

# Contract Awards

## under Copernicus Delegation Agreement

### 1 January 2017 to 31 December 2017<sup>1</sup>

---

<sup>1</sup> One or more Service Contracts may be awarded under a Framework Agreement. This list covers Service Contracts awarded in the period mentioned above. The relevant Framework Agreement may have been awarded in a previous period.

ITT Ref.	Title	Date of award of Framework Agreement (FA) and of Service Contract (SC)	Name of recipient	Address of recipient	Amount of Framework Agreement, Euro	End date of Framework Agreement	Amount of Service Contract Awarded, Euro
C3S_23a	Software Infrastructure for the Climate Data Store (CDS)	FA: 26 May 2016 SC2: 25 Sep 2017	Telespazio Vega UK Ltd	350 Capability Green Luton, LU1 3LU United Kingdom	1,997,000.00	7 Jun 2019	947,819.24
<p>Description:</p> <p>This contract is for development of software infrastructure for a Climate Data Store (CDS) that will provide access to climate data and tools needed for climate services development and delivery. The software infrastructure will support:</p> <ul style="list-style-type: none"> <li>— A web portal providing a central and holistic view of all information available to the C3S;</li> <li>— Consistent and seamless access to data repositories distributed over multiple data suppliers;</li> <li>— A catalogue of all data and products available;</li> <li>— Provision of quality information on all data and products;</li> <li>— Implementation of toolboxes to allow users to perform computations on the data and develop information products;</li> <li>— Performance monitoring in terms of usage, system availability of the CDS, response time(s).</li> </ul>							
C3S_23b	Provision of Cloud Hosting Services for Climate Data Store (CDS)	FA: 10 Oct 2017 SC1(BL): 10 Oct 2017 SC1(OPT1): 1 Nov 2017 SC1(OPT2): 1 Nov 2017	CloudFerro sp. z o.o.	ul. Nowogrodzka 31 00-511 Warsaw Poland	1,583,918.41	31 Dec 2019	SC1(BL): 948,575.34 SC1(OPT1): 212,914.30 SC1(OPT2): 146,880.00
<p>Description:</p> <p>ECMWF as the Entrusted Entity for the Copernicus Climate Change Service (C3S) issued a contract for Provision of Cloud Hosting Services for the Climate Data Store (CDS). The Climate Data Store (CDS) constitutes the core building block of the C3S and will be at the heart of the C3S infrastructure. The objective of the contract is to assure the highest quality of service for the C3S users by hosting the Climate Data Store (CDS) on a on a fully managed On-premises Private Cloud with an additional public cloud service to allow for growth.</p> <p>SC(BL) - Service Contract based on the Baseline services and price SC(OPT2) - Service Contract based on Option 2 services and price</p>							
C3S_25	Software Development for the Climate Data Store (CDS) Toolbox	FA: 12 Aug 2016 SC2: 5 Dec 2017	B-Open Solutions Srl	Via Principe Eugenio 15 00185 Rome Italy	973,292.31	31 Aug 2019	474,659.69
<p>Description:</p> <p>This contract is for development of software for the Climate Data Store (CDS) Toolbox. The CDS is composed of a set of distributed data repositories containing all types of climate data and products ranging from very large datasets such as observation, reanalysis, climate projection, multi-model seasonal forecast products, to smaller and more elaborated value added products such as climate indicator maps, time series, tables, etc.</p> <p>One of the aims of the C3S is to provide an authoritative set of software (the CDS Toolbox) that will allow the users to develop applications that will make use of the content of the CDS. The Toolbox will be composed of:</p> <ul style="list-style-type: none"> <li>— Tools that perform basic operations on data, such as computation of statistics, sub-setting, averaging, value at points, etc.;</li> <li>— Workflows that combine tools by chaining them so that the output of some feeds as input to others;</li> <li>— Applications that make use of workflows and selected data and products of the CDS to build interactive webpages.</li> </ul>							

ITT Ref.	Title	Date of award of Framework Agreement (FA) and of Service Contract (SC)	Name of recipient	Address of recipient	Amount of Framework Agreement, Euro	End date of Framework Agreement	Amount of Service Contract Awarded, Euro
<p>These applications will be made available to users of the CDS via the C3S web portal, allowing them to perform data manipulation on the data and products of the CDS, and visualise their results. Users will also be able to share with other users of the CDS useful and quality controlled applications they have developed.</p> <p>The data available in the CDS will vary greatly in volume (kilobytes to petabytes), in format (GRIB, NetCDF) and in nature (observations, fields, time series).</p> <p>The contractor will:</p> <ul style="list-style-type: none"> <li>— Establish the minimum set of tools required (differences or re-gridding, as well as statistical computations such as means or standard deviations);</li> <li>— Review the existing software that could be used to implement this set of tools;</li> <li>— Design a common data model that can be used to combine data and products of different types;</li> <li>— Establish a method by which workflows using data and products that are held in various distributed data repositories can be orchestrated, allowing computation to be performed close to the data and data transfers to be minimised;</li> <li>— Implement a series of reference applications that will demonstrate all functions offered by the Toolbox and will be used as examples.</li> </ul> <p>The contractor will work closely with ECMWF and developments will follow an agile methodology. Technological choices will be based on existing open source software. Ownership of all rights in the resulting software will be assigned, through ECMWF, to the European Commission and ECMWF will release the resulting software, on behalf of the European Commission, under an open source licence. The architecture of the system will be open and extendible, and scale both in terms of the number of concurrent users and volume of available data.</p>							
C3S_34a Lot 3	Global climate projections: data access, product generation and impact of front line developments	FA: 12 Aug 2016 SC2: 2 Nov 2017	Met Office	FitzRoy Road Exeter, EX1 3PB United Kingdom	567,493.70	30 Nov 2018	304,889.81
<p>Lot 3 Title: Roadmap toward a reference set of climate projections for Europe (EUCP)</p> <p>Description:</p> <p>The contractor for Lot 3 will perform impact studies to assess the benefit of additional resources for front-line global simulations, in order to guide requirements and resource allocations for the operational phase of C3S. These studies will respond to sectoral (and associated ECV) requirements, by analysing how CMIP6/MIPs address these best. The contractor will investigate the comparative benefit of increased ensemble size versus resolution for global models, using for example simulations contributing to the CMIP6 HighResMIP as a reference, and linking the results to the specific needs of different economic sectors. The contractor will assess the benefit of initialised projections for the 1<sup>st</sup> 1/2 of the 21<sup>st</sup> Century, with a focus on advantages and disadvantages of estimating multi-decadal signals in the presence of a drifting model climate, and their consequences in terms of climate information to be used by sectoral applications. The work to be undertaken is closely linked to outcomes of relevant FP7/H2020 projects and CMIP5/CMIP6 simulations.</p>							
C3S_51 Lot 2	Evaluation and Quality Control Function for the Climate Data Store	FA: 12 Oct 2016 SC1(OPT): 25 Mar 2017 SC2: 12 Dec 2017	NPL Management Limited	Hampton Hill Teddington, TW11 0LW United Kingdom	2,040,765.20	31 Dec 2018	SC1(OPT): 78,656.41 SC2: 898,585.71
<p>Lot 2 Title: Quality Assurance for ECV Products from Observations</p> <p>Description:</p> <p>Activities in Lot 2 will address ECV products derived directly from observations without use of an assimilating model. Data used will include in situ observations and satellite measurements and will cover global and/or regional scales. An inventory of observational ECV products will be produced and include a description of the input observations and processing methods used as well as spatial coverage and resolution of the data, length of record and where relevant, product update frequency and timeliness. EQC activities in this Lot will expose strengths and limitations of each product based on information content and processing methods. Traceability of ECV products to the original observation sources is an essential requirement for assessment of uncertainties. Scientific assessment and gap analysis for observational ECV products will include a literature survey as a starting point. System maturity aspects will be considered for possible use in operational services provision. An optional work package includes additional development activities, tools and services, which will facilitate the engagement of user communities which use observational data via the C3S Climate Data Store.</p>							

ITT Ref.	Title	Date of award of Framework Agreement (FA) and of Service Contract (SC)	Name of recipient	Address of recipient	Amount of Framework Agreement, Euro	End date of Framework Agreement	Amount of Service Contract Awarded, Euro
C3S_311a	Collection and Processing of In Situ Observations						
<p>General Description:</p> <p>ECMWF as the Entrusted Entity for the Copernicus Climate Change Service (C3S) issued a number of services related to collection and processing of in situ observations in support of climate services development. The overall objective for this set of services is to improve access to available in situ instrumental data records and data streams from observing networks, as needed for monitoring climate change and to support climate science. The C3S has the ambition to provide open and free access to all observations relevant to climate services development via a unified Climate Data Store. Development of observational content for the Climate Data Store relies on the scientific framework provided by the Global Climate Observing System (GCOS).</p> <p>Goals to be addressed by the services tendered include: improvement of the historic instrumental record by means of data rescue, quality control and homogenisation of in situ observations; harmonisation of access to data from major archives of climate observations as well as specialised networks of observing sites; development of merged collections of in situ observations suitable for climate reanalysis; development of high-resolution ECV products for Europe.</p>							
C3S_311a Lot 1	Lot Title: Coordination of data rescue activities	FA: 22 Mar 2017 SC1: 22 Mar 2017	Met Office	FitzRoy Road Exeter, EX1 3PB United Kingdom	2,335,843.92	31 Mar 2021	1,242,054.47
<p>Description:</p> <p>The Contractor for Lot 1 will deliver a coherent set of services to support coordination and harmonisation of in situ data rescue activities around the world. The objective is to facilitate and support ongoing efforts to digitise documented historic instrumental data records and to make these records more easily accessible for further processing and analysis.</p> <p>The Contractor for this Lot shall:</p> <ul style="list-style-type: none"> <li>— Work with existing international data rescue support initiatives such as the Atmospheric Circulation Reconstructions over the Earth (ACRE) and the International Data Rescue Portal (I-DARE);</li> <li>— Develop and maintain a global inventory of known data rescue activities;</li> <li>— Support imaging and digitization activities for selected high-priority data records;</li> <li>— Provide data-rescue registry services including: <ul style="list-style-type: none"> <li>— Access to up-to-date information about completed, active and planned data rescue activities world-wide;</li> <li>— Access to standardised and searchable metadata on these activities;</li> <li>— Tools for identifying opportunities, gaps and priorities in data rescue;</li> <li>— Facilities to support collaboration on data rescue projects;</li> <li>— Facilities for submitting digitised data sets to international climate data archives;</li> <li>— Promote community tools for imaging, digitizing and quality control;</li> <li>— Promote best practices, data standards and metadata requirements.</li> </ul> </li> </ul>							
C3S_311a Lot 2	Lot Title: Access to observations from global climate data archives	FA: 1 Mar 2017 SC1: 1 Mar 2017	National University of Ireland Maynooth	County Kildare Maynooth Ireland	2,212,888.79	28 Feb 2021	937,957.51
<p>Description:</p> <p>The Contractor for Lot 2 will deliver services providing reliable access to data from managed archives of historic, quality-controlled, in situ climate observations. The objective is to rationalise, harmonise and improve access to the large variety of climate data archives existing at various locations around the world.</p> <p>The Contractor for this Lot shall:</p> <ul style="list-style-type: none"> <li>— Address near-surface observations over land and ocean;</li> <li>— Aim for maximum access to the entire instrumental data record available for the domains addressed;</li> </ul>							

ITT Ref.	Title	Date of award of Framework Agreement (FA) and of Service Contract (SC)	Name of recipient	Address of recipient	Amount of Framework Agreement, Euro	End date of Framework Agreement	Amount of Service Contract Awarded, Euro
<ul style="list-style-type: none"> <li>— Coordinate with existing climate data providers in Europe or elsewhere;</li> <li>— Broker access to quality-assured in situ observations with maximum spatial (global) and temporal (multi-decadal) coverage;</li> <li>— Manage differences and changes in data supply, sources, quality, formats etc.;</li> <li>— Harmonise data formats and metadata conventions;</li> <li>— Provide a uniform data service to users via the C3S Climate Data Store;</li> <li>— Develop a governance structure and operating rules together with the data custodians, to allow for continued operation of data services after the end of contract.</li> </ul>							
C3S_311a Lot 3	Lot Title: Access to observations from baseline and reference networks	FA: 1 Mar 2017 SC1: 1 Mar 2017	Consiglio Nazionale delle Ricerche — Istituto di Metodologie per l'Analisi Ambientale (National Research Council — Institute of Methodologies for Environmental Analysis)	Piazzale Aldo Moro 7 00185 Rome Italy	2,085,247.46	28 Feb 2021	1,273,390.35
<p>Description:</p> <p>The Contractor for Lot 3 will deliver services to provide reliable access to data from baseline and reference networks of observation sites. The objective is to rationalise, harmonise and improve access to measurements provided by the large variety of existing networks, to facilitate climate monitoring, estimation of ECVs and uncertainty assessments.</p> <p>The Contractor for this Lot shall:</p> <ul style="list-style-type: none"> <li>— Prioritise access to observations of ECVs that are not well observed from space;</li> <li>— Prioritise access to data that can be used and redistributed without restriction;</li> <li>— Address multiple atmospheric ECVs;</li> <li>— Provide timely access to observations from GCOS-relevant network components and systems supporting one or more ECVs;</li> <li>— Harmonise data formats and metadata conventions;</li> <li>— Make use of the coordination function carried out by the European Environment Agency;</li> <li>— Take account of the requirements of other Copernicus services for in situ network data;</li> <li>— Develop a governance structure and operating rules together with the network operators, to allow for continued operation of data services after the end of contract.</li> </ul>							
C3S_311a Lot 4	Lot Title: Climate monitoring products for Europe based on in situ observations	FA: 23 May 2017 SC1: 23 May 2017	Koninklijk Nederlands Meteorologisch Instituut (Royal Netherlands Meteorological Institute)	PO Box 201 3730 AE De Bilt Netherlands	1,908,730.90	31 Mar 2021	1,908,730.90
<p>Description:</p> <p>The Contractor for Lot 4 will deliver services for the provision of access to consistent time series and high-resolution maps of ECVs and derived indicators based on in situ observations within the European domain. The objective is to derive maximum benefit for climate services from existing European networks of observing sites managed by national meteorological and hydrological services.</p> <p>The Contractor for this Lot shall:</p> <ul style="list-style-type: none"> <li>— Build upon existing European activities such as the European Climate Assessment and Dataset project;</li> <li>— Develop a consistent set of climate data products addressing multiple ECVs for the European domain;</li> </ul>							

ITT Ref.	Title	Date of award of Framework Agreement (FA) and of Service Contract (SC)	Name of recipient	Address of recipient	Amount of Framework Agreement, Euro	End date of Framework Agreement	Amount of Service Contract Awarded, Euro
<ul style="list-style-type: none"> <li>— Address data access in coordination with existing institutional frameworks within Europe such as EUMETNET and EIONET;</li> <li>— Promote harmonisation of tools and practices, i.e. for homogenisation of time series and quality control;</li> <li>— Provide a uniform data service to users via the C3S Climate Data Store.</li> </ul>							
C3S_322	Regional Climate Reanalysis						
<p>General Description:</p> <p>ECMWF as the Entrusted Entity for the Copernicus Climate Change Service (C3S) issued contracts for the production of regional reanalyses covering geographical areas of special interest to European users of climate services. The regional reanalyses are needed to generate high-resolution, physically consistent, gridded estimates of Essential Climate Variables (ECVs, Bojinski et al. 2014) that will complement the information available from lower-resolution global reanalyses.</p> <p>The scope of activities for each contract includes:</p> <ul style="list-style-type: none"> <li>— development of a production system for regional reanalysis;</li> <li>— preparation and quality control of observations and other input data;</li> <li>— reanalysis production, post-processing and quality assurance;</li> <li>— user guidance and user support via the C3S Service Desk;</li> <li>— management, implementation and coordination.</li> </ul> <p>C3S shall take ownership of all regional reanalysis data products delivered by these contracts.</p>							
C3S_322 Lot 1	Lot Title: Regional Reanalysis Products for Europe	FA: 14 Aug 2017 SC1: 14 Aug 2017	Swedish Meteorological and Hydrological Institute	SE-601 76 Norrköping Sweden	3,295,716.59	31 Aug 2021	1,511,712.00
<p>Description:</p> <p>The Contractor for Lot 1 will generate and deliver regional reanalysis products for Europe based on the concept of a single pan-European reanalysis in accordance with the following requirements:</p> <ul style="list-style-type: none"> <li>— the spatial domain shall be a single domain consistent with CORDEX Region 4 (see <a href="http://www.cordex.org">www.cordex.org</a>);</li> <li>— the effective spatial resolution of data products shall be 10 km or less;</li> <li>— the reanalysis shall span a time period of at least 30 years continuing into present time;</li> <li>— the temporal resolution of data products shall be sufficient to resolve the diurnal cycle;</li> <li>— reanalysis products shall be updated on a monthly basis;</li> <li>— the reanalysis shall be produced using a single model-based data assimilation system with firm basis in estimation theory;</li> <li>— consistent estimates of uncertainty shall be generated based on explicit statistical assumptions on model errors and observation errors;</li> <li>— a well-defined strategy for ensuring temporal consistency of the reanalysis products shall be implemented;</li> <li>— well-defined strategies for quality assessment during production and post-production shall be implemented, e.g. based on comparison with alternative C3S ECV products derived from observations and/or global reanalyses.</li> </ul>							
C3S_322 Lot 2	Lot Title: Regional Reanalysis Products for the Arctic	FA: 23 Aug 2017 SC1: 23 Aug 2017	Norwegian Meteorological Institute	P.O.Box 43 Blindern 0313 Oslo Norway	3,099,999.00	31 Aug 2021	1,527,428.04
<p>Description:</p> <p>The Contractor for Lot 2 will generate and deliver regional reanalysis products for the Arctic based on the concept of a single pan-Arctic reanalysis in accordance with the following requirements:</p> <ul style="list-style-type: none"> <li>— the reanalyses shall assimilate the main components of the Arctic observing system, including satellite data;</li> <li>— the reanalyses shall make good use of complementary data on surface properties in the region, e.g. related to snow and sea ice;</li> </ul>							

ITT Ref.	Title	Date of award of Framework Agreement (FA) and of Service Contract (SC)	Name of recipient	Address of recipient	Amount of Framework Agreement, Euro	End date of Framework Agreement	Amount of Service Contract Awarded, Euro
<ul style="list-style-type: none"> <li>— the reanalyses shall span a time period that is as long as possible given the availability of observations and other input data;</li> <li>— spatial and temporal resolution of data products shall be commensurate with key processes affecting climate change in the region;</li> <li>— reanalysis products shall be updated on a monthly basis;</li> <li>— consistent estimates of uncertainty shall be generated based on explicit statistical assumptions on model errors and observation errors;</li> <li>— a well-defined strategy for ensuring temporal consistency of the reanalysis products shall be implemented;</li> <li>— well-defined strategies for quality assessment during production and post-production shall be implemented, e.g. based on comparison with alternative C3S ECV products derived from observations and/or global reanalyses.</li> </ul>							
C3S_34b	Regional climate projections						
<p>General Description:</p> <p>ECMWF as the Entrusted Entity for the Copernicus Climate Change Service (C3S) has issued contracts for providing access to climate projections at global and regional level, developing multi-model products focussed on projected values of Essential Climate Variables (ECVs), assessing the potential benefit of improving specific aspects in the production of climate projections (e.g. with respect to the standards specified in international inter-comparison projects), and filling recognized gaps in the production of regional projections. A common goal across the C3S activities is a comprehensive assessment of the projection uncertainties, with reliable estimations of the roles played by different emission scenarios, global and regional model formulation, and internal climate variability.</p> <p>These contracts are dedicated to the provision and assessment of regional projections produced with regional climate models (RCMs) for different emission scenarios (using an appropriate set of GCM lateral boundary forcings), to be developed as a part of the Service. The contract awarded under Lot 1 is concerned with providing technical solutions to access data from existing RCM simulations and boundary conditions with future experiments; the one awarded under Lot 2 will support a new and well-coordinated set of simulations for the European domain and its scientific exploitation.</p>							
C3S_34b Lot 1	Lot Title: Access to CORDEX simulations for the European domain	FA: 11 May 2017 SC1: 11 May 2017	Centre National de la Recherche Scientifique	1 place Aristide Briand 92195 Meudon France	1,279,194.04	30 Apr 2021	591,435.14
C3S_34b Lot 2	Lot Title: Definition and generation of a '3-D matrix' of RCM projections	FA: 11 May 2017 SC1: 11 May 2017	Swedish Meteorological and Hydrological Institute	SE-601 76 Norrköping Sweden	3,664,999.14	30 Apr 2021	651,751.00
C3S_422	Global and European Services						
<p>General Description:</p> <p>ECMWF as the Entrusted Entity for the Copernicus Climate Change Service (C3S) issued an Invitation to Tender (ITT) for services related to operational service provision. Copernicus Climate Change Service(C3S) aims to provide information to support the development of a climate resilient society. Through the Sectoral Information System (SIS), C3S has already 7 Proof of Concept elements (POCs) under development, addressing the needs of sectoral users in water, energy, insurance, agriculture and urban-management sectors in Europe. It is expected that building upon the experience gained from the POCs, a new set of operational services will be developed and delivered to address the sectors that are not served by the existing contracts.</p> <p>Lot 1 aims to develop a set of operational services able to provide relevant and high-impact climate information to users operating on a global scale, addressing sectors such as health, agriculture and food security, air and marine transport, tourism, biodiversity. The service will be designed to provide high-visibility to the development that is taking place within C3S. The service will build upon the experience acquired during the preparation of the proof of concept demonstrators that are being developed as part of the SIS but whilst those covered the European domain and focussed mainly on individual sectors, the service developed in the context of this Lot will need to be global and might have a broader scope across several sectors.</p> <p>Lot 2 aims to develop a set of services demonstrators based on the Climate Data Store (CDS) and able to provide relevant climate information to users operating at regional scale in Europe or in other regions of European interest. In particular, we are looking for services addressing the needs of one or more of the following sectors: transport, tourism, coastal areas, marine and fisheries, health and biodiversity. The service will build upon the experience acquired during the preparation of the proof of concept demonstrators that are being developed as part of the SIS. The services</p>							

ITT Ref.	Title	Date of award of Framework Agreement (FA) and of Service Contract (SC)	Name of recipient	Address of recipient	Amount of Framework Agreement, Euro	End date of Framework Agreement	Amount of Service Contract Awarded, Euro
will rely upon and act as demonstrators of the functionalities of the CDS and thus will need to be put together solely using the tools and datasets available on the CDS and be designed fully compatible and interoperable with them.							
C3S_422 Lot 1	Lot Title: Global Services	FA: 9 Aug 2017 SC1: 9 Aug 2017	O.M. Offshore Monitoring Ltd	Nicou Pattichi 26 3071 Limassol Cyprus	2,496,935.78	28 Feb 2019	SC1: 384,582.11
Description: The Contractor will deliver a set of operational climate services for the shipping industry. Working with sea captains and shipping companies the contract aims to extend the use of routing software to the seasonal time-scale whilst also looking at risks (e.g. icebergs) and opportunities (e.g. north passage) generated by a warmer world.							
C3S_422 Lot 1	Lot Title: Global Services	FA: 23 Aug 2017 SC1: 23 Aug 2017	Swedish Meteorological and Hydrological Institute	SE-601 76 Norrköping Sweden	2,543,533.80	28 Feb 2019	845,246.00
Description: The Contractor will deliver operational climate services addressing the needs of a varied set of communities all over the world. The Contractor having already engaged with national and sub-national organisations aims to develop climate services to their needs using the datasets and the tools available on the Climate Data Store. Among other things the contract will develop a global system able to make hydrological predictions as well as long-term projections.							
C3S_422 Lot 1	Lot Title: Global Services	FA: 9 Aug 2017 SC1: 9 Aug 2017	Stichting Wageningen Research — Wageningen Environmental Research	PO Box 47 6700 AA Wageningen Netherlands	2,496,773.79	31 Jan 2019	531,534.09
Description: The Contractor will deliver a set of operational global climate services for the agricultural sector. The Contractor will look at the main stable crops (Maize, wheat, rice and barely) and, using a combination of local agricultural calendar and climate information, will predict the global crop yield for the season to come.							
C3S_422 Lot 2	Lot Title: European Services	FA: 1 Sep 2017 SC1: 1 Sep 2017	Stichting Deltares	Boussinesqweg 1 2629 HV Delft Netherlands	1,247,066.00	28 Feb 2019	572,230.29
Description: The Contractor will deliver operational climate services for the coastal community. More specifically, the contract will put together detailed datasets of historical storm surges and associated coastal floods and will look at how these events could be changing with climate change. Specific case studies will be developed to address the needs of specific user communities.							
C3S_422 Lot 2	Lot Title: European Services	FA: 25 Oct 2017 SC1: 25 Oct 2017	Plymouth Marine Laboratory	Prospect Place, The Hoe Plymouth, PL1 3DH United Kingdom	1,496,172.04	31 Mar 2019	518,025.88
Description: The Contractor will deliver operational climate services for European fisheries. More specifically, the contract will examine how the climate-change induced alterations of the oxygen & nutrient level and surface circulation in the European shelf seas could alter the distribution and the seasonality of the fish stocks.							
C3S_422 Lot 2	Lot Title: European Services	FA: 25 Sep 2017 SC1: 25 Sep 2017	Tourisme, Transports, Territoires, Environnement Conseil	38 rue Sénac de Meilhan 13001 Marseille France	1,263,030.76	31 Mar 2019	269,191.75



ITT Ref.	Title	Date of award of Framework Agreement (FA) and of Service Contract (SC)	Name of recipient	Address of recipient	Amount of Framework Agreement, Euro	End date of Framework Agreement	Amount of Service Contract Awarded, Euro
<p>Description:</p> <p>The Contractor will deliver operational climate services for the tourism sector. The significant changes we expect to take place in the climate of Europe, if unmitigated, have the potential to significantly disrupt the tourism business. With specific indicators addressing the needs of winter, coastal and global tourism, the contract aims to provide the target users with the tools they need to prepare the sector for the changes to come.</p>							
C3S_422 Lot 2	Lot Title: European Services	FA: 31 Oct 2017 SC1: 31 Oct 2017	Vlaamse Instelling Voor Technologisch Onderzoek NV (Flemish Institute for Technological Research)	Boeretang 200 B-2400 Mol Belgium	999,809.94	30 Apr 2019	361,547.41
<p>Description:</p> <p>The Contractor will deliver operational climate services for the health sector. Using a combination of high-resolution urban modelling and vector borne diseases the contractor will provide health authorities in Europe with usable information about the likelihood of upcoming heatwaves or outbreaks of specific diseases.</p>							
C3S_433	Seasonal Forecasts						
<p>General Description:</p> <p>ECMWF as the Entrusted Entity for the Copernicus Climate Change Service (C3S) has awarded contracts for the production of seasonal forecast (SF) data for use as part of a multi-model seasonal forecast system. Contracts have been negotiated with several suppliers of seasonal forecast data, to cover the period 1.10.2015 to 31.12.2017. This period is separated into 2 phases: a Proof of Concept (POC) phase from 1.10.2015 to 31.12.2016, and a Pre-Operational phase from 1.1.2017 to 31.12.2017. Starting in January 2018, C3S should move to a fully operational phase, for which the procurement of seasonal forecast data will be the subject of a separate tender process for selecting up to 4 or 5 providers. ECMWF is contracting with 2 experienced providers (hereafter referred to as Core Providers), with the capability of contributing with a properly documented product from the start of the project, and with 2 providers yet in a development phase (hereafter referred to as Additional Providers), who have the potential to contribute to the multi-model system at some stage during the pre-operational phase.</p> <p>During the Proof-of-Concept (POC) phase, the 2 core providers will supply a Specified Data stream from the beginning of the contract, and will provide a Specified Data stream from an enhanced forecasting system before the end of the contract period. The Specified Data from these Providers, together with similar data provided by ECMWF, will be used for initial development of the Seasonal Forecasts services of C3S during the POC phase of the project. The Core Providers will be funded to provide both for the immediate provision of the specified data from the start of the project, and to enable each provider to implement a next generation, high resolution forecasting system with comprehensive re-forecast data. A contribution to the development of C3S multi-model products is also part of the contracted activities.</p> <p>The 2 Additional Providers will supply a Specified Data stream starting during the Pre-Operational phase (2017). These Additional Providers will demonstrate the potential to contribute to the multi-model system at some stage during the Pre-Operational phase. This data will feed into the C3S Seasonal Forecasts system as it becomes available. These additional Providers will be funded from the start of the POC phase and this funding is intended to support the introduction of a seasonal forecasting system with comprehensive re-forecast data.</p>							
C3S_433 Lot 1	Lot Title: Core Providers	FA: 18 Dec 2015 SC2: 10 Apr 2017	Météo-France	73 avenue de Paris 94165 Saint Mande Cedex France	1,454,786.06	31 Mar 2018	738,552.90
C3S_433 Lot 1	Lot Title: Core Providers	FA: 17 Dec 2015 SC2: 28 Feb 2017	Met Office	FitzRoy Road Exeter, EX1 3PB United Kingdom	1,699,999.76	28 Feb 2018	758,070.26

ITT Ref.	Title	Date of award of Framework Agreement (FA) and of Service Contract (SC)	Name of recipient	Address of recipient	Amount of Framework Agreement, Euro	End date of Framework Agreement	Amount of Service Contract Awarded, Euro
C3S_433 Lot 2	Lot Title: Additional Providers	FA: 14 Jan 2016 SC2: 6 Mar 2017	Centro Euro-Mediterraneo sui Cambiamenti Climatici S.C. A R.L.	Via Augusto Imperatore 16 73100 Lecce Italy	792,338.00	31 Mar 2018	384,452.00
C3S_433 Lot 2	Lot Title: Additional Providers	FA: 14 Jan 2016 SC2: 2 Feb 2017	Deutscher Wetterdienst	Frankfurter Str. 135 63067 Offenbach Germany	798,733.00	31 Mar 2018	384,575.00
C3S_441	Sectoral Information System – Proof of concept						

General Description:

ECMWF as the Entrusted Entity for the Copernicus Climate Change Service (C3S) has awarded contracts for a proof-of-concept aiming at demonstrating the value chain from earth observation and model outputs to actionable climate information in different Sectors. This Sectoral Information System (SIS) will translate and combine climate information from the Climate Data Store of the C3S and other sources to support users acting in specific sectors. Customized information products in the form of climate change indicators and ancillary information pertinent to the sectors and various EU sectoral policies will be disseminated via the Climate-ADAPT platform and the C3S data portal as it develops. The contractors will take full advantage of existing capabilities and products in European Member States and Commission Services. This proof-of-concept will require large sectoral user engagement, and demonstration of the value chain from earth observation and model simulations to tailored climate indicators addressing specific sectors, based on case studies. The focus will be over Europe. The contractors will bring together both providers and users to operate each component. The providers will be expected to deliver data products and information services and to engage with (and develop) the corresponding user communities across public and private sectors.

C3S_441 Lot 2	Lot Title: Energy	FA: 16 Dec 2015 SC2: 7 Jul 2017	Commissariat a l'energie atomique et aux energies alternatives	Batiment Le Ponant D 25 rue Leblanc 75015 Paris France	1,599,399.52	31 Mar 2018	518,131.07
------------------	-------------------	------------------------------------	--	---	--------------	-------------	------------

Description:

In the energy sector, on national or international levels, efforts have been put into addressing scientific and technological challenges in implementing efficient ways to produce and manage sources of energy. The resilience and efficiency of energy systems is strongly influenced by the weather and climate environment. Climate variables and ancillary information is key to address energy industry challenges in the most effective and innovative way. Changes in temperature, precipitation, sea level, and the frequency and severity of extreme weather events will likely affect how much energy is produced, delivered, and consumed. The sectoral information system in energy will consider climate change indicators and ancillary information important to the totality of all of the industries involved in the production and sale of energy, including fuel extraction, manufacturing, refining and distribution involving relevant users.

C3S_441 Lot 3	Lot Title: Any other area	FA: 9 Dec 2015 SC2: 27 Mar 2017	CGI IT UK Limited	250 Brook Drive Green Park Reading, RG2 6UA United Kingdom	1,600,000.00	31 Jan 2018	672,170.00
------------------	---------------------------	------------------------------------	-------------------	---	--------------	-------------	------------

Description:

Climate change and variability are important components in many sectors such as agriculture and forestry, health, coastal areas, insurance, tourism, and infrastructure. Climate information will be relevant to each of these sectors to a different degree and require specific indicators as well as ancillary information. In this lot, the contractor will develop a proof-of-concept SIS scheme addressing the insurance sector.

ITT Ref.	Title	Date of award of Framework Agreement (FA) and of Service Contract (SC)	Name of recipient	Address of recipient	Amount of Framework Agreement, Euro	End date of Framework Agreement	Amount of Service Contract Awarded, Euro
C3S_511	Quality Assessment of ECV Products	FA: 14 Nov 2017 SC1: 14 Nov 2017	Consiglio Nazionale delle Ricerche - Istituto di Scienze dell'Atmosfera e del Clima (National Research Council of Italy - Institute of Atmospheric Sciences and Climate)	Via Piero Gobetti, 101 40129 Bologna Italy	4,888,061.88	30 Jun 2021	1,695,308.40
<p>Description:</p> <p>ECMWF as the entrusted entity for the Copernicus Climate Change Service (C3S) has issued a contract for quality assessment of Essential Climate Variable (ECV) products derived from observations and from climate reanalyses. The contract contributes to the Evaluation and Quality Control (EQC) function of the C3S, which is designed to ensure that C3S users have access to the best available data about climate, and receive clear contextual guidance on the use of these data. C3S users include scientists, consultants, planners and policymakers, the media and the general public.</p> <p>This contract will carry out independent quality assessments of ECV products available on the C3S Climate Data Store (CDS), and will ensure that the assessments stay up-to-date. Information from the assessments will be used to develop user guidance on fitness-for-purpose for specific use cases. As the C3S enters its operational phase in 2018, the product assessments and user guidance will be available on the CDS as part of a standardised set of quality assurance information.</p>							
CAMS_26	Provision of ICOS NRT Atmospheric Observations	FA: 22 Sep 2017 SC1: 22 Sep 2017	Commissariat à l'énergie atomique et aux énergies alternatives	Bâtiment Le Ponant D 25 rue Leblanc 75015 Paris France	580,922.69	30 Jun 2021	236,204.44
<p>Description:</p> <p>The Integrated Carbon Observation System (ICOS) is one of the European Research Infrastructures selected as an ESFRI landmark. ICOS provides the long-term observations required to understand the present state and predict future behaviour of climate, the global carbon cycle and greenhouse gases emissions. This contract is for the provision of an improved access to the ICOS atmospheric data for the purposes of the validation of CAMS global and regional forecasts. The specific activities support routine and reliable preparation, transmission and quality control of ICOS data.</p>							
CAMS_27	Provision of NDACC Observations	FA: 20 Jul 2017 SC1: 20 Jul 2017	Royal Belgian Institute for Space Aeronomy	Ringlaan 3 B-1180 Brussels Belgium	800,000.00	30 Jun 2021	354,525.70
<p>Description:</p> <p>The international Network for the Detection of Atmospheric Composition Change (NDACC) is composed of more than 70 high-quality, remote-sensing research stations for observing and understanding the physical and chemical state of the stratosphere and upper troposphere and for assessing the impact of stratosphere changes on the underlying troposphere and on global climate. This contract is for the provision of an improved access to the NDACC atmospheric data for the purposes of the validation of CAMS global and regional forecasts. The specific activities support routine and reliable preparation, transmission and quality control of NDACC data.</p>							

ITT Ref.	Title	Date of award of Framework Agreement (FA) and of Service Contract (SC)	Name of recipient	Address of recipient	Amount of Framework Agreement, Euro	End date of Framework Agreement	Amount of Service Contract Awarded, Euro
CAMS_41	Development of global greenhouse-gas aspects	FA: 27 Apr 2016 SC2: 24 Jan 2017 SC3: 20 Dec 2017	Commissariat à l'énergie atomique et aux énergies alternatives	Bâtiment Le Ponant D 25 rue Leblanc 75015 Paris France	525,000.00	31 Mar 2019	SC2: 190,570.53 SC3: 208,265.71
<p>Description:</p> <p>This contract is for providing support for and further development of the global production modelling and data assimilation system of CAMS operated at ECMWF in the area of greenhouse gases representation in the troposphere and stratosphere. The contractor will provide:</p> <ul style="list-style-type: none"> <li>— An improved representation of methane fluxes from natural wetlands for use in the CAMS global production system;</li> <li>— A full assessment of the use of satellite observations of solar-induced chlorophyll fluorescence (SIF) to further optimize the land surface model used in the CAMS global production system;</li> <li>— Retrieval products from the GOSAT satellite in a timely manner;</li> <li>— Memoranda and reports.</li> </ul> <p>Besides, the contractor will provide advice and support for the team developing the global production system at ECMWF.</p>							
CAMS_42	Development of global reactive gases aspects	FA: 27 Sep 2016 SC2: 24 Nov 2017	Koninklijk Nederlands Meteorologisch Instituut (Royal Netherlands Meteorological Institute)	PO Box 201 3730 AE De Bilt Netherlands	1,299,999.98	30 Sep 2019	462,754.33
<p>Description:</p> <p>This contract is for providing support for and further development of the global production system of CAMS operated by the Global Service Provider, which delivers 3-dimensional distributions of reactive gases in the troposphere and stratosphere through data assimilation and numerical modelling. The contractor will deliver numerical code representing Chemical Mechanisms and the related Removal Process Parameterizations, will develop and test the assimilation of satellite radiance observations in the wavelength range between 0.24 and 2.5 µm, as well as memoranda and reports. The contractor will also provide advice and support for the team developing the global production system at ECMWF.</p>							
CAMS_43	Development of global aerosol aspects	FA: 16 Mar 2016 SC3: 5 Dec 2017	Centre National de la Recherche Scientifique	1 place Aristide Briand 92195 Meudon France	1,048,200.25	31 Mar 2019	425,686.85
<p>Description:</p> <p>This contract is for providing support for and further development of the global production modelling and data assimilation system of CAMS operated at ECMWF in the area of aerosols representation in the troposphere and stratosphere. The contractor will provide:</p> <ul style="list-style-type: none"> <li>— Aerosol processes representation schemes, including also removal parameterizations and dynamical source parameterizations for use in the CAMS global production system;</li> <li>— A tested prototype of a 1D-Var retrieval algorithm for aerosol optical depth;</li> <li>— Memoranda and reports.</li> </ul> <p>Besides, the contractor will provide advice and support for the team developing the global production system at ECMWF.</p>							
CAMS_44	Development of the global fire assimilation system	FA: 26 Apr 2016 SC3: 20 Dec 2017	Max Planck Gesellschaft zur Förderung der Wissenschaften e.V. vertreten durch Max-Planck-Institut für	Hahn-Meitner-Weg 1 55128 Mainz Germany	949,882.54	31 Mar 2019	386,933.76

ITT Ref.	Title	Date of award of Framework Agreement (FA) and of Service Contract (SC)	Name of recipient	Address of recipient	Amount of Framework Agreement, Euro	End date of Framework Agreement	Amount of Service Contract Awarded, Euro
			Chemie (Max Planck Society for the Advancement of Science represented by Max Planck Institute for Chemistry)				
<p>Description:</p> <p>This contract is for providing support for and further development of the global fire data assimilation system (GFAS) of CAMS operated at ECMWF. GFAS delivers near-real-time emissions of gases and aerosols through data assimilation and numerical modelling, as both a product in its own right and a critical input to CAMS atmospheric composition forecasts.</p> <p>The contractor will provide:</p> <ul style="list-style-type: none"> <li>— improvements for the current GFAS system in terms of diurnal cycle, of fire evolution forecast capabilities and of emission factors;</li> <li>— near-real-time Fire Radiative Power (FRP) observations from the GOES satellites;</li> <li>— an FRP monitoring system;</li> <li>— memoranda and reports.</li> </ul> <p>Besides, the contractor will provide advice and support for the team developing the global production system at ECMWF.</p>							
CAMS_50	Regional production	FA: 18 Nov 2015 SC2: 24 Feb 2017 SC3: 20 Dec 2017	Météo-France	73 avenue de Paris 94165 Saint Mandé Cedex France	4,999,647.30	30 Sep 2018	SC2: 1,626,995.92 SC3: 1,155,662.05
<p>Description:</p> <p>This contract is for the operational delivery of the European-scale air quality component of CAMS. The production must be based upon a geographically distributed ensemble of between five and ten individual models and a central processing function to deliver three streams:</p> <ul style="list-style-type: none"> <li>— on a daily basis, hourly analyses and forecasts up to +96h;</li> <li>— with a delay of a few weeks (in order to maximise the number of observations) interim re-analyses will be produced daily with systems frozen in their configuration of January 1st every year;</li> <li>— with a delay of up to two years (due to the delay in getting fully validated data), re-analyses will be processed with frozen systems, which are only updated every few years.</li> </ul> <p>All the individual assimilation and forecast systems must be mature, well validated and operated by their main developers. This aspect is essential so that the operators can directly maintain a steady flow of changes to the numerical codes, in order to include new research developments, to make corrections reflecting findings from verification/validation, and to implement approved changes requested by users. Acquisition of data, monitoring of the production, verification of the outputs, data services and support to the users are also included in this contract.</p>							
CAMS_71	Products in support of policy users	FA: 26 Apr 2016 SC2: 6 Feb 2017	Institut national de l'environnement industriel et des risques	Parc technologique Alata 60550 Verneuil-en-Halatte France	1,299,998.05	31 Mar 2019	427,131.49
<p>Description:</p> <p>This contract will deliver a range of products of the CAMS portfolio that are especially targeted for (and continually developed with) Policy Users. These products are:</p> <ul style="list-style-type: none"> <li>— Annual interim assessment reports based on the Interim Regional Re-analyses in support of national annual reporting duties about air quality and threshold exceedances;</li> <li>— Annual assessment reports based on the Regional Re-analyses performed with validated surface observations, to serve as a reference document on the status of air quality in Europe;</li> </ul>							

ITT Ref.	Title	Date of award of Framework Agreement (FA) and of Service Contract (SC)	Name of recipient	Address of recipient	Amount of Framework Agreement, Euro	End date of Framework Agreement	Amount of Service Contract Awarded, Euro
<p>— Daily 'green scenarios', which offer alternative forecasts of European air quality obtained with reduced level of anthropogenic emissions and allowing assessing and comparing the effectiveness of possible temporary mitigation measures or of candidate measures as part of future policies development;</p> <p>— Daily and on-demand source-receptor calculations, which allow tracking the pollutants according to their sources and evaluating the different contributions to the local air quality.</p> <p>The contract also comprises the organisation of an annual workshop of the CAMS Policy Users for discussing evolution and usability of the CAMS policy products and, more generally, of the CAMS Regional and Global Products that are relevant for EU, national and local policies.</p>							
CAMS_72	Solar radiation products	FA: 15 Dec 2015 SC3: 12 Dec 2017	Deutsches Zentrum für Luft- und Raumfahrt e. V. (German Aerospace Center)	Linder Höhe 51147 Köln Germany	1,399,601.00	31 Dec 2018	427,324.98
<p>Description:</p> <p>This contract is to deliver the main CAMS products related to solar radiation: global (clear sky) and multicontinental (Europe, Africa, the Middle East and Asia as defined by the METEOSAT field of view to take into account clouds) solar irradiance information. Time series based on an on-request access to long-term data sets and several days' near real-time information are also made available to users, targeting particularly solar energy applications. Finally, this contract provides routinely an evaluation of the quality of the products delivered as well as of the global UV irradiance monitoring and forecasts produced by ECMWF.</p>							
CAMS_73	Greenhouse gases fluxes	FA: 16 Dec 2015 SC2: 24 Jan 2017 SC3: 5 Dec 2017	Commissariat à l'énergie atomique et aux énergies alternatives	Batiment Le Ponant D 25 rue Leblanc 75015 Paris France	799,999.89	30 Nov 2018	SC2: 275,407.81 SC3: 193,650.14
<p>Description:</p> <p>This contract is for providing quantitative estimates of net surface fluxes of greenhouse gases, which are key drivers of the Earth's climate evolution. Ground-based and now satellite remote-sensing observations allow these to be monitored. The data provided so far by the pilot projects leading to CAMS have delivered time-series of CH<sub>4</sub>, CO<sub>2</sub> and N<sub>2</sub>O surface flux fields of high quality. This contract is for extending the time series, both forwards and backwards (as far as possible) in time, while maintaining their quality at the highest international standard. Periodically, the contractor will reprocess the whole period in order to reflect improvements in spatial resolution as well as in modelling and data assimilation techniques used for the atmospheric flux inversions. The documentation of associated errors and comparison with independent observations as well as with main competing international products also forms part of the activities.</p>							
CAMS_74	Radiative forcings	FA: 21 Jan 2016 SC2: 12 Jan 2017	University of Reading	PO Box 217 Whiteknights Reading, RG6 6AH United Kingdom	524,605.76	31 Dec 2018	152,067.23
<p>Description:</p> <p>This contract is for providing quantitative estimates of the Radiative Forcings (RF) from atmospheric constituents considered in CAMS. RF are an essential element for evaluating and comparing the strength of the various mechanisms affecting the Earth's radiation balance and thus causing climate change. RF arising from changes in distributions of radiatively active atmospheric gases and particles are both short-lived and long-lived, depending on the atmospheric residence time of the corresponding species. Some of the RF are highly heterogeneous spatially and temporally and this contract is aiming at making the most of CAMS outputs to derive RF distributions in support of climate research and assessments, such as the ones of the IPCC. The contractor will estimate radiative forcings from CAMS outputs (greenhouse gases, reactive gases and aerosol) and will also assess feasibility of deriving Effective Radiative Forcings (ERF) as a potential service extension.</p>							

ITT Ref.	Title	Date of award of Framework Agreement (FA) and of Service Contract (SC)	Name of recipient	Address of recipient	Amount of Framework Agreement, Euro	End date of Framework Agreement	Amount of Service Contract Awarded, Euro
CAMS_81	Global and regional emissions	FA: 11 Jul 2017 SC1: 11 Jul 2017	Centre National de la Recherche Scientifique	16, Avenue Edouard Belin 31400 Toulouse France	1,289,984.26	31 Aug 2020	653,400.59
<p>Description:</p> <p>This contract will provide gridded distributions of anthropogenic (global and Europe) and natural emissions (global only) in direct support of CAMS production chains, with target resolutions of 10 to 50 km (global) and 5 to 10 km (Europe). The emissions will include aerosol, NOx, NH3, SO2, DMS/OCS, NMVOCs, CO, CH4, N2O, CO2, certain halogen species and Radon-222. They must also be stratified into headline activity sectors. The period covered will be from 2000 to present for the global emissions, and from 2003 to as close as possible to present for the European regional emissions. Subsequent years will be added at the pace of 1 additional year every year, as reporting or ancillary or activities proxy data become available. Besides the yearly totals, the Contractor will deliver monthly, weekly and diurnal temporal profiles, so that variations can be accounted for in the CAMS systems. Improving the representation of the temporal variations of emissions and investigating modelling methodologies to calculate certain emissions as a function of meteorological parameters (including forecasted ones) or of other proxies will be in scope of the developmental aspects of the work.</p>							
CAMS_84	Global & regional a posteriori validation	FA: 2 Nov 2015 SC3: 20 Dec 2017	Koninklijk Nederlands Meteorologisch Instituut (Royal Netherlands Meteorological Institute)	PO Box 201 3730 AE De Bilt Netherlands	2,824,999.00	30 Sep 2018	734,422.33
<p>Description:</p> <p>This contract is for products validation activities in support of CAMS users. The main outputs of these activities will be 3-monthly validation reports for the near-real-time global products. Validation reports will also be delivered for candidate upgrade global production chains as well as for the CAMS reanalysis. This contract will also provide daily plots and quality monitoring statistics of the near-real-time global production, which will be integrated in the CAMS website and will be easily accessible together with the products from the CAMS catalogue. While the coverage will be global, specific efforts will be targeted at validation over the Arctic and the Mediterranean areas. Validation of the regional air quality products in the free troposphere and the interface between the global and regional systems will also be in scope of these activities.</p>							
CAMS_94	User interaction activities	FA: 7 Dec 2015 SC3: 15 Nov 2017	Deutsches Zentrum für Luft- und Raumfahrt e. V. (German Aerospace Center)	Linder Höhe 51147 Köln Germany	699,962.86	31 Dec 2018	222,939.27
<p>Description:</p> <p>This contract supports the management of the relationship between CAMS and its users, with the overarching goal to ensure the best possible uptake of the products by the users and to their full satisfaction. More specifically, the activities include:</p> <ul style="list-style-type: none"> <li>— developing, maintaining and populating the CAMS User Requirements Database (URDB) and supporting ECMWF in the maintenance of the Requirement Analysis Document (RAD);</li> <li>— organising user workshops and establishing additional user feedback mechanisms;</li> <li>— monitoring continually the Service Product Portfolio against the Requirement Analysis Document;</li> <li>— providing statistical analyses of CAMS users.</li> </ul>							

ITT Ref.	Title	Date of award of Framework Agreement (FA) and of Service Contract (SC)	Name of recipient	Address of recipient	Amount of Framework Agreement, Euro	End date of Framework Agreement	Amount of Service Contract Awarded, Euro
CAMS_95	CAMS Use Cases						
General Description: ECMWF as the Entrusted Entity for the Copernicus Atmosphere Monitoring Service (CAMS) issued eight contracts as a result of the ITT CAMS_95 CAMS Use Cases. The overall objective of the projects funded under this ITT, which are focused on the Eastern and Southern European Countries, is to develop and demonstrate end-to-end applications (product, software or service) based on CAMS products with the aim to stimulate innovative ideas and support the development of downstream applications.							
CAMS_95a	Contract Title: Air quality forecasts for urban environments using CAMS services and public open data sets	FA: 16 Jun 2017 SC1: 16 Jun 2017	Heich Consult GmbH	Bergiusweg 1 D-50354 Huerth Germany	95,000.00	31 Dec 2018	47,550.00
CAMS_95b	Contract Title: Copernicus Application Facility for Environmental Effects on Health and Comfort	FA: 24 Mar 2017 SC1: 24 Mar 2017 SC2: 17 Oct 2017	IAASARS, National Observatory of Athens	Lofos Nymfon Thission 11810 11851 Athens Greece	94,965.20	31 Mar 2019	SC1: 41,052.00 SC2: 53,913.20
CAMS_95c	Contract Title: Copernicus CAMS Solar app: Application for rooftop photovoltaic power stations	FA: 5 May 2017 SC1: 5 May 2017 SC2: 18 Oct 2017	NOVELTIS SAS	153 rue du Lac 31670 Labège France	94,991.27	31 Mar 2019	SC1: 28,351.92 SC2: 66,639.35
CAMS_95d	Contract Title: General public delivery of Atmospheric Information through city's media	FA: 5 May 2017 SC1: 5 May 2017 SC2: 7 Nov 2017	Weatherforce Consulting SAS	2, Place Saint Pierre 31000 Toulouse France	94,986.25	30 Apr 2019	SC1: 41,949.38 SC2: 53,036.87
CAMS_95e	Contract Title: Air Quality Forecasting Service for Riga	FA: 24 Mar 2017 SC1: 24 Mar 2017 SC2: 15 Nov 2017	Cambridge Environmental Research Consultants Ltd	3 King's Parade Cambridge, CB2 1SJ United Kingdom	94,933.75	30 Sep 2019	SC1: 44,081.50 SC2: 50,852.25
CAMS_95f	Contract Title: A CAMS Use Case on Air Quality Planning in Urban Areas using the ATMOSYS-CAMS Application	FA: 5 May 2017 SC1: 5 May 2017 SC2: 17 Oct 2017	Vlaamse Instelling Voor Technologisch Onderzoek NV	Boeretang 200 B-2400 Mol Belgium	94,394.42	30 Jun 2019	SC1: 47,359.13 SC2: 47,035.29
CAMS_95g	Contract Title: Use Case on Personal Allergy Symptom Forecasting System	FA: 5 May 2017 SC1: 5 May 2017 SC2: 20 Oct 2017	Šiauliai University	Vilnius str. 88 LT-76285 Šiauliai Lithuania	94,990.60	30 Sep 2019	SC1: 28,037.10 SC2: 66,953.50
CAMS_95h	Contract Title: Assistance for use of CAMS product in the field of air quality monitoring	FA: 29 Jun 2017 SC1: 29 Jun 2017	Institut national de l'environnement industriel et des risques	Parc technologique ALATA 60550 Verneuil-en-Halatte France	94,988.91	30 Jun 2019	54,805.27



ITT Ref.	Title	Date of award of Framework Agreement (FA) and of Service Contract (SC)	Name of recipient	Address of recipient	Amount of Framework Agreement, Euro	End date of Framework Agreement	Amount of Service Contract Awarded, Euro
COP_001	Framework for Agencies to Supply Copernicus Communication Services	FA: 9 Aug 2016	List as provided in the 2016 Copernicus Contract Awards report		9,500,000.00	14 Aug 2020	See separate table below (Contract IDs with "COP_001" prefix)

General Description:

ECMWF has set up a roster of agencies to supply communication services and products for its Copernicus Climate Change Service (C3S) and Copernicus Atmosphere Monitoring Service (CAMS) activities.

The areas of work that will be covered by the framework are broadly as follows:

- Event design and delivery;
- Stakeholder engagement;
- Media and public relations;
- Content development, in both copy and graphic design;
- Marketing and marketing research;
- Specialist digital media solutions and services.

In total, 16 agencies have been accepted to the roster for different service areas as a result of this procurement exercise. It is anticipated that further invitations to tender will be launched for accepting additional agencies onto the framework.

The total financial value of the contract stated above is the maximum budget available for the Framework to which the awarded entities are accepted.

Contract ID	Title	Date of award	Name of recipient	Address of recipient	Amount of contract, Euro or Pounds	End date of contract
COP_001_017	Provision of Copernicus Websites Design and Build, Hosting and Support	18 May 2017	Code Enigma Ltd	Smithfield Business Centre 5 St John's Lane London, EC1M 4BH United Kingdom	€ 305,680.00	17 Nov 2019
COP_001_024	Copernicus Media Partnership Proposition	3 Oct 2017	CAP&CIME PR	8 rue Royale 75008 Paris France	€ 554,920.00	2 May 2018
COP_001_025	Corporate design and print services	24 Mar 2017	Red Stone Design	9-10 Charterhouse Buildings London, EC1M 7AN United Kingdom	€ 121,000.00	23 Mar 2018
COP_001_025	Corporate design and print services	24 Mar 2017	Carol Byrne Creative Communications	Daidadi, 32 Platia Papagou, Ermopolis 84100 Syros Greece	€ 49,000.00	23 Mar 2018
COP_001_026	COP22 communication activity	12 Jan 2017	ICF Mostra	Chaussee d'Alseberg, 1001 1180 Brussels Belgium	€ 17,500.00	completed
COP_001_034	Science Content Writing	18 Dec 2017	EJR-Quartz	3e Binnenvestgracht 23F 2312 NR Leiden Netherlands	€ 123,098.61	31 Dec 2018
COP_028	Provision of short text describing meteorological and atmospheric composition parameters for a data/science savvy audience	1 Jul 2017	Assimila Limited	Reading Enterprise Centre University of Reading Earley Gate Reading, RG6 6BU United Kingdom	€ 27,650.00	31 Jan 2018
COP_029	Copernicus Communication Activity	10 Jul 2017	ICF Mostra	Chaussee d'Alseberg, 1001 1180 Brussels Belgium	€ 156,560.00	30 Jun 2018
COP_030	User experience support for digital projects	15 Jun 2016	CX Partners Ltd	First Floor 2 College Square Anchor Road Bristol, BS1 5UE United Kingdom	€ 51,870.00	completed
C3S_423	Consultancy Services relating to the Engineering and Infrastructure Sector	2 Aug 2017	Stichting Nederlands Normalisatie-instituut	Vlinderweg 6 2623 AX Delft Netherlands	€ 134,180.00	completed

Contract ID	Title	Date of award	Name of recipient	Address of recipient	Amount of contract, Euro or Pounds	End date of contract
17-8003	Press release workshop	2 Feb 2017	EJR-Quartz	3e Binnenvestgracht 23F 2312 NR Leiden Netherlands	€ 2,680.00	completed
17-8009	ECCA 2017 sponsorship package	2 Feb 2017	Conference Partners Ltd	Exchange place 5 Semple Street Edinburgh, EH3 8BL United Kingdom	£ 20,850.00	completed
17-8010	Hackathon Event	2 Feb 2017	Red Stone Design	9-10 Charterhouse Buildings London, EC1M 7AN United Kingdom	£ 3,000.00	completed
17-8023	CDS Cloud Hosting - Infrastructure as a Service	23 Feb 2017	CloudSigma AG	Badenerstrasse 549 8048 Zurich Switzerland	€ 75,000.00	completed
17-8029	Catering for C3S General Assembly	2 Mar 2017	Skandi Traiteur	35 Rue écopole 31270 Villeneuve-Tolosane France	€ 26,171.00	completed
17-8034	Space rental and catering for CAMS General Assembly	20 Mar 2017	Marriott Warsaw Hotel	Al. Jerozolimskie 65/79 00-697 Warszawa Poland	€ 46,462.00	completed
17-8072	Sponsorship and additional costs for Wissenswerte 2017	20 Jun 2017	WFB Wirtschaftsförderung Bremen GmbH	Kontorhaus am Markt Langenstraße 2-4 (Eingang Stintbrücke 1) 28195 Bremen Germany	€ 15,000.00	completed
17-8093	Meteorological technology World expo	12 Sep 2017	UKi Meida & Events Ltd	Abinger House Church Street Dorking Surrey, RH4 1D United Kingdom	€ 21,136.00	completed
17-8094	WCSJ2017 World conference of science journalism	13 Sep 2017	University of California, Berkeley	2200 Bancroft Way Berkeley, California, 94720-42-4 United States of America	€ 20,951.00	completed
17-8122	AV Equipment and graphics rental and setup for ICR5	6 Nov 2017	IES International Exhibition Services	Via Anton Giulio Bragaglia 33 00123 Rome Italy	€ 44,506.00	completed
17-8124	Catering for ICR5 Conference	8 Nov 2017	Pepe Catering Due Srl	Via Palombarese 428 00013 Santa Lucia Loc. Fonte Nuova (Rm)	€ 46,460.00	completed

Contract ID	Title	Date of award	Name of recipient	Address of recipient	Amount of contract, Euro or Pounds	End date of contract
				Italy		
17-8125	Space rental, cleaning & security staff support for ICR5 Conference	8 Nov 2017	Angelicum Congress	Largo Angelicum 1 00184 Rome Italy	€ 37,156.00	completed
17-8143	Consultancy service to provide eLearning	13 Dec 2017	Virtual College Ltd	Marsel House Stephensons Way Ilkley, West Yorkshire LS29 8DD United Kingdom	€ 15,000.00	1 Jun 2018