controllers, with each Party being able to determine the purpose within the boundaries of Article 2.4 and the means of Processing the Personal Data under its control in accordance with its privacy statement.
- 2.4 The Personal Data will be processed only for:
 - a) the performance of the Contract, including the execution, management, monitoring of the work as well as audits and the fulfilment of the obligations set out in this Annex:
 - b) the management of the relationship of the Parties in relation to the Contract, notably for administrative, financial, audit or for communication purposes;
 - the compliance with any legal or regulatory obligation to which a Party is subject;
 - d) the compliance, in case the performance of the Contract requires access to the Parties' premises, with the health, safety and security requirements, legal or regulatory obligations applicable to the respective Party in such matters.

3. PERSONAL DATA

- 3.1 The Personal Data to be processed by the Data Processor during the execution of the work under the Contract are identified in the Statement of Work.
- 3.2 The Personal Data exchanged by the Parties for the performance of the Contract are as follows:
 - a) the Agency shall communicate to the Contractor only the Personal Data concerning ESA representatives/contact persons including name,

- work address, email and telephone numbers;
- b) the Contractor shall communicate to the Agency only:
 - (i) Personal Data concerning the Supplier's representatives/contact persons including name, work address, email and telephone numbers:
 - (ii) Personal Data concerning the Supplier's key Personnel, including title, name, work address, email, telephone numbers, education, professional experience, description of the person's job and responsibilities and the precise assignment of the person to the activity under the Purchase Order.
 - (iii) Sensitive Personal Data concerning the Contractor's Personnel, performing work onsite ESA premises or having the need to access information provided by the Agency which is subject to security restrictions.

4. PARTY'S OBLIGATIONS

4.1 When acting as Data Controller, each Party is individually and separately responsible for complying with the level of protection resulting from its Data Privacy Regulations in relation to Personal Data, including the collection and update of the Personal Data that it communicates to the other Party, the lawfulness and the quality of such Personal Data and for the means by which they were collected. Should the legal basis for the collection of the Personal Data cease to exist or the quality of the Personal Data be affected, the Party will inform the other Party without undue delay.

The Parties shall preserve the rights and legal remedies of the Data Subject as recognised and protected in the Data Privacy Regulations applicable respectively to each Party. In particular, the Data Controller which disclosed the Personal Data to the other Party will respond to enquiries from Data Subjects and, as the case may be, from any competent authority concerning the data processing of the relevant Personal Data.

In case the Parties engage Processors to support their internal operations, including the Processing of the Personal Data exchanged, it is the responsibility of that Party to ensure that its Processors assume obligations consistent with the Data Privacy Regulations applicable to the respective Party, in order to guarantee an adequate level of protection of Personal Data.

4.2 When acting as Data Processor, such Party shall:

- a) process the Personal Data:
 - in compliance with this PDP Annex and, generally, with the level of protection resulting from the Data Privacy Regulations then in force:
 - solely for the purpose and the instructions defined by the Data Controller;
 - solely in the Agreed Territory;
 - without exceeding the retention period;
 - in such a way as to minimize, by means of suitable preventive security measures, the risk

- of accidental or unlawful destruction, loss, alteration, unauthorized disclosure or access, or Processing operations that are either unlawful or inconsistent with the purpose.
- b) promptly investigate any reasonable suspicion of Personal Data Breach and act in accordance with Article 11 below.
- c) cooperate with the Data Controller to enable the latter to guarantee to every Data Subject or his/her delegates the possibility to exercise the rights granted to him/her by the Data Privacy Regulations. The Data Processor acknowledges that Data Subject rights shall be exercised through the Data Controller. Therefore, the Data Processor undertakes to immediately notify the Data Controller of any request that Data Subjects address directly to the Data Processor, and will not respond to any such request or take any other related action, until authorized by the Data Controller.
- d) Immediately inform the Data Controller if, in its opinion, an instruction from the Data Controller infringes any provision on the Processing of Personal Data under the present Annex.

5. DATA RETENTION

- 5.1. The Parties shall not retain or process the Personal Data exchanged longer than is necessary to carry out the purpose described in Article 2.4 herein, unless required otherwise:
 - a) under the Data Privacy Regulations, (e.g. in the frame of audits, inspections and incidents) or
 - b) under the Party's statutory obligations.
- 5.2. The retention period shall be defined in the privacy notices of the Parties.
- 5.3. All Personal Data must be, effectively destroyed/deleted upon expiration of the retention period, unless conservation of such data is required for compliance with any legal or regulatory obligation to which the Party having received the Personal Data from the other Party is subject.

6. CONFIDENTIALITY

The Parties shall ensure the confidentiality of the Personal Data processed by protecting them against unauthorized or unlawful access, acquisition, use and disclosure, in particular by:

- a) limiting access to the Personal Data of the other Party only to their Personnel, that:
 - are required or authorized to access such Personal Data;
 - have committed themselves to confidentiality or are under a statutory obligation of confidentiality;
 - have received the appropriate Personal Data protection training.
- b) taking into consideration, in terms of IT tools, product, applications, the principles of personal data protection by design and by default.

7. SECURITY

The Parties shall adopt appropriate technical and organisational security measures, giving due regard to the risks inherent in the Processing and to the nature, scope, context and purpose of the Processing, in order to ensure the following as appropriate:

- a) the on-going confidentiality, integrity, availability and resilience of Processing systems and services;
- b) measures to protect Personal Data from accidental, unlawful or unauthorized access, use, destruction, loss, modification or transfer.

8. DATA PROTECTION OFFICER/CONTACT POINT

For any Personal Data protection matters, the Parties shall involve their specific contact points identified in the Contract.

9. TRANSFER

The Party having received the other Party's Personal Data under the Contract shall Process (and have processed by its authorised subcontractors or subprocessors) such Personal Data only in the Agreed Territory of Processing. In case the Parties agreed otherwise, transfer of Personal Data outside the Agreed Territory shall only take place in accordance with Article 13 below.

10. SUBCONTRACTORS

- 10.1 The Contractor is authorised to disclose Personal Data received from the Agency to its Subcontractors provided that:
 - a) subcontracting is specifically authorised by Contract and the Subcontractors are indicated in the Contract;
 - b) all the conditions set forth in this Annex are flown down and fulfilled by the Sub-contractors in their respective area of responsibility; in particular the Processing of the Personal Data by the Subcontractors is performed for the purpose described in Article 2.4 herein and the Personal Data are not transferred outside the Agreed Territory.
- 10.2 Disclosure of the Agency's Personal Data to other third Parties requires prior approval of the Agency.

11. PERSONAL DATA BREACHES

- 11.1 After becoming aware of a Personal Data Protection Breach falling in its area of responsibility, and affecting the Personal Data communicated by the other Party, the Party shall notify the other Party within 48 hours.
- 11.2 The Parties will provide each other reasonable assistance to facilitate the handling of the Personal Data Breach and accurate information about the breach, in particular (but not only) in case a complaint is, or likely to be, lodged by a Data Subject in relation to the Breach.

12. LAW DISPUTE RESOLUTION

Concerning Personal Data protection matters, notwithstanding any other provisions on the governing law set forth elsewhere in the Contract, the provisions set forth in the Data Privacy Regulations, as defined herein, will apply as mentioned in Article 2 herein and will prevail in case of conflict. Without prejudice to the foregoing, disputes between the Parties on Personal Data protection matters shall be settled in accordance with Article 1.3.3 of the Contract.

13. EU STANDARD CONTRACTUAL CLAUSES

- 13.1. Under the ESA Personal Data Protection Framework, the transfer of Personal Data towards a country not recognized as offering an Adequate Level of Protection may only be done after being authorised by the ESA Data Protection Officer (DPO) and subject to "adequate safeguards with respect to the protection of the Personal Data and data subject's rights".
- 13.2. As "adequate safeguards", the Parties agreed to adopt the level of protection resulting from the provisions of the EU Standard Contractual Clauses for the Transfer of Personal Data to Third Countries pursuant to Regulation (EU) 2016/679, in their latest version released / approved by the European Commission (hereinafter "EU SCC"), which shall be deemed included, by reference, in the Contract, together with the Annexes of EU SCC filled in as appropriate, subject always to the prevailing principles applicable in relation to ESA:
 - a) the provisions of EU SCC will apply mutatis mutandis, only to the extent compatible with the specific statute of ESA as international intergovernmental organisation and always subject to the application of ESA Convention, in particular its Annex I "Privileges and immunities" and its legal framework, including by PDP available Framework http://www.esa.int/About Us/Law at ESA/Highlig hts of ESA rules and regulations which shall prevail in particular in case of conflict, ambiguity or inconsistency; b) any provision of the EU SCC referring a dispute to a national court or another national or international forum is deemed not applicable, given that the Parties agree that:
 - (i) any Personal Data-related incidents or disputes shall be submitted to the independent Data Protection Supervisory Authority established by ESA Council Resolution, in which case the Rules of Procedure for the Data Protection Supervisory Authority, as set forth ESA PDP Framework, shall apply;
 - (ii) any other matter giving rise to a dispute shall be referred to arbitration as per Article 1.3.3 of the Contract.
 - c) such transfer shall only take place after obtaining the written authorisation by the ESA Data Protection Officer (DPO) in consideration of the
 - (i) annexes of the EU SCC, added to the Contract in particular:
 - Annex I.A [List of Parties : data exporter/data importer]
 - Annex I.B [Description of the transfer(s)]

- Annex I.C [Competent Supervisory Authority]
 Annex II [Technical and organisational measures, including Technical and Organisational Measures to Ensure the Security].
- Annex III [List of Sub-processors]
- (ii) the following selected module(s) provided by the EU SCC, which are contractually agreed to by the Parties are applicable:

(to be selected as appropriate)

Module One of the EU SCC: Transfer Controller to Controller

Module Two of the EU SCC: Transfer Controller to Processor

APPENDIX 1

STATEMENT OF WORK



ESA ESRIN Via Galileo Galilei 1 00044 RM Frascati Italy

TRAINING ACADEMY FOR EO EDUCATION SUPPORT - EXPRO + ESA EXPRESS PROCUREMENT [PLUS] - EXPRO [+]

TRAINING ACADEMY FOR EO EDUCATION SUPPORT - EXPRO +



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1. INTRODUCTION

1.1. Scope of the Document

The scope of this activity is the provision to ESA of specialised training and related user support in the field of EO techniques and applications, covering different areas (from Earth Science to operational applications of Remote Sensing from space) and ranges of users (universities, young scientists, professionals using geo-information).

1.2. Applicable and Reference Documents

1.2.1. Applicable Documents (ADs)

AD1	Annexes A-G to Statement of Work

1.2.2. Reference Documents (RDs)

The following links can be consulted by the Contractor as they contain relevant information:

ESA EO Training and Education https://eo4society.esa.int/training-education/
 ESA Network of Resources https://eo4society.esa.int/network-of-resources/
 ESA PUMAS Initiative https://eo4society.esa.int/training-education/MOOCs

• ESA SNAP https://step.esa.int/main/toolboxes/snap/

ESA PolSARPro https://earth.esa.int/eogateway/tools/polsarpro
 ESA OpenEO platform https://eo4society.esa.int/projects/openeo/

 ESA Earth System Data Lab
 ESA Virtual Labs
 https://www.earthsystemdatalab.net/ https://eo4society.esa.int/virtual-labs/

ESA RACE Dashboard https://race.esa.int/
 ESA/NASA/JAXA EO Dashboard
 https://eurodatacube.com/

EO Browser
 CEOS WGCapD
 https://www.sentinel-hub.com/explore/eobrowser/
 https://ceos.org/ourwork/workinggroups/wgcapd/

GITHUB https://github.com/

ESA rules and regulations

https://www.esa.int/About Us/Law at ESA/Highlights of ESA rules and regulations

1.3. Acronyms and Abbreviations (alphabetical order)

API: Application Programming Interface

BSc: Bachelor of Science

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CEOS: Committee on Earth Observation Satellites

CONAE: National Space Activities Commission of Argentina

EARSeL: European Association of Remote Sensing

Laboratories

EO: Earth Observation

ESA: European Space Agency ESDL: Earth System Data Lab

ESRIN: ESA Centre for Earth Observation

ICT: Information and Communication Technology

IR: Infrared

JAXA: Japan Aerospace Exploration Agency

LMS: Learning Management System MOOC: Massively Open Online Course

MSc: Master of Science

NASA: United States National Aeronautics and Space

Administration

NoR: Network of Resources

PECS: Plan for European Cooperating States

PhD: Doctor of Philosophy

Postdoc: Post-doctorate

PUMAS: Promotion of Utilisation and Mission Applications and

Science

Q&A: Question and Answer

R&D: Research and Development

RS: Remote Sensing

SAR: Synthetic Aperture Radar

SELPER: Latin American Society in Remote Sensing and

Spatial Information Systems

SNAP: Science Toolbox Exploitation Platform

SoW: Statement of Work TPM: Third-Party Mission UN: United Nations VM: Virtual Machine

WGCapD: Working Group on Capacity Building and Data

Democracy

1.4. Background and Objective(s)

1.4.1. Background

ESA has for many years been providing EO training courses for universities and young professionals, covering a wide range of EO sensors, techniques, and applications, recently complemented also by webinars, MOOCs, and challenges related to Remote Sensing from Space. On top of these activities, ESA wishes to enlarge its training activities by outsourcing additional activities to the Contractor. For reference and information, a description of the way



ESA is currently organising in-person EO training course is given in Annex A to the Statement of Work (AD1).

The SoW will be part of the Contract and shall serve as an applicable document throughout the execution of the work.

1.4.2. Objective(s) of the Activity

The objective of this activity is to provide training and training materials in remote sensing (RS) and Earth Observation (EO) on a wide scale (covering a large range of related topics and addressing a wide audience in many different countries) through the creation and delivery, on behalf of ESA, of an EO Training academy (with an Online Course Portal) supporting training participants and alumni, and promoting these opportunities. The purpose of this activity is to increase the knowledge and capacity in RS/EO and related technologies among university students, graduates, young scientists (like PhD students or Post-Docs), and professionals. Remark that ALL training activities carried out on behalf of ESA by the Contractor as part of this Contract, and the use of/access to all related training tools and materials, shall be free of charge for participants (no fees can be required to be paid by participants).

The service shall:

- Provide training to users enabling them to autonomously access and exploit Sentinel data, ESA and TPM EO data as well as any EO-related ICT tools and resources appropriate for training, provided by ESA or freely available. This includes organising, on behalf of ESA, training courses in person (in different locations, mostly in Europe) and/or online; it may include also ESA courses organised in partnership with other organisations, such as with other space agencies/universities, or in CEOS-led initiatives engaging specific user communities, e.g., users from PECS countries, from developing countries and from Latin America (as part of the PUMAS initiative); it can include also additional courses proposed proactively by the Contractor (subject to ESA approval).
- Support users/learners along their training experience, for instance through (online and in-person) courses, online tutorials, webinars, provision of cloud processing resources (VM)¹ during training (and shortly after), dedicated forum for alumni-support, service promotion, and making materials available for further use as part of MOOCs and future trainings.²
- Design (together with ESA) a concept for EO challenges for students at various levels (BSc, MSc, PhD, Postdoc) to encourage innovative thinking amongst the participants, broaden the scope of how EO data can be used, and build community for young or new EO researchers and users, leveraging the available EO Platforms already available or

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¹ The Contractor is encouraged to apply for ESA sponsorship of cloud resources (VMs, ESA ESDL, ESA Open EO platform etc) via the NoR. Whenever this is accepted, the saved resources shall be re-allocated for more training activities throughout the rest of the Contract.

² For the platform services the NoR offers for training https://eo4society.esa.int/2023/10/13/nor-webinar-series-enters-a-new-training-season/.



in preparation for training and community building purposes. The training/challenges shall be highly interactive and shall result in concrete outcomes for the participants³.

2. WORK TO BE PERFORMED

2.1. Set-up and run an EO Training Academy, carrying out training courses and similar educational activities

Setting up an EO Training academy, in strict cooperation with ESA and in line with ESA recommendations, which shall perform a number of academic activities (or sub-tasks):

- 1. Provide training and academic education related to satellite EO in partnerships with training institutions and universities as part of or facilitated by the Contractor.
- 2. Include academic lecturers and experts in the different domains of RS applications and Earth Science, for the preparation and delivery of theory and practicals, as well as for users/alumni support during and after the courses/webinars.
- 3. Provide a single online learning portal where the training course recordings and materials are accessible, and where users/alumni can find support on the covered training materials and the use of the portal itself (see point 3.2). Tasks related to the learning portal are more specifically described in section 2.1.2.
- 4. Support and carry out a variety of EO training activities, alone or in cooperation with any external bodies or as part of existing partnerships, such as CEOS WGCapD partners and major ESA partners in Training and CB (other space agencies, UN, Earsel, SELPER, etc.), as requested by ESA.
- 5. Actively pursue collaboration and coordination with related open-science activities (the forthcoming EarthCODE⁴ environment, when available, and all related platforms like ESDL, Open EO etc.) that support collaborative and end-to-end reproducible EO scientific research and future training⁵ as far as the use/re-use of training tools and materials is concerned.
- 6. On top of ESA or ESA-partner requests for training activities, the Contractor shall be proactive in identifying and proposing a list of possible recipients, topics, and applications suitable for additional training activities (potential inputs to the Training

,

³ Such as https://eo4society.esa.int/2023/05/29/earth-system-science-workshop-explores-datacubes-at-esrin-science-hub/, https://eo4society.esa.int/event/sciencehubchallengefeb2024/

⁴ Currently in preparation, expected to be operation starting in Q3-2024. Eventually, this will be an Open Science environment to support Earth System scientific research; it will give access to ESA Earth Science projects (input and output data, algorithm and code, documentation), as well as tools to package, visualise, share and disseminate openly research and results that are part of ESA EO platforms (e.g., OpenEO Platform, DeepESDL). A community portal will provide an entry point to the collaborative development tools and resources.

⁵ see also lectures on the ESA MOOCs (<u>https://eo-college.org/courses/</u>) Page 7/26

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Plan), which could be covered by this Contract. Along with ESA requests, these activities shall populate the training workplan when accepted by ESA.

The Contractor shall set up a proposed Training Plan including a related event calendar (see Deliverable D1). The content shall re-use as much as possible (at least as a starting point) the training material already available at ESA (via the EO4Society – Training and Education and related Resources web pages and past RUS trainings⁶) in order to carry out Training courses (in person and online), webinars, tutorials. Throughout the duration of the Contract, the living document containing the Training Plan (for the following 12 months or more) shall be updated and reviewed with ESA on a quarterly basis, subject to periodic approval by ESA. For this Contract, ESA targets a total of at least 30 days of training per year, including (for each year) a combination of at least:

- A. Three **5-day in-person or hybrid synchronous training sessions** in a <u>combination of different locations</u> in Europe (except for one event per year outside Europe), with a baseline of 35 users per training, in various locations hosted at a university or a research institution (or, exceptionally, in ESRIN), and in particular:
 - The locations of the training courses shall be decided jointly with ESA over the course of the contract duration, also considering requests that ESA receives from its member states or partner agencies (e.g., as part of CEOS).
 - An average of one training delivered outside of Europe, e.g., as part of the PUMAS cooperation programme between ESA and CONAE (or similar).
 - These trainings shall cover a variety of topics, typically including (among others that can be requested by ESA and/or proposed to ESA by the Contractor):
 - EO platforms including data access (ESA EO data, TPM, Sentinels).
 - Basic processing of EO data (level-1) including typical image corrections and data analysis, using ESA Toolboxes (SNAP, POLSARPRO) and other ESA platforms; focus on reusable materials and accessible software like open source, such as Jupyter notebooks and other open-source tools.
 - More advanced EO processing and data analytics for specific applications, including techniques and algorithms useful for the thematic applications (such as disaster management, agriculture management, vegetation monitoring, forestry, marine applications, solid earth, etc.) and for Earth Science, including data assimilation into models as well as using AI/ML techniques etc.
 - Theoretical knowledge relevant for the practical exercises done using the data and processes mentioned above.
 - o In principle, the courses will cover Theory and Practice in equal proportions.

https://eo4society.esa.int/training-education/, https://eo4society.esa.int/resources/copernicus-rus-training-materials/



- The activity will cover the training end to end (i.e., course advertisement, participant selection, registration and logistics, training preparation and delivery, including hours and the travel of trainers, feedback collections and future recommendations) as well as the availability of training facilities (whenever they are not offered by the host country/host institution). This will be carried out in close coordination with, and following requirements of, ESA. The logistics also includes coffees/breaks during each day, and an icebreaker/social event held in the first days of the course.
- The course organiser shall cover the travel expenses of teachers and their effort (teaching and preparation time). There shall be no fee for participants; however, participants shall cover their own travel and accommodation expenses.
- The engaged stakeholders and precise topic of the training events shall be selected and defined in agreement with ESA, based on this engagement.
- B. Three or four **2-to-3-day** *online* training webinars for a general audience interested in EO.
 - These materials shall cover the following topics (among others that can be requested by ESA and/or proposed to ESA by the Contractor):
 - Introduction of satellite EO (optical and SAR, focus on Sentinel missions),
 - EO for agricultural monitoring,
 - EO for water resources management.
 - As well as all related theory in the relevant fields of the course (such as: RS for cryosphere, atmosphere, biosphere, lithosphere, hydrosphere, and any applications addressed by the course).
 - o The practicals shall include, but not be exclusive to the:
 - Use of Cloud computing for EO (including fundamentals of data processing on the cloud, cloud-optimized formats, datacubes, Python cloud-based IDEs etc.).
 - Digital tools for Collaborative EO R&D on Cloud and use of ESA FAIR Open Science Tools and environments (e.g., Open Science Catalogue, EarthCODE)
 - Use of free ESA RS toolboxes (SNAP, PolSARPro, ...)
 - Use of ESA online EO platforms (EO Browser, Virtual labs, DeepESDL, OpenEO Platform, ...).
 - These practical exercises shall aim to be at a level where they are useable for Training of Trainers purposes, allowing participants to pass on acquired knowledge to others, to maximise the effect of trainings.
- C. At least one **EO Challenge** (or similar: Hackaton, Contest) per year, at various levels (BSc, MSc, PhD, etc.).



- Design (together with ESA) a concept for periodic challenges for students at various levels (BSc, MSc, PhD, Postdoc) leveraging the available EO Platforms already available or in preparation. The training/challenges shall be highly interactive and shall result in concrete outcomes for the participants.
- These challenges will be online and open to participants from anywhere on Earth.
- o The specific format and content of these challenges are left open to the Contractor, to encourage the development of new kinds of training activities.
- The goals of these challenges are to encourage innovative thinking amongst the participants, broaden the scope of how EO data can be used, and build community for young or new EO researchers and users.
- Presentations by ESA staff may be scheduled during the challenge for the participants to learn more about ESA's work and to gain inspiration for their own research.
- The challenge shall be free for participants; however, they are expected to cover their own travel and accommodation costs if in-person.

The practicals for the training activities described above shall make maximum use of:

- ESA's open access EO data such as data from the Copernicus Sentinels;
- Resources available via the sponsoring mechanism of the ESA Network of Resources (NoR)⁷ (see section 3.1) such as ESA EO platforms and open-source tools integrated with the upcoming EarthCODE (e.g., the OpenEO Platform, the Deep Earth System Data Lab (DeepESDL), etc.). Only for teaching the use of software like SNAP or PolSARPRO, Virtual Machines (VMs) may be used if necessary.
- The Contractor shall use suitable NoR services (Platform access) identified by ESA.
 Examples of possible scenarios, in terms of cloud resources (VMs, platforms), using the NoR, are given in the Annex G, for the purpose of inspiration/dimensioning of resources for planning of trainings.

In order to be safe and have a back-up solution, should the intended platform be down or unavailable, the Contractor shall always have a way to run at least a demonstration of the practical exercise on a local PC.

Furthermore, the selected resources (i.e., access to cloud computing or Virtual Machines, or logins to the selected platforms) are also made available for the participants for 5 days after the training activity, for students wishing to finish / repeat / transfer any work done during the course.

The Contractor shall always make sure that the exercises are executable for the entire duration of the Contract, compatibly with updates of libraries, checking also that all third-party modules are still available and working as expected, etc.

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⁷ For the platform services the NoR offers for training https://eo4society.esa.int/2023/10/13/nor-webinar-series-enters-a-new-training-season/.



The teachers delivering the trainings shall be proposed on a case-by-case basis for each activity during planning, and the choice of trainers is subject to approval by ESA. The names of all experts who contributed to ESA EO courses over a variety of topics in the past is published on ESA web pages⁸.

In case the Contractor cannot themselves provide official academic credits for the training courses using the certificate, the Contractor shall analyse reasonable solutions to help students enrolled in studies gain credits for completing the training course using the certificate, at their institution. In any case, a detailed certificate of course completion, containing information such as hours, learning objectives and subjects of training, shall be delivered to each participant at the end of each training course (see Annex B to the Statement of Work (AD1) for an example of such certification). The format of the certificate and the details required for this shall be automatically included in the certificate, to best facilitate this possibility.

At the end of a training activity, the Contractor shall collect anonymous feedback from the participants regarding their satisfaction with the content and quality of the activity and their recommendations for improvement of future training activities, based on a survey questionnaire to be proposed by the Contractor, for ESA approval (see Annex C to the Statement of Work (AD1) for a typical ESA participant feedback form, as reference).

Based on this feedback, create a final report for each training activity, which summarises the course organisation, content, and feedback, for the purposes of improving training activities created both within this Contract and at ESA in general, and for tracking the performance of the activities (see Annex D to the Statement of Work (AD1) for an ESA training course feedback report).

Particularly for the case of teaching modules and/or courses to be delivered in remote locations outside Europe (e.g. South America in the case of PUMAS trainings), it is recommended to carry out the work in partnership with local training centres & experts/teachers to both increase efficiency and reduce costs.

Where appropriate and required by ESA, training modules shall be prepared in Spanish, when targeting South American countries (not more than once per year).

Training modules from both existing courses, and future materials made as part of this Contract shall be updated and reused as much as possible. For this purpose, training materials shall be made useable asynchronously on the online course portal (e.g., recordings of lectures, and detailed guides for practicals) for the duration of the Contract.

→ THE EUROPEAN SPACE AGENCY

⁸ See https://eo4society.esa.int/training-education/ and related sections describing ESA MOOCs, webinars, training courses, including the names of professors and experts who contributed with lectures.

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The expected timeline for training activity preparation to be followed by the Contractor is as follows (Day 0 being the starting date of the activity):

- Day 0 − 5 months before the activity: Course publication and opening for interested participant applications on the training course portal.
- Day 0 3 months before the activity: Application submission deadline
 - a. Selection of participants
- Day 0 2 months before the activity: Send out notification of acceptance to all applicants, send out links to relevant online materials for applicants both accepted and rejected to follow online.

2.2. Online Course Portal

The hub for the work of the training academy shall be an online course portal to be made available and maintained by the Contractor. News and announcements of upcoming training activities, plus all developed training material, including recording of lectures and practicals shall be grouped/organized by course and published on this dedicated portal.

It is expected that a dedicated web environment or, preferably, LMS already in use by one of the Universities/Institutions of the Contractor is made available for the purpose.

The Contractor shall also ensure that the training materials shall be split and organized in a coherent, user friendly and visually appealing way for students and other users, to (re)use/consult after the end of the course (for the duration of the Contract).

The portal shall:

- Host the online (*synchronous*) webinars and lectures and/or Q&A sessions⁹ using new and previous materials.
- Ensure that the training materials, including ones made for synchronous courses, are, as much as possible, available for students to follow *also asynchronously*, for the whole duration of the Contract.
- Ensure that the source code from the exercises shall be made openly available for other
 platforms (also Earth-CODE) to discover and consume, where applicable. Maximum reuse of freely available tools and related libraries (where appropriate) is advised,
 including links to different source code libraries and developer platforms such as GitHub
 and Euro Data Cube.
- Provide online preparation modules and tools and access to follow-up support for physical training events.

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⁹ Training sessions may also be a combination of recorded and live sessions; these may combine for instance lecture recordings from training courses and modules, with the appropriate teacher available for a Q&A following the lecture recording as part of the webinar.



Appendix 1 to

- Host and make available all training materials from training courses and webinars.
 Remark: Training materials shall be broken into learning objects (presentations, videos, images, text, etc.) and made available for ESA to store and re-use as part of other trainings, courses, MOOCs, etc.
- Include information on the goals and different elements of each training module. The
 portal shall give access and links to different digital tools used in teaching.
- Contain the official approved training calendar with description of upcoming training activities. These pages shall contain information about the event, and link to a registration page where students can register/apply. The registration page shall contain key privacy information for the participants, as laid out in the ESA Personal Data Protection rules.
- Include a news section and a forum.
- Provide a contact and support section for the use of the platform and other technical support related to the technologies used (e.g. platform services).

The relevant ESA web pages will link to the Contractor's Online Course Portal.

2.3. Support to Course Participants and Alumni

- Once a training activity has been decided and planned, create an event page on the Portal containing the necessary information about the activity and a link to a registration page where interested students can apply. The Contractor shall provide a contact point (such as a dedicated email), where potential participants may inquire and receive further information about the training activities.
- Manage the applications of the students, and select training participants from these
 applications, in accordance with ESA guidelines which will be made available in due
 course. These selection guidelines differ depending on the intended audience and
 activity topic.
- Before a training activity is delivered, propose and provide **links and online resources** for students to access at least two months before the course. As much as possible, these resources shall include ESA materials, platforms, and MOOCs as appropriate.
- Provide course participants with the necessary processing resources / tools / datasets (all free of charge for participants) for the duration of each training activity (preferably service platforms, otherwise cloud resources with virtual machines where EO software can be installed by the Contractor for access and analysis of geospatial data; another option is to use Jupyter Notebooks with direct links to EO data using APIs and run these locally), and to course alumni for a week after the course is finished. As much as possible, this shall use existing open-source and free-to-use platforms such as ESA platform services and ESA cloud infrastructure, within the limits of availability.
- Create, maintain, and animate a **forum** for technical and scientific help and networking for course alumni on the Online Course Portal, particularly during online activities.



Dedicated expert support through the Forum and/or other mechanisms shall be given to participants during training activities and to alumni for a week after each specific training activity. The export support shall answer questions from the students, with the answers visible to everyone, and provide links to additional information for alumni to use. Access to more support for individual curious alumni may be given, depending on teacher availability and interest.

- In general, for any trainings, a good level of *interactivity* between participants and teachers shall be guaranteed.

2.4. Promotion

The Contractor shall:

- a. Promote the EO Training Academy and its portfolio within this Contract, at relevant international and national training courses and events. The promotion shall follow a coherent visual brand for all activities that are a part of the EO training academy.
- b. Develop promotional materials (such as digital flyers, animations, and short videos and sharable content on the goals of the project and future courses) to create awareness of the EO training academy offer within potential participants and relevant stakeholders. These include also potential participants such as students at universities, as well as university professors all over Europe.
- c. Create and populate a news section on the online learning portal, with the training calendar and training related news and announcements.
- d. Communicate on social media e.g., X (former Twitter), LinkedIn on the achievements and future courses of the project.
- e. Coordinate the promotional actions above with other platform providers either managed or indicated by ESA, including EO4Society, Science Hub and other ESA websites.

2.5. Legal requirements

2.5.1. Data protection

The Contractor shall accept the conditions indicated in this chapter and in the Personal Data Protection rules¹⁰ by signing the Contract. The Contractor and any of its data sub-processors for all training activities and handling of the online course portal, or any other situation where collection of personal data is necessary in relation to this contract, must:

i. be EU <u>GDPR compliant</u>, and guarantee adequate data protection under EU GDPR, including the use of GDPR-compliant tools for data collection, storage, access and

¹⁰ See RD on *ESA rules and regulations*.



Appendix 1 to

- transfer where applicable; process the Personal Data collected for and during the execution of the activity only in Territories having an Adequate Level of Protection according to the relevant EU GDPR definition/list.
- ii. be compliant and consistent with the ESA Personal Data Protection rules (same as above).
- iii. provide evidence of this in the Proposal, including evidence on how they as Controller (see A) below) collect, store and share (where applicable) the Personal Data, and how they are going to inform participants of the personal data processing and how they record consent for such personal data processing and indicate the retention periods. Personal data shall be deleted at the end of the contract and a *Certificate of Deletion* (called CD1) shall be issued & delivered to ESA.
 - a. **Remark**: the Contractor shall retain the personal data ONLY inside the EU or within an ESA Member State.

A. The Contractor shall be <u>Data Controller</u> under the law (GDPR) for the data and purposes they consider appropriate for the fulfilment of the tasks associated with this Contract (except case B – see below).

In its role of Data Controller, the Contractor shall prepare a dedicated <u>Data Collection Form</u> (<u>see example template provided in RD4</u>), in English, that shall contain a link to the Contractor's dedicated Privacy Notice and that shall be published online on a safe GDPR compliant IT tool (see *Privacy Requirements* on Personal Data Protection Framework in the RD on *ESA rules* and regulations).

B. The Contractor shall be <u>Data Processor</u> under the law (with ESA as Data Controller) for the following purposes:

Handling of necessary personal data for the training activity applicants and participants, collection of recording consent forms for participants and teachers, and consent forms for the publishing of training materials used by the activity teachers (with credit). *Personal data involved are* anything that can be used to identify the person, such as name, email, address, age, etc., and also including the participant's images, videos, written/audio-recorded quotes taken during the training activity.

As Data Processor, the Contractor and its sub-processors shall use secure and GDPR-compliant tools for data processing, access, collection, storage and transfer to ESA of the collected data, and provide evidence of it in the Proposal. The Contractor shall make sure that the setup and the operation of all infrastructure are in line with industry best practices and information security management principles as well as directly relevant/related standards (such as the ISO 27000 series).

All additional applicable conditions concerning Personal Data Protection are provided in the RD on *ESA rules and regulations*.

The Contractor shall provide capabilities to ensure:

• The minimization of data collection: ensure that only the personal data necessary for the purpose are collected / processed, (not excessive data).



- Purpose limitation: note that a change to the original purpose of processing as notified in the privacy notice or a new purpose may require new additional consent from the data subject, for the new /changed processing.
 - Data collected for the purpose of student registration for training activities must not be used for any other purpose unless explicitly agreed upon by ESA. This includes selling of personal data or transfer of personal data to any third party.
- Retention periods implementation (for students; only the duration of each activity)
- Security (Processing shall be only in the EU/ EEA or Territories having an Adequate Level of Protection as recognised by the EC also for any sub-processors/affiliates/ access provided).
- Auditability (including the addition of teacher Consent Agreements in each activity reports and handover at the end of the Contract).

2.5.2. Consent and Agreement

For each training activity, the Contractor in their role as personal data processor shall:

- i. Collect the **Consent from participants** in a data privacy agreement. Specifically, the registration page for each training activity must include a part where the registering person must read the **data privacy notice** (see Annex F to the Statement of Work (AD1)) tailored to the activity and must agree to it, detailing the collection and use of relevant personal data for the duration of the activity by the Contractor and ESA, to be allowed to register. This data is collected mainly for the purposes of participant selection and course logistics and shall be deleted at the end of the contract again, a *Certificate of Deletion (called CD2)* shall be issued and delivered to ESA.
- ii. Collect written **Agreement from the participants** to be recorded and have the recording published on the course portal (see Annex E to the Statement of Work (AD1)). As much as possible, avoid recording the students unless relevant (i.e., if they ask a question for the teacher). These agreements shall be collected before the start of the activity and be kept for as long as personal information of the students is kept as well (at least one year after the date of publication of the concerned recorded videos).
- iii. Collect written **Consent Agreement from Teachers** that during all training activities, they agree to be recorded and agree to have *the recording and their materials used during the activity* published online. This written agreement must be collected before the completion of the activity, and materials must not be published online unless the agreement is collected. All *Teacher Consent Agreements (called TCA)* must be kept by the Contractor on a database for the duration of the Contract, be attached to each training activity feedback report and must be subsequently transferred to ESA at the end of the Contract (see section 4.4).



2.5.3. Logistics and Liability

The Contractor shall also make sure that **all legal issues and constraints about the logistics during courses in person** - e.g., covering issues such as civil liability, health, and safety of course participants, potential damages to the logistics and hardware — **are respected**, as requested by the host institute & host country where the training activities are taking place. In any cases, ESA will NOT be liable of any damages during ESA training activities organised by the contractor.

2.5.4. IPR

Regarding **IPR**, the Contractor shall refer to article 6 of the Contract.

3. AGENCY UNDERTAKINGS

3.1. Items Made Available by the Agency: data processing resources.

Category	Description	Quantity	Delivery Date
Access to paid ESA platforms to run training activities.	Access to ESA platforms (through NoR sponsoring and via EarthCODE and related resources: OpenEO Platform, DeepESDL), or if necessary VMs to run training practicals. See for inspiration/dimensioning about use of platforms/services, Annex G for (non-exhaustive) examples.	As needed. See Annex G to the Statement of Work (AD1) for possible dimensioning	As needed
ESA materials from past training activities	Access to materials used and published as part of past ESA training materials, which may be used with credit to the corresponding authors. All materials available are on https://eo4society.esa.int/training-education/ , and for many, ESA also have the original format (i.e., ppt instead of pdf)	As needed	As needed



4. REQUIREMENTS FOR MANAGEMENT, REPORTING, MEETINGS AND DELIVERABLES

The following are the requirements for Management, Reporting, Meetings and Deliverables applicable to the present activity.

4.1. Management

4.1.1. Training Academy Required Expertise

ESA expects the Contractor to gather the necessary expertise to execute the activities through the creation of an academic consortium of partners with several universities/academia/teaching and research institutions located in different areas of Europe. Such consortium shall have, as a *key skill, solid expertise in teaching (in person and online) about a wide range of RS techniques and applications*. Consultancy agreements may be used to extend the expertise as required. The pool of experts shall include teaching skills within a large variety of topics ranging from:

- RS theory and techniques,
- sensors (microwaves, optical, IR)
- applications (forestry, agriculture, marine, atmosphere, cryosphere, biosphere, hazards, ground displacements, land use land cover), including both theory & practice.

The Contractor will be responsible for organizing and handling training materials, courses, webinars, etc. The selected experts/teachers/lecturers shall be proposed to ESA for approval and shall demonstrate teaching experience when addressing international audiences of students/participants from many different countries, including using different set-ups in various locations in Europe (with situations that may require flexibility and organisation skills in order to face unexpected logistic challenges). It shall demonstrate familiarity with:

- Academic experience in teaching EO and Remote Sensing,
- o Earth observation tools, as identified in this statement of work,
- Teaching in English (and where applicable, Spanish), to meet the needs of ESA's diverse target groups,
- Targeting students at university/doctorate/post-doctorate level,

Furthermore, the Contractor shall demonstrate expertise in:

- o Online learning and the best practices for handling this, during both teaching itself and in forums, discussion boards, or similar,
- o Handling, organising, and making available online resources in a user-friendly way,
- Contacting and working with professors and experts from a range of institutions,



o Managing the communication of Training activities, coordinating communication campaigns and the associated presence in the media and online.

4.1.2. General

The Contractor shall implement an effective management and cost-efficient approach to the project.

The Contractor's nominated Project Manager shall be the main interface to ESA and be responsible for the management, execution of the work to be performed. In the case of a Consortium, the Project Manager will be in charge of the coordination and control of the consortium's work (including the submission of the deliverables to the Agency).

4.2. Reporting

4.2.1. Minutes of Meeting

The Contractor is responsible for the preparation and distribution of Minutes of Meetings held in connection with the Contract. Electronic versions shall be issued and distributed to all participants, to the Agency's Technical Officer and to the Agency's Contracts Officer not later than five (5) days after the meeting concerned.

The minutes shall clearly identify all agreements made and actions accepted at the meeting.

4.2.2. Bar-chart Schedule

The Contractor shall be responsible for maintaining the bar chart for work carried out under the Contract, as agreed with the Agency.

The Contractor shall present an up-to-date chart for review at all subsequent meetings, indicating the current status of the Contract activity (WP's completed, documents delivered, etc.).

4.2.3. Progress Reports

Every 3 months, the Contractor shall provide a Progress Report in electronic format to the Agency's representatives, covering the activities carried out under the Contract. This report shall refer to the current activities shown on the latest issued bar chart and shall give:

- Action items completed during the reporting period;
- Description of progress: actual vs schedule, milestones and events accomplished;



- Reasons for slippages and/or problem areas, if any, and corrective actions planned and/or taken, with revised completion date per activity;
- Events anticipated during the next reporting period (e.g. milestones reached);
- · Milestone payment status.

4.2.4. Problem Notification

The Contractor shall notify the Agency's representatives (Technical Officer and Contracts Officer) of any problem likely to have a major effect on the time schedule of the work or to significantly impact the scope of the work to be performed.

4.2.5. Technical Documentation

As they become available and not later than the dates in the schedule, the Contractor shall submit for the Agency's approval Technical Notes, Task/WP Reports, etc.

Technical documentation to be discussed at a meeting with the Agency shall be submitted electronically two (2) weeks prior to the meeting.

4.3. Meetings

Progress Meetings can take place as appropriate between quarterly review meetings. All meetings can take place by default by videocalls.

The final presentation shall take place to a public audience, within twelve (12) months of Contract closure. During the activity the Agency will decide on the format for the final presentation (e.g. dedicated meeting, conference, specific event).

Additional meetings may be requested either by the Agency or the Contractor.

With due notice to the Contractor the Agency reserves the right to invite Third Party(ies) to meetings to facilitate information exchange.

For each meeting the Contractor shall propose an agenda in electronic form and shall compile and distribute hand-outs of any presentation given at the meeting. Should the Contractor wish to invite Third Party(ies) to meetings, the prior approval of the Agency shall be sought.



4.4. Deliverable Items

The draft versions of the final documents shall be submitted for approval, in electronic searchable, indexed and not encrypted PDF and native (WORD) format, to the Agency's Technical Officer.

The finalised versions thereof shall be issued in electronic searchable, indexed and not encrypted PDF and native (WORD) format not later than four (4) weeks after the approval of the draft versions and shall be sent by email to:

- the- Agency's Technical Officer, and
- the ESA Information and Documentation Centre ESTEC Library (email: esa.ids@esa.int).

All documents shall bear the appropriate copyright notice. In all cases, this shall include the title, ESA Contract number, deliverable number, date, status (draft), version and/or revision number. The information shall be repeated consistently in the header or footer of every page.



ESA ESRIN Via Galileo Galilei 1 00044 RM Frascati Italy

Documentation

All documentation deliverables mentioned (including all their constituent parts) shall also be delivered in electronic form in a format agreed by the Agency (PDF format, the native format and in other exchange formats where relevant). All the documentation shall be delivered on computer readable media (e.g., sent by email) as agreed with the Agency.

Doc ID	Title	Definition	Milestone	e-copy to DMS
approved by ESA in System (DMS) using	their final version) documents resulting from	. (or others as applicable for other ESA Directors at technology Contract shall be electronical s applies not only to the final documentation	ly sent by the Contractor to D/TEC's	Data Management
D1	Training plan (living document with a list of the planned training activities)	Covering at least the following 12 months, to be updated and approved quarterly with ESA. The initial version shall be delivered at KO+2m. This document shall be continuously updated, and reviewed quarterly with ESA, taking into account feedback from previous courses in the planning of future activities. This shall include the intended text of the survey questionnaire for course participants (to be adapted for each course). During this review, ESA will also point at the appropriate platform/service to be used for the new proposed training activities.	Milestone 1 (K0+3m), plus every quarterly review	
D2	Promotion plan	To be stored and made accessible on the online learning Portal for the duration of the Contract. To be updated and approved quarterly with ESA.		



delivered/made accessible to ESA with a description of the training content, shared information with participants (e.g., links to resources and key emails sent), an overview of the organisers and partners and formal/informal arrangements facilitating the activity, and project related technical documentation. Furthermore, this report shall contain an anonymised overview of participant feedback, and from this, a recommendations list useable for future training activities. Attached shall also be the relevant teacher Consent Agreements regarding publishing of used recordings and materials for the specific training activity. Completed activities description Completed activities description Completed activities description Completed activities description To be updated after the end of each training activity. This document shall collect and summarise the recommendations made from all activities. To be updated after the end of each training activity. This document shall collect and summarise the recommendations made from all activities.				E	SA AO/1-12008/24/I-KE
training activity and made accessible to ESA, with statistics and basic information on the delivery of each activity. This document shall collect and summarise the recommendations made from all activities. To be updated after the end of each	D3		delivered/made accessible to ESA with a description of the training content, shared information with participants (e.g., links to resources and key emails sent), an overview of the organisers and partners and formal/informal arrangements facilitating the activity, and project related technical documentation. Furthermore, this report shall contain an anonymised overview of participant feedback, and from this, a recommendations list useable for future training activities. Attached shall also be the relevant teacher Consent Agreements regarding publishing of used recordings and materials for the specific training		
	D4	Completed activities description	training activity and made accessible to ESA, with statistics and basic information on the delivery of each activity. This document shall collect and summarise the recommendations	every quarter	
Quarterly activity report Additional content of the provide to	D5	Quarterly activity report	training activity, with statistics and basic information on the delivery of each activity. This document shall collect and summarise the recommendations made from all activities, and provide to ESA the estimated cost quotation, which will be	1	
P Final Presentation Final Review yes	FP	Final Presentation		Final Review	yes



				3A AU/ 1-12006/24/1-KE
FR	Final Report	The FR shall provide a complete description of all the work done during the activity and shall be self-standing, not requiring to be read in conjunction with reports previously issued. It shall cover the whole scope of the activity, i.e. a comprehensive introduction of the context, a description of the programme of work and report on the activities performed and the main results achieved.	Final Review	yes
		The FR is a mandatory deliverable, due upon completion of the work performed under the Contract. For the avoidance of doubt, "completion of the work performed under the Contract" shall mean the finalisation of a series of tasks as defined in a self-contained Statement of Work.		



Other Deliverables (Hardware, Software, Models, Data, Algorithms, etc.)

Item Identifier	Title	Milestone	Remarks
OCP	Online Course Portal	KO+3m	As defined in section 2.1.2. To be approved by ESA before publication
РН	Product Handover	Final Review at the latest, but preferably continuously throughout the duration of the Contract	At the latest the end of the Contract (but preferably done continuously, at the end of each training activity), the Contractor shall deliver / hand over to ESA (who is entitled to re-use for any further training and publish them) all materials and recordings created and delivered during the training activities, as learning objects: this includes materials and recordings that are created for the EO training Academy and materials stored or used on the Online Course Portal. These materials should be in standard editable and reusable formats (e.g., word, ppt, mp4, .ipynb,, and not pdf) for possible reuse for future training activities. This includes any potential interactive elements created for the OCP. Moreover, the Contractor shall deliver / hand over to ESA all Consent Agreements from Teachers (TCA in par. 2.5.2) to publish their materials and recordings online, as well as all Certificates of Deletion (CD1 and CD2 in par. 2.5.1 and 2.5.2).
СН	(potential) Code handover	End of contract	If source code is to be used for the creation of the e-Learning training material, the Contractor shall deliver directly to the Agency the software in source code form.



5. SCHEDULE AND MILESTONES

5.1. Duration

The duration of the work **shall not exceed 36 months** from kick-off to the end of the activity (delivery of the draft Final Report).

5.2. Milestones

The following milestones shall apply:

- 1) Approval of first issue of OCP and Training and Promotion Plan. K0+3m
- 2) First yearly review. K0 + 12m
- 3) Second yearly review. K0+24m
- 4) Final review. K0+36m

5.3. Reviews

Four main reviews are planned for the duration of this project:

5.3.1. Training and Promotion Plan Review

- Date: T0 + 3 months
- Input: Deliverables D1, D2, OCP
- Description: To review and approve of the initial training and promotion plan

5.3.2. Quarterly Reviews

- Date: T0 + 3 months and following quarters
- Input: Deliverables consistent with table above
- Description: To review the progress and deployment of developed activities.

5.3.3. Final Review

- Date: T0 + 36 months
- Input: Deliverables D3, D4, D5, FR, FP, PH, CH.
- Description: To review the work of the project and approve of the final report and Product Handover. This shall coincide with the final meeting of the project.



ANNEX A. DESCRIPTION OF TYPICAL ACTIVITIES PERFORMED FOR THE ORGANIZATION/RUNNING OF ESA EO TRAINING COURSES

Just for inspiration, this is a non-exhaustive list of typical activities related to the organisation/running of ESA EO training courses (in person):

- Create and run an online course portal for the duration of the Contract.
- Keep an updated workplan of training activities to be organised for the following
 12 months, also considering the feedback from past courses.
- Publishing and announcing every training course on the ESA relevant web pages, managing student applications to these courses, selecting participants, and providing applicants with sufficient notification of acceptance; complying with the ESA Personal Data Protection Rules.
- Preparing training activities:
 - a. Defining the course content and programme jointly with our partners and/or requestors (depending on the specific activity).
 - b. Identifying and coordinating teachers for delivering the training.
 - c. Configuring necessary platforms and software as needed. This may include setting up a stable reference virtual machine for training with upto-date software, setting up copies of this for each training if used, or preparing tutorial materials (Jupyter Notebooks, guides, EarthCODE,...) to be run on the chosen platform.
- Delivery of training activities:
 - a. During the delivery of the activity, possibly record the trainings, both Theory and Practice.
 - b. Publish these videos along with the course content on our course portal, in a manner relevant to the type of training activity. These materials are intended to be reusable as possible, for future students to follow asynchronously even when materials are created for a synchronous training activity.
- Deliver certificates to successful participants at the end of each activity.
- Collect feedback from participants at the end of the course.
- Compile a final report for each course, summarising the content of the course, including statistics based on the anonymised participant feedback satisfaction.
- These reports are used to guide the creation of future activities and to track the performance of the activities held.



ANNEX B. CERTIFICATE FOR COURSE COMPLETION EXAMPLE





ANNEX C: PARTICIPANT FEEDBACK FORM EXAMPLE

In general, how would you rate the course? *	
Ghoose one of the following answers	
Please choose only one of the following:	
Excellent	
Good	
○ Fair	
Poor	
O Very bad	
Make a comment on your choice here:	
How relevant was the course for your interests? Please specify *	
Choose one of the following answers Places phases and are of the following:	
Please choose only one of the following:	
Excellent	
Good	
Fair	
Poor	
O Very bad	
Make a comment on your choice here:	
Manual Continuon on your cross trains.	
	I
How would you rate the quality of the theory sessions? *	
Choose one of the following answers	
Please choose only one of the following:	
Excellent	
Good	
O Fair	
O Poor	
○ Very bad	
Make a comment on your choice here:	
How would you rate the quality of the practical sessions? *	
Choose one of the following answers	
Please choose only one of the following:	
○ Excellent	
Good	
○ Fair	
Poor	
○ Very bad	
Make a comment on your choice here:	
I	



	low was the balance between the time spent in theory sessions and in practical sessions? Please comment that you wanted more/less of *
	Choose one of the following answers ease choose only one of the following:
(Excellent Good Fair Poor
) Very bad
ľ	ake a comment on your choice here:
	are there any additional topics you think should have been included? If so, please comment. *
	Choose one of the following answers lease choose only one of the following:
1	Yes
1	O №
1) Maybe
1	lake a comment on your choice here:
- 1	
Г	
	Are there any topics you think should have been left out? If so, please comment. * Ochoose one of the following answers tease choose only one of the following: Yes No Maybe Lake a comment on your choice here:
	Choose one of the following answers lease choose only one of the following: Yes No Maybe
	Choose one of the following answers lease choose only one of the following: Yes No Maybe
	Choose one of the following answers lease choose only one of the following:) Yes) No) Maybe lake a comment on your choice here: The practicals consisted of a simultaneous demo from the teacher which you could do on your own PC at the
	Choose one of the following answers lease choose only one of the following:) Yes) No) Maybe lake a comment on your choice here: The practicals consisted of a simultaneous demo from the teacher which you could do on your own PC at the same time. On average throughout the week, did this format allow you to complete the practical exercises and
	Choose one of the following answers lease choose only one of the following:) Yes) No) Maybe lake a comment on your choice here: The practicals consisted of a simultaneous demo from the teacher which you could do on your own PC at the same time. On average throughout the week, did this format allow you to complete the practical exercies and understand the concepts introduced better? Please comment with any possible improvements, considering the size of the participant group.
	Choose one of the following answers lease choose only one of the following:) Yes) No) Maybe lake a comment on your choice here: The practicals consisted of a simultaneous demo from the teacher which you could do on your own PC at the same time. On average throughout the week, did this format allow you to complete the practical exercies and understand the concepts introduced better? Please comment with any possible improvements, considering the size of the participant group. * O Choose one of the following answers
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	Choose one of the following answers lease choose only one of the following: Yes No Maybe lake a comment on your choice here: The practicals consisted of a simultaneous demo from the teacher which you could do on your own PC at the same time. On average throughout the week, did this format allow you to complete the practical exercies and understand the concepts introduced better? Please comment with any possible improvements, considering the size of the participant group. * O Choose one of the following answers Please choose only one of the following: O I completed the practical exercises and understood the concepts introduced
	Choose one of the following answers lease choose only one of the following: Yes No Maybe lake a comment on your choice here: The practicals consisted of a simultaneous demo from the teacher which you could do on your own PC at the same time. On average throughout the week, did this format allow you to complete the practical exercies and understand the concepts introduced better? Please comment with any possible improvements, considering the size of the participant group. * O Choose one of the following answers Please choose only one of the following: O I completed the practical exercises and understood the concepts introduced O I completed the practical exercises and understood the concepts well



Choose one of the following answers	
Please choose only one of the following:	
O Yes	
O No	
Partly	
Not applicable	
Make a comment on your choice here:	
Did you find using the SI experience. *	NAP advantageous and useful during the course? Please comment with your
O Choose one of the following answers Please choose only one of the following:	
Extremely useful	
Very Useful	
Rather useful	
O Neutral	
Poor	
O Very bad	
•	
Make a comment on your choice here:	
I	
	or Notaback advantageous and useful during the source? Please comment with your
Choose one of the following answers Clease choose only one of the following: Extremely useful Very Useful Rather useful	er Notebook advantageous and useful during the course? Please comment with your
experience. * Choose one of the following answers elease choose only one of the following: Extremely useful Very Useful Rather useful Neutral	er Notebook advantageous and useruf during the course? Please comment with your
Cxperience. * Choose one of the following answers Please choose only one of the following: Extremely useful Very Useful Rather useful Neutral Poor	er Notebook advantageous and useruf during the course? Please comment with your
Choose one of the following answers Clease choose only one of the following: Extremely useful Very Useful Rather useful Neutral Poor Very bad	er Notebook advantageous and useruf during the course? Please comment with your
Choose one of the following answers Clease choose only one of the following: Extremely useful Very Useful Rather useful Neutral Poor Very bad	er Notebook advantageous and userul during the course? Please comment with your
Experience. * Choose one of the following answers Please choose only one of the following: Extremely useful Very Useful Rather useful Neutral Poor Very bad Make a comment on your choice here:	arned about Land cover/Land Use on Monday/Tuesday for your research? if so
Choose one of the following answers Clease choose only one of the following: Extremely useful Very Useful Rather useful Neutral Poor Very bad Make a comment on your choice here: Will you use what you lead to the following answers Choose one of the following answers	
Experience. * O Choose one of the following answers release choose only one of the following: Extremely useful Very Useful Rather useful Neutral Poor Very bad Make a comment on your choice here: Will you use what you lead to be please specify. * O Choose one of the following answers release choose only one of the following:	
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Experience. * O Choose one of the following answers release choose only one of the following: Extremely useful Very Useful Rather useful Neutral Poor Very bad Make a comment on your choice here: Will you use what you lead to be please specify. * O Choose one of the following answers release choose only one of the following: Yes No	
Experience. * O Choose one of the following answers Please choose only one of the following: Extremely useful Very Useful Rather useful Neutral Poor Very bad Make a comment on your choice here:	



Will you use what you learned about Forestry on Tuesday/Wednesday for your research? if so please specify. • Choose one of the following answers
Please choose only one of the following:
○ Yes
O No
○ Maybe
Make a comment on your choice here:
Will you use what you learned about Agriculture on Wednesday/Thursday for your research? if so please specify. *
Choose one of the following answers Please choose only one of the following:
○ Yes
O №
Maybe
Make a comment on your choice here:
Will you use what you learned about Flooding on Thursday for your research? if so please specify. * • Choose one of the following answers Please choose only one of the following: Yes No Maybe Make a comment on your choice here:
In general, how would you rate the experience of the course taking place in-person , in Osijek? As opposed to possibly having it online. *
Choose one of the following answers Please choose only one of the following:
○ Excellent
○ Good
○ Fair
O Poor
○ Very bad
Make a comment on your choice here:



Coffee breaks were held every morning and afternoon. Was the frequency and duration of the breaks appropriate for you?
f one/both were not appropriate, please comment with the change you wish had been made. *
Choose one of the following answers
lease choose only one of the following:
Yes, both frequency and duration was appropriate
Only the frequency was appropriate
Only the duration was appropriate
Neither were appropriate
take a comment on your choice here:
w was your interaction and communication with the organisers before the course? *
hoose one of the following answers
se choose only one of the following:
Excellent
Good
Fair
Poor
Very bad
Not applicable
e a comment on your choice here:
ow was your interaction and communication with the organisers and teachers during the course? *
Choose one of the following answers
ase choose only one of the following:
Excellent
Good
Fair
Poor
Very bad
Not applicable
ke a comment on your choice here:
ow was the food and drinks available during the coffee breaks ? *
Choose one of the following answers ase choose only one of the following:
Excellent
Good
Fair
Poor
Very bad
Not applicable
ke a comment on your choice here:



How was the Social Event Monday?
Choose one of the following answers Please choose only one of the following:
© Excellent
Good Fair
O Poor
O Very bad
O Not applicable
Make a comment on your choice here:
Overall, are there any changes you would make to future EO training courses? * Please write your answer here:
Which advantages and disadvantages did you experience when following this course, in comparison to other training courses you have attended? * Please write your answer here:

Thank you for your feedback!



ANNEX D: TRAINING COURSE FEEDBACK REPORT EXAMPLE OVERVIEW

This course took place from the 18th-22nd of September 2023 in Osijek, Croatia. This training course was organised jointly by the European Space Agency (ESA), Faculty of Electrical Engineering, Computer Science and Information Technology Osijek (FERIT), Croatia and Ministry of Science and Education of the Republic of Croatia (MZO). The website of the course is https://eo4society.esa.int/event/esa-2023-croatia/, with a link to the registration page. The registration deadline was August 15th, 2023.

The main target group of the training were MSc or early PhD students in science or engineering with an interest in remote sensing and/or the topics covered during the course. A total of 35 participants attended the course.

Due to the remote location of the course, a shuttle bus to Budapest Airport was organised before and after the course, which 11 participants used and some teachers. This meant students who did not live close by or had a car could attend the course still. In the feedback, they said having this option was excellent.

The course covered a variety of topics to introduce the participants to remote sensing principles and applications using both optical and SAR remote sensing. The topics covered were:

- · Introduction to SAR remote sensing
- EO for land cover/land use
- EO for Agriculture
- EO for Forestry
- EO for Flood mapping
- Optical and SAR remote sensing for marine applications (biological applications, and oil spill and ship detection)

Along with lectures, practical sessions let participants work with data for these applications using a range of software, including OpenEO, Jupyter Notebook, SNAP, and Google Earth Engine. Students could run these practicals on the university computers or on their own laptops.



The practical and lecture materials are available on the course page on EO4Society's website: https://eo4society.esa.int/resources/esa-2023-croatia/



Programme

Time (CEST)	18-Sep	40.6==	20.6	24.6==	22.6		
8:00 - 8:30	Registration	19-Sep	20-Sep	21-Sep	22-Sep		
8:30 - 8:45	Welcome from the local host of Osijek Univesity and ESA	Land Cover/Land use -	Forestry - Ana Potocnik-	Agriculture - Gabriel	Marine - ship detection/oil		
8:45 - 10:15	Introduction to SAR remote sensing - Alexander Jacob and Michele Claus (EURAC)	Alexander Jacob (EURAC)	Alexander Jacob (EURAC) Buhvald (University of Ljubljana)	Caballero (university of Valencia)	spills - Marko Perkovic (University of Ljubljana)		
10:15 - 10:45	Coffee Break			Coffee session: Research design for EO - Q&A with teachers			
10:45 - 12:00	Introduction to SAR remote sensing - Alexander Jacob (EURAC)	Land Cover/Land use - Alexander Jacob (EURAC)	Forestry - Ana Potocnik- Buhvald (University of Ljubljana)	Agriculture - Gabriel Caballero (university of Valencia)	Marine - ship detection/oil spills - Marko Perkovic (University of Ljubljana)		
12:00 - 13:00			Lunch				
13:00 - 13:30	Lur	nch	SAR and Agriculture in the Pannonian Basin - Levente	Lunch			
13:30 - 13:45			Ronczyk (DATelite Ltd)				
13:45 - 15:00	Land Cover/Land use - Alexander Jacob (EURAC)	Forestry - Kristof Ostir (University of Ljubjana)	Agriculture - Jochem Verrelst (university of Valencia)	Flooding - Stephen Clandillon (University of Strasbourg) remote	Marine - biological - Evangelos Spyrakos (University of Stirling)		
15:00 - 15:30			Coffee Break				
15:30 - 17:30	Land Cover/Land use - Alexander Jacob (EURAC)	Forestry - Kristof Ostir (University of Ljubljana)	Agriculture - Jochem Verrelst (university of Valencia)	Flooding - Martin Phillipsen (RSAC c/o ESA)	Marine - biological - Evangelos Spyrakos (University of Stirling)		
15:30 - 17:30 17:30 - 17:45		•		-	Evangelos Spyrakos		



Recommendations and summary

21 participants completed the feedback survey (see the following pages for all results). In summary, the participants generally found the course excellent, very relevant to their work, and with excellent lectures and good practical exercises. Overall, the course met their expectations, and almost all participants said they would use the techniques they learned here going forward.

The balance between theory and practicals was rated excellent, although some students mentioned wanting more examples in the theory. The students mainly said they did not complete the practical exercises during the course itself due to a lack of time, but that they did understand the concepts introduced in them. They mentioned that having written instructions to follow, and not just the teachers' example, would be ideal.

Overall students said they would use what they learned on the course going forward, particularly on things covering SAR, and the sessions covering land cover/land use and flooding. For software, students found SNAP useful (particularly ones not familiar with Python) and mentioned wanting to use it again in the future, 70% of students had not used it before the course. Jupyter notebooks were rated very useful, although more comments in the code was needed – 2/3s of students already used Jupyter Notebooks before the course.

All the participants thought having the course in-person was rewarding and mentioned being able to network as a main positive of the course. Communication with organisers both before and during the course was good. However, while the coffee breaks were appropriate there was a lack of food and drink options with no gluten free options for food. The social event on the first day could also have been more structured or allowed students to talk to the teachers more, rather than sit in individual groups with other participants.

For future courses, students mentioned wanting to know which software will be used in advance so that they could pre-install it on their computers, and that the practicals should have been more self-guided with help from the teachers, rather than a tutorial following the teachers' example. Having more time for the practicals or doing practicals that are shorter would be better. Several students mentioned not knowing coding beforehand as a disadvantage, therefore having more resources available for people to follow would be beneficial.

For future courses, it would be ideal to have it take place in a location with an international airport, as having to organise a shuttle bus to allow students from other countries to participate is impractical, although beneficial.



ANNEX E: PARTICIPANT RECORDING AND STREAMING CONSENT FORM

TRAINING ACADEMY FOR EO EDUCATION SUPPORT

Form Requesting Consent for Recording and Streaming

The European Space Agency (hereinafter the "Agency" or "ESA") is an intergovernmental organisation established by its Convention opened for signature in Paris on 30 May 1975 having its headquarters located at 24 rue du Général Bertrand, CS 30798, 75345 Paris Cedex 07, France.

Protection of Personal Data is of great importance for ESA, which strives to ensure a high level of protection as required by the ESA Framework on Personal Data Protection (hereinafter the "ESA PDP Framework") which applies to this Form Requesting Consent (hereinafter "the Form"). ESA implements appropriate measures to preserve the rights of data subjects, to ensure the processing of personal data for specified and legitimate purposes, in a non-excessive manner, as necessary for the purposes for which the personal data are collected or for which they are further processed, in conditions protecting confidentiality, integrity and safety of personal data and in accordance with the principles set forth in the PDP Framework, available at:

http://www.esa.int/About Us/Law at ESA/Highlights of ESA rules and regulation s and as detailed in the ESA Privacy notice and Consent Form copied in Annex.

The ESA PDP Framework, in its implementation aims at ensuring an equivalent level of protection as the EU General Data Protection Regulation (Regulation (EU) 2016/679) in processing personal data. ESA processes your personal data for the purpose of registration and handling applications to training activities done within the framework of the EO training academy and on the Online Course Platform in accordance with the principles of the ESA PDP Framework and as detailed in the ESA *Training Academy for EO Education Support* copied in Annex.

ESA requires contracting companies that perform processing of personal data on behalf of ESA to ensure an adequate level of protection under the ESA PDP Framework (e.g. through compliance with EU Regulations in the field of personal data protection).

Ι,	[name,	surname]	,	my	email	address
is:.						

having regard to the training activity (hereinafter "the Event") hosted on ESA's behalf by XXXXXX (insert name and headquarters address and representing authority of the Contracting Company which has signed the Contract with ESA hereby the "Licensee"),



herewith give my consent to the Agency and to the Licensee to record my appearance and/or voice and sound and/or written quotes for the purpose of producing, publishing and disseminating outreach materials for the promotion of the specific ESA training activity participated in, and of the ESA Education Programme in general (including its ESERO project), for non-commercial purposes; to use such appearance and/or voice and sounds and/or written quotes as shown in the resulting recordings and to process such personal data;

- 1. warrant that I am not a member of ACTRA¹;
- 2. acknowledge and accept that such personal data provided for the purpose of the Event may be processed by ESA (or for ESA, by ESA's partners and suppliers) for potential ESA internal and/or public communication purposes, and that this may include the upload of the recording on the ESA and its partners and suppliers' website and media channels²:
- 3. understand that such personal data may be subject to cross border transfer to locations where processing by, or for, ESA, by the Licensee and by ESA's partners and suppliers, is so performed, and may be accessed, rectified and deleted, in all cases in compliance with ESA Framework on Personal Data Protection [or the laws and regulations applicable to the Licensee (e.g. GDPR)] ensuring an Adequate Level of Protection under the ESA Framework on Personal Data Protection; that I have the right to access my personal data, to be informed about the existence and the extent of data processing, to rectify incorrect personal data as the case may be and to oppose further processing on serious and legitimate grounds;
- 4. understand that third party IT tools or social media may be used to promote an activity. ESA websites may provide links to social media and videos may be available on ESA or other social media pages. If you view a video or interact with the social media or other websites, social media or third-party cookies are likely to be installed on your device, covered by third party Terms and Conditions and cookie policies. ESA has no influence over these. Carefully assess the privacy policies and Terms and Conditions prior to use regarding your data subject rights, further processing and to protection of your personal data;
- 5. understand that online webinars may be held using a third-party videoconference IT service such as Microsoft Teams, which process personal data according to their own cookies and privacy policies (available at:

¹ Alliance of Cinema, Television and Radio Artists

² http://www.esa.int/ESA Multimedia/Copyright Notice Images and http://www.esa.int/ESA Multimedia/Terms and Conditions



https://esait.sharepoint.com/sites/esa365/Shared Documents/PRIVACY%20NOT ICE%20-%20Final%20General%20esa365%20Privacy%20Notice.pdf) over which ESA has limited influence and does not necessarily advocate. By participating in the activity and using the IT tool, you consent to the processing of your personal data according to the third-party tool's conditions and its privacy policy:

- 6. understand that the personal details contained in the present Form will be kept as proof of my consent for as long as the process persists;
- acknowledge that I can freely withdraw my consent at any time by using the contact details mentioned in the *Training Academy for EO Education Support - Privacy Notice*; in that case, all processing operations that were based on my consent and took place before the withdrawal of my consent remain valid;
- 8. acknowledge that the Event will be photographed/audio and/or video recorded and/or live broadcasted through web streaming/social media/TV channels, etc.;
- 9. agree on the collection and on the processing of my personal data when attending this Event and on the publication of the audio and video recordings and/or web streaming, as the case may be, and that, depending on the type of production/meeting/event the publication of the resulting recordings might be on a publicly available website, social media, printed media, or on an access-restricted site;
- 10. acknowledge that, if I do not agree with my appearance and/or voice and sound being recorded and published, I have the possibility to opt out by staying in the optout non filmed zone of the room/ or by contacting the [EO TRAINING ACADEMY EMAIL to be set by the Course Organiser for the Training Academy / online courses, that shall be created for this purpose] and that, in this case, and depending on available resources, the organiser may offer me an alternative room or, in case of unavailable recourses, I will be seated in a designated part of the meeting room where there is no filming.
- 11. confirm that I shall not receive or claim any compensation, financial or otherwise, in respect of foregoing authorisations or any matter referred to in this Form;
- 12. agree that this Form shall be effective as of the date of its signature.



3. To exercise the rights mentioned in Art.7 above, please contact ESA at the following address: DPO@esa.int.
have read and understood the specific privacy statement and the conditions of this form.
lame, date
Signature



ANNEX F: ESA PRIVACY NOTICE

Training Academy for EO Education Support ESA PRIVACY NOTICE

Introduction

The European Space Agency (herein the "Agency" or "ESA") is an intergovernmental organisation established by its Convention opened for signature in Paris on 30 May 1975 having its headquarters located at 24 rue du Général Bertrand, CS 30798, 75345 Paris Cedex 07, France.

Protection of Personal Data is of great importance for ESA, which strives to ensure a high level of protection as required by the ESA Framework on Personal Data Protection (herein the "ESA PDP Framework") which applies in this field. ESA implements appropriate measures to preserve the rights of data subjects, to ensure the processing of personal data for specified and legitimate purposes, in a not excessive manner, as necessary for the purposes for which the personal data were collected or for which they are further processed, in conditions protecting confidentiality, integrity and safety of personal data and generally to implement the forth the **PDP** Framework, principles set in available http://www.esa.int/About Us/Law at ESA/Highlights of ESA rules and regulation

ESA PDP Framework is composed of the following elements:

- the Principles of Personal Data Protection, as adopted by ESA Council Resolution (ESA/C/CCLXVIII/Res.2 (Final)) adopted on 13 June 2017;
- the Rules of Procedure for the Data Protection Supervisory Authority, as adopted by ESA Council Resolution (ESA/C/CCLXVIII/Res.2 (Final)) adopted on 13 June 2017; and
- the Policy on Personal Data Protection adopted by Director General of ESA on
 5 February 2018 and effective on 1 March 2018.

This notice is intended to inform you, as data subject, about:

- the identity of the data controller and contact details of ESA Data Protection Officer ("DPO");
- the type of personal data which is collected and processed;
- the modalities of collection of personal data;
- the purpose of the collection and processing;



- the recipients (if any) to whom the personal data of the data subject shall be disclosed:
- the time-limits for storing the personal data;
- the practical modalities of exercising the rights of the data subject under the ESA PDP Framework.

This notice also enables ESA to indicate how you can provide your consent relating to the collection and further processing of your personal data hereby described, under ESA PDP Framework. This privacy notice was last updated on: 22/01/2024.

(1) Who is the Data Controller and for which purposes?

Your personal data mentioned in this Privacy Notice as specified below are collected and further processed to enable your registration and participation in a training activity organised as part of the Training Academy for EO Education Support, the performance of all activities necessary to conduct this training, promotion and all communication in relation to the training. For these purposes only, as well as for the purposes mentioned in Article 5 of ESA Policy on Personal Data Protection, ESA is Data Controller.

Company XXX has a contract with ESA as Data Controller and is responsible for the organization and logistics of all training activities held as part of the Training Academy for EO Education.

Company XXX acts as Data Processor on behalf of ESA to process the personal data of participants, contained in the applicable consent form, which are therefore the only personal data that Company XXX shares with ESA.

ESA does not instruct any third party – including [Company XXX] – to conduct any web analytics, profiling or any other processing on ESA's behalf, other than the purposes mentioned below.

ESA does not consider your personal data as an asset for sale or for commercial exploitation on behalf of ESA.

- [xxx] refers to: [xxx contracted company: https://www.xxx.xx/]
 - [xxx refers to company name and any of its corporate affiliates. https://www.xxx/privacy-policy/]

Your personal data may also be collected and processed upon an independent decision of [contracted company, e.g. YYY and/or its sub-supplier [e.g. ZZZ], which technically (or more?) support the launch of the training activity. In this case, the privacy notices of YYYY and/or ZZZ will apply and ESA will have no liability



whatsoever in connection with collection and processing of Your personal data by XXX and/or ZZZ as separate Data Controllers.

- Company XXX acts as data controller and processor, to build and operate the EO Training Academy, and the Online Course Portal and, under its own responsibility, to enable applicants to be evaluated and selected, to enable communication with applicants, manage and run training activities with selected participants, to record these activities and publish on the Portal, and to collect anonymised feedback based on these activities.
- Company YYYY (any Subcontractor) acts as XXX sub-supplier and subprocessor which operates, under its own responsibility, to aid in any task necessary as otherwise performed directly by XXX, as described above.

For specific organizational and logistics purposes of the training activity, such as enabling your online registration to the activity or shipping you goodies and/or certificates, ESA will, in its role of Data Controller, share some of the collected data with specific providers (listed under disclosure section (6) in this document), contracted by ESA as Data Processors.

In addition, for the fulfilment of the purposes and objectives of the ESA Education Programme of which the training activity is part, such as communication and outreach purposes, and to inform you about future possibilities to be engaged, the data collected by ESA may – only upon your explicit consent - be disclosed by ESA to Companies listed in section (6) of this document and further processed by other ESA third parties as agreed in the contract.

This Privacy Notice also enables ESA to obtain your consent relating to the collection and further processing of your personal data, under ESA PDP Framework.

This privacy notice was last updated on: [date]

The description of the collected data, the justification for their collection and processing, and the role of the parties involved is provided in detail in the sections below.

(2) What are the contact details of ESA Data Protection Officer?

According to ESA PDP Framework, your first point of contact concerning personal data matters is the ESA Data Protection Officer ("DPO"), who may be contacted at DPO@esa.int.



For the contact details of Company XXX as separate Controller please refer to their Privacy Notice available at this link (the Company XXX shall add here their own link to their Privacy Notice).

(3) What kind of personal data about you are collected and further processed?

The following data may be collected and further processed:

Collected Data

Personal Data:

- Name:
- Date of birth:
- Gender:
- E-mail:
- Organisation / University details (name and address)
- Title (e.g. Ms, Mr, Dr...)
- Background and publications
- Information in connection with your use of the website, such as information in server logs, including information on how the website was used by you, your search queries:
- IP (internet protocol) address and data about your [system activity, hardware settings, browser settings, date and time of your request...]:
- Cookies, i.e.:
- Other information that you provide, which may directly or indirectly identify you:

General Data:

- Team name (if applicable)
- Country of teaching/mentoring
- School or Organisation name and full postal address
- Type of school
- Subject(s) of teaching/mentoring
- Number of male/female/other students in their team

You are required <u>not to send</u> to the Agency any sensitive information (including information that indicate, directly or indirectly, an individual's racial or ethnic origin, political opinions, adhesion to unions, religious or philosophical beliefs, health life, sexual orientation, genetic or biometric data, criminal convictions).

(4) How are your personal data collected or further processed?



Your personal data may be collected through various means, including via:

- The EO training academy email account.
- The registration form for the specific training activity accessible at this link. (link to be created by the XXX company)

(5) Why are your personal data collected and further processed?

Your personal data are collected and further processed for the following purposes:

5.A) For the organization and logistics of training activities:

- Purposes of Data collection and processing:
 - a) Checking eligibility criteria compliance by using data such as age ranges and country of residence.
 - b) Enabling access and participation in the training activity venues, wherever applicable. This may include webinars and meetings in videoconference, as well as logistics purposes such as coordinating hotel and transportation bookings, accessing competition venues (including launch field/range), adapting the facilities adequacy, printing of badges, and other logistics purposes and, if applicable, any medical data that may be required from a medical emergency situation during the event, or by the national law and regulations in force at the location and time of the Competition (e.g. COVID-19 related certification).
 - c) Communicating via e-mail and/or phone with participants, in order to provide organisational information/updates and answer queries.
 - d) Creating participation certificates which contain the participant names, school/organization name, country.
 - e) Shipping goodies, prizes and certificates to participant's shipping address, recipient's contact point's email and phone number); shipping thanking goodies to Jury members.
 - f) Gathering key participation statistical data for educational research and stakeholder reporting.
 - g) Creating and publishing outreach and promotional content and materials on the ESA Education Programme in general. Such materials may include participant's images/photos, videos, written/audio-recorded quotes, with option to opt out for each individual participant at online registration through the dedicated consent form thereby available.



h) Other purposes that will be disclosed to you if and when such information is requested.

Third party IT tools, including Social Media

Third party IT tools or social media may be used to inform you and to promote an activity (meeting, event). ESA websites may provide links to social media and videos may be available on ESA social media pages. If you view a video or interact with the social media or other websites, social media or third party cookies are likely to be installed on your device, covered by third party Terms and Conditions and cookie policies. ESA has no influence over these. Carefully assess the privacy policies and Terms and Conditions prior to use with regard to your data subject rights, further processing and to protection of your personal data.

Online webinars may be held using a third-party videoconference IT service such as Microsoft Teams or Webex, which process personal data according to their own cookies and privacy policies over which ESA has limited influence and does not necessarily advocate. By participating in the activity and using the IT tool, you consent to the processing of your personal data according to the third-party tool's conditions and its privacy policy.

The Agency and its Data Processors do not consider your personal data as an asset for sale and, thus, do not sell your personal data to any third parties.

(6) How long do we retain your personal data for?

The Agency and its Data Processors may keep your personal data for as long as necessary for the fulfilment of the above-mentioned purposes (for participants, this is typically until 3 months after the training activity), and in any case not more than 5 years from the moment of collecting your data. Your Personal Data shall be deleted thereafter.

Exception applies to the photo/video/audio-written records used for communication which will be retained by ESA for as long as the legitimate purpose persists, unless consent is withdrawn by the data subject (or his/her parent/legal guardian when applicable).



(7) How can you erase, rectify, complete or amend your personal data?

The Agency is keen to collect and process accurate personal data and to keep it updated.

You may request the erasure, rectification, completion or amendment of your personal data if, and to the extent that it is inaccurate or incomplete, having regard to the purposes for which they are collected and processed, or if they are processed in violation with the principles referred in ESA PDP Framework.

If you choose to make a request for the erasure of personal data, you understand and agree that ESA will not be able to process your registration or further participation in the training activity.

The above-mentioned request should be submitted to the ESA DPO, as first point of contact, by sending an email to: dpo@esa.int in copy to: EMAIL

(8) What could you do in case of a data protection incident?

In case of a data protection incident, you should contact ESA DPO, as first point of contact, by sending an email to: dpo@esa.int in copy to: EMAIL

In case you wish to submit a complaint, you are required to comply with the Rules of Procedure of the Supervisory Authority set forth by ESA PDP Framework. You will be required to demonstrate that a data protection incident occurred in relation to your personal data, following a decision of the Agency or at least to justify serious reasons to believe that such incident occurred.

(9) Your consent

The processing of personal data described in this privacy notice is based on your consent.

You may provide your consent during the ESA online registration process to training activity accepting this Privacy Notice (selecting 'yes' in the related checkbox).

You can withdraw such consent by requesting ESA to stop the processing. This will not affect the legitimacy of the personal data processing that took place prior to the withdrawal of user consent.



You can withdraw your consent at any time by sending an email to ESA DPO at: dpo@esa.int in copy to: EO TRAINING ACADEMY EMAIL

If you choose not to give or to withdraw your consent to the collection and processing of your personal data described in this Privacy Notice (with the exceptions of your optout options described in Chapter 5, points g) and h)), you understand and agree that you will no longer be able to participate in the training activity.

For those cases where your consent was not already obtained by ESA (including by other modalities) and is required under the ESA Framework on Personal Data Protection, you hereby agree with the collection and further processing of your personal data.

You will be able to withdraw your consent depending on the modality used to collect your personal data, in particular:

by sending an email to ESA DPO at: DPO@ESA.int in copy to EO TRAINING ACADEMY EMAIL



ANNEX G: SOME EXAMPLES OF POSSIBLE SCENARIOS FOR THE USE OF NOR RESOURCES (ESA PLATFORMS AND VIRTUAL MACHINES (VMS) WITHIN TRAINING ACTIVITIES ORGANISED IN THE FRAME OF THIS CONTRACT

(Remark: this is a non-exhaustive list, purely for inspiration and information)
Assumptions:

- (i) in-person course is, on average 5 days long with around 35 students;
 - for in-person courses, the students typically ask for access to the platform/software for 5 days after the course is over, in order to complete or repeat exercises given during practicals, test additional things, and transfer practical files to their own systems;
- (ii) An online course is, on average, 3 days long with up to 50 students:
- (iii) An in-person challenge is, on average, 5 days long with around 20 participants.

Scenario:	In person courses	Online courses	Challenges
1	_	2-3 courses using Platform + free websites/services	1 Platform + free websites/services
2		2-3 courses using Platform + free websites/services	1 Platform + free websites/services
3		3-4 courses using Platform + free websites/services	1 Platform + free websites/services



Scenario n.1 involves: (i) in-person courses using ESA platforms (e.g. Open EO platform and ESDL) and running EO software on students/universities own PCs; (ii) online courses only using 1 platform per course and focusing more on showing Jupyter Notebook or websites (like EO Browser and ESA virtual labs); (iii) a challenge only using 1 platform. In total, this scenario would require the use of around 280 months of platform subscription per year.

Scenario n. 2 involves: (i) one in-person course using VMs (e.g. EOX VMs) and two in-person courses using platforms (e.g. Open EO platform and/or DeepESDL); (ii) online courses using a mix platforms and websites; (iii) a challenge using 1 platform. In total, this scenario would require the use of 250 months of platform subscriptions + 410 VM user days (including 2 months of 1 VM for preparation).

Scenario n. 3 involves: (i) one in-person course using both VMs and a platform, and two in-person courses with Platforms only; (ii) 3-4 online courses using VMs + websites; (iii) a challenge using 1 platform. In total, this scenario would require the use of 330 months of platform subscriptions + 410 VM user days.

APPENDIX 2

CONTRACT CHANGE NOTICE

For submission of a change, the Contractor shall submit its proposal in the format of a CCN using the cover page included below. The form shall be filled with the following information as a minimum:

- The Contractor's name and the ESA Contract number;
- The title of the area affected by the change (Work Package reference, new work, etc.);
- The name of the initiator of the change (Contractor or ESA);
- The description of the change (including Work Package Descriptions, Work Breakdown Structure);
- The reason for the change;
- The price breakdown in Euro (€), if any (breakdown by company, Phase, etc., including PSS A2 and PSS A8 forms);
- The Milestone Payment Plan for the CCN, if any;
- Effect on other Contract provisions;
- Start of Work end of Work (including contractual delivery dates and overall planning, milestones, etc.);
- A CCN Form, as per the format below, signed by the Contractor's representatives.

The Contractor shall, on request of the Agency, provide additional documentary evidence. At the request of either Party, the proposed change may be discussed at a Change Review Board, consisting of both the Contracts Officer and the Technical Officer of each Party.

		Conti	Contractor:			
eesa	DIRECTORATE	ESA	ESA Contract No. 4000145896/24/I-KE			
CONTRACT CHANGE NOTICE No.		DATE	DATE:			
TITLE OF AREA AFFECTED (WORK PACKAGE ETC)): WP F	WP REF:			
		INITI	ATOR OF CHANGE:			
DESCRIPTION OF CHANGE						
REASON FOR CHANGE						
PRICE BREAKDOWN (Currency)/PRICE-LEVEL						
EFFECT ON OTHER CONTRACT P	ROVISIONS		START OF WORK			
			END OF WORK			
CONTRACTOR'S PROJECT MANAG	MANAGER: CONTRACTOR'S CONTRACTS OFFICER:					
DATE:		DATE:				
[DISPOSITION RECORD OR OTHER AGREED CONDITION RECORDED WITH THE CCN APPROVAL]						
ESA TECHNICAL OFFICER: ESA CONTRACTS OFFICER:			S OFFICER:			
DATE: DATE:		DATE:	<u>:</u> :			

APPENDIX 3

INVENTORY/FIXED ASSET RECORD

1.1. Content of electronic Inventory/Fixed Asset Record

The Contractor shall establish an electronic Inventory/Fixed Asset Record with, as a minimum, the following information:

For all items:

- Contract number/subcontract number, if applicable;
- unique item number;
- confirmation that the item has been marked with the unique item number;
- description of item;
- part number/serial number/type code;
- quantity;
- system/subsystem;
- property owner;
- manufacturer;
- classification (category see section 1.2 below);
- acquisition value (i.e. original purchase price or price at Contract signature as applicable);
- date of purchase or production ("in service date" if not corresponding with date of purchase/production);
- in-service date:
- foreseen useful life (to be agreed with ESA);
- physical location (e.g. facility, building, room);
- entity responsible for care and custody;
- related WBS code or other identifier (to be coordinated with the Agency);
- description and date of any change to the property item;
- planned method of disposal (if applicable).

In addition to the above, the following information shall be added to those items that are identified as becoming ESA Fixed Assets in Article 3 of the Contract, as applicable:

- Acquisition value
 - revision of this value as a result of change(s) to the asset;
- Impairment report of each ESA Fixed Asset remaining in the custody of the Contractor after its acceptance by ESA (using the template that will be provided by the Agency upon announcement by the Contractor that the item has been impaired);
- date of acceptance by ESA (planned date of acceptance);
- foreseen handling after ESA's acceptance (e.g. transfer to ESA, continuing in custody of the Contractor).

1.2. Classification of Inventory/Fixed Assets items

For the purpose of Inventory/Fixed Asset Control, items shall be classified into five (5) categories, according to the source and intended use of the items, as follows:

Source/Purpose	Supplier-acquired Items	Customer-furnished Items	
Consumable items (e.g. parts, materials, supplies)	Class 1	Class 2	
Capital items/production support equipment and tools (e.g. instruments, jigs, fixtures)	Class 3	Class 4	
Items purchased by the supplier or his lower tier suppliers on their own account but amortised under the Contract	Class 5		

- Note 1: Consumable items are parts, materials, supplies, components, modules, minor expendable tools, assemblies, units and subsystems, which through the production process lose their identity and are absorbed directly or indirectly by the system/product to be provided under the Contract.
- Note 2: Consumable items are in principle not capitalised per item; however, before consumption they are identified as assets of the Agency under the collective term "Consumable".
- Note 3: Capital items/production support equipment and tools are jigs, fixtures, devises, apparatus, instruments, machines, installations, technical facilities, buildings, computer programmes, documentation, models, samples or any other item, which, after their use in or in conjunction with the production process under the Contract, are expected to have a residual utility or other value for the Agency.
- Note 4: Capital items have a useful life of more than one (1) year and are identified as individual items in the supplier's and its lower tier suppliers' list of Agency's assets.

APPENDIX 4

WORK ORDER PROCEDURE AND TEMPLATE

The Agency's orders for Additional Activities within the Ceiling Price for Additional Activities described in the Statement of Work shall be placed by means of the following procedure:

- 1. The Agency's Technical Officer issues a Work Order Request (WOR) to the Contractor by email, including a definition of the envisaged Additional Activities to be performed (including a list of deliverables).
- 2. The Contractor (on their behalf and on behalf of their Subcontractor(s)), submits to the Agency's Technical Officer a proposal by email, which shall contain at least:
 - The Agency's WOR;
 - A definition of the envisaged Additional Activities to be performed (including a list of deliverables);
 - A Firm Fixed Price, calculated on the basis of the FUPs established in the Contract;
 - The FUPs to be applied for the implementation of the Additional Activities and any relevant justification;
 - A schedule for the implementation of the Additional Activities and a delivery date;
 - The remainder of the Ceiling Price.
- 3. The Agency's Technical Officer accepts or rejects the proposal by email.
- 4. The Contractor proceeds to implement the concerned Additional Activities as per the agreed schedule.
- 5. The Contractor shall not start any Additional Activities without the Agency's Technical Officer's written authorisation. Any activities undertaken by the Contractor without such authorisation shall be at the Contractor's risks and expenses.
- 6. Every 6 months, the Contractor, on their behalf and on behalf of their Subcontractor(s), shall be entitled to submit the corresponding invoices according to the procedure for payment set forth in the Contract, and this for the authorised Additional Activities which have been completed during the concerned 6-month period and for which final acceptance has been provided in writing by the Agency's Technical Officer. Partial acceptance of authorised Additional Activities shall not trigger any authorisation to request a payment (be it total or partial).
- 7. The Contractor shall provide to the Agency, as an attachment to their Confirmation (MAC) an Excel spreadsheet detailing the number and title of the WOR, of the FUPs and the overall budget consumed. Moreover, the Excel spreadsheet shall give a complete picture of the overall situation, including a list of all WOs authorised, amounts invoiced in the 6-month period over all WOs, amounts outstanding for the upcoming periods.

WORK ORDER TEMPLATE

under ESA Contract no 4000xxxxxx/24/I-KE between the European Space Agency and [contractor]

Article 1 - Subject of the Work Order - Applicable Documents

The contractor shall perform [activity] according to the following documents, in order of precedence:

- a) ESA Contract No. 4000xxxxxx/24/I-KE and its appendices 1-4;
- b) The present Work Order No [x];
- c) [ESA Change Request No[x], reference [x], issue [x], dated dd/mm/yyyy, which constitutes Annex 1 of this Work Order No [x]
- d) The minutes of the negotiation meeting for Work Order No [x], reference [x], dated dd/mm/yyyy, not attached hereto but known to both Parties;
- e) The contractor's Proposal for Work Order No [x], reference [x], dated dd/mm/yyyy, not attached hereto but known to both Parties.

Article 2 - Delivery and Meetings

The delivery date of the [deliverable] specified in ESA Change Request No [x] for Work Order No [x]1 is dd/mm/yyyy.

Article 3 - Price and Payments

The Conversion of the Ceiling Price into a Firm Fixed Price of this Work Order amounts to:

xxx,xxx EUR (xxx,xxx EURO) FFP

broken down per Contractor and Subcontractor as follows:

Company Name	ESA Entity Code	Type P/Prime; SI/Subco Indirect	Country (ISO Code)	Total Amount in Euro				
[contractor 1]		P/SI		xxx,xxx				
		P/SI		·				
[contractor n]		P/SI		xxx,xxx				
	xxx,xxx							
As a result, the remainder of the Ceiling Price for future Work Orders is the following:								
Available Ceiling Price	EUR xxx,xxx							
Amount of the Ceiling Price converted into a FFP the present Work Order No [x]: EUR xxx,xxx								
Remainder of the Ceilir	EUR xxx,xxx							
Payment under this Work Order shall be made in accordance with the provisions of Article 4 of the Contract.								
Electronically signed by the Parties to this Contract,								
On:								
For the Contractor For the European Space Agency								
Technical Officer Technical Officer								

Contracts Officer

Contracts Officer