

**Copernicus Space Component**

**ERATOSTHENES Centre of Excellence - ESA**

**Copernicus Technical Collaborative Arrangement**

## **Copernicus Space Component Technical Collaborative Arrangement**

Between:

the **European Space Agency**

represented by Ms Simonetta Cheli, Director of Earth Observation Programmes,

and

the **ERATOSTHENES Centre of Excellence** acting in the capacity of Cyprus's National Point of Contact for the Copernicus Sentinel Collaborative Ground Segment,

represented by Dr. Kyriacos Themistocleous, External Affairs and Business Development Director

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# **1 INTRODUCTION**

## **1.1 Background**

‘Copernicus’ is a European programme, providing Earth Observation information for environmental monitoring and civil security. The dedicated Copernicus Sentinel missions are being developed to meet the operational needs of the programme.

Copernicus now forms part of the European Union’s Space Programme, which was established under Regulation (EU) 2021/696 of the European Parliament and of the Council of 28 April 2021 establishing the Union Space Programme and the European Union Agency for the Space Programme (‘the EU Space Programme Regulation’). Within the frame of the European Union Space Programme Regulation, the European Commission has concluded agreements with the European Space Agency (‘ESA’) and the European Organization for the Exploitation of Meteorological Satellites (‘EUMETSAT’) for continuing the implementation of the space component of Copernicus.

ESA supports the activities which States participating in ESA’s Copernicus Space Component Programme (‘the CSC Programme’) carry out to further national use of Copernicus Sentinel data. The initiative is called the Copernicus Sentinel Collaborative Ground Segment (‘the CollGS’). The European Commission has invited ESA to extend participation in the CollGS to interested Copernicus Participating States, by establishing a technical collaborative arrangement with the Copernicus Participating State, where requested by the State.

ESA is responsible for the implementation of the technical collaborative arrangements, in coordination with the European Commission, and subject to the prior submission of the arrangements for the European Commission’s consideration.

The Copernicus Data Policy, which applies to the technical collaborative arrangements, is established at Article 53 of the EU Space Programme Regulation.

Cyprus, in its capacity as an EU Member State, is a Copernicus Participating State.

As Cyprus is not participating in the CSC Programme, the present Technical Collaborative Arrangement (‘TCA’) is required as a basis for ESA to support the conduct of activities by Cyprus for the purpose of furthering national use of Copernicus Sentinel data.

## **1.2 National Point of Contact for the Copernicus Sentinel Collaborative Ground Segment activities**

ERATOSTHENES Centre of Excellence enters into the present TCA with ESA, as the authority responsible for implementing this TCA on behalf of Cyprus, and it is authorised to interact directly with ESA to this end. ERATOSTHENES Centre of Excellence is accordingly the Copernicus Sentinel Collaborative Ground Segment National Point of Contact for Cyprus and shall be referred to throughout the TCA as ‘the NPC’.

In case other third-party entities, such as universities, institutes, private companies, intend to participate in any of Cyprus's Copernicus Sentinel data initiatives established under this TCA, the NPC will act as the interface and contact point between ESA and any such other entity.

### **1.3 Areas of technical cooperation**

The Copernicus Space Component technical collaborative arrangements with Copernicus Participating States provide a frame for specialised solutions in five main areas of cooperation:

1. Data acquisition and Quasi Real Time production (local passive listen-in stations)
2. Complementary collaborative data products and algorithms definition
3. Core data product dissemination and access (e.g. mirror sites)
4. Development of innovative tools and applications
5. Complementary external validation support activities

Additional areas of technical cooperation may be included in the future if they are deemed relevant and agreed by the European Commission.

### **1.4 References**

An overview of the Copernicus Sentinel missions is available on the Sentinel Online portal at [sentinels.copernicus.eu](https://sentinels.copernicus.eu). In particular, the portal contains up to date information on:

- Each of the Copernicus Sentinel missions which is operated by ESA, describing both the space and ground segment aspects, and providing news from the operations;
- Available user-level data from the Copernicus Sentinels, including the contents and format specifications;
- Detailed user handbooks; and
- How to link to the Copernicus Data Space Ecosystem, including registration process, user manuals, and operational news.

The Copernicus Data Space Ecosystem ('CDSE') is an open ecosystem which is operated on behalf of ESA to provide free instant access to data from the Copernicus Sentinel missions and to offer a wide range of services to assist exploitation of the data. The CDSE provides bulk dissemination capabilities for Copernicus Sentinel data products, as well as a range of hosted local processing services. The CDSE is a core part of the Copernicus Space Component which is managed by ESA as part of its entrusted tasks within the European Union Space Programme. The CDSE is publicly accessible online at the internet address: <https://dataspace.copernicus.eu/>.

The following documents are referenced in this TCA and provide further supporting information for the cooperation:

- *ESA EO Operations Framework (EOF) - CSC - Operations Concept*, ref. ESA-EOPG-EOPGC-TN-19 (in its latest version at the date of signature: issue 1, rev. 2, dated 27 March 2024). A copy of this document is appended to this TCA at Annex I.
- The European Commission's legal notice setting out the conditions of the licence under which Copernicus Sentinel data and information may be used: "Legal notice on the use of Copernicus Sentinel Data and Service Information", accessible online via [https://sentinels.copernicus.eu/documents/247904/690755/Sentinel\\_Data\\_Legal\\_Notice](https://sentinels.copernicus.eu/documents/247904/690755/Sentinel_Data_Legal_Notice)

A copy of this document is appended to this TCA at Annex II.

- Sentinel High Level Operations Plan (HLOP), ref. COPE-S1OP-EOPG-PL-15-0020, issue 3, rev. 1, dated 16 December 2021. This document is updated from time-to-time following agreement with the European Commission.

The HLOP is available in the Sentinel Online portal <https://sentiwiki.copernicus.eu/web/document-library>.

These annexes are an integral part of the TCA.

## **2 PURPOSE, ENTRY INTO EFFECT AND TERM**

- 2.1 ESA and the NPC wish to cooperate for the purpose of supporting Cyprus's development of a national collaborative acquisition/listening-in station for Sentinel-1 data for maritime services. The data will be hosted for at least 30 days for related Copernicus Sentinel data initiatives, without any exchange of funds. The NPC may in

the future also decide to create a national data mirror site for Sentinel-1 and Sentinel-2 data that will cover the regional area of Cyprus in the future, if needed.

- 2.2 This TCA will enter into effect upon the date of the last signature and will remain in force as long as wished by both ESA and the NPC.
- 2.3 In the event that either ESA or the NPC is unable to continue one or several of the activities described in this TCA, each may have the option of terminating the participation in the activity, after consultation with the other and after giving reasonable advance notice.
- 2.4 In particular, ESA can terminate the TCA if a change in ESA's Copernicus Space Component Programme or in the Copernicus Programme managed by the European Union results in ESA no longer being able to maintain the level of support to the NPC agreed in the TCA.

### **3 SCOPE**

- 3.1 This TCA sets out the framework for the technical collaborative activities between ESA and the NPC. It describes Cyprus's intended Collaborative Ground Segment initiatives, the operational interfaces, the support required from ESA and the conditions under which that support is provided.
- 3.2 This TCA does not provide for any legally binding rights and obligations between ESA and the NPC, with the exception of the provisions of Section 5.4 concerning correct use of the Copernicus Data Space Ecosystem, of Section 6 concerning Copernicus Sentinel data governance, Section 10 on Personal Data Protection and of Section 11 which contains the Disclaimer.

### **4 CYPRUS'S X-BAND COLLABORATIVE ACQUISITION (SHARED VISIBILITY) STATION (CAS)**

- 4.1 The NPC intends to establish and operate a Collaborative Acquisition (Shared Visibility) Station ('CAS') to be able to provide an end-to-end service for maritime awareness using NRT data from the Copernicus Sentinel satellites. The final products will be available to regional users involved in maritime **services and in establishing the guidelines of such a service**. These activities will demonstrate the capabilities of the NPC for processing and delivering the data before and during the early operation

stage.

- 4.2 The NPC will be the owner of an X-band antenna that will be installed at the premises of the Cyprus Telecommunications Authority ('CYTA') in Pera Orinis. CYTA is a satellite ground station operator, with multi-year experience in operating antennas and associated equipment. The NPC has contracted CYTA for hosting and operating the NPC's antenna. The NPC plans to acquire Copernicus Sentinel-1 data while the data are being downlinked by a 'visible' core Copernicus Sentinel X-band ground station. ESA will downlink data acquired from the Copernicus Sentinel satellites to the X-band core ground stations according to the applicable pre-defined long-term observation plans. This will enable the NPC to acquire the downlinked Copernicus Sentinel data when the NPC's X-band antenna has visibility of the downlinking satellite. The data acquisition will be performed by listening in, on a non-interference basis, to the relevant ESA X-band core station downlinks.
- 4.3 The NPC will download, store and process Sentinel-1 data, including data for maritime services. All the data will be stored, managed and processed by the NPC at a dedicated NPC infrastructure in Cyprus.
- 4.4 ESA will provide sample data sets including e.g. Sentinel-1 acquisition and downlink plans, and Sentinel-1 orbit files.
- 4.5 The NPC will be able to request the licence for the Sentinel-1 L1/2 processor directly from the owner of the processor IPR (MDA Space). Upon signature of the licence between MDA Space and the NPC, ESA will provide access to the processor executable software for autonomous deployment and operations by the CAS.
- 4.6 ESA will provide the relevant files to support the CAS planning, such as:
  - ESA MPIP ICD (ESA-EOPG-EOPGC-IF-16), which has general information for all services;
  - GMV MPIP ICD (S12MP\_OPMAEV-GMV-ICD-001), which sets out the technical details about the HTTPS interface to be used by the collaborative ground stations.
- 4.7 The NPC is planning to install the processor executable software in Q1 2025, and to start the data downlink operations in Q3 2025 in the Pera Satellite Earth Station in Cyprus operated by CYTA. The server and antenna management system will be hosted at Makarios Satellite Earth Station as currently the Pera Station is unmanned.



The Makarios Satellite Earth Station is CYTA's teleport site that is operated on a 24/7 basis.

- 4.8 The NPC will host the downlinked Sentinel-1 data on their servers for at least 30 days for related national initiatives. ESA and Copernicus will be able to request access for all data during that time period if wished.

#### 4.9 **Reporting to ESA**

- 4.9.1 The NPC will keep ESA informed about the course and success of any Sentinel Collaborative Ground Segment initiative.

- 4.9.2 The regular reports regarding the CAS shall have at least annual frequency, and shall as a minimum contain information regarding:

- Any changes to the pre-agreed set up of activities that will have an impact on ESA's support to the national activities.
- The total volume of Copernicus Sentinel data which was acquired by the CAS, during the reporting period and since the start of operations. The totals will also be broken down by:
  - Sensed area;
  - Sensing mode;
  - Time of acquisition.
- Number and volume of Sentinel-1 core user-level data generated by the Sentinel-1 IPF Processor;
- Number and volume of the additional processed products generated at the CAS, together with a description of the products;
- A description of the onward use being made of the data acquired at the CAS, including applications which are or are intended to be served by the data acquired at the CAS;
- Statistics regarding the onwards use being made of the Copernicus Sentinel data generated at the CAS, including:
  - Number and volume of Copernicus Sentinel user-level data products which were generated at the CAS and successfully made available for

onwards use via the National Mirror Site; and the total broken down per mission;

- Number of 'active users', i.e. users who made one or more successful download during the reporting period of Copernicus Sentinel data products generated at the CAS;
- Total number and volume of Copernicus Sentinel user-level data products generated at the CAS which have been downloaded by users since the start of operations, and the total which were downloaded during the reporting period;
- Number and volume of Copernicus Sentinel user-level data products generated at the CAS which were downloaded by users during the reporting period, broken down by:
  - Copernicus Sentinel mission
  - Copernicus Sentinel user-level data type
  - category of use
  - application domain
  - country of the user.

4.9.3 The collection of these statistics will require the NPC to structure the user registration process so that when users register, they provide the following information to be associated anonymously with their user account:

**a) User geographic origin**

Users will be asked during the registration process to state the country from which they will primarily download the data.

**b) User's organisation**

Users will be asked during the registration process to state the type of organisation for which they work, using the following list of categories:

- International public organisation;
- National/regional/local public authority;
- Research and education organisation;

- Business/commercial/professional – SME;
- Business/commercial/professional – non-SME;
- Charity or NGO;
- Natural persons – personal interest;
- Other.

**c) User thematic activity**

Users will be asked to select their main intended area of application for the data from the following list of application areas:

- Land;
- Marine environment, maritime affairs and fisheries;
- Arctic policy and polar areas;
- Transport;
- Energy;
- Environmental compliance;
- Raw materials;
- Air quality and atmospheric composition;
- Health;
- Tourism;
- Climate Change;
- Civil protection and humanitarian aid operations;
- International development and cooperation;
- Migration and home affairs;
- Security;
- Research and innovation;
- Other.

**d) User sector of activity**

Users will be asked to state their main target sector, using the following categories:

- Public sector (including policy support);
- Business sector;
- Research;
- Education;
- Media and public relations;
- Charities and NGOs;
- Private individuals for non-commercial purposes;
- Other.

- 4.9.4 The NPC will implement an automated means to collect the required statistical information on Copernicus Sentinel data distributed from the CAS, and it will ensure such data is formatted/structured to ensure it is of maximum value.
- 4.9.5 The NPC will design the user registration process so that the statistical information can be collected while preserving the anonymity of the user and in compliance with national and/or regional legislation for protecting the users' personal data. Neither the NPC nor the Operator will disclose any personal data (i.e. information from which a natural person can be identified) of the users to ESA.
- 4.9.6 ESA will be entitled to ask the NPC and the Operator, on an annual basis, to complete a questionnaire which asks for these statistics.
- 4.9.7 Where possible, these usage statistics for CAS-acquired Copernicus Sentinel data will be presented separately to the usage statistics provided in line with Section 5.5 below for Copernicus Sentinel data sourced from the CDSE or other Collaborative Ground Segment partners.
- 4.9.8 It is highlighted that ESA may pass the information provided in the annual report to a third-party contractor for processing and analysis. The information and an analysis of the statistics will be sent to the European Commission and subsequently made publicly available.

## **5 CYPRUS'S NATIONAL MIRROR SITE INITIATIVE**

- 5.1 The NPC may subsequently decide to establish a national mirror site for the Copernicus Sentinel data which is available from ESA under Copernicus ('the National Mirror Site').
- 5.2 The National Mirror Site, if implemented, will be designed to store an archive of and process the following Copernicus Sentinel data for the regional area of Cyprus:
  - Sentinel-1 and Sentinel-2 data.
- 5.3 The NPC will be responsible for the National Mirror Site initiative and it will be entitled to delegate the operation of the National Mirror Site to a separate national organisation (hereafter "the Operator") subject to ESA's agreement.
- 5.4 **Access to the Copernicus Data Space Ecosystem (CDSE) for the National Mirror Site**
  - 5.4.1 If the NPC decides to establish a National Mirror Site for Copernicus Sentinel data, ESA will provide the NPC with an account reserved for the Copernicus Sentinel Collaborative Ground Segment partners on the CDSE, or on any equivalent Copernicus Sentinel data access point subsequently operated on behalf of ESA, for the purpose of stocking the National Mirror Site.
  - 5.4.2 The NPC or the Operator will directly connect to the CDSE. Other partners may participate in the implementation of the National Mirror Site activity as required, following prior agreement with ESA and the European Commission.
  - 5.4.3 The CDSE will continuously store Copernicus Sentinel data acquired during the previous month(s) at the processing levels agreed as part of the Copernicus Sentinel data portfolio and the associated timeliness as defined in the document "ESA EO Operations Framework (EOF) - CSC - Operations Concept", attached at Annex I below. The CDSE enables searching, browsing, previewing and downloading all Copernicus Sentinel data, as well as a range of hosted local processing services.
  - 5.4.4 Access to the CDSE is allowed via a web authentication module. ESA will provide the NPC with a single username and password to access the CDSE. This username and password may be used only by NPC or the nominated Operator (including their representatives, employees and contractors involved in the initiative on their behalf) for the purpose of the National Mirror Site initiative and neither the NPC nor the

Operator will share the username or password with other natural or legal persons.

- 5.4.5 The NPC shall not misuse or interfere with the service of the CDSE when it accesses and/or downloads available content.
- 5.4.6 ESA will provide appropriate interfaces to transfer Copernicus Sentinel data to the National Mirror Site via internet. It is intended that the National Mirror Site will make use of a connection to the GÉANT or CYTA's International Fiber network.
- 5.4.7 ESA will make its reasonable efforts to sustain all the functionalities and contents offered by the CDSE. The transmission of content from the CDSE may be interrupted or delayed by ESA in the event of technical constraints, such as the internet bandwidth. In such a case, the download requested by the Operator will be enabled later, taking into account other users' requests.

## **5.5 Reporting to ESA on uptake from the National Mirror Site**

- 5.5.1 The NPC will keep ESA informed about the course and success of Cyprus's National Mirror Site.
- 5.5.2 The regular reports regarding the National Mirror Site will have at least annual frequency, and will as a minimum contain information regarding:
  - Sentinel data use and applications;
  - Onward-dissemination of Sentinel data, including user statistics of the National Mirror Site;
  - Complementary collaborative data products or services being generated and made available to users;
  - Any changes to the pre-agreed set up of activities that will have an impact on ESA's support to the national activities.
- 5.5.3 More specifically, as concerns National Mirror Site usage statistics, the NPC will provide an annual set of statistics covering as a minimum:
  - a) Statistics on the Copernicus Sentinel data offer on the National Mirror Site:**
    - Volume of Sentinel data acquired for the National Mirror Site from a data access interface operated on behalf of ESA;

- Number and volume of Sentinel user-level data products published on the National Mirror Site, by mission and user-level data type.

**b) Statistics on the level of user-uptake from the National Mirror Site:**

- Number of registered users on the National Mirror Site, number of new users, and number of active users during the reporting period, including users' geographic origin, affiliation, thematic activity, and sector of activity;
- Number and volume of Sentinel user-level data products downloaded by the users via the National Mirror Site, by mission, by product type, including users' geographic origin, affiliation, thematic activity, and sector of activity;
- Complementary Sentinel data and information developed by the NPC, or the Operator;
- Support, if any, provided to Copernicus calibration and validation activities by the NPC or the Operator.

5.5.4 The template for providing this information to ESA is attached at Annex III below.

5.5.5 The collection of these statistics will require the NPC to structure the user registration process so that when users register, they provide the following information to be associated anonymously with their user account:

**e) User geographic origin**

Users will be asked during the registration process to state the country from which they will primarily download the data.

**f) User's organisation**

Users will be asked during the registration process to state the type of organisation for which they work, using the following list of categories:

- International public organisation;
- National/regional/local public authority;
- Research and education organisation;
- Business/commercial/professional – SME;
- Business/commercial/professional – non-SME;
- Charity or NGO;

- Natural persons – personal interest;
- Other.

**g) User thematic activity**

Users will be asked to select their main intended area of application for the data from the following list of application areas:

- Land;
- Marine environment, maritime affairs and fisheries;
- Arctic policy and polar areas;
- Transport;
- Energy;
- Environmental compliance;
- Raw materials;
- Air quality and atmospheric composition;
- Health;
- Tourism;
- Climate Change;
- Civil protection and humanitarian aid operations;
- International development and cooperation;
- Migration and home affairs;
- Security;
- Research and innovation;
- Other.

**h) User sector of activity**

Users will be asked to state their main target sector, using the following categories:

- Public sector (including policy support);
- Business sector;



- Research;
- Education;
- Media and public relations;
- Charities and NGOs;
- Private individuals for non-commercial purposes;
- Other.

5.5.6 The NPC will implement an automated means for the National Mirror Site to collect the required statistical information on Copernicus Sentinel data re-distribution and analysis, and it will ensure such data is formatted/structured to ensure it is of maximum value.

5.5.7 It is highlighted that ESA may pass the information provided in the annual report to a third-party contractor for processing and analysis. The information and an analysis of the statistics will be sent to the European Commission and subsequently made publicly available.

5.5.8 The NPC will design the user registration process so that the statistical information can be collected while preserving the anonymity of the user and in compliance with national and/or regional legislation for protecting the users' personal data. Neither the NPC nor the Operator will disclose any personal data (i.e. information from which a natural person can be identified) of the National Mirror Site users to ESA.

## **6 COPERNICUS SENTINEL DATA GOVERNANCE**

6.1 Use of Copernicus Sentinel data is governed by the 'Legal notice on the use of Copernicus Sentinel Data and Service Information' which is referenced at Section 3(iii) above and appended to this TCA as Annex II ('the Legal Notice').

6.2 It is recalled that the Legal Notice stipulates as follows:

"Where the user communicates to the public or distributes Copernicus Sentinel Data and Service Information, he/she shall inform the recipients of the source of that Data and Information by using the following notice:

(1) 'Copernicus Sentinel data [Year]' for Sentinel data; and/or

(2) 'Copernicus Service information [Year]' for Copernicus Service Information.

Where the Copernicus Sentinel Data and Service Information have been adapted or modified, the user shall provide the following notice:

(1) 'Contains modified Copernicus Sentinel data [Year]' for Sentinel data; and/or

(2) 'Contains modified Copernicus Service information [Year]' for Copernicus Service Information."

- 6.3 The NPC will comply with the Legal Notice and it will publish, or ensure that the Operator publishes, the appropriate accreditation any time Copernicus Sentinel data is published or otherwise used on the National Mirror Site.
- 6.4 The NPC will ensure that any user of Copernicus Sentinel data downlinked at the CAS or disseminated via the National Mirror Site reads and accepts the Legal Notice any time a user accesses any part of Copernicus Sentinel data with the possibility of further distributing that part of Copernicus Sentinel data.
- 6.5 The Legal Notice may be updated by the European Commission from time to time. If the European Commission updates the terms and conditions, ESA will communicate the new terms and conditions to the NPC. The NPC will ensure that the new terms and conditions are published on any data access point managed by or on behalf of the NPC, and that every user who accesses Copernicus Sentinel data from a data access point managed by or on behalf of the NPC is made aware of and accepts the new terms and conditions before that user accesses the Copernicus Sentinel data.
- 6.6 If in the future specific Copernicus Sentinel data is assessed by the EU to be "sensitive", the access to such Copernicus Sentinel data through the CDSE or direct downlink, and use and distribution of the data, may become subject to different licensing conditions. This shall also apply for Copernicus Sentinel data which has already been received by the NPC or the Operator through the CDSE or through direct downlink or by any other means, if the Copernicus Sentinel data is assessed to be "sensitive" after the time of data download.
- 6.7 In the event that the EU designates all or any Copernicus Sentinel data as "sensitive", the NPC will ensure that the affected data is removed from the Data Mirror Site. It is understood that the NPC will be unable to retract data which has already been re-distributed.

## **7 ADDITIONAL COPERNICUS SENTINEL DATA PRODUCTS, APPLICATIONS AND SERVICES**

The NPC plans to encourage the development and validation of additional products, applications and services, such as regional products, to contribute to Copernicus Sentinel data validation activities and promote the use of Copernicus Sentinel data across several application areas.

The NPC will, on a case-by-case basis, act as interface between ESA and the other entities involved in developing additional Copernicus Sentinel data products, applications and services, and will remain at all times responsible for ensuring compliance with the relevant terms and conditions of this TCA by those other entities.

## **8 ESA'S SUPPORT IN COPERNICUS SENTINEL OBSERVATION PLANNING**

ESA will endeavour to include, where possible, Copernicus Sentinel data requirements indicated by the NPC into the Copernicus Sentinel acquisition planning. The acquisition planning is implemented by ESA according to the Copernicus Sentinel High Level Operations Plan (HLOP), which is referenced at Section 1.4 above. Data Requirements for future acquisitions may be communicated to ESA by the NPC at any time. It is noted that Copernicus Sentinel missions follow a long-term planning, so that changes to the acquisition plan, if accepted, can be implemented only approximately every 6 months.

## **9 CHANGE TO THE TCA**

- 9.1 At any time, the NPC may propose a new initiative to be added to the cooperation. If ESA agrees to incorporate the new initiative, it will be incorporated in the cooperation through a written amendment to this TCA.
- 9.2 The NPC may also propose changes in the scope of an existing initiative or the suspension/temporary suspension of an initiative, by presenting to ESA the envisaged new content or new timeframe. ESA and the NPC will negotiate about any changes which might affect the level of ESA's support. If the changes agreed between ESA and the NPC require any increase in the support which ESA will provide, the changes will be subject to ESA's prior authorisation by means of a written amendment to this TCA.

- 9.3 Marginal changes in the content of an existing initiative, that will not necessitate changes in ESA's support, may be unilaterally communicated to ESA by the NPC and will not require an amendment of this TCA.

## **10 PERSONAL DATA PROTECTION**

- 10.1 ESA shall process all personal data which is disclosed to it in the frame of this TCA in compliance with the Personal Data Protection Framework applicable to ESA and available on the following website:

[http://www.esa.int/About\\_Us/Law\\_at\\_ESA/Highlights\\_of\\_ESA\\_rules\\_and\\_regulations](http://www.esa.int/About_Us/Law_at_ESA/Highlights_of_ESA_rules_and_regulations)

- 10.2 The NPC shall process all Personal Data which is disclosed to it in the frame of this TCA in compliance with the national and/or European legislation applicable to the NPC in the Agreed Territory of Processing which provide an Adequate Level of Protection under the ESA Personal Data Protection Framework (e.g. EU Regulations in the field of personal data protection, including but not limited to Regulation (EU) 2016/679). Personal Data shall only be processed for the purpose of implementing this TCA and only in the Agreed Territory of Processing which includes:

- ESA Member States, as they are listed on the following website:

[http://www.esa.int/About\\_Us/Welcome\\_to\\_ESA/New\\_Member\\_States](http://www.esa.int/About_Us/Welcome_to_ESA/New_Member_States); and

- The European Union; and
- Countries recognised by the European Commission as ensuring an Adequate Level of Protection of Personal Data under the European Union's legal framework.

- 10.3 Where desired by the NPC, ESA will publish information about Cyprus's Collaborative Ground Segment initiatives online, together with the NPC's contact details, to support the networking amongst Copernicus Sentinel data users and to promote the initiative across partners.

- 10.4 The NPC will provide ESA with contact details, including Personal Data (name, organisation, telephone number and email address), for the purpose of facilitating the coordination and uptake of Cyprus's Collaborative Ground Segment initiatives. The NPC consents, and has obtained the necessary permissions to be able to consent, to the use of this Personal Data by ESA and the other Collaborative Ground Segment partners for coordinating Collaborative Ground Segment activities, and to the

publication of this Personal Data on a publicly accessible webpage managed by ESA. The NPC shall inform ESA of any change required to the contact details and ESA shall ensure that the contact details published on the ESA-managed website are updated accordingly in a timely manner.

## **11 DISCLAIMER**

- 11.1 Access to data from the Copernicus Sentinel missions is on an “as is” basis. ESA disclaims all conditions, representations and warranties of any kind of any kind, whether express, implied statutory or otherwise including, but not limited to what concerns the functionalities of the CDSE and the data transferred. This disclaimer includes the warranties regarding availability, continuity, accuracy, integrity, reliability, fitness for or compatibility with a particular purpose or meeting the users' requirements, satisfactory results or non-infringement of third-party rights.
- 11.2 ESA and the NPC will make all reasonable efforts, and act in good faith, to conduct the activities - at all stages until the finalisation of the activities - and to provide support as acknowledged pursuant to the TCA. Consequently, it is understood and recognised by all individuals and entities involved in the initiatives, that:
- (a) ESA, the NPC or the Operator are not in a position to guarantee that any of the activities will be brought to a fully successful completion and produce the expected results; and
  - (b) the failure to conduct any of the corresponding activities at any stage or at any level of fulfilment cannot constitute a basis for a claim against each other.
- 11.3 ESA shall not be held liable for any damage that may result from the support activities provided under this TCA, including in particular the functionalities of the CDSE, the data transfer, and advice and communication by ESA personnel.
- 11.4 ESA may review, modify, suspend or terminate the provision of efforts in support of Cyprus's Copernicus Sentinel Collaborative Ground Segment activities at any time during the cooperation, in particular and inter alia in the event:
- a. of lack of sufficient funding for sustaining Copernicus Sentinel missions, and associated facilities and activities;
  - b. that a satellite or ground system failure occurs; or

- c. that planned activities of related Copernicus Sentinel systems and facilities are suspended or cancelled in order for ESA or the EU to carry out activities considered of a higher priority.

11.5 ESA may modify the Copernicus Sentinels' operations plans at any time, if it considers such corrective action necessary for ensuring the safety and success of the missions.

ESA and the NPC have decided to sign this TCA using an electronic signature solution. This is in consideration of the representation and warranty mutually granted by ESA and the NPC that the electronic signature shall be recognised an equivalent of the handwritten signature and shall not be denied legal effect on the grounds that it is in an electronic form.