

**Consortium Agreement
concerning the exploitation of the**

**Cabauw Experimental Site for Atmospheric Research
(CESAR)**

14 April 2017



Cabauw Experimental Site for Atmospheric Research

THE UNDERSIGNED:

KONINKLIJK NEDERLANDS METEOROLOGISCH INSTITUUT (KNMI), Utrechtseweg 297, 3731 GA De Bilt, The Netherlands, hereinafter referred to as KNMI and represented by Prof. Dr. G. van der Steenhoven, Director General;

TECHNISCHE UNIVERSITEIT DELFT, having its seat at Stevinweg 1, 2628 CN Delft, The Netherlands, represented by Prof. Dr. Ir. T.H.J.J. van der Hagen, President Executive Board, Delft University of Technology, hereinafter referred to as TU-Delft;

STICHTING ENERGIEONDERZOEK CENTRUM NEDERLAND (ECN), Westerduinweg 3, Postbus 1, 1755 ZG Petten, The Netherlands, represented by its Chief Executive Officer, Dhr. T.G. Martin, CEO Executive Board;

WAGENINGEN UNIVERSITY, Department of Environmental Sciences, registered in Wageningen and having its offices at Droevendaalsesteeg 3, 6708 PB Wageningen, The Netherlands, represented by Drs. I.T.J. Grimm MBA, Director Operations;

NEDERLANDSE ORGANISATIE VOOR TOEGEPAST NATUURWETENSCHAPPELIJK ONDERZOEK TNO (Netherlands Organisation for applied scientific research TNO), a legal entity by public law (i.e. the TNO-wet), duly organised and existing under the laws of the Netherlands with registered offices at Anna van Buerenplein 1, 2595, DA Den Haag, the Netherlands, hereinafter referred to as TNO, legally represented by Dr. H.G.C. Werij, Director Space and Scientific Instrumentation, acting in full capacity on behalf of the Board of Management of TNO;

The State of the Netherlands, having its seat in The Hague, the Netherlands, represented by the Dutch Minister of Health, Welfare and Sport, for these purposes represented by the Director-general of the RIJKSINSTITUUT VOOR VOLKSGEZONDHEID EN MILIEU – NATIONAL INSTITUTE FOR PUBLIC HEALTH AND THE ENVIRONMENT (RIVM), Em. Prof. dr. A.N. van der Zande, having its registered office at Antonie van Leeuwenhoeklaan 9, 3721 MA Bilthoven;

UNIVERSITEIT UTRECHT, Institute for Marine and Atmospheric Research Utrecht (IMAU)), Princetonplein 5, 3584 CC Utrecht, The Netherlands, represented by Prof. Dr. Ir. H.A. Dijkstra, head department of Physics and Astronomy;

EUROPEAN SPACE AGENCY, an international organisation with headquarters in Paris France, acting through its EUROPEAN SPACE RESEARCH & TECHNOLOGY CENTRE (ESTEC) at Keplerlaan 1, 2201 AZ, Noordwijk, The Netherlands, represented by Franco Ongaro, Director of Technology, Engineering and Quality and ESTEC Head of Establishment.

HEREINAFTER SEPARATELY REFERRED TO AS "Party" AND COLLECTIVELY REFERRED TO AS "Parties" OR "Consortium"

CONSIDERING THAT:

- The Netherlands have an active research community dealing with remote sensing and in-situ observations of the atmosphere and the land surface;
- Atmospheric and land surface observations require a multi-disciplinary approach;
- The Parties hereto have available valuable and often unique research instrumentation and other research facilities suitable for atmospheric and land surface research;
- There is a large demand for qualified and multi-disciplinarily educated scientists in the area of atmospheric and land surface observations;
- KNMI has under its responsibility an observational site for atmospheric research known as Cabauw, located at Zijdweg 1, Lopik, The Netherlands, hereinafter called "*the Facility*";
- Co-operation amongst the Parties and combining their measurement facilities in one location have shown to offer unique opportunities for challenging, multi-disciplinary and complex research projects on scientific and policy relevant subjects;
- The Parties, active in the area of atmospheric and land surface observations have in 2002 established, by means of a Memorandum of Understanding, which is superseded by this Consortium Agreement, a platform that enables co-operative execution of multi-disciplinary research projects and education in the area of atmospheric and land surface research;
- The Parties wish to regulate with this Agreement their observational cooperation at the site as well as their observation programme performed at the Facility.
- The Parties wish to regulate, with this Agreement, the cooperative long-term exploitation of the Facility and its embedding in the national and international context of atmospheric and land surface research.

AGREE TO WORK TOGETHER IN A CONSORTIUM CALLED CESAR TO EXPLOIT THE FACILITY AND PERFORM RESEARCH ON THIS FACILITY UNDER THE FOLLOWING ARRANGEMENTS:

General

- 1) Each Party will co-locate scientific research instruments and other relevant facilities at the Facility to establish a long-term observation programme for challenging, multi-disciplinary research;
- 2) The Parties will define and execute a joint observation and science programme in the area of atmospheric and land surface observations, including the long term financial consequences;
- 3) The instruments placed at the Facility by a Party, remain in ownership by that Party.

Organization of the Consortium

- 4) The *CESAR Executive Board (CEB)*:
 - a. represents *CESAR* in national and international scientific bodies, stakeholders and towards policy makers;
 - b. manages the day-to-day activities of *CESAR*;
 - c. consists of three members of the *CESAR Scientific Steering Committee*, one of them always being of *KNMI*;
 - d. oversees the *CESAR* regulatory material including the *CESAR Observation and Science Plan*, *CESAR Annual Summary*, *CESAR Site Regulation*, *CESAR Data Policy*, *CESAR File Format and Meta Data Document*;
 - e. schedules meetings of *CSSC* and *CSB*;
 - f. provides a secretary to the *CSB*.
- 5) The *CESAR Scientific Steering Committee (CSSC)*:
 - a. composes and maintains the *CESAR Observation and Science Plan* that describes the present and future scientific activities in annual cycles;
 - b. consists of one delegate from each *Party*, one of them being appointed as chair;
 - c. executes the *CESAR Observation and Science Plan* within the boundaries set by the *CESAR Supervisory Board (CSB)*;
 - d. reports progress of the *CESAR Observation and Science Plan* to the *CSB* in the *CESAR Annual Summary*;
 - e. is represented by the *CEB* in meetings of the *CSB*
- 6) The *CESAR Supervisory Board (CSB)*:
 - a. supervises *CESAR* on the general, strategic and financial level;
 - b. is responsible to ensure the long-term financially balanced exploitation of the Facility, and continuity of the *CESAR* observation program at an appropriate level;
 - c. consists of one delegate from each *Party* at the appropriate organisational level;
 - d. is chaired by *KNMI*; a *secretary of the CSB* is appointed from the members of the *CEB*;
 - e. meets twice a year;
 - f. may invite persons not affiliated to any *CESAR Party* to take part in an advisory panel;
 - g. annually receives a summary from the *CSSC* with an overview of research results, and submitted and awarded research project proposals;

- h. annually receives financial information from all *Parties* as necessary to document the fulfilment of their obligations under this Agreement (such information would typically be provided by the end of the first quarter of the year);
 - i. annually establishes the *CESAR Observation and Science Plan* including the *CESAR* budget;
 - j. monitors the execution of the *CESAR Observation and Science Plan*, including the financial information.
- 7) KNMI is responsible for *the Facility* and will maintain the "General rules of behaviour at the site" to as described in the *CESAR Site Regulation*.
- 8) KNMI is responsible for keeping the *CESAR* financial administration and for keeping the budget.
- 9) The *CESAR Site Manager*, appointed by KNMI, coordinates the daily activities at the *Site*.
- 10) The *CESAR Data Archive* is maintained by KNMI and the *CESAR Data Manager*, appointed by KNMI, coordinates and operates the *CESAR Data Archive*.
- 11) Voting rules and quorum:

Each of the above mentioned *CESAR* Bodies shall not decide unless two-thirds (2/3) of its members are present or represented (quorum).

If the quorum is not reached, the chairperson of the Body shall convene another meeting within 15 calendar days. If in this meeting the quorum is not reached once more, the chairperson shall convene an extraordinary meeting which shall be entitled to decide even if less than the quorum of members are present or represented.

Each member of a *CESAR* Body present or represented in the meeting shall have one vote.

Decisions shall be taken by a majority of two-thirds (2/3) of the votes cast.

Membership

- 12) A new party may become a member of the Consortium only after unanimous approval of the *CESAR* Supervisory Board.
- 13) A Party may terminate its participation in the Consortium upon 3 months prior written notice to the Chair. In case the leave has adverse consequences to the activities of any of the other Parties or of *CESAR*, the *CSSC* will propose and the *CSB* and will decide the measures to be taken by the leaving Party and the term that will apply in order to mitigate these consequences, all within reasonable limits.
- 14) By decision of the *CSB* a Party can be excluded from *CESAR* when it fails to fulfil its obligations as described in this agreement. A majority of at least 2/3rd of the *CESAR* Scientific Steering Committee is needed to advise the *CESAR* Supervisory Board to exclude a Party.

- 15) Parties agree that no financial compensation or cost charge for data and scientific results can be claimed by any of the Parties; all exchange of data and scientific knowledge within CESAR is performed free of charge, all this being limited to the non-commercial use of data, scientific knowledge and results of the research. The CSB stimulates the Parties – as far as legally possible - to agree to a fair and reasonable compensation for commercial use of knowledge by a Party to this Agreement and by a licensee that is not a Party to this Agreement.
- 16) Each Party has the obligation to contribute to the CESAR Observation and Science Plan.
- 17) Each Party has the obligation to annually provide to the CSB financial information related to the execution of its part in the CESAR Observation and Science plan.
- 18) Each Party has the obligation to pay the fixed annual CESAR member contribution as decided by the CSB.
- 19) Each Party has the obligation to pay the variable institutional contribution to the CESAR budget established by the CSB no later than three months after the CSB has decided on the CESAR budget for the current year.

Projects and campaigns

- 20) No project can be performed at the site by external partners, which are not part of the Consortium, without the involvement of at least one of the Parties. From the perspective of CESAR this Party or these Parties will be the point of contact for this external partner.
- 21) Any modification to the Facility's infrastructure considered necessary for a given project to be executed at the site, needs specific approval of KNMI in advance.
- 22) Each Party providing specific instrumentation and other research facilities to CESAR shall remain the owner of such instrumentation and/or facilities and will take care of the insurance that Party considers to be appropriate. Governmental organizations, which are not allowed to take out insurance unless there is a legal obligation, bear their own risks. Each Party will only operate its own instrumentation, unless an explicit agreement between two or more Parties states otherwise. Each Party will label its property if possible and keep an administration of the specific instrumentation and other research facilities provided by it to CESAR.
- 23) Each Party shall be responsible for the maintenance and the scientific reliability of the instrumentation and facilities provided by it.
- 24) Financial support for use of the Facility will be included in project proposals and will be contributed to the CESAR budget.
- 25) A fee applies for external parties using the Facility and will be added to the CESAR budget. Fees are established by the CSB.

CESAR Activities

- 26) CESAR activities are long term (programmatic) observations, projects, and campaigns. All CESAR activities are described in the CESAR Observation and Science Plan, each latest version of which will be attached to this Consortium Agreement as Attachment 1.
- 27) CESAR as a whole or a number of CESAR Parties can cooperate jointly in externally funded projects.
- 28) CESAR forms a partnership between legal entities, but is itself not a legal entity.
- 29) In case of EU projects, or similar, joint cooperation can be in the form of a Joint Research Unit (JRU), or similar.
- 30) For a specific project or proposal at least one of the Parties is selected to be the legal entity that will sign the contract, and who will be held responsible for the project by the funding agency.
- 31) For each project in which CESAR jointly operates, the responsibilities and budget allocation of each Party involved in the project will be agreed and documented in the project proposal. If needed or wanted the Parties may decide to specify a specific Agreement for a particular project.

Data

- 32) A Party providing specific instrumentation and other research facilities to CESAR shall also be the owner of the data obtained with said instrumentation and/or facilities.
- 33) For data dissemination to the Data User outside of CESAR and data exchange between the Parties a CESAR Data Archive will be operated and maintained by KNMI. KNMI appoints a CESAR Data Archive Manager. The Parties are obliged to deliver all relevant observational data gathered under their respective responsibility to the CESAR Data Archive or to another publicly accessible data archive which shall be referenced in the CESAR Data Archive, and within an, for all Parties, acceptable time frame.
- 34) Datasets will as they are created be described in a CESAR Dataset Definition Document and will be approved by the CESAR Scientific Steering Committee. The CESAR Scientific Steering Committee will inform the CESAR Data Archive Manager about approved new Datasets.
- 35) Datasets generated through the operation of instruments at The Facility and the application of scientific knowledge, remain intellectual property of the Party or Parties owning such instruments or scientific knowledge.
- 36) To each dataset a CESAR Data Provider is linked. The CESAR Data Provider is the scientist that plays the leading role in the creation of the Dataset. The CESAR Data Provider is responsible for the quality of the Dataset.
- 37) A Dataset is either publicly accessible (Public) or has restricted access (Restricted).

- 38) Restricted Datasets contain preliminary data and are specifically meant for data exchange between the Parties in the process of improving the quality of the data before they can get the Public status.
- 39) The Party or the Parties who own(s) the Dataset has (have) the sole discretion to determine whether the Dataset is Public or Restricted.
- 40) All Data Users will have access to the Public Datasets subject to the rules described in the CESAR Data Policy Document.
- 41) When the access to a Dataset is Restricted, then the Parties who own the data in that Dataset determine which Data Users have access to the Dataset subject to the rules described in the CESAR Data Policy Document.
- 42) External Partners involved in CESAR projects will be encouraged to make relevant datasets acquired at the site available through the CESAR Data Archive. At the same time the CESAR Scientific Steering Committee may give these External Partners access to Restricted Datasets. This under the restriction of approval by the Dataset owners.

Education

- 43) The educational aspects of CESAR shall be organised and managed by the universities being party to the CESAR initiative. The other partners are invited to contribute to the education program. The educational aspects will be described in the annual CESAR Observation and Science Plan.

Financial management

- 44) Each Party has the obligation to annually provide financial information related to the execution of the CESAR Observation and Science plan. KNMI compiles the CESAR annual financial report that will be part of the CESAR Annual Summary that is presented to the CSB.
- 45) The CSB is responsible to ensure the long-term financially budgetary balanced exploitation of the Facility, and continuity of the CESAR observation program at an appropriate level. The CESAR Annual Summary contains the necessary monitoring information.
- 46) The CSB determines appropriate user fees for different modalities of use of the facility as described in the CESAR budget.
- 47) The CSB annually sets the institutional contribution to the CESAR budget. The height of the institutional contribution will be based on the contribution of each Party to the execution of the CESAR Observation and Science Plan, the status of the CESAR budget and the perspectives for the coming years. The institutional fee can be nil.
- 48) No abstentions from members if the CSB are allowed during CSB meetings where decisions are made on the CESAR budget, in exception to paragraph 11).

- 49) If the CESAR budget cannot be balanced for a certain year, the CSB will take any or a combination of the following actions:
- a. The institutional contribution will be decided upon by the CSB and added to the CESAR budget
 - b. The CSB may decide to request KNMI to source temporary additional funding, which KNMI will try to achieve in accordance with the possibilities and financial regulations that apply at the time. In case of a loan, future projects are used to pay off the loan.
 - c. The CSB may decide on cancelling activities in de CESAR Science and Observation Plan
 - d. If the CSB cannot reach agreement on the CESAR budget, the Chair may be forced to reduce expenditure unilaterally, in exception to paragraph 11).

Confidentiality

- 50) No Party will divulge in any way any information in whatever form or mode of transmission that comes to its knowledge and of which it knows or may reasonably be assumed to know that the information is confidential, except in so far as the Party is compelled to divulge such information under a statutory regulation or court ruling.
- 51) Each Party shall apply the same degree of care with regard to the confidential information disclosed as with its own confidential and/or proprietary information, but in no case, less than reasonable care.
- 52) Each Party shall promptly advise the other Party/Parties whose rights of confidentiality have been violated by any unauthorised disclosure, misappropriation or misuse of confidential information after it becomes aware of such unauthorised disclosure, misappropriation or misuse.
- 53) Each Party will cause its employees or third parties it may involve, to comply with these obligations to confidentiality.

Liability

- 54) Except for malicious intent or gross negligence the liability of a Party to the other Parties for each damage by virtue of an imputable failure to comply with any obligation arising from this Agreement and/or by virtue of unlawful act or omission or any other ground or title, shall be limited to the direct loss or harm incurred on the understanding that this shall not exceed the amount the Party concerned in such case will receive from its liability insurance. If a Party has no liability insurance this amount will be subject to the best efforts of the Party to find compensation or get funds. All this according to Dutch law.
- 55) In respect of any data, scientific knowledge, materials or equipment supplied by one Party to another Party under this Agreement, no warranty or representation of any kind is made, given or implied as to the sufficiency or fitness for purpose nor as to the absence of any infringement of any proprietary rights of third parties. Therefore, the recipient Party shall be entirely responsible for the use to which it puts such data, scientific knowledge, materials or equipment. The recipient Party shall indemnify and hold harmless the providing Party and its representatives from and defend

them against any and all claims and damages relating directly or indirectly to the use of the providing Party's data, scientific knowledge, materials or equipment by the receiving Party or by any third party who obtained the same directly or indirectly from the receiving Party.

- 56) Each Party shall be solely liable for any loss, damage or injury to third parties resulting from that Party's performance of or failure to perform its obligations and activities under this Agreement, and from that Party's use and exploitation of data and scientific knowledge.

Term and termination

- 57) This Agreement enters into force on the date that the last Party has signed, and will be valid for a period of 4 (four) years. This Agreement will be renewed for a new period by unanimous decision of the CSB. This Agreement ends after written announcement by all Parties and approval by the CSB.

Law and disputes

- 58) This Agreement is governed by the laws of the Netherlands. Any disputes arising out of or in connection with this Agreement that cannot be settled in an amicable manner between duly authorised representatives of each Party shall exclusively be referred to the competent courts of The Hague, the Netherlands.

Special provisions for the European Space Agency

- 59) The special provisions under this chapter aim at allowing the participation of the European Space Agency in this Agreement taking into account its specific status as an international organisation and its constraints in entering into undetermined financial obligations. In case of conflict, these special provisions take precedence over any other provision in this Agreement.
- 60) Nothing in this Agreement may be interpreted as a waiver of any privileges or immunities accorded to the **European Space Agency** by its constituent documents or international law.
- 61) Any dispute involving the **European Space Agency** in connection with or arising out of this Agreement, which the Parties cannot resolve amicably, shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce of Paris by a single arbitrator appointed in accordance with the said rules. The arbitration proceedings shall be conducted in the English language in The Hague, Netherlands.
- 62) The **European Space Agency's** financial responsibility under this Agreement shall be limited to the payment of the annual CESAR member and institutional contributions referred to in paragraphs 18 and 19 above, fixed at an initial level of 20k EUR per year. To cover cost evolution during the term of this Agreement, the amount of the annual CESAR contribution to be paid by the European Space Agency may be revised by unanimous decision of the CSB, to be properly documented in an Attachment to this Agreement. The European Space Agency shall not incur, and the other Parties will hold ESA harmless from, any costs, contributions or charges above this annual CESAR contribution.

Documents referred to:

CESAR Site Regulation
CESAR File Format and Meta Data Document
CESAR Dataset Definition Document
CESAR Data Policy Document
CESAR Observation and Science Plan
CESAR Annual Summary
CESAR Budget
CESAR Dataset Definition Document

Terms:

CESAR
CESAR Executive Board (CEB)
CESAR Scientific Steering Committee (CSSC)
CESAR Supervisory Board (CSB)
CESAR Budget
Party|Parties Site
The Facility
CESAR Site Manager
CESAR Data Manager

Data Archive
Data Provider
[Public|Restricted] Datasets
Dataset Owner
Data User: any party that is provided with data based upon an approved request in accordance with clause 36
External Partners Joint
Research Unit

Attachments:

1. CESAR Observation and Science Plan

<p>KNMI</p> <p>Prof. Dr. G. van der Steenhoven Director General</p>	
<p>done at:</p> <p>date:</p>	

TU DELFT Prof. Dr. Ir. T.H.J.J. van der Hagen, President Executive Board	
done at:	
date:	

WAGENINGEN UNIVERSITY Drs. I.T.J. Grimm MBA, Director Operations	
done at:	
date:	

ECN Dhr. T.G. Martin, CEO Executive Board	
done at:	
date:	

TNO dr. H.G.C. Werij, Director Space and Scientific Instrumentation	
done at:	
date:	

RIVM, on behalf of the Dutch Minister of Health, Welfare and Sport Em. prof. dr. A.N. van der Zande, Director-general of RIVM	
done at:	
date:	

UNIVERSITEIT UTRECHT/IMAU Prof. Dr. Ir. H.A. Dijkstra, head department of Physics and Astronomy	
done at:	
date:	

<p>EUROPEAN SPACE AGENCY, acting through its EUROPEAN SPACE RESEARCH & TECHNOLOGY CENTRE (ESTEC)</p> <p>Franco Ongaro, Director of Technology, Engineering and Quality and ESTEC Head of Establishment</p>	
done at:	
date:	