

145-800-2014

Subkontrakt pre služby Copernicus

Pre zaobstaranie CAMS use na plánovanie kvality ovzdušia v mestských oblastiach s využitím
ATMOSYS-CAMS aplikácie

(ECMWF/COPERNICUS/2017/CAMS_95f_VITO)

Zmluvné strany:

VITO NV, výskumná organizácia organizovaná a existujúca podľa belgických zákonov (registrovaná pod číslom 244.195.916), sídlo: Boeretang 200, 2400 Mol, Belgicko and zastúpená: Dirk Fransaer, generálny riaditeľ, ďalej spomínaná ako « VITO » alebo « **Contractor** »

and

SHMU, Slovenský hydrometeorologický ústav, sídlo: Jeséniova 17, 833 15 Bratislava, Slovakia and zastúpený: Martin Benko, generálny riaditeľ, ďalej spomínaný ako « SHMU » alebo « **Sub-contractor** »

Tento subkontrakt sa odvoláva na rámcovú dohodu ECMWF/COPERNICUS/2017/CAMS_95f_VITO

Zmluvou sú upravené zmluvné podmienky, cena (príloha č. 3) a povinnosti zmluvných strán v súvislosti s realizáciou projektu:

The CAMS ATMOSYS – Urban Use Case, cieľom ktorého je vytvoriť webové rozhranie pre odbornú verejnosť umožňujúce hodnotenie dopadu zmien dopravnej infraštruktúry a emisných zdrojov na kvalitu ovzdušia (EIA)

Začiatok a trvanie zmluvného vzťahu: 1. apríl 2017 – až 30. Jún 2019

Predmet zmluvy:

Úloha 95f11: Vyhodnotenie produktov CAMS reanalysis pre demonštračnú oblasť Slovenska. Off-line analýza údajov o kvalite ovzdušia produkovaných pre Slovensko pomocou údajov CAMS ako pozadia, spojených s IFDM.

Úloha 95f13: VITO nasadí službu ATMOSYS-CAMS na Slovensku v spolupráci so svojim partnerom SHMU

Úloha 95f14: Validácia a hodnotenie. V tejto úlohe experti SHMU a VITO vyhodnotia plánovaciu službu založenú na CAMS a porovnajú ju so súčasnými štúdiami hodnotenia kvality ovzdušia.

Úloha 95f21: Školenie pre užívateľov na Slovensku

(podľa Prílohy č. 2)

Cena: 7000,- EUR (podľa Prílohy č. 3)

Spôsob financovania:

Po vykonaní úloh v termínoch: 31/10/2017

31/07/2018

31/07/2019

(podľa prílohy č. 3)

145-800-1014

**Subcontract for Copernicus Services
for the provision of a CAMS use case on air quality planning in
urban areas using the ATMOSYS-CAMS application
(ECMWF/COPERNICUS/2017/CAMS_95f_VITO)**

This Subcontract for Copernicus Services for the provision of a CAMS use case on air quality planning in urban areas using the ATMOSYS-CAMS application (ECMWF/COPERNICUS/2017/CAMS_95f_VITO) is entered into force as from April 1st, 2017 by and between :

VITO NV, a research organisation organized and existing under the laws of Belgium (registered under the number 244.195.916, VAT-no. BE0244.195.916.), having its registered offices situated at Boeretang 200, 2400 Mol, Belgium and hereby duly represented by Dirk Fransaer, Managing Director, hereinafter referred to as « VITO » or the « **Contractor** »

and

SHMI, the Slovak Hydrometeorological Institute, having its offices at Jeséniová 17, 833 15 Bratislava, Slovakia (IČO: 00156884, IČ DPH: SK2020749852 and hereby duly represented by Martin Benko, Director General, hereinafter referred to as « SHMU » or the « **Sub-contractor** »

In the terms of this Subcontract, the Sub-contractor and VITO may each be referred to as the « Party » or collectively as the « Parties ».

WHEREAS VITO has submitted a proposal, prepared by VITO in collaboration with all subcontractors involved (SHMI, UAVR, UNIBS, TA), in response to ECMWF's ITT CAMS_95 Use Cases (not attached hereto but known by the Parties) through which VITO indicated that it is capable, with the assistance of these subcontractors, to deliver the Services (as defined hereinafter);

WHEREAS , on the basis of this proposal, the European Centre for Medium-Range Weather Forecasts, an inter-governmental organization governed by its Convention and associated Protocol on Privileges and Immunities ("ECMWF") selected VITO to enter into the Framework Agreement ECMWF/COPERNICUS/2017/CAMS_95f_VITO for the provision of a CAMS use case on air quality planning in urban areas using the ATMOSYS-CAMS application under two separate service contracts No. 2017/CAMS_95f_VITO/SC1 and No. 2017/CAMS_95f_VITO/SC2 in accordance with this Framework Agreement ECMWF/COPERNICUS/2017/CAMS_95f_VITO;

WHEREAS the Sub-contractor and VITO wish to establish a subcontract for the provisions by the Sub-contractor of certain Services (as defined below – see article 1.3.1) in accordance with the terms and conditions set forth hereunder;

NOW, therefore, the following is agreed:

Clause 1 – Introduction

1.1. Contractual documents

This Subcontract refers to the Framework Agreement ECMWF/COPERNICUS/2017/CAMS_95f_VITO and the subsequent service contracts for implementation of the services (as indicated above). The Framework Agreement and the referenced Annexes form an integral part of this Subcontract with the complements and amendments described in this Subcontract.

1.2. Definitions and interpretation

1.2.1. Definitions

Words beginning with a capital letter shall have the meaning defined herein, and where not defined herein they shall have the meaning defined in the Framework Agreement ECMWF/COPERNICUS/2017/CAMS_95f_VITO.

1.2.2. Additional definitions

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"Assets"	<p>All tangible and intangible assets which:</p> <p>are created or acquired by the Sub-contractor for the purpose of or in the course of performing its contribution to the Services; and</p> <p>ECMWF fund, in whole or in part, through the payment the Contractor makes to the Sub-contractor under the terms of this Subcontract or a related Service Contract; and</p> <p>Are worth more than Euro 7000; and</p> <p>Are not items of Integrated Technology.</p>
"Business Day"	A day other than a Saturday, Sunday or bank or public Holiday in England, Wales or in the country in which the Contractor is situated.
"C3S"	The Copernicus Climate Change Service referred to in the Copernicus Regulations
"CAMS"	The Copernicus Atmospheric Monitoring Service referred to in the Copernicus Regulation.
"Change"	A change of all or part of the Services and/or the Specification requested in accordance with Clause 2.5 (Service Change).
"Claim"	Any action, claim, demand, proceeding, filing, objection or complaint of any nature of kind.
"Confidential Information"	<p>the terms of this Subcontract ;</p> <p>all information disclosed to the relevant Party by or on behalf of the other Party in connection with this Subcontract and/or a Service Contract and which relates to the provisions of this Subcontract and/or a Service Contract or the negotiations relating to this Subcontract and/or a Service Contract;</p> <p>know-how, secret processes and inventions disclosed to the relevant Party by or on behalf of the other Party in connection with this Subcontract and/or a Service Contract;</p> <p>all other information disclosed to the relevant Party by or on behalf of the other Party (whether before or after the date of this Subcontract) which is marked as or has been otherwise indicated to be confidential or which derives value to a Party from being confidential or which would be regarded as confidential by a reasonable business person.</p>
Deliverables	all those things to be produced and delivered to or made accessible to VITO and/or ECMWF as part of the Services. Deliverables are identified in Annexes 1, 2 and 3 and may include individuals or multiples of the following, without limitation, numerical datasets, reports, graphics, web content, software, algorithms, models, prototypes, Copernicus Information (as defined at Article 3(8) of the Copernicus Regulation), research and development results and documentation of implemented processes and algorithms.
"Funds"	Any sums of money paid by VITO to the Sub-contractor under the terms of this Framework Contract or a related Service Contract.
"Pre-Existing Technology"	Technology which is the subject of industrial and Intellectual Property Rights (e.g. rights of ownership and use by ECMWF, the Contractor, the creator, the Union or any third party) and which exists prior to the Contractor ordering something under this Framework Contract or a Service Contract for which such Technology is put to use with or without modification or adaptation.
"Price"	The Price payable by the Contractor to the Sub-contractor for the performance of the Services is shown in Annex 3, the payment plan. Prices for each subcontractor, including the Subcontractor, are detailed under the Services Contracts (Annex 3C of each Service Contract).

"Related Person"	Any natural person that has the power to represent the Sub-contractor or to take decisions on its behalf.
"Risk Register"	The risk register and risk management plan, which the Sub-contractor has agreed to in Annex 1 (Sub-contractor's Tender), and which the Parties will discuss in relation to the Services from time to time.
"Service Contract"	An agreement for the provision of the Services as outlined in Annex 1 by VITO (and its subcontractors) to ECMWF over a specific period of time.
"Sub-contractor Manager"	The Sub-contractor's manager of this Subcontract , relevant Service Contracts and the Services appointed pursuant to Clause 2.4.3.
"Sub-contractor Personnel"	the employees, agents, consultants and of the Sub-contractor, who provide or who are involved in the delivery of the Services.
"Technology"	Any know-how, method, process, system, machinery, software or other form of technology put to use by the Sub-contractor in the course of performing its contribution to the Services.

1.2.3. In this Subcontract unless the context otherwise requires or the contrary intention appears:

- any reference to an enactment (which term shall include any directly applicable EC legislation) includes: (i) that enactment as amended, extended, consolidated, re-enacted or applied by or under any other enactment before or after this Subcontract ; and (ii) any subordinate legislation made (before or after this Subcontract) under that or any other applicable enactment, including one within this Clause 1.2.2;
- the singular includes the plural and vice versa, and reference to any gender includes the other genders;
- references to a person include any individual, firm, company, corporation, government, state or agency of a state or any association, trust, joint venture, consortium or partnership (whether or not having a separate legal personality);
- references to this Subcontract or any other agreement or document are to this Subcontract or such other agreement or document as it may be validly varied, amended, supplemented, restated, renewed, novated or replaced from time to time (in each case, however fundamentally);
- references to a Party to this Subcontract or a Service Contract include a reference to its successors and permitted assigns under this Subcontract or a Service Contract;
- references to "written" or "in writing" include faxes and emails into which a verifiable electronic signature is incorporated but exclude all other emails;
- any reference to an English legal term for any action, remedy, method of judicial proceeding, legal document, legal status, court, official or any legal concept or thing includes, in respect of any jurisdiction other than England, a reference to what most nearly approximates in that jurisdiction to the English legal term;
- the words "including" and "in particular" and any similar words or expressions are by way of illustration and emphasis only and do not operate to limit the generality or extent of any other words or expressions;
- all Annexes and the Introduction to this Subcontract form part of it and take effect as if set out in this Subcontract , and any reference to this Subcontract includes the Annexes and the Introduction;
- all annexes to a Service Contract form part of it and take effect as if set out in the relevant Service Contract and any reference to the Service Contract includes the annexes to it; and
- references to Clauses Annexes and Paragraphs refer to clauses of, annexes to and paragraphs in annexes to, this Subcontract or a Service Contract (as applicable).

1.2.3. The headings in this Subcontract or a related Service Contract are for convenience only and do not affect its interpretation.

1.2.4. The footnotes in this Subcontract or a Service Agreement are for information only and do not affect its interpretation.

1.3 Subcontract - Purpose and Effect

- 1.3.1 This Subcontract describes the Services that the Sub-contractor is required to supply to the Contractor in the framework of the Framework Contract and that are detailed in Annex 2.
- 1.3.2 The Price referred to in Clause 4.1 (Price) includes all charges for its contribution to the Services, and there shall be no other charges unless expressly stated for any of:
- 1.3.2.1 acquisition by the Sub-contractor of any data, information, materials or Technology for the purpose of providing its contribution to the Services;
- 1.3.2.2 carrying out any and all necessary tests;
- 1.3.2.3 Licenses for Software;
- 1.3.2.4 support and maintenance of Software, including on-site analyst support and migration aid where agreed in this Subcontract ;
- 1.3.2.5 for any other work which is ancillary or incidental to the carrying out of the Services;
- 1.3.2.6 any costs or expenses except as expressly referred to in Clause 4.1(Price), Annex 2 (Contractor's Tender for Framework Agreement) or in a specific Service Contract.
- 1.3.2 Use by ECMWF and others
- 1.3.3.1 The benefits of this Subcontract and each Service Contract shall be for unlimited use by: the Commission in accordance with the Copernicus Regulation and Delegated Regulation EC/1159/2013 (establishing registration and licensing conditions for [Copernicus] users).
- 1.3.3.2 The benefits of this Subcontract and each Service Contract shall also be for unlimited use by: ECMWF; the government and national agencies of ECMWF Member States as are Parties from time to time to the Convention signed on 11 October 1973 or any successor Convention thereto; and governmental and non-governmental international scientific and technical organizations with which ECMWF is required or expected under such Convention or Conventions to co-operate and other authorised users of ECMWF services.
- 1.3.3.3 References throughout this Subcontract and each Service Contract to use of the Services by ECMWF shall be deemed to include use by those organizations referred to in Clause 1.3.3.1 and 1.3.3.2.

1.4 Commencement And Duration

The Term starts retroactively on April 1st, 2017 (Effective Date) and shall end on or before 30 June 2019.

Clause 2- Operation of Services

2.1. Sub-contractor's Performance And Related Obligations

2.1.1 Sub-contractor's Undertakings

2.1.1.1 The Sub-contractor represents, warrants and undertakes:

- that it will perform its obligations under this Subcontract in a timely and professional manner using Good Industry Practice as well as its own established internal procedures;
- that the Sub-contractor Personnel have the qualifications and experience claimed or attributed to them in Annex 2 (Contractor's Tender) and are, in any event, suitably skilled, experienced and qualified to carry out the duties and tasks assigned to them in connection with the performance of the Services;
- that neither the Sub-contractor nor any Sub-contractor Personnel or any person acting on its behalf has offered, given or agreed to give or will offer, give or agree to give any person any inducement or reward (or anything which might be considered an inducement or reward) in connection with the Contractor entering into this Subcontract or any Service Contract;
- to comply with (and to procure that the Sub-contractor Personnel comply with) the Contractor's and/or ECMWF's reasonable requests in performing the Services;
- the performance of the Services shall not infringe any existing Intellectual Property Rights of any third party;
- that it has the full capacity and authority to make the assignments of Ownership and to grant the licences referred to in this Subcontract and each Service Contract;
- that the contents of Annex 2 (including its answers to all ITT questions) are correct and that the Contractor will be informed within five (5) Business Days of any of the contents becoming

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incorrect, during the Term;

- that it has made and shall make its own enquiries to satisfy itself as to the accuracy and adequacy of any information supplied to it by or on behalf of the Contractor and/or ECMWF;
- that it has raised all relevant due diligence questions with the Contractor before the Effective Date;
- that it has entered into this Subcontract in reliance on its own due diligence alone; and
- that if, at any time during the Term it receives funding or reimbursement from another source, towards the resource costs set out at Annex 2 (Contractor's Tender for Framework Agreement) or for providing some or all of the same or essentially the same Deliverables as agreed in this Subcontract or for acquiring or developing some or all of the same or essentially the same Assets as agreed in this Subcontract, it shall consult with the Contractor and adjust the Price accordingly.

2.1.2 Sub-contractor's obligations

2.1.2.1 The Sub-contractor shall:

- provide its contribution to the Services as set out in Annex 1 and Annex 2 to this Subcontract and as confirmed or varied in Annex 3A and 3B to the relevant Service Contract, including, without limitation, meeting the agreed Deliverables, Milestones, KPI's and Performance Targets;
- report to and liaise with Service Manager and other key personnel (ref Clause 2.4.3) and act only to the extent of the instructions given to the Sub-contractor from time to time by them;
- promptly report to the Contractor:
 - A. any breach of this Subcontract and/or a Service Contract by the Sub-contractor or the Sub-contractor Personnel; and
 - B. any fact or matter that is reasonably likely to prevent the Sub-contractor from complying with his obligations under this Subcontract and/or a Service Contract, within three (3) Business Days of becoming aware of the same;
- during each of the current Service Contracts, except for the last possible Service Contract in the Term, the Sub-contractor will assume that the current Service Contract is to be followed by another and, on the basis of that assumption the Sub-contractor will prepare, in a timely way and in cooperation with the Contractor, an Implementation Plan for provision of the Services over the period of the next Service Contract. The Implementation Plan will have to meet with ECMWF's requirements and will feed into ECMWF's own implementation plan for provision of CAMS/C3S (as appropriate) in the next year of the Copernicus Programme.

2.1.3 Compliance with Laws

2.1.3.1 The Sub-contractor shall perform its obligations under this Subcontract and each Service Contract in a manner that complies with all applicable Laws in force during the Term and shall not cause the Contractor and/or ECMWF to breach any Laws in force during the Term.

2.1.3.2 The Sub-contractor shall immediately notify the Contractor if it becomes aware of any allegation of non-compliance with any Law by any person in relation to this Subcontract and/or a Service Contract.

2.1.3.3 As soon as the Sub-contractor becomes aware of any change that should be made to the Services to ensure that the Services and the performance of them conform to any Law, Good Industry Practice or any new legal or regulatory requirement which affects the Services the Sub-contractor shall notify the Contractor of the change and, unless otherwise instructed by the Contractor (following instructions of ECMWF), the Sub-contractor shall carry out the change at no charge to the Contractor or ECMWF.

2.1.4 Sub-contractor Personnel

2.1.4.1 The Sub-contractor shall retain overall control of the Sub-contractor Personnel at all times so that the Sub-contractor Personnel shall not be deemed to be employees, agents or contractors of the Contractor or ECMWF.

2.1.4.2 If it appears to the Contractor that the Services are being disrupted by the actions or behaviour of a member of the Sub-contractor Personnel or that his qualifications, expertise or work do not correspond to the relevant HR profile in Annex 2 (Contractor's Tender for Framework Agreement) or to Good Industry Practice, the Subcontractor shall have the right to make a reasoned request for his immediate replacement in relation to the Services.

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- 2.1.4.3 Any Sub-contractor Personnel replaced following the Contractor's request pursuant to Clause 2.1.4.2 must have the appropriate qualifications, expertise and ability to correspond to the relevant HR profile in Annex 2 (Contractor's Tender for Framework Agreement) or to Good Industry Practice. The Sub-contractor shall be responsible for any delay in the execution of the tasks assigned to it resulting from the replacement of Sub-contractor Personnel.
- 2.1.5. IT and other Security
- 2.1.5.1 The Sub-contractor shall, and shall procure that all Sub-contractor Personnel shall, comply with any of the Contractor's and/or ECMWF's site security procedures if and when at the Site.
- 2.1.5.2 The Sub-contractor shall, and shall procure that all Sub-contractor Personnel shall, comply with the Contractor's and/or ECMWF's IT security requirements, as appropriate, including for the transmission of Deliverables. These will be communicated between the Contractor and the Sub-contractor as necessary.
- 2.1.5.3 The Contractor shall provide all security passes and controlled access for Sub-contractor Personnel who are to have access to the Site.
- 2.1.6. Quality of Deliverables
- 2.1.6.1 The Contractor shall have the right to inspect any Deliverables at any time on or after delivery by the Sub-contractor to ensure each Deliverable complies with the requirements of this Subcontract and of the relevant Service Contract.
- 2.1.6.2 If the Contractor discovers that any Deliverable does not comply with the requirements of this Subcontract or of the relevant Service Contract, the Contractor shall be entitled to notify the Sub-contractor specifying the non-compliance and requiring remedy by the Sub-contractor.
- 2.1.6.3 Within a reasonable time of receiving notice pursuant to Clause 2.1.6.2 and in any event within 30 calendar days, the Sub-contractor shall remedy any non-compliance in a Deliverable and re-submit the Deliverable to the Contractor. The Sub-contractor, within seven days' time of receiving the notice pursuant to Clause 2.1.6.2, may request an extension to remedy any non-compliance within up to 45 calendar days, if it can show that compliance within 30 days is impossible due to circumstances beyond the Sub-contractor's reasonable control. The Contractor shall not unreasonably withhold its consent to the extension request.
- 2.1.6.4 Until such time as the Sub-contractor has complied with Clause 2.1.6.3, the Contractor shall be entitled:
- i. to withhold payment relating to the relevant Deliverable;
 - ii. to accept the relevant Deliverable despite the non-conformance and withhold a reasonable proportion of the payment relating to that Deliverable; or
 - iii. at any time after expiry of the periods referred to in Clause 2.1.6.3, to reject the relevant Deliverable and to require repayment and not to make any further payment in relation to the relevant Deliverable.
- 2.1.7 Insurance requirements
- 2.1.7.1 Save as otherwise agreed with the Contractor, the Sub-contractor shall effect and maintain appropriate insurances with insurers who are at all times of good financial standing and reputation and for a period of insurance which includes:
- i. for all insurances, the Term of this Subcontract but shall also provide cover for obligations that survive expiry or termination of this Subcontract and each Service Contract; and
 - ii. for professional indemnity insurance, the period of 6 years following the expiry or termination of this Subcontract.
- 2.1.7.2 Save as otherwise agreed with the Contractor, the Sub-contractor shall maintain:
- i. third party property damage insurance for an amount not less than [£5,000,000] for any single occurrence and in the aggregate as to the number of occurrences in respect of liability for all plant, equipment and motor vehicles owned or used by the Sub-contractor or any Sub-contractor directly or indirectly engaged in providing its contribution in the Services; and

- ii. professional indemnity insurance for an amount not less than [£10,000,000] per occurrence and in the aggregate annually.
- 2.1.7.3 The Sub-contractor shall provide evidence of the insurances referred to in this Clause 2.1.7, or such other cover or contingency arrangements as the Sub-contractor maintains, to the satisfaction of the Contractor.
- 2.2. Software
- The provisions of Annex 4 shall apply to the extent that the agreed Deliverables include any software or code.
- 2.3. Reporting
- 2.3.1 Annual Reporting
- 2.3.1.1 By 5 January of each Year, the Sub-contractor shall transmit preliminary financial information concerning the Services and relating to the previous Year, as required by the Contractor and ECMWF and in a format specified by the Contractor and ECMWF in order to comply with its accounting closure requirements.
- 2.3.1.2 The Contractor may request additional information related to the content of the documents. The Sub-contractor shall make reasonable efforts to supply the requested information within ten (10) calendar days of the request;
- 2.3.2 Quarterly Reporting
- 2.3.2.1 The Contractor is obliged to submit quarterly implementation reports to ECMWF at the latest twenty (20) calendar days after the expiry of the relevant calendar quarter.
- 2.3.2.2 During the Term of this Subcontract, the Contractor may request information from the Sub-contractor regarding the progress made in the performance of its contribution to the Services covering programmatic, technical, and contractual aspects, including the status of the Risk Register and any deviations from the foreseen schedules and/or budgeted limits. The Sub-contractor shall make reasonable efforts to supply this information within ten (10) calendar days of the request.
- 2.3.3 Ad-Hoc Reporting
- The Contractor may ask for information or ad-hoc reports whenever it considers that to be necessary for the performance of its contribution to the Services or to satisfy the requirements of the ECMWF/Commission. The Sub-contractor shall make reasonable efforts to supply additional information within ten (10) calendar days of the request and ad-hoc information/reports within fifteen (15) calendar days of the request.
- 2.3.4 If the Sub-contractor fails to submit the documents referred to in Clauses 2.3.1.1, Clause 2.3.2.2 or Clause 2.3.3 or the requested information or the revised documents referred to in Clause 2.3.1.2 by the set deadline or if the submitted new documents are not properly revised, the Contractor reserves the right to suspend payments in accordance with Clause 5.3 (Suspension of Payments). If any additional information or documents are requested under this Clause 2.3.1, the time-limit for scrutiny shall be suspended and shall resume once the information or documents concerned have been received by the Contractor. Approval of the report shall not imply recognition of the legality and regularity of the underlying costs or of the authenticity, completeness and correctness of the declaration and information they contain.
- 2.3.5 Central Exclusion Database
- 2.3.5.1 The Sub-contractor shall notify the Contractor in writing and within five (5) Business Days if the Sub-contractor or any persons having powers of representation, decision-making or

control over any of them have their names entered into the Union's Central Exclusion Database at any time during the Term.

2.3.5.2 The Sub-contractor shall notify the Contractor in writing and within five (5) Business Days if the Sub-contractor or any persons having powers of representation, decision-making or control over any of them have been the subject of a judgment which has the force of *res judicata* for fraud, corruption, involvement in a criminal organisation, money laundering or any other illegal activity, where such conduct was detrimental to the Union's financial interests.

2.3.5.3 If and when the Sub-contractor notifies the Contractor under Clause 2.3.5.2, ECMWF shall transmit the information to the Commission for entry on the Central Exclusion Database.

2.3.6 Conflict of Interest

2.3.6.1 The Sub-contractor shall take reasonable measures to prevent any situation where the impartial and objective performance of its contribution to the Services is compromised for reasons involving economic interest, political or national affinity, family or emotional life or any other shared interest (a "Conflict of Interests").

2.3.6.2 Should any situation come to the attention of the Sub-contractor, constituting or likely to lead to a Conflict of Interests during the performance of its contribution to the Services, it shall be notified to the Contractor, in writing without delay. The Sub-contractor shall take reasonable steps to rectify this situation. The Contractor reserves the right to verify that the measures taken are appropriate and may require additional measures to be taken within a specified deadline.

2.3.7 Obligation to inform the Contractor

2.3.7.1 The Sub-contractor shall provide any information requested by the Contractor in order to verify compliance with this Subcontract and/or any Service Contract.

2.3.7.2 With respect to the performance of the Services, the Sub-contractor shall also inform the Contractor without delay of:

- i. the death, departure or absence (for one calendar month or more) of any Sub-contractor Personnel who have been identified in Annex 2 (Contractor's Tender for Framework Agreement);
- ii. any substantial changes to its systems, rules or procedures that relate to the management of the Funds;
- iii. any substantial change in its legal, financial, technical, organisational or ownership situation;
- iv. any Fraud or irregularity which comes to its attention and any situation which may give rise thereto and the measures taken;
- v. any event that may harm ECMWF's and/or the Union's financial interests; and
- vi. any event which may delay or jeopardize performance of the Services.

2.4. Communications by and between the Parties

2.4.1 Authorised Representatives

The sole individuals with authority to sign this Subcontract, related Service Contracts and any variations of the same are detailed in the heading of this Subcontract.

2.4.2 Formal Notices

Formal notices shall be deemed received when delivered except for a letter by prepaid first class mail which shall be deemed received two (2) Business Days after despatch, or a fax which shall be deemed to be received immediately the sender shall have received a signal to that effect provided that a copy of such fax shall be mailed within twelve (12) hours of the sending of such fax or an email which shall be deemed to be received when it enters the recipient's inbox, provided that a verifiable electronic signature is incorporated into the email and a copy of such email shall be mailed within twelve (12) hours of the sending of such email. The relevant addresses are as follows

For Sub-contractor: Director General, martin.benko@shmu.sk

For VITO: The Managing Director, dirk.fransaer@vito.be

2.4.3 Key Contact Personnel

VITO and the Sub-contractor shall designate key personnel to represent their interests in discussions and meetings. The appointing Party may change such appointments from time to time by notice in writing to the other Party.

The identities and contact details of the Contractor's Service Manager (to ECMWF) and other key personnel for both parties are set out below:

For Sub-contractor: jana.krajcovicova@shmu.sk

Service Manager for VITO: Lisa Blyth, lisa.blyth@vito.be

Alternative contact: Bino Maiheu, bino.maiheu@vito.be

2.4.4 Progress Meetings

During the Term, the Contractor's person and the Sub-contractor shall conduct face to face, video conference or telephone conference meetings to review progress, discuss outstanding issues and identify any delays. The regularity and frequency of such meetings shall be agreed between the Parties, as appropriate to the nature and maturity of the Services. The Contractor shall be responsible for chairing such meetings and for recording their decisions in minutes and circulating those minutes to the appropriate individuals.

2.4.5 Other Meetings

The Contractor may invite or require the Sub-contractor Manager and/or other representatives to attend other meetings (including meetings requested by ECMWF relating to CAMS, C3S or the Copernicus Programme from time to time).

2.4.6 Publicity

2.4.6.1 The Sub-contractor shall not, without first obtaining the Contractor's written consent, make any press announcements or publicity about this Subcontract or any related Service Contract or the Services or the Deliverables or its role in providing the Services or the Deliverables or its contribution to CAMS/C3S.

2.4.6.2 The Sub-contractor shall ensure that the Sub-contractor Personnel comply with the provisions of Clause 2.4.6.1.

2.4.6.3 Subject to the provisions of Clause 2.7 (Confidentiality), the Contractor reserves the right to publish anything about the Subcontract, a related Service Contract, the Services or the Deliverables.

2.4.6.4 The provisions of this Clause 2.4.6 shall apply during the Term and indefinitely thereafter.

2.5. Service Change

2.5.1. Request

If, at any time during the Term a Party wishes to alter any part of the Services, including the Specification of any part of the Services, then it shall provide the other Party with full written particulars of such Change.

2.5.2 Sub-contractor's Quotation

The Sub-contractor shall submit to the Contractor, together with its own request or within fifteen (15)

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Business Days of receiving a request from the Contractor, a full written quotation for such requested Change. The quotation shall be based on the unit prices given for resources in the relevant year of the Term, in Annex 2 (Contractor's Tender for Framework Agreement). The quotation shall also specify what implications the Change will have for the Contractor, the Sub-contractor's ability to meet its other obligations under this Subcontract and/or any Service Contract and any variation to the terms of this Subcontract and/or any Service Contract that will be required as a result including, changes to:

- 2.5.2.1 the Specification and the Services;
- 2.5.2.2 the Deliverables, Milestones, KPI's and Performance Targets;
- 2.5.2.3 details of the cost of implementing the Change;
- 2.5.2.4 details of the on-going costs required by the Change when implemented, including any increase or decrease in the Price, any alteration in the resources and/or expenditure required by either Party and any alteration to the working practices of either Party;
- 2.5.2.5 a timetable for the implementation, together with any proposals for the acceptance of the Change;
- 2.5.2.6 such other information as the Contractor may reasonably request in (or in response to) the Change; and
- 2.5.2.7 an analysis of the risks arising from the implementation of the Change and a proposal as to pro-active management, by both Parties, of the risks identified.

2.5.3 The Contractor's action on quotation

Upon receipt of such quotation, the Contractor may either:

- 2.5.3.1 accept such quotation, in which case this Subcontract, the Service Contract(s) (including any agreed dates) and, if appropriate, the Specification shall be amended accordingly; or
 - 2.5.3.2 withdraw the proposed Change in which case this Subcontract and each Service Contract shall continue in force unchanged.
- 2.5.4 No such Changes shall be effected unless approved in writing by the duly authorised representatives of the Contractor and the Sub-contractor identified at Clause 2.4.1.

2.6. Process for Resolving Disputes

- 2.6.1 Any dispute which may arise between the Parties concerning this Subcontract and/or any Service Contract shall be determined as provided in this Clause 2.6.
- 2.6.2 For the purpose of this Clause 2.6 a dispute shall be deemed to have arisen when one Party serves on the other a notice in writing stating the nature of the dispute.
- 2.6.3 Unless this Subcontract and/or the relevant Service Contract has already been terminated or expired by the date of the notice of dispute, and except to the extent that Services are suspended (Clause 5.4) or payments for Services are suspended (Clause 5.3) before or after the date of the notice of dispute, the Sub-contractor shall continue to perform the Services with all due diligence and the Contractor shall continue to make payments in accordance with this Subcontract and/or the relevant Service Contract.
- 2.6.4 After service of the notice of dispute, the following procedure shall be followed by the Parties (all time periods specified in this Clause 2.6.4 shall be extendable by mutual agreement):
 - 2.6.4.1 Within two (2) Business Days, the Contract Office and the Service Manager shall meet to attempt to settle the dispute;
 - 2.6.4.2 if no settlement results from or within two (2) Business Days of the meeting specified in Clause 2.6.4.1, the Parties shall meet within the following five (5) Business Days to attempt to settle the dispute.
 - 2.6.4.3 If no settlement results from or within five (5) Business Days of the meeting specified in Clause 2.6.4.2, the Parties shall proceed in accordance with Clause 6.9.2.

2.7. Confidentiality

- 2.7.1 Subject to Clause 2.7.2, each Party shall treat all Confidential Information as strictly

confidential and shall not disclose Confidential Information to any person. The foregoing notwithstanding, the Contractor is entitled to disclose the Confidential Information to other (sub)contractor's involved in the performance of the Services and to ECMWF's for the purposes detailed in the Framework Agreement.

- 2.7.2 A Party may disclose Confidential Information if and to the extent:
 - 2.7.2.1 required by Law or order of the courts, or by any securities exchange or regulatory or governmental body to which such Party is subject or submits, wherever situated (whether or not the requirement for information has the force of law);
 - 2.7.2.2 disclosed on a necessary basis to the professional advisers, auditors and bankers of such Party, who themselves are under a professional obligation of confidentiality;
 - 2.7.2.3 the Confidential Information has come into the public domain other than by a breach of any obligation of confidentiality; or
 - 2.7.2.4 with the prior written approval of the other Party.
- 2.7.3 The restrictions contained in this Clause 2.7 shall continue to apply after the termination or expiry of this Subcontract and each Service Contract (however arising) for five years, unless and to the extent that the Party who disclosed the relevant Confidential Information agrees to release the other Party from its confidentiality obligations earlier.
- 2.7.4 Publication of this Subcontract

In the event that either Party is obliged by Law to publish to the general public all or part of this Subcontract or any Service Contract, that Party shall notify the other of the same and the two Parties shall consult regarding appropriate redactions from the Subcontract or Service Contract before publication.

2.8. Personal Data Protection

- 2.8.1 Where the performance of the Services requires the processing of personal data the Sub-contractor shall process any personal data in accordance with the national data protection legislation to which the Sub-contractor is subject. If the Sub-contractor will process personal data outside the European Economic Area it will do so in a manner which satisfies EU personal data protection concerns (e.g. under a "safe harbour" agreement or equivalent). For this purpose, the Sub-contractor shall designate a responsible member of Sub-contractor Personnel as its data controller and publish the contact details of its data controller, through the Copernicus Services Websites for use by ECMWF and the subjects of the personal data which it processes.
- 2.8.2 Subjects of personal data processed by the Sub-contractor shall have the right of access to their personal data and the right to rectify any such data. Should they have any queries concerning the processing of their personal data, they shall address them to the relevant data controller.
- 2.8.3 Subjects of personal data processed by the Sub-contractor shall have the right of recourse at any time to the authority designated under relevant national legislation to receive complaints on personal data protection.

2.9. Sub-contracting

The Sub-contractor shall not enter into any sub-delegation agreement, outsource its responsibility for its contribution to the Services or assign any of its rights and obligations under this Subcontract or a Service Contract to a third party.

CLAUSE 3 - Intellectual Property Rights

- 3.1. Deliverables
 - 3.1.1. Ownership of the Deliverables, including all Intellectual Property Rights in the Deliverables shall be fully and irrevocably acquired by the Contractor (who has to transfer to ECMWF) under

this Subcontract .¹

- 3.1.2. Ownership of the Deliverables shall be acquired by the Contractor from the moment they are delivered. Delivery shall be deemed to constitute an effective assignment of Ownership to the Contractor.
- 3.1.3. The Price is deemed to include any fees payable in relation to the acquisition of Ownership of Deliverables by the Contractor.
- 3.1.4. During the Term, the Sub-contractor shall take care and custody of their Deliverables in the form of an archive, maintain an inventory of the Deliverables and provide all information needed for keeping account of the Deliverables.
- 3.1.5. Unless otherwise agreed in writing, for their deliverables only add reference to annex??, a licence is granted to the Sub-contractor, by virtue of this Subcontract , subject to the following conditions:
 - 3.1.5.1 the Sub-contractor may use the Deliverables for any of its own purposes, including commercial purposes but excepting any purpose which conflicts with the aims of the Copernicus Programme;
 - 3.1.5.2 if the Sub-contractor communicates or publishes any of the Deliverables to any person other than the Contractor or ECMWF, the communication or publication must explicitly state that:
 - i. the information/material contained is being communicated/published in the name of the Commission;
 - ii. the information/material contained has been produced "with funding by the European Union"; and
 - iii. the Commission is not responsible for any use that may be made of the information/material contained;
 - 3.1.5.3 the licence is non-exclusive, irrevocable, worldwide, free of charge and without limitation in time;
 - 3.1.5.4 the licence allows the licensee to modify the Deliverables and/or to grant sub-licences.

3.2. Assets

- 3.2.1 Ownership of Assets, including all Intellectual Property Rights in the Assets shall be fully and irrevocably acquired by the Contractor under this Subcontract .²
- 3.2.2 Annually, by 5 January or the first Business Day after 5 January, the Sub-contractor shall provide to the Contractor an inventory of all Assets acquired or developed in the previous calendar year. This yearly provision inventory shall be deemed to constitute an effective assignment of Ownership of the identified Assets to the Contractor. The inventory of Assets should include, as a minimum, information about their identification numbers (part and serial number), individual values in EUR, dates of acquisition, contract references and their physical location.
- 3.2.3 The Price is deemed to include any fees payable in relation to the acquisition of Ownership of Assets by the Contractor.
- 3.2.4 During the Term, the Sub-contractor shall maintain an updated inventory of the Assets and provide all information needed for keeping account of the Assets by the Contractor. The Sub-contractor shall ensure care and custody of Assets under its responsibility. At the end of the Term, the Sub-contractor shall deliver up those Assets which the Contractor requires, at its own expense.
- 3.2.5 Ownership of the Assets shall vest in the Contractor on creation. The Sub-contractor hereby assigns to the Contractor with full title guarantee and free from all encumbrances all rights in the Assets including the right to sue for and recover damages or other relief in respect of the infringement of any rights in the Assets.

¹ The Contractor is to assign ownership to ECMWF who is obliged to assign ownership of most of the Deliverables to the Commission under the terms of the Delegation Agreement.

² The Contractor is to assign ownership to ECMWF who is obliged to assign ownership of most of the Deliverables to the Commission under the terms of the Delegation Agreement.

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- 3.2.6 Unless otherwise agreed in writing, a licence is granted to the Sub-contractor, by virtue of this Subcontract to use the Assets for provision of its contribution to the Services and any of its own purposes, including commercial purposes but excepting any purpose which conflicts with the aims of the Copernicus Programme. The licence is exclusive, free of charge and for the duration of the Term only. The licence allows the licensee to grant sub-licences but only for the duration of the Term.
- 3.3. Pre-Existing Technology
- 3.3.1 This Agreement shall not affect the Ownership of Pre-Existing Technology. The Contractor's pre-existing technology is described in Annex 4.
- 3.3.2 Even though the Sub-contractor may use the Contractor's Pre-Existing Technology in the performance of its contribution to the Services, the Sub-Contractor shall not acquire any intellectual property rights in that Pre-Existing Technology.
- 3.3.3 By virtue of this Subcontract, a licence is granted by the Sub-contractor to the Contractor on the Sub-contractor's Pre-Existing Technology as is needed to perform the Services and to use such Pre-Existing Technology as is necessary to render the Deliverables useable, for the purposes of the Copernicus Programme. The licence is non-exclusive, irrevocable, worldwide, free of charge and without limitation in time. The licence allows the licensee to grant sub-licences.
- 3.4 Integrated Technology
- 3.4.1 Integrated Technology shall be owned by the owner of the Pre-Existing Technology into which it is integrated.
- 3.4.2 During the Term, the Sub-contractor shall maintain an inventory of the Integrated Technology and provide all information needed for keeping account of the Integrated Technology.
- 3.4.3 By virtue of this Subcontract, a licence is granted to the Contractor as needed for the performance of the Services and to use Integrated Technology and such Pre-Existing Technology as is necessary to render the relevant Integrated Technology useable, for the purposes of the Copernicus Programme and any future programme with the same or similar purposes to the Copernicus Programme. The licence is non-exclusive, irrevocable, worldwide, free of charge, includes the right to sublicense to ECMWF who may further sub-license and is without limitation in time. The licence allows the licensee to modify the Integrated Technology and/or to grant sub-licences³.
- 3.5. Warranties
- 3.5.1 The Sub-contractor warrants that it owns, or has all necessary rights, authorisations and licences in respect of, all Intellectual Property Rights used in the provision of its contribution to the Services to enable the Sub-contractor to perform the Services in accordance with this Subcontract and each Service Contract and to comply with the Sub-contractor's obligations under this Clause 3.5.1
- 3.5.2 The Sub-contractor shall procure that each agreement which it enters into with Sub-contractor Personnel or other third parties in accordance with this Subcontract or a Service Contract permits ECMWF to achieve and to exercise all the rights set out for it in Clause 3 (Intellectual Property Rights).

CLAUSE 4 - Finance

- 4.1. Price

³ ECMWF is obliged to license the Integrated Technology on to the Commission under the terms of the Delegation Agreement .

The Price of the Services is set out in the relevant Service Contract. The Contractor shall pay the Price subject to the terms of this Subcontract .

4.2. Costs

4.2.1 The basis for the Price shall be a set of unit costs and overheads for the Sub-contractor's resources, shown in Annex 1 (The Contractor and Subcontractor's Tender for the Framework Agreement) to this Subcontract .

4.2.2 For audit purposes (see Clause 5.1 (Audits)) the Sub-contractor shall keep and maintain throughout the Term and until the expiry of six (6) years after the end of the Term full and accurate records of the Sub-contractor's costs and overheads incurred in the performance of the Services.

4.2.3 The Sub-contractor shall take all necessary steps to ensure the integrity of all records held in accordance with Clause 4.2.2 and to prevent any corruption or loss of such records.

4.2.3.1 In order for an actual cost to be acceptable for audit purposes it must meet all the following criteria:

- i. it is actually incurred by the Sub-contractor. Amounts that shall be recovered from the Sub-contractor in accordance with Clause 5.2 (Recovery) shall not be considered as actually incurred;
- ii. it is incurred during the Term;
- iii. it is linked to and is necessary for the performance of the Services.
- iv. it is identifiable and verifiable, in particular being recorded in the accounts of the Sub-contractor and determined according to the usual cost accounting practices of the Sub-contractor;
- v. it complies with the requirements of applicable tax and social legislation;
- vi. it is reasonable, justified and complies with the principles of sound financial management, in particular value for money and cost.

4.2.3.2 The following types of cost shall not be acceptable, for audit purposes, even if the relevant cost meets the criteria set out in Clause 4.2.3.1:

- i. debt and debt service charges (interest);
- ii. provisions for future losses and debts;
- iii. exchange losses;
- iv. cost resulting from Commitments relating to any suspended Services during the Period of suspension;
- v. deductible VAT; and
- vi. contributions in kind.

4.3. Expenses

4.3.1 The Price includes the Sub-contractor's reasonable expenses that are directly incurred in the performance of its contribution to the Services.

4.3.2 Save to the extent that the Sub-contractor's expenses are included in the Price, the Contractor shall not reimburse any of the Sub-contractor's expenses.

4.3.3 For audit purposes (see Clause 5.1 (Audits)) the Sub-contractor shall keep and maintain throughout the Term and until the expiry of six (6) years after the end of the Term full and accurate records of the Sub-contractor's expenses incurred in the performance of the Services.

4.3.4 The Sub-contractor shall take all necessary steps to ensure the integrity of all records held in accordance with Clause 4.3.3 and to prevent any corruption or loss of such records.

4.3.5 In order for an actual expense to be acceptable for audit purposes it must meet the following criteria:

4.3.5.1 travel and subsistence expenses should be incurred on the basis of the shortest itinerary and the minimum number of nights necessary for overnight stay at the destination;

4.3.5.2 the expense of travel by air should be no more than the maximum cost of an economy class ticket at

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- the time of the reservation;
- 4.3.5.3 the expense of travel by boat or rail should be no more than the maximum cost of a [first class] ticket;
- 4.3.5.4 the expense of travel by car should be no more than the maximum cost of a [first class] rail ticket for the same journey on the same day;
- 4.3.5.5 the expense of subsistence should not be incurred for a return journey of less than 200km;
- 4.3.5.6 the expense of daily subsistence, including accommodation, meals, sundries and local transport between the airport or station, the accommodation and the destination should not exceed [EUR 300];
- 4.3.5.7 conversion between another currency and EUR shall be made as specified in Clause 4.4 (Currency).
- 4.4. Currency
- 4.4.1 Payments shall be made by the Contractor in EUR.
- 4.4.2 The Sub-contractor shall submit invoices to the Contractor in EUR.
- 4.4.3 Where the Sub-contractor keeps its accounts in a currency other than the euro, it shall convert costs incurred in another currency into EUR at the average of the daily exchange rates published in the C series of the Official Journal of the European Union⁴, determined over the corresponding reporting period.
- 4.4.4 Where no daily euro exchange rate is published in the Official Journal of the European Union for the currency in question, conversion shall be made at the average of the monthly accounting rates established by the Commission and published on its website⁵, determined over the corresponding reporting period.
- 4.5. Invoices
- 4.5.1 Subject to the provisions of this Agreement, the Sub-contractor may raise an invoice in respect of the Services in arrears in printed and electronic form in any format reasonably requested by the Contractor and shall include the following information:
- 4.5.1.1 the Sub-contractor's identification;
- 4.5.1.2 a reference to this Subcontract or to a specific Service Contract;
- 4.5.1.3 the date of the invoice;
- 4.5.1.4 the amount of the payment required, in EUR, not including VAT;
- 4.5.1.5 where possible, the following statement - "This supply is VAT exempt pursuant to Article 4 of the Protocol on the Privileges and Immunities of ECMWF, Articles 3 and 4 of the Protocol on the Privileges and Immunities of the European Union and Article 151 of Council Directive 2006/112/EC (concerning official usage of supplies by the European Union)"; and
- 4.5.1.6 if charging VAT is unavoidable:
- i. the amount of VAT required;
- ii. the Sub-contractor's VAT number; and
- iii. contact details for the authority from whom the Contractor should claim reimbursement of VAT.
- 4.5.2 The electronic form of all invoices should be sent to **finance@vito.be**;
- 4.6. VAT and Other Taxes
- 4.6.1 As a rule, ECMWF is exempt from all taxes and duties, including VAT, pursuant to the provisions of Article 4 of its Protocol on Privileges and Immunities⁶;
- 4.6.2 ECMWF does not undertake "economic activities". Therefore it is not a taxable person under Article

⁴ <https://www.ecb.int/stats/exchange/eurofxref/html/index.en.html>

⁵ http://ec.europa.eu/budget/contracts_grants/info_contracts/infoeuro/infoeuro_en.cfm

⁶ http://old.ecmwf.int/about/basic/governance/convention_and_protocol/amending_convention/original_official_languages/en/amended_convention_protocol_privileges_en.pdf

9 of Directive 2006/112/EC. Consequently, it does not have a VAT number.

4.6.3 ECMWF is purchasing the Services, for official use by the European Union, which is itself exempt from VAT, pursuant to the provisions of Articles 3 and 4 of its own Protocol on Privileges and immunities⁷ and pursuant to Article 151 of Directive 2006/112/EC;

4.6.4 Accordingly, the Sub-contractor shall take all necessary steps to facilitate ECMWF's exemption from VAT which might otherwise be payable in relation to the Services. For these purposes, it shall request the necessary instructions from ECMWF and provide in due time the information which ECMWF requires;

4.6.5 ECMWF / the Contractor will not pay any other taxes or duties relating to the Services, the Deliverables or the Assets.

4.7. Payment Process

4.7.1 For payments 1 and 3 as set-out in Annex 3, the Contractor will pay within thirty (30) days after receipt of the amount from ECMWF and receipt of an invoice which is correct and in a form acceptable to the Contractor and ECMWF, together with supporting records that conform to the requirements of Clause 4.5 (Invoices) and Annex 3C (Financial Annex) to the relevant Service Contract, unless the Contractor/ECMWF disputes the whole or any portion of the invoice, in which case the amount in dispute shall not be due and the Contractor shall notify the Sub-contractor of the amount in dispute and the nature of the dispute.

The Contractor will pay payment 2, within thirty (30) days after receipt of an invoice which is correct and in a form acceptable to the Contractor and ECMWF, together with supporting records that conform to the requirements of Clause 4.5 (Invoices) and Annex 3C (Financial Annex) to the relevant Service Contract, unless the Contractor/ECMWF disputes the whole or any portion of the invoice, in which case the amount in dispute shall not be due and the Contractor shall notify the Sub-contractor of the amount in dispute and the nature of the dispute.

Where part of an invoice is disputed, the Contractor shall pay the undisputed amount within thirty (30) days after receipt of the amount from ECMWF and receipt of the relevant invoice and supporting records. The Contractor and the Sub-contractor shall use reasonable endeavours to resolve the dispute in question within ten (10) Business Days of the dispute arising. If they fail to so resolve the dispute, either Party may refer the matter to the Dispute Resolution Procedure. Following resolution of the dispute:

4.7.1.1 the Sub-contractor will issue an invoice that meets the requirements of Clause 4.5 and Annex 3 in the agreed amount (or in the amount determined under the Dispute Resolution Procedure to be payable); and

4.7.1.2 the Contractor will pay the agreed amount (or the amount determined under the Dispute Resolution Procedure to be payable) to the Sub-contractor within thirty (30) days after receipt of the amount from ECMWF and receipt of a correct invoice in respect of such amount.

4.8. Banking Arrangements

4.8.1 The time for payment of invoices under the payment process described in Clause 4.7 (Payment Process) will not begin to run until and unless the Contractor has first received official written notification of the Sub-contractor's bank account details from the Sub-contractor.

4.8.2 The Sub-contractor shall be responsible for any bank charges made in respect of receipt or management of payments from the Contractor.

4.8.3 The Sub-contractor shall notify the Contractor immediately of any changes to its bank account

⁷ https://www.ecb.europa.eu/ecb/legal/pdgc_32620121026en_protocol_7.pdf

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details.

4.9. Financial Corrections

- 4.9.1 If the Sub-contractor has breached any of its obligations under this Subcontract or a Service Contract, the Contractor may apply financial corrections by excluding payments, in proportion to the value and seriousness of the breach.
- 4.9.2 Before applying financial corrections pursuant to Clause 4.9.1, the Parties will seek settlement according to the first stage of the Dispute Resolution Procedure
- 4.9.3 If no settlement can be reached, the Contractor shall formally notify its intention to the Sub-contractor:
 - 4.9.3.1 specifying the corrections it intends to apply and the reasons and;
 - 4.9.3.2 inviting it to submit observations within thirty (30) days of receiving notification.
- 4.9.4 If the Contractor does not receive any observations or decides to apply the financial corrections regardless of observations it has received, it shall formally notify confirmation of the corrections giving its reasons thereof.
- 4.9.5 If the Contractor applies the financial corrections pursuant to Clause 4.9.4, the Sub-contractor may continue the Dispute Resolution Procedure.

CLAUSE 5 - Governance

5.1. Audits

- 5.1.1 The Sub-contractor shall keep secure and maintain until six (6) years after the final payment of all sums due under this Subcontract and each Service Contract:
 - 5.1.1.1 full and accurate records of the Services and the Sub-contractor's compliance with this Subcontract and each Service Contract; and
 - 5.1.1.2 full and accurate details of the Prices and all other payments made by the Contractor; and
 - 5.1.1.3 invoices, information used to prepare the invoices and other documents relating to the provision of the Services.
- 5.1.2 The Contractor, ECMWF and the Commission shall each have the right from time to time and on reasonable notice to perform, either itself or through its representatives (which, for the Commission shall include OLAF, the European Court of Auditors and any other person authorised by the Commission):
 - 5.1.2.1 full and detailed audits and inspections of:
 - i. the Sub-contractor's performance of its contribution to the Services;
 - ii. the Prices invoiced to the Contractor under this Subcontract and each Service Contract;
 - iii. the costs and expenses behind the Prices; and
 - iv. the Sub-contractor's compliance with the provisions of this Subcontract and each Service Contract generally; and
 - 5.1.2.2 checks on risk-based and random samples of transactions.
- 5.1.3 The Sub-contractor shall, at its cost, provide the Contractor and/or ECMWF and the Contractor's and/or ECMWF's representatives with all reasonable assistance in order to enable the Contractor/ECMWF to initiate, carry out and complete any audit contemplated in this Clause 5.1 (Audits).
- 5.1.4 the Contractor/ECMWF and the Contractor's/ECMWF's representatives shall have the right to take copies of records, invoices, documents and information referred to in Clause 5.1.1 at the Sub-contractor's cost.
- 5.1.5 If, as a result of the Contractor's ECMWF's exercise of its rights under this Clause 5.1 (Audits), it is found that the Sub-contractor has failed to perform its obligations under this

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Subcontract and/or any Service Contract, the Contractor/ECMWF may make these findings available to the Sub-contractor and, in such a case, the Sub-contractor shall respond promptly to the issues raised setting out actions it proposes to take with respect to the findings to remedy his failure.

- 5.1.6 If as a result of the Contractor's/ECMWF's exercise of its rights under this Clause 5.1 (Audits), it is found that there has been an overpayment of the Price or any other charges, the Sub-contractor shall promptly reimburse the Contractor for its costs (including professional fees and expenses) incurred in exercising its rights and shall forthwith pay to the Contractor the amount of overpayment together with interest calculated at a reasonable rate.
- 5.1.7 Any inspection or audit, or failure to inspect or audit, shall not in any way release the Sub-contractor from its obligations under this Subcontract or any Service Contract.
- 5.1.8 The provisions of this Clause 5.1 shall survive termination or expiry of this Subcontract and each Service Contract for any reason until the end of the sixth (6th) ECMWF financial year following the ECMWF financial year in which this Subcontract terminates or expires.
- 5.1.9 Checks, audits, investigations and evaluation by the Commission, OLAF, the Court of Auditors or any other person authorised by the Commission:
- 5.1.9.1 The Sub-contractor agrees that the Commission, including the European Anti-Fraud Office (OLAF), and the Court of Auditors may at any time during the Term and up to five (5) years after the termination or expiry of this Subcontract carry out checks and audits on the Services.
- 5.1.9.2 The period set out in Clause 5.1.9.1 shall be longer if there are on-going audits, appeals, litigation or pursuit of claims concerning this Subcontract, a Service Contract or the Delegation Agreement in such cases, the Sub-contractor shall keep the documents which it is required to maintain under this Clause 5.1 until such audits, appeals, litigation or pursuit of claims are closed.
- 5.1.9.3 On the basis of the audit findings, the Commission may take the measures which it considers necessary, including financial corrections and recovery of all or part of the payments made but only in accordance with Clause 4.9 (Financial Corrections) or Clause 5.2 (Recovery), whichever is relevant.
- 5.1.9.4 OLAF may carry out investigations, including on-site checks and inspections, in accordance with the provisions and procedures laid down in Regulation (EU, Euratom) No 883/2013 of the European Parliament and of the Council of 11 September 2013 concerning investigations conducted by the European Anti-Fraud Office (OLAF)⁸ and Council Regulation (Euratom, EC) No 2185/96 of 11 November 1996 concerning on-site checks and inspections carried out by the Commission in order to protect the European Communities' financial interests against Fraud and other irregularities⁹ with a view to establishing whether there has been Fraud, Corruption or any other illegal activity affecting the financial interests of the Union in connection with the performance of the Services.
- 5.1.9.5 Where appropriate, OLAF findings may lead to financial corrections and/or recovery by the ECMWF.
- 5.2. Recovery
- 5.2.1 If any amount is to be recovered under the terms of this Subcontract or a Service Contract, the Sub-contractor shall repay the Contractor the amount in question.
- 5.2.2 Before recovery, the Parties will seek settlement according to the first stage of the Dispute Resolution Procedure.
- 5.2.3 If no settlement can be reached, the Contractor shall formally notify the Sub-contractor of its intention to recover the amount in question, specifying the amount due and the reasons for recovery and inviting the Sub-contractor to make any observations within thirty (30) calendar days after the date of the Contractor's notification.
- 5.2.4 If no observations have been submitted or if, despite the observations submitted by the Sub-contractor, the Contractor decides to pursue the recovery procedure, the Contractor may confirm

⁸ OJ L 248, 18.9.2013, p. 1

⁹ OJ L 292, 15.11.1996,
p.2.

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recovery by giving its reasons and by formally issuing a debit note ("Debit Note"), specifying the terms and the date for payment.

- 5.2.5 If the Contractor decides to pursue the recovery procedure pursuant to Clause 5.2.4, the Sub-contractor may continue the Dispute Resolution Procedure.
- 5.2.6 If payment has not been made by the date specified in the Debit Note, ECMWF shall recover the amount due:
 - 5.2.6.1 by offsetting it against any amounts owed to the Subcontractor; or
 - 5.2.6.2 by taking legal action in accordance with Clause 6.9.2.
- 5.2.7 If payment has not been made by the date set out in the Debit Note, the amount due shall bear interest at a reasonable rate for late payment interest.
- 5.2.8 Any partial payment shall first be appropriated against charges and interest on late payment and then against the principal.
- 5.3. Suspension of Payment
 - 5.3.1 The Contractor may, in accordance with the principle of proportionality, suspend payments in all or in part:
 - 5.3.1.1 if it has substantiated evidence that the Sub-contractor has committed Substantial Errors, irregularities or Fraud during its participation in ECMWF's selection procedure or during the performance of the Services, or if the Sub-contractor fails to comply with its obligations under this Subcontract and/or a Service Contract;
 - 5.3.1.2 if it has substantiated evidence that the Sub-contractor has committed Systemic or Recurrent Errors, irregularities, Fraud or breach of obligations under this Subcontract and/or a Service Contract which call into question the reliability of its internal control system or the legality and regularity of the underlying costs;
 - 5.3.1.3 if it suspects Substantial Errors, irregularities, Fraud or breach of obligations committed by the Sub-contractor during its participation in ECMWF's selection procedure or the performance of the Services and needs to check whether they have occurred; and
 - 5.3.1.4 if the Commission suspends or ceases payments to ECMWF under the Delegation Agreement.
 - 5.3.2 Before suspension of a payment, the Parties will seek settlement according to the first stage of the Dispute Resolution Procedure.
 - 5.3.2.1 If no settlement can be reached, the Contractor shall formally notify the Sub-contractor of its intention to suspend payments, specifying the reasons thereof and, in the cases referred to in Clauses 5.3.1.1 and 5.3.1.2, the necessary conditions for resuming payments. The Sub-contractor shall be invited to make any observations within thirty (30) calendar days after receipt of this notification.
 - 5.3.2.2 If, after examination of the observations submitted by the Sub-contractor, the Contractor decides to stop the procedure of payment suspension, the Contractor shall formally notify the Sub-contractor thereof.
 - 5.3.2.3 If no observations have been submitted or if, despite the observations submitted by the Sub-contractor, the Contractor decides to pursue the procedure of payment suspension, it may suspend payments by formally notifying the Sub-contractor, specifying the reasons for the suspension and, in the cases referred to in Clauses 5.3.1.1 and 5.3.1.2, the definitive conditions for resuming payments or, in the case referred to in Clause 5.3.1.3, the indicative date of completion of the necessary checks.
 - 5.3.2.4 If the Contractor suspends payments pursuant to Clause 5.3.2.3, the Sub-contractor may continue the Dispute Resolution Procedure.
 - 5.3.3 The suspension of payments shall take effect on the date when the notification is sent by the Contractor.
 - 5.3.4 In order to resume payments, the Sub-contractor shall endeavour to meet the notified conditions as soon as possible and shall inform the Contractor of any progress made in this respect.

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- 5.3.5 The Contractor shall, as soon as it considers that the conditions for resuming payments have been met or the necessary checks, including on-the-spot checks, have been carried out, formally notify the Sub-contractor thereof.
- 5.3.6 During the period of suspension of payments and without prejudice to the right to terminate this Subcontract and/or a Service Contract in accordance with Clause 5.5 (Termination), the Sub-contractor is not entitled to submit any new invoices.
- 5.3.7 The corresponding invoices (covering costs incurred during the period of suspension) may be submitted as soon as possible after resumption of payments or may be included in the first request for payment due following resumption of payments.

5.4. Suspension of Services

5.4.1 Suspension of the Services by the Sub-contractor

If any circumstances cause the Sub-contractor to form the opinion that performance of all or part of the Services would be impossible, excessively difficult or financially damaging, it shall inform the Contractor without delay, giving the necessary reasons and details and giving as much notice as possible of its intention to suspend performance. If time allows, the Sub-contractor shall consult with the Contractor, with a view to avoiding suspension of performance. Unless this Subcontract or the relevant Service Contract is terminated in accordance with Clause 5.5, the Sub-contractor shall, once the circumstances allow resuming the performance of the Services, inform the Contractor immediately.

5.4.2 Suspension of the Services by the Contractor

5.4.2.1 The Contractor may, in accordance with the principle of proportionality, suspend the Services in full or in part if:

- i. it has substantiated evidence that the Sub-contractor has committed Substantial Errors, irregularities or Fraud during its participation in ECMWF's selection procedure or during the implementation of the Services or if the Sub-contractor fails to comply with its obligations under this Subcontract and/or a Service Contract; or
- ii. it has substantiated evidence that the Sub-contractor has committed Systemic or Recurrent Errors, irregularities, Fraud or breach of obligations under the present or other agreements funded by Union funds which call into question the reliability of its internal control system or the legality and regularity of the underlying costs; or
- iii. it suspects Substantial Errors, irregularities, Fraud or breach of obligations committed by the Sub-contractor in its participation in ECMWF's selection procedure or in the performance of the Services and needs to check whether they have occurred; or
- iv. the Commission has suspended or is threatening to suspend all or part of CAMS/C3S, including or requiring the relevant Services.

5.4.2.2 Before suspension, the Parties will seek settlement according to the first stage of the Dispute Resolution Procedure.

5.4.2.3 If no settlement can be reached, the Contractor shall formally notify the Sub-contractor of its intention to suspend, specifying the reasons thereof and in the cases referred to in Clauses 5.4.2.1 (i) and 5.4.2.1 (ii), the necessary conditions for resuming the performance. The Sub-contractor shall be invited to submit observations within thirty (30) calendar days from receipt of this notification.

5.4.2.4 If, after examination of the observations submitted by the Sub-contractor, the Contractor decides to stop the suspension procedure, it shall formally notify the Sub-contractor thereof.

5.4.2.5 If no observations have been submitted, or if, despite the observations submitted by the Sub-contractor, the Contractor decides to pursue the suspension procedure, it may proceed with the suspension by formally notifying the Sub-contractor thereof, specifying the reasons for the suspension, and in the cases referred to in Clauses 5.4.2.1 (i) and 5.4.2.1(ii) the definitive conditions for resuming the implementation or, in the case referred to in Clause 5.4.2.1(iii), the indicative date

of completion of the necessary checks.

- 5.4.2.6 If the Contractor proceeds with the suspension of the Services pursuant to Clause 5.4.2.5, the Sub-contractor may continue the Dispute Resolution Procedure.
- 5.4.2.7 The suspension of the Services pursuant to Clause 5.4.2.5 shall take effect on the day of the receipt of the notification by the Sub-contractor or on a later date, where the notification so provides.
- 5.4.2.8 In order to resume the Services, the Sub-contractor shall endeavour to meet the notified conditions as soon as possible and shall inform the Contractor of any progress made in this respect.
- 5.4.2.9 Unless this Subcontract or the relevant Service Contract is terminated under Clause 5.5 (Termination), the Contractor shall as soon as it considers that the conditions for resuming the Services have been met or the necessary checks, including on-the-spot checks, have been carried out, formally notify the Sub-contractor thereof.
- 5.4.3 Any cost resulting from Commitments relating to the suspended Services and made by the Sub-contractor during the period of suspension shall not be accepted by the Contractor.

5.5. Termination

- 5.5.1. The Subcontract and/or a Service Contract is terminated automatically and without further formality in the event of termination of the Framework Agreement and/or Service Contract executed under the Framework Agreement. The relevant provisions of the Framework Agreement apply.

5.5.2 Termination by the Contractor

- 5.5.2.1 The Contractor may at any time in any of the following events, immediately terminate this Subcontract and/or a Service Contract by notice in writing without compensation to the Sub-contractor provided always that such termination shall not prejudice or affect any right of action or remedy which shall have accrued or shall accrue thereafter to the Contractor:
 - i. if the Sub-contractor or any persons having powers of representation, decision making or control over it is subject to an Insolvency Event; or
 - ii. if there is a Critical Service Failure; or
 - iii. upon the occurrence of an infringement under Clause 5.8.4.2 (Infringement) that cannot be remedied; or
 - iv. if the Contractor, acting reasonably, considers that the Sub-contractor has undergone changes in its legal, financial, technical, organisational or ownership situation or in its systems, rules or procedures which are likely to substantially affect the performance of the Services or call into question the outcome of its selection by the Contractor; or
 - v. the Sub-contractor has failed to comply with its obligations under this Subcontract and/or a Service Contract; or
 - vi. in the event of Force Majeure notified in accordance with Clause 5.7 (Force Majeure) or in the event of suspension of the Services by the Sub-contractor, where it appears to the Contractor that resuming the Services is impossible or would call into question the Sub-contractor's selection by the Contractor; or
 - vii. if the Sub-contractor or any Related Person has been found guilty of professional misconduct proven by a final judgement or award; or
 - viii. if the Contractor has substantiated evidence that the Sub-contractor or any Related Person has committed Fraud, Corruption or is involved in a Criminal Organisation, Money Laundering or any other illegal activity detrimental to the financial interests of the Contractor; or
 - x. if the Contractor has substantiated evidence that the Sub-contractor or any Related Person has committed Substantial Errors, irregularities or Fraud in the performance of the Services, including in the event of submission of false information during its selection by the Contractor; or
 - xi. if the Sub-contractor or any persons having powers of representation, decision-making or

control over any of them have their names entered into the Union's Central Exclusion Database.

5.5.3 Termination by the Sub-contractor

The Sub-contractor may terminate this Subcontract and/or a Service Contract immediately by notice in writing to the Contractor if the Contractor shall fail to pay any undisputed sum due under the terms of this Subcontract and/or a Service Contract (otherwise than in consequence of any Default on the part of the Sub-contractor) and such sum remains unpaid for thirty (30) calendar days after written notice from the Sub-contractor that such sum has not been paid (such notice to contain a warning of the Sub-contractor's intention to terminate).

5.5.4 Termination for Convenience

If either Party believes that this Subcontract and/or a Service Contract can no longer be effectively or appropriately carried out, it shall consult the other Party. Failing agreement on a solution, either Party may terminate this Subcontract and/or a Service Contract by formally notifying the other Party thereof. Termination shall take effect forty five (45) calendar days after receipt of the notification, unless agreed otherwise by the Parties.

5.5.5 In the event of a Force Majeure notification in accordance with Clause 5.7 (Force Majeure), the Sub-contractor may enter into discussions with the Contractor according to Clauses 2.6.4.1 to 2.6A.4 and, subject to the outcome of those discussions, may write to the Contractor to terminate this Subcontract with a two month notice period.

5.5.6 Expiry and termination of this Subcontract, howsoever arising, shall cause each Service Contract then in force at the effective date of such expiry or termination to terminate.

5.6. Consequences of Termination or Expiry

5.6.1 Any termination or expiry of this Subcontract and/or a Service Contract (however occasioned) shall not affect any accrued rights or liabilities of either Party nor shall it affect the coming into force or continuance in force of any provision thereof which is expressly or by implication intended to come into or continue in force on or after such termination or expiry.

5.6.2 Neither Party shall be entitled to claim compensation by the other Party on account of a termination or expiry of this Subcontract and/or a Service Contract.

5.6.3 Sub-contractor's Obligations on Termination or Expiry.

5.6.3.1 On the termination or expiry of this Subcontract and/or a Service Contract, the Sub-contractor shall co-operate with the Contractor and with any new contractor under any arrangements notified to him by the Contractor, to effect a full and orderly transition to the Contractor or to such new contractor and shall furnish the Contractor or a new contractor with any work in progress, Deliverables, Assets, information or documentation reasonably required by the Contractor.

5.6.3.2 The Sub-contractor shall comply with all reasonable instructions from the Contractor with regard to termination or expiry and shall take reasonable steps to mitigate any costs which the Contractor shall incur as a result of termination of this Subcontract and/or a Service Contract.

5.6.3.3 On the Contractor's request, the Sub-contractor shall promptly deliver to the Contractor all the Contractors and ECMWF materials and documents in the Sub-contractor's (or any Sub-contractor Personnel's) possession together with all the documents and information (in any format) requested by the Contractor at the time of termination or expiry.

5.6.4 Personnel on Termination or Expiry

5.6.4.1 It is not anticipated that the Services to be provided under this Subcontract or any Service

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Contract will or are likely to give rise to a relevant transfer for the purposes of the Transfer of Undertakings (Protection of Employment) Regulations 2006 as amended ("TUPE") or any equivalent or analogous Law in any part of the world. Accordingly, the Sub-contractor hereby indemnifies the Contractor and ECMWF against all Loss together with reasonable legal expenses suffered by the Contractor and ECMWF, which arise out of or in connection with:

- i. any breach by the Sub-contractor or a Sub-contractor of Regulation 13 (duty to inform and consult representatives) of TUPE or any equivalent or analogous provision in any Law in any part of the world;
- ii. any act or omission by the Sub-contractor or a Sub-contractor in respect of any of their obligations or liabilities in relation to current or former Sub-contractor Personnel; and
- iii. any claim for redundancy payment, unfair dismissal compensation or notice monies and expenses or a protective award, in connection with or as a result of any claim or demand by any such Sub-contractor Personnel whether arising directly from the termination or expiry of the Agreement or otherwise directly from TUPE and whether in respect of their employment or its termination (including any claim that they are employed either by the Contractor/ECMWF or by a person engaged to provide services which are the same or similar to the Services (a "New Supplier") as a result of TUPE or that ECMWF or a New Supplier has otherwise inherited liability as a result of TUPE).

5.6.4.2 The Sub-contractor's indemnification obligations herein are subject to:

- i. the Contractor promptly providing the Sub-contractor with notice of any matter which may come within the scope of the indemnity;
- ii. the Contractor allowing the Sub-contractor sole control over the defence of any claim and any related settlement negotiations; and
- iii. the Contractor reasonably co-operating with the Sub-contractor's requests for assistance.

5.7 Force Majeure

- 5.7.1 A Party faced with Force Majeure shall formally notify the other Party without delay, stating the nature, likely duration and foreseeable effects.
- 5.7.2 The Parties shall use all reasonable endeavours to limit any damage due to Force Majeure. They shall use all reasonable endeavours to resume the performance of the Services as soon as possible.
- 5.7.3 The Party faced with Force Majeure shall not be held to be in breach of its obligations under this Subcontract if it has been prevented from fulfilling them by Force Majeure.

5.8. Indemnities

- 5.8.1 The Sub-contractor shall indemnify and hold harmless the Contractor for and against all Losses together with all reasonable legal costs, and disbursements suffered or incurred by the Contractor and that may be finally awarded by a court in respect of any Claim, that:
- 5.8.1.1 the operation, possession or use of any part of the Services; or
- 5.8.1.2 the Contractor/ECMWF's use, reproduction or exploitation of the Deliverables and/or the Assets; or
- 5.8.1.3 the Contractor/ECMWF's use of the Integrated Technology in accordance with the rights granted under Clause 3.4 (Integrated Technology); infringes any Intellectual Property Rights or confidentiality rights of the said third party.
- 5.8.2 The Sub-contractor shall also indemnify and hold harmless the Contractor for and against all Losses together with all reasonable legal costs and disbursements suffered or incurred by the Contractor as a result of:
- 5.8.2.1 a breach of the Sub-contractor's obligations under his confidentiality obligations set out in Clause 2.7 (Confidentiality);
- 5.8.2.2 a breach of the Sub-contractor's obligations to comply with any applicable Laws set out in Clause 2.1.3 (Compliance with applicable Laws);
- 5.8.2.3 death or personal injury caused by any act or omission by the Sub-contractor or any Sub-contractor Personnel;
- 5.8.2.4 any Loss of third party property caused by any act or omission of the Sub-contractor or any

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Sub-contractor Personnel.

5.8.3 Upon becoming aware of a Claim:

5.8.3.1 the Contractor shall notify the Sub-contractor in writing and will, at the Sub-contractor's expense, give to the Sub-contractor such authority, information and assistance as it shall reasonably require for the defence or settlement of such Claim.

5.8.3.2 the Sub-contractor shall undertake at his own expense all negotiations and other work to defend or settle any such Claim.

5.8.4 Infringement

5.8.4.1 If a Court of competent jurisdiction holds or legal Counsel (having been selected and briefed by mutual agreement between the Parties) advises that, in respect of any part of the Services, there is an infringement as aforesaid, the Sub-contractor shall, at his own expense and at his option:

- i. procure for the Contractor and ECMWF the right to continue using such part of the Services;
- ii. replace such part with non-infringing substitutes, provided that such substitutes do not entail a material diminution in performance or function; or
- iii. modify such part so that it becomes non infringing without incurring a material diminution in performance or function.

5.8.4.2 In the event that the Sub-contractor is unable to exercise any of the options set out above within a reasonable time then the Contractor, without prejudice to any rights or remedies either Party may have under this Subcontract , under a Service Contract or at law, shall be entitled to terminate the licence for any affected Software at no cost to the Contractor/ECMWF and the Sub-contractor shall refund Price and any other charges paid by the Contractor in respect of the affected Service. If any such infringement prevents the Services from being performed in accordance with the Specification then the Contractor will be able to terminate this Subcontract and/or the relevant Service Contract in accordance with Clause 5.5 (Termination).

5.8.5 The Sub-contractor shall not be liable to the Contractor in respect of any alleged infringement as aforesaid if the same results from any unauthorised alteration or modification to any part of the Services without the prior consent of the Sub-contractor.

5.8.6 Subject to the other terms of this Subcontract and/or a Service Contract, each Party agrees to indemnify and hold harmless the other Party for any claims, relating to damage or injury of any kind which the first Party causes to third parties in the performance of its tasks, activities and responsibilities under this Subcontract and/or a Service Contract.

5.9. Limits of Liability

5.9.1 Neither Party shall be liable to the other for any loss of profit, loss of revenue, any loss of turnover, goodwill, reputation or opportunity or any indirect, or consequential loss, arising out of or in connection with:

5.9.1.1 this Subcontract or

5.9.1.2 a Service Contract

whether or not that Party had been informed of or was aware that there was a serious possibility of such loss.

5.9.2 Subject to Clause 5.9.6, neither Party shall be liable to the other for any injury, loss or damage to staff, contractors or property arising out of activities undertaken pursuant to this Subcontract and/or a Service Contract except and to the extent that such loss, damage or injury is caused by that Party's wilful misconduct or gross negligence.

5.9.3 Sub-contractor's Total Aggregate Liability

Subject to Clauses 5.9.1 and 5.9.2, the Sub-contractor's total aggregate liability in respect of all Loss caused by its own and its Sub-Sub-contractors' Defaults under or in connection with a Service Contract shall not exceed two (2) times the Price agreed for the same Service Contract.

5.9.4 The Contractor's Total Aggregate Liability

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Subject to Clauses 5.9.1 and 5.9.2, the Contractor's total aggregate liability (in addition to its obligation to pay the Price for the Services) in respect of all Loss caused by its own Defaults under or in connection with a Service Contract shall not exceed two (2) times the Price agreed for the same Service Contract.

5.9.5 Clauses 5.9.3 (Sub-contractor's Total Aggregate Liability) and 5.9.4 (the Contractor's Total Aggregate Liability) shall not limit either Party's liability in respect of:

5.9.5.1 any amounts payable by way of indemnity pursuant to this Subcontract and/or a Service Contract; or

5.9.5.2 for Loss occasioned by wilful Default, wilful repudiation of all or part of this Subcontract and/or a Service Contract by the Sub-contractor, or abandonment of work by the Sub-contractor in breach of the terms of this Subcontract and/or a Service Contract, and no amount payable in respect of the items set out in this Clause 5.9.5 shall count towards the caps on liability under 5.9.3 (Sub-contractor's Total Aggregate Liability) and 5.9.4 (the Contractor's Total Aggregate Liability).

5.9.6 Notwithstanding any contrary provision in this Subcontract and/or a Service Contract, neither Party limits or excludes its liability in respect of:

5.9.6.1 any death or personal injury caused by its negligence;

5.9.6.2 any fraudulent misrepresentation ; or

5.9.6.3 any other statutory or other liability which cannot be excluded under applicable Law.

5.9.7 Categories of Direct Loss

Notwithstanding Clause 5.8.1 the Contractor shall be entitled to recover as a direct loss:

5.9.7.1 any additional operational and/or administrative costs and expenses arising from the Sub-contractor's Default, including costs relating to the time spent by the Contractor's management and employees in dealing with the consequences of the Default; and

5.9.7.2 reasonable costs and expenses incurred by the Contractor in rectifying a default of the Sub-contractor, and in procuring new or replacement Services for the remainder of the Term.

5.9.8 As some of the Deliverables shall be provided to users without any warranty as regards quality or suitability for any purpose, the Parties shall cooperate to defend any claim brought by a user relating to the same.

5.9.9 Subject to the other terms of this Subcontract and each Service Contract, each Party shall assume sole liability towards third parties, including liability for damage or injury of any kind sustained by third parties, in the course of the performance of its tasks, activities and responsibilities under this Subcontract and each Service Contract.

CLAUSE 6 - Miscellaneous

6.1. General Undertakings

6.1.1 Each Party undertakes to the other that:

6.1.1.1 it has all necessary power and authority to enter into and perform its obligations under this Subcontract and each Service Contract;

6.1.1.2 it has taken all requisite corporate and other action to approve the entering into and performance of this Subcontract and each Service Contract and shall provide evidence of that action to the other Party on request;

6.1.1.3 there are no actions, suits or proceedings or regulatory investigations pending or, to that Party's knowledge, threatened against or affecting that Party before any court or administrative body or arbitration tribunal that might affect the ability of that Party to meet and carry out its obligations under this Subcontract and each Service Contract;

6.1.1.4 once duly executed, this Subcontract and each Service Contract will constitute legal, valid and binding obligations on it;

6.1.1.5 it is solvent and able to perform all of its obligations under this Subcontract and each Service Contract and will remain so throughout the Term; and

6.1.1.6 entering into this Subcontract and each Service Contract will not cause that Party to be in breach of

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any other contract to which it is a Party or any statutory or other legal requirement.

6.2. Language

All requests for payments, reports and documents under this Subcontract and each Service Contract shall be transmitted in English.

6.3. Severance

If any provision of this Subcontract or each Service Contract is held invalid, illegal or unenforceable for any reason by any Court of competent jurisdiction, such provision shall be severed and the remainder of the provisions hereof shall continue in full force and effect as if this Subcontract and each Service Contract had been executed with the invalid illegal or unenforceable provision eliminated. In the event of a holding of invalidity so fundamental as to prevent the accomplishment of the purpose of this Subcontract, the Contractor and the Sub-contractor shall immediately commence good faith negotiations to remedy such invalidity.

6.4. Amendments to this Subcontract

6.4.1 Any amendment to the Agreement and/or each Service Contract shall be agreed in writing by the duly authorised representatives of each Party, identified at Clause 2.4.1.

6.4.2 An amendment to this Subcontract and/or each Service Contract may not have the purpose or the effect of making changes to this Subcontract and/or the relevant Service Contract which would call into question the Sub-contractor's selection by the Contractor.

6.4.3 Amendments to this Subcontract and/or each Service Contract shall enter into force on the date on which the last Party signs them,

6.5. Independence of Sub-contractor

6.5.1 Nothing in this Subcontract or any Service Contract is intended to, or shall be deemed to, establish any partnership or joint venture between the Parties, constitute any Party the agent of another Party, or authorise any Party to make or enter into any commitments for or on behalf of any other Party.

6.5.2 Each Party confirms it is acting on its own behalf and not for the benefit of any other person.

6.6. No Third Party Rights

Subject to the provisions of Clause 5.1 (Audits), no one other than a Party to this Subcontract, or a Service Contract (as appropriate) shall have any right to enforce any of its terms.

6.7. Entire Agreement

This Agreement and each Service Contract (as appropriate) constitutes the entire understanding between the Parties relating to the subject matter thereof and it shall supersede all prior negotiations, understandings or agreements with respect to such subject matter. The Parties acknowledge that neither is relying on any statement, representation, warranty or understanding (whether negligently or innocently made) of any person, whether a Party to this Subcontract, or to a Service Contract or not, other than is expressly set forth in this Subcontract or the Service Contract (as appropriate). Nothing in this Clause 6.7 shall, however, operate to limit or exclude any liability for fraudulent misrepresentation.

6.8. Provisions With Continuing Effect

6.8.1 The following Clauses together with all other provisions of this Subcontract and each Service Contract which are intended to have effect following any expiry or termination of this Subcontract and each Service Contract, shall survive expiry or termination of this Subcontract and each Service Contract to the extent permissible by law: Clause 1.2 (Definitions and Interpretation); Clause 2.1.7.1(ii) (PI Insurance Requirements); Clause 2.6 (Process for Resolving Disputes); Clause 2.7

(Confidentiality); Clause 3 (Assets and Intellectual Property Rights); Clause 5.1 (Audit); Clause 5.6 (Consequences of Termination); Clause 5.6.4.1 (Sub-contractor's Obligations on Termination); Clause 5.8 (Indemnities); Clause 5.9 (Limits of Liability); and Clause 6 (Miscellaneous).

6.9. Governing Law

- 6.9.1 Unless otherwise agreed in writing, the laws of Belgium shall govern the validity, construction and performance of this Subcontract and each Service Contract, without reference to its conflict of law principles.
- 6.9.2 In the event of a dispute arising in connection with this Subcontract and/or a Service Contract, the Parties shall comply with Clause 2.6 (Process for Resolving Disputes) if any dispute cannot be so settled, it shall be finally settled by Court located in Brussels (Belgium).

Done and executed in two (2) original copies, one copy for each Party.

For Subcontractor.

Name: Martin Benko
Title: RNDr., PhD.
Date:

For Contractor,

Dijk Fransaer
Managing Director
Date:

Annex 1 — The Service Contract: The Contractor and Subcontractor's Tender for the Framework Agreement

Annex 1 comprises the following documents:

Annex 2 to the Framework Agreement ECMWF/COPERNICUS/2017/CAMS_95f_VITO

Annex 2 — Sub Contractor's Scope of Services

During the development stage SHMU will be involved in providing local data to set-up the test application for Slovakia and will undertake an evaluation of the application once ready. When it moves to the next phase, the market trial, SHMU will be responsible for setting up a workshop to demonstrate the application to potential users (e.g. MoE certified experts and consultants carrying out EIAs, experts and stakeholders from the 70+district environmental and 8 regional environmental offices). Thereafter, with support from VITO they will investigate with those state administrators and the official (i.e. MoE-certified) air quality modelling experts, the next steps for possible acceptance and implementation of the application within their administration. One of the team members from SHMU is one of the MoE-certified EIA experts. They will also collate user feedback.

Service Contract 1

Period: 01/04/2017 until 30/09/2017

Work package # CAMS_95f10 Design and Development Phase

Description of tasks and deliverables

Task 95f11: Evaluation of the CAMS reanalysis products for the demonstration area of Slovakia. Off-line analysis of the air quality data produced for Slovakia using the CAMS data as background, coupled to IFDM.

SHMU is responsible for the following tasks:

- Agree with VITO on a suitable demonstration city for the reference run evaluation.
- Collect and provide VITO with their most recent best available emission data (point sources, traffic intensities, fleet composition etc..) for that demonstration city to allow VITO set-up an air quality reference simulation using IFDM coupled to the appropriate CAMS background data.
- *Deadline for the first version of data: 15th of May 2017*
- Supply appropriate in-situ data to validate the resulting data.
- SHMU will also provide support to VITO in answering queries regarding data quality, format and handling. If requested they will also re-format the data to the required input if possible.
- Feedback on the suitability of the CAMS-IFDM high resolution map and data for air quality reporting & assessment in Slovakia including:
 - comparison to their current methodology of preparing air quality maps and data at SHMU. For a similar same domain.
 - a comment on the quality of the resulting CAMS-IFDM high resolution map
 - an evaluation of the quality of the CAMS data for both the case study area and all of Slovakia, with a comment on the suitability of use of this data going forward

Task 95f13 : Deployment: VITO will deploy the ATMOSYS-CAMS service over Slovakia in collaboration with their partner SHMU.

In this task a maximum of 2 case studies (ideally past cases) chosen by SHMU will be implemented in the ATMOSYS planning service. They will also be prepared off-line to test the performance of the ATMOSYS planning application.

SHMU is responsible for the following tasks:

- Agree with VITO on a suitable case studies.
- Collect and provide VITO with the required emission data (point sources, traffic intensities, fleet composition etc..) to allow VITO to set-up the case studies.
- *Deadline for the first version of data: 2nd of June 2017*

Task 95f14 : Validation and evaluation. In this task, the SHMU and VITO experts will evaluate the CAMS-based ATMOSYS planning service and compare it against existing air quality assessment studies.

SHMU is responsible for the following tasks:

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- To evaluate the performance and output of the ATMOSYS-CAMS planning application that was used for the case studies in Task 95f13. This evaluation should:
 - o build on the Task 95f11 evaluation, providing information on the performance and quality of the simulations run via the application
 - o provide some feedback on the user experience in using the application.
- This will be summarized in a brief short evaluation report which will be used as input for deliverable D95f.1.4.1, the ATMOSYS-CAMS performance evaluation report for Slovakia.

Service Contract 2

Period: 01/10/2017 until 30/06/2019

Work package # CAMS_95f20 Market Trial Phase

Description of tasks and deliverables

Task 95f21: User Training Workshop in Slovakia:

SHMU is responsible for the following tasks:

- Identification of the potential users (e.g. MoE certified experts carrying out EIAs) of the ATMOSYS planning application in Slovakia, including the key district and regional environmental office personnel that are responsible for local air quality policy with regard to assessment of air pollution reduction measures (e.g. for traffic hotspots) on a local scale and/or for assessing the impact of local developments on the air quality.
- Organization of a 1-day workshop in Slovakia to which those users and key stakeholders will be invited for a demonstration of the application and the case studies established during SC1. This will include any translations required.
- Gather feedback from the users and formulate actions for further follow-up to stimulate uptake of the application.
- An assessment of the Potential for Uptake of the ATMOSYS-CAMS application in Slovakia, addressing the following:
 - o List of potential users
 - o Feedback of their experience of the application
 - o Description of how the application could be launched in Slovakia detailing potential channels for uptake, barriers to uptake and next steps to be taken.
 - o This report should be updated after 12 months

Deliverables				
#	Responsible	Nature	Title	Due
D95f.2.1.1	SHMU	Report	Assessment of the Potential for Uptake in Slovakia	M12, M24 (update)

Milestones				
#	Responsible	Title	Means of verification	Due
M95f.2.1.1	SHMU	User Workshop Held	Workshop Minutes	M10

Annex 3- Financial Annex

1 Payment plan

All work packages and tasks will be covered under the "Fixed Price" payment method

						Duration	Amount (EUR)
Price Framework Contract for Subcontractor SHMU						27 months	7 000,00
Price Service Contract 1						6 months	1 950,00
Price Service Contract 2						21 months	5 050,00
Payment number	Payment method	Date request for payment	Period of activities / Milestone covered	Activities covered by payment	Amount (EUR)	Percentage	Cumulative budget (EUR)
1	Fixed Price	31/10/2017	Service Contract 1 - 01/04/2017 to 30/09/2017	All tasks, milestones and deliverables planned in the contract before 30/09/2017	1950,00	27.9%	
2	Fixed Price	31/07/2018	Service Contract 2 - 01/10/2017 to 30/06/2018	All tasks, milestones and deliverables planned in the contract before 30/06/2018	2050,00	29.3%	
3	Fixed Price	31/07/2019	Service Contract 2 - 01/07/2018 to 30/06/2019	All tasks, milestones and deliverables planned in the contract before 30/06/2019	3000,00	42.8%	
TOTAL						100%	

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Annex 4 — Software – Pre-Existing Technology

Pre-existing industrial and intellectual property of Contractor:

Access Rights to the ATMOSYS air quality management (planning component) software tool. VITO excludes specifically from its obligation to grant access rights to Pre-Existing Technology, - all source codes of the ATMOSYS air quality management software tool and the various model components.

Within this Project a demonstration application for SHMU will be established. SHMU and the potential users may have access to this demonstration application. Ownership of the application and all source codes is with VITO.

ATMOSYS is the umbrella (trademark) name for a suite of modular air quality management software tools (and web apps) that have been created for air quality assessment, source apportionment, forecasting, planning and service validation. The key underlying software and air quality models (computer programs) are as follows:

- OPAQ for air quality forecasting which comprises of the scientific models RIO and OVL
- The IFDM model for local scale air quality assessments, source apportionment and planning studies
- FASTRACE a road traffic emission that builds upon the emission factors used in COPERT IV

The ATMOSYS package also contains various visualization and analysis functionalities and tools. Here is for example a summary of the functionalities of the scenario planning part:

- Sector contributions analysis: determination of the contribution of each emission sector (traffic, residential, industry..) at a particular point on the map, shown in a pie-chart.
- Source zone contributions: determination of the contribution of each source zone (e.g. administrative zone within the city or region) at a particular point on the map, also shown in a pie chart.
- Sector scenario tool : where each sector/source zone can be scaled and the impact on the sector/zone contributions assessed. This functionality may enable the user to perform an initial screening of air quality mitigation plans.
- Validation tool : functionality to load up a measurement file and perform a simple validation exercise for the presented air pollutant concentration map.

These functionalities are integrated into the visualization ATMOSYS dashboard which is developed to the customer's needs.

The ATMOSYS air quality management system is built upon a number of **third party software tools** to which VITO does not hold the IPR. The table below specifies the software used and its licensing model.

<i>dependency</i>	<i>license model</i>	
spring framework	ASL 2.0	https://www.apache.org/licenses/LICENSE-2.0
hibernate	LGPL 2.1 / ASL 2.0	https://www.gnu.org/licenses/old-licenses/lgpl-2.1.html
postgresql	PostgreSQL license	https://opensource.org/licenses/postgresql
tomcat-servlet-api	ASL 2.0 / CDDL 1.0	https://opensource.org/licenses/CDDL-1.0
jackson-databind	ASL 2.0	
h2	MPL 2.0 / EPL 1.0	https://www.mozilla.org/en-US/MPL/2.0/
junit	EPL 1.0	
guava	ASL 2.0	
slf4j	MIT license	https://opensource.org/licenses/MIT
logback-classic	EPL 1.0 / LGPL 2.1	
lombok	MIT license	
mail	CDDL 1.0 / GPL 2 + CE	http://openjdk.java.net/legal/gplv2+ce.html
geotools	LGPL 2.1	
jai_core	JAI license	http://download.java.net/media/jai/builds/release/1_1_3/LICENSE-jai.txt
commons-lang3	ASL 2.0	
commons-io	ASL 2.0	
amqp-client	ASL 2.0 / MPL 1.1 / GPL 2.0	https://www.mozilla.org/en-US/MPL/1.1/
apache poi	ASL 2.0	
jfep	ASL 2.0	
de.ruedigermoeller fst	ASL 2.0	

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When deployed for a client, a number of additional (open source) datasets may be used. The usage depends on the configuration of the ATMOSYS components by a VITO researcher and the availability of local (bottom-up) information provided by the client.

- Depending on the local availability of a traffic network & intensity information, data from the open streetmap project (<http://www.openstreetmap.org>) is employed

- E-PRTR point sources may be used

- TREMOVE data (<http://www.tmlleuven.be/methode/tremove/>) may be used for fleet composition

- Depending on the necessity to include street canyon parametrisations, the OSPM model

(<http://envs.au.dk/en/knowledge/air/models/ospm/>) is used. VITO is not allowed to transfer a license to a third party for this particular model.