Data policy of TCS AH Service Providers

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1 – DEFINITIONS

Creative Commons (CC) Licences	See https://creativecommons.org/
Data, Data Products, Software and Services (DDSS).	Measurements and/or observations of physical and chemical parameters, collections thereof, and information derived from such measurements and/or observations. Data and Data Products are provided by Suppliers to European Plate Observing System (EPOS) Integrated Core Services (ICS) and Thematic Core Services (TCS) in order to make them openly distributed by EPOS and accessible by Users. Data and data products provided are grouped in 4 levels: raw or basic data (level 0), data products coming from (nearly) automated procedures (level 1), data products resulting from scientific investigations (level 2), integrated data products resulting from complex analysis (level 3). Software are Computer programs or any other processing, visualization and analysis tools for treatment of Data and Data Products, also including methods and workflows or their description. Tools and Software are made available and/or accessible in EPOS through specific EPOS Services. They may be made available as software packages, libraries, or descriptions for download, and/or be made accessible for execution.
Core Services	Both ICS and TCS (see definitions below)
Integrated Core Services (ICS)	Services provided by EPOS as integrated services reaching across the scientific themes/disciplines of EPOS, focusing on advanced ICT infrastructures (e-infrastructures) for discovery of and access to DDSS generation of multidisciplinary products and services, development and execution of workflows.
Service Providers	Entities in charge of aggregating, collecting and ensuring access to DDSS. They feed the EPOS Integrated Core Services (ICS) with DDSS from one or more Suppliers.
Suppliers	Entities allowing distribution of their DDSS through EPOS by signing a letter of intent (see Appendix 1).
Thematic Core Services (TCS)	Thematic groups of Service Providers are organized in and coordinated by Thematic Core Services which provide the scientific expertise for EPOS and interact in close connection with the user community.

Thematic Core Service Anthropogenic Hazards (TCS AH)	Thematic group entrusted with organization and promotion of research and data in the area of anthropogenic hazards.

2 – GENERAL INTRODUCTION

This policy covers Anthropogenic Hazards services and data collected, acquired, processed, implemented and disseminated by Service Providers within the TCS AH.

In particular, this policy shall be applied to services and data accessible within IS-EPOS platform, which aims at building a prototype of European Plate Observing System Thematic Core Service Anthropogenic Hazards (EPOS TCS AH), and which purpose is to create a pan-European multidisciplinary infrastructure for solid Earth science to support a safe and sustainable society.

This data policy is prepared for the needs of EPOS so it could foster open, free and easy access to DDSS from the Service Providers in the area of anthropogenic hazard. It is consistent with EPOS data policy and also respects national and European legislation which are primary regulations. The EPOS data policy takes precedence over this data policy and it shall be applied directly to the DDSS managed by TCS AH.

The data policy of TCS AH Service providers is supplemented by the Data Management Plan for each TCS AH Data Provider, which provide the detailed rules concerning data management in the infrastructure operated within TCS AH.

3 – GUIDING PRINCIPLES

Through its policy TCS AH Service Providers aim to support, promote and enable:

● the continuing availability and the maintenance of AH data and services,
● wider exploitation, re-use and re-combination of AH data,
● full, free and long-term open access to all kinds of AH data and IS-EPOS services, whilst recognizing and respecting the variety of business models and services and data ownerships that enable these resources to be created,
● protection of integrity, transparency, and traceability in AH data and services,
● recognition of the quality of services and data through quality assurance and quality control procedures,

● publication of relevant metadata in the adopted standards to discover and allow data for scientific re-use,

● to accompaniment the research data and services by high-quality documentation describing at least the origin of data, filed work, data collection methods, processing and data management, service use explanation, the research algorithm which is the base of service and the service management,

● facilitate curation and long-term preservation of data and services.

Due to the data provided by TCS AH Service Suppliers EPOS can offer transnational and interdisciplinary services that will simultaneously integrate and support national and regional infrastructures.

TCS AH Service Providers intend to adopt the following key principles:

- to disseminate data and knowledge through Open Access;
- to make DDSS available in a timely manner, without undue delay and preferably free of charge taking in due account the need to differentiate between virtual and remote access and physical access;
- to follow the OECD principles for research data from public funding;
- to utilize a widely accepted community licensing scheme, e.g. Creative Commons.

4 – EUROPEAN LEGAL FRAMEWORK RELATED TO ENVIRONMENTAL DATA, INFORMATION AND DATABASES

Data policy of TCS AH Service Providers takes into account the overall European legal framework related to environmental data, information and databases. The most important regulatory documents which also impact TCS AH Service Providers data policy are:
- *Aarhus Convention* (access to environmental data),
- *INSPIRE Directive* (sharing of the spatial information among public sector organizations and access to the spatial data),
- *Database Directive* (protection of the databases),
- *Software Directive* (protection for computer programs) and
- *PSI Directive* on the re-use of the public sector information

Data policy of TCS AH Service Providers also recognizes relevant international observation system initiatives and national policies and legislation with the aim of full and open exchange of data, metadata and elaborated data products to be made available with minimum time delay and at minimum and whenever possible no-costs.

5 – ACCESS TO EPOS DATA, DATA PRODUCTS, SOFTWARE AND SERVICES

5.1 OPEN ACCESS

The services, data and data products implemented in EPOS by TCS AH Service Providers come with conditions and users will have to accept those conditions in return for the right to use them. Both EPOS and TCS AH make services, data and data products available under the same terms and conditions. Reasonable restrictions that are still in line with open access principles may therefore be implemented for specific data sets, especially when their divulgation could jeopardize a potential industrial/commercial use, violate the rules on personal data protection or on confidentiality for security reasons; or for any other legitimate reason given by a Supplier. Wherever possible EPOS will support the wishes and conditions placed by Suppliers on the way in which the DDSS can be used.

Procedures to accept restrictions and embargo conditions will be handled by a dedicated EPOS committee. Information on restriction and embargo conditions shall be available to the user in a clear and transparent way. In the case of an admitted exception, EPOS provides the user with access under the same terms and conditions as the original Supplier.

Within the EPOS Data Policy and Data Policy of TCS AH Service Providers, users, with regard to access rights and restrictions, are classified as follows:

- **Anonymous**: Access without any identification or accreditation is not allowed at the ICS level. However, if the TCS decide to allow anonymous access, they must provide alternative mechanisms to track users and purposes of DDSS use;
- **Registered**: Identified access requiring prior registration, which may differ from specific EPOS services;
- **Authorized**: Identified and authenticated access requiring specific permissions for particular DDSS or EPOS services to identified user group(s). Only a Registered user can become an Authorized user.

Within the EPOS Data Policy and Data Policy of TCS AH Service Providers, "Access to DDSS", with regard to access rights and restrictions, is classified as follows:

- **Open**: DDSS freely available/accessible to User either for download or for direct use within an EPOS Service.
- **Restricted**: DDSS that are available under the conditions set out by the Service Providers. Restrictions may also mean that fees could be charged. Restrictions to specific user categories, specific type of, if any, should be limited to specific datasets.
- **Embargoed**: DDSS that are available only after a predefined limited time (embargo period) has passed since collection/generation. Once the embargo period has passed, they may become either Open or Restricted.

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Metadata (and DDSS descriptions) are always free and available at any time, even for restricted and embargoed data.

Software disseminated via EPOS can take one of three forms:

- *Acquired Software*, acquired for use by EPOS or users.
- *Contributed Software*, which may be contributed by another research infrastructure and which may have restrictions on use.
- *Generated Software*, which will be generated within EPOS.

5.2 LICENSING

For an effective rights management, all the DDSS provided by TCS AH Service Providers and distributed by EPOS shall have a license affixed to them. EPOS is aiming to grant one default license set for all the DDSS, Creative Commons 4.0, with two allowed licenses, CC:BY and CC:BY:NC. TCS AH Services Providers ensure that they are allowed by the Suppliers to affix licenses on unlicensed data on their behalf in case the supplied DDSS don't include a license.

5.3 QUALITY CONTROL

Data and software providers shall retain the primary responsibility for the quality of the resource they provide and distribute. For data, data products and software produced within EPOS project, the Service Providers shall strive to publish quality metadata including, where appropriate, information on transparency, accuracy, relevance, timeliness, consistency and comparability. In consequence, the quality control of the DDSS rests with the Supplier. The TCS AH Service Providers are responsible for checking the quality parameters of the metadata descriptions that provide information for discovery, contextualisation and action and on provenance and traceability.

Moreover, TCS AH shall provide a mechanism to obtain users feedback on DDSS quality. TCS AH will ensure a continuous process of review and assessment to verify that the TCS AH DDSS provision is operating as envisioned, finding out improvements and preventing identified problems.

Detailed procedures of quality control are described in the Data Management Plan for each TCS AH Service Provider.

5.4 LIABILITY

- EPOS and TCS AH users register and in so doing agree to relieve EPOS and TCS AH of any liability for any

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use of the EPOS DDSS

- TCS AH Service Providers are not liable for any misuse of DDSS or associated metadata.

5.5 PRIVACY

- TCS AH Service Providers comply with all legislation regarding the protection of personal data and privacy
- Conditions agreed by Service Providers on availability/use of information relating to persons (alive or dead).
- Conditions agreed by users when personal information is used or emerges from manipulation of DDSS, or when users are collaborating within and using EPOS.

6 –INTELLECTUAL PROPERTY RIGHTS

The intellectual property rights of the DDSS shall remain the property of the entity or of the person that has generated it, except in cases of waving of those rights by the latter.

TCS AH data, services and data products are made available under an appropriate license that takes into account intellectual property issues, such as copyright, acknowledgement/attribution, identification, and specific reuse conditions. There are restricted DATA that are available after the approval of the Supplier, upon which fees could be charged. Embargoed DATA that are available only after a specific time (embargo period) has passed since collection/generation. During the embargo period they will only be available to specific Authorized Users. Once the embargo period has passed, they may become either Open or Restricted. Relevant IP issues for these data type are acknowledgement/attribution, Creative identification and right to use.

The Suppliers give to EPOS a worldwide; free of charge, perpetual, transferable, non-exclusive right to use their DDSS and any intellectual property rights related to them for any purpose to meet the EPOS objectives and to serve the EPOS Users. This right includes, but is not restricted to, the right to modify, reproduce, incorporate to other data and databases as well as produce new developments. The Suppliers are in charge of checking that the DDSS they provide do not infringe any third party intellectual property rights, and ensure that third party interests are fully acknowledged.

7 – MANAGEMENT FOR THE TCS AH DATA POLICY

Failure of implementing the TCS AH data policy shall be reported to the EPOS head office which will inform

an *ad hoc* committee, whose statutes, missions and composition will be defined by EPOS general assembly. The committee will then take a decision accordingly.

The responsibility of the implementation and monitoring of the Data Policy falls to the Service Providers. This implies that there shall be a dedicated Data Management Plan for every Service Provider, and that every Service Provider needs to ensure the proper DDSS delivery. In addition, the Service Providers need to make sure the Suppliers are informed and agree that EPOS distributes their DDSS (see Appendix 1).

8 – POLICY REVIEW

This document is subject to revision according to the needs and strategy changes of EPOS, as well as according to the evolution of the legislation. The reviewed policy shall be approved by the EPOS general assembly.