

#### ISTITUTO NAZIONALE DI GEOFISICA E VULCANOLOGIA

il Direttore

Istituto Nazionale di Geofisica e Vulcanologia AOO INGV Protocollo Generale - U N. 0019015 del 18/12/2019

Gestione WEB

Al Dott. Alexander GARCIA Alla Dott.ssa Carmela FREDA Alla Dott.ssa Agata SANGIANANTONI

Ai Direttori di Dipartimento Ai Direttori di Sezione Al Direttore della Direzione Centrale Affari Generali e Bilancio Al Responsabile del Centro Servizi Contabilità e Bilancio All'Ufficio Bilancio

Oggetto: Pubblicità atti

Si notifica in copia l'allegata Delibera n. 242/2019 del 27/11/2019 – Allegato A al Verbale n. 10/2019 concernente: Ratifica del Decreto del Presidente n. 174 del 15/11/2019, concernente: "EPOS Anthropogenic Hazards TCS Consortium Agreement".

Dott. Giovanni VORRE

#### ISTITUTO NAZIONALE DI GEOFISICA E VULCANOLOGIA



Delibera n. 242/2019

Allegato A al Verbale n. 10/2019

Oggetto: Ratifica Decreto del Presidente n. 174 del 15/11/2019, concernente "EPOS Anthropogenic Hazards TCS Consortium Agreement".

#### IL CONSIGLIO DI AMMINISTRAZIONE

- VISTO il Decreto legislativo 29 settembre 1999, n. 381, concernente la costituzione dell'Istituto Nazionale di Geofisica e Vulcanologia (INGV),
- VISTO il Decreto legislativo 25 novembre 2016, n. 218, recante "Semplificazione delle attività degli enti pubblici di ricerca ai sensi dell'articolo 13 della legge 7 agosto 2015, n. 124";
- VISTO lo Statuto dell'Istituto Nazionale di Geofisica e Vulcanologia, approvato con Delibera del Consiglio di Amministrazione n.372/2017 del 9 giugno 2017, come modificato con Delibere del Consiglio di Amministrazione n. 424/2017 del 15 settembre 2017 e n. 501/2017 del 21.12.2017, e pubblicato sul Sito WEB Istituzionale (Avviso di emanazione pubblicato sulla Gazzetta Ufficiale della Repubblica Italiana Serie generale n. 27 del 2 febbraio 2018 e, in particolare, l'art. 7, comma 6, lett. c), il quale prevede che il Presidente: "adotta provvedimenti di competenza del Consiglio di amministrazione nei casi di necessità e urgenza da sottoporre a ratifica nella prima riunione successiva del Consiglio stesso";
- VISTO il Regolamento di Organizzazione e Funzionamento dell'Istituto Nazionale di Geofisica e Vulcanologia emanato con Decreto del Presidente n. 45 del 21.02.2018, pubblicato sul sito istituzionale;
- VISTO il Regolamento di Amministrazione, Contabilità e Finanza emanato con Decreto del Presidente n. 119/2018 del 14.05.2018, pubblicato sul sito web istituzionale;
- VISTA la decisione di esecuzione (UE) n. 2018/1732 della Commissione Europea, del 30 Ottobre 2018 relativa all'istituzione del Sistema di osservazione della placca tettonica europea — Consorzio per un'infrastruttura europea di ricerca (ERIC EPOS), notificata con il numero C(2018) 7011;
- VISTO il Decreto Ministeriale per il riparto del Fondo ordinario per gli Enti e le Istituzioni di ricerca, con il quale il MIUR ripartisce i finanziamenti necessari per la partecipazione italiana agli ERIC sotto la voce «attività di ricerca valenza internazionale» e in particolare, l'art. 1, comma 3 che prevede testualmente "I contributi per la partecipazione agli ERIC, o ai progetti da questi realizzati, sia nella forma in-kind sia di contributi finanziari a valere sul FOE, questi ultimi come determinati nella relativa tabella riferita alle "Attività di ricerca a valenza internazionale" costituiscono a tutti gli effetti quota di entrata dei bilanci dei medesimi ERIC, anche mediante eventuale trasferimento diretto";
- **CONSIDERATO** che la sottoscrizione del *Consortium Agreement* (CA) da parte di tutti i Partner è propedeutica alla formazione dell'organo decisionale (*Consortium Board* CB) che gestirà le attività future del TCS-AH e che in data 18 Novembre si è tenuta la prima riunione del CB;

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#### ISTITUTO NAZIONALE DI GEOFISICA E VULCANOLOGIA

- CONSIDERATA la richiesta di avviare con urgenza le procedure di sottoscrizione e di adottare il Decreto del Presidente n. 174 del 15/11/2019, concernente "EPOS Anthropogenic Hazards TCS Consortium Agreement";
- VALUTATE le esigenze scientifiche e tecnologiche dell'Istituto;
- SENTITO il Collegio dei Revisori dei Conti in corso di seduta;
- Su proposta del Presidente,

#### **DELIBERA**

la ratifica del Decreto del Presidente n. 174 del 15/11/2019, concernente "EPOS Anthropogenic Hazards TCS Consortium Agreement".

Il predetto Decreto è allegato alla presente Delibera, della quale costituisce parte integrale e sostanziale.

Letto, approvato e sottoscritto seduta stante.

Roma, 27/11/2019

|La segretaria verbalizzante |(Sig.ra Silvana TUCCI)

Cilles Tucel

IL PRESIDENTE (Prof. Carlo DOGLIONI)



Decreto n. 174

Oggetto: EPOS Anthropogenic Hazards TCS Consortium Agreement.

#### IL PRESIDENTE

- VISTO il Decreto legislativo 29 settembre 1999, n. 381, concernente la costituzione dell'Istituto Nazionale di Geofisica e Vulcanologia (INGV);
- VISTA la Legge 27 settembre 2007, n. 165, concernente la "Delega al Governo in materia di riordino degli Enti di Ricerca";
- VISTO il Decreto legislativo 31 dicembre 2009, n. 213, concernente il "Riordino degli. Enti di Ricerca in attuazione dell'art. 1 della Legge 27 settembre 2007, n. 165";
- VISTO il Decreto legislativo 25 novembre 2016, n. 218, recante "Semplificazione delle attività degli enti pubblici di ricerca ai sensi dell'articolo 13 della legge 7 agosto 2015, n. 124";
- VISTO lo Statuto dell'Istituto Nazionale di Geofisica e Vulcanologia, approvato con Delibera del Consiglio di Amministrazione n.372/2017 del 9 giugno 2017, come modificato con Delibere del Consiglio di Amministrazione n. 424/2017 del 15 settembre 2017 e n. 501/2017 del 21.12.2017, e pubblicato sul Sito WEB Istituzionale (Avviso di emanazione pubblicato sulla Gazzetta Ufficiale della Repubblica Italiana Serie generale n. 27 del 2 febbraio 2018), in particolare, l'art. 2, comma 5;
- VISTO il vigente Regolamento di Organizzazione e Funzionamento dell'Istituto Nazionale di Geofisica e Vulcanologia, pubblicato sul sito istituzionale;
- VISTO il Regolamento di Amministrazione, Contabilità e Finanza emanato con Decreto del Presidente n. 119/2018 del 14.05.2018, pubblicato sul sito web istituzionale;
- VISTA la decisione di esecuzione (UE) n. 2018/1732 della Commissione Europea, del 30 Ottobre 2018 relativa all'istituzione del Sistema di osservazione della placca tettonica europea Consorzio per un'infrastruttura europea di ricerca (ERIC EPOS), notificata con il numero C(2018) 7011;
- VISTO il Decreto Ministeriale per il riparto del Fondo ordinario per gli Enti e le Istituzioni di ricerca, con il quale il MIUR ripartisce i finanziamenti necessari per la partecipazione italiana agli ERIC sotto la voce «attività di ricerca valenza internazionale» e in particolare, l'art. 1 comma 3 che prevede testualmente "I contributi per la partecipazione agli ERIC, o ai progetti da questi realizzati, sia nella forma in-kind sia di contributi finanziari a valere sul FOE, questi ultimi come determinati nella relativa tabella riferita alle "Attività di ricerca a valenza internazionale" costituiscono a tutti gli effetti quota di entrata dei bilanci dei medesimi ERIC, anche mediante eventuale trasferimento diretto";
- VISTA la nota del 27/06/2019, prot. n. 1551, con la quale il dott. Gilberto Saccorotti, responsabile delle attività nell'ambito del WP 14 di EPOS IP, ha precisato che il Consortium Agreement è mirato a formalizzare la partecipazione della comunità.

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scientifica al TCS EPOS Anthropogenic Hazards- TCS AH nonché, ad assicurare una governance condivisa per contribuire all'operatività di EPOS garantendo l'impegno delle comunità e delle infrastrutture di ricerca nazionali coinvolte nella fornitura di dati e prodotti scientifici, trasmettendo lo schema del Consortium Agreement;

- VISTA la nota del 14/11/2019, prot. n. 2651, con la quale lo stesso dott. Gilberto Saccorotti ha rappresentato che la sottoscrizione del Consortium Agreement (CA) da parte di tutti i Partner è propedeutica alla formazione dell'organo decisionale (Consortium Board CB) che gestirà le attività future del TCS-AH e che il prossimo 18 Novembre è prevista la prima riunione del CB, cui l'INGV potrà partecipare solo a seguito della sottoscrizione del CA e ha richiesto contestualmente, la possibilità di avviare con urgenza le procedure di sottoscrizione;
- CONSIDERATO che nella suddetta nota è proposto il dott. Alexander Garcia quale Rappresentante INGV all'interno del TCS EPOS Anthropogenic Hazards Consortium Board;
- RAVVISATA la necessità di nominare un rappresentante INGV all'interno del TCS Consortium Board;
- VISTO lo schema del Consortium Agreement e le disposizioni contenute;
- VALUTATE le esigenze scientifiche e tecnologiche dell'Istituto;
- RAVVISATA la necessità di provvedere al fine di consentire la partecipazione al primo Consortium Board del TCS Anthropogenic Hazards e considerato il carattere d'urgenza;

#### DECRETA

E' approvato il Consortium Agreement EPOS Anthropogenic Hazards TCS - TCS AH, allegato al presente decreto quale parte integrante e sostanziale.

Il dott. Alexander Garcia, Ricercatore dell'INGV, è nominato Rappresentante INGV all'interno del TCS EPOS Anthropogenic Hazards Consortium Board, per un periodo di tre anni, rinnovabile, a decorrere dalla data di sottoscrizione del Consortium Agreement.

Il Rappresentante avrà cura di interfacciarsi, preliminarmente all'approvazione, aggiornamento e/o revisione del Work Programme annuale, con Presidente e Direttore di Dipartimento, trasmettendo agli stessi una relazione sulle azioni e sulle risorse che costituiscono, per ciascuna annualità, il contributo INGV al TCS Anthropogenic Hazards.

Il presente decreto sarà sottoposto al Consiglio d'Amministrazione per la prescritta ratifica nella prossima seduta utile.

Roma, 15/11/2019

Prof. Carlo DOGLIONI

OF



#### Istituto Nazionale di Geofisica e Vulcanologia

il Présidence

Alexander Garcia alexander garcia@ingv.it

To whom it may concern

#### **DECLARATION**

Acting on behalf of Istituto Nazionale di Geofisica e Vulcanologia (INGV) I hereby confirm that Mr. Alexander Garcia, in compliance with the provisions of the attached Consortium Agreement is the INGV Representative in the Consortium Board of TCS AH.

This declaration does not authorizes and empowers Mr. Alexander Garcia to sign documents that shall be prior approved, according Italian Law and internal Rules, by INGV decision making Body and the pro tempore legal Representative.

Signature (Prof. Cafe Disc JONI)

Date of signature: November 15 2019

Name of the signing person: Carlo Doglioni

Position in the organization: President

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## SIGNATURES:

## Istituto Nazionale di Geofisica e Vulcanologia,

Via di Vigna Murata 605, 00143 Rome, Italy,

Signature\_

IL PRESIDENTE Prof. Carlo DOGLIONI) TO THE STATE OF TH

Date of signature: 15 NOV. 2019

Name of the signing person: Prof. Carlo Doglioni

Position in the organization: President

## Thematic Core Services Anthropogenic Hazard Consortium Agreement for the Construction and Operation of the EPOS Research Infrastructure

#### between

- Istituto Nazionale di Geofisica e Vulcanologia, based in via di Vigna Murata 605, 00143
   Rome, Italy, represented by Carlo Doglioni, President of the organization, hereinafter referred to as "INGV"
- 2. Centre national de la recherche scientifique, established in 3 rue Michel-Ange, Paris 75794, France, intracommunity VAT identification number FR40180089013, represented by its Chairman and CEO, Mr Antoine PETIT, who has delegated his signing authority for this Consortium agreement to the Regional Representative of the Paris Regional Michel Ange Division, Ms Hélène MAURY, hereinafter referred to as "CNRS"; The CNRS is acting in the name and on behalf of the National Institute for Earth Sciences and Astronomy (INSU), CNRS authorized by Université Grenoble Alpes (UGA), Université Savoie Mont-Blanc, Institut pour la Recherche et le Développement (IRD) and Institut Français des Sciences et Technologies des Transports de l'Aménagement et des Réseaux (IFFSTTAR), is acting on behalf of ISTerre LABORATORY -UMR5275 (Joint Research Unit), directed by Mr Stéphane GUILLOT, hereafter referred to as the "ISTerre LABORATORY",

CNRS, authorized by Université de Strasbourg, is acting in the name and on behalf of the joint research unit, Institut de Physique du Globe de Strasbourg –UMR7516, directed by Mrs Laurence JOUNIAUX, hereafter referred to as «IPGS LABORATORY»"

- 3. Helmholtz Zentrum Potsdam Deutsches Geoforschungszentrum, based in Telegrafenberg, 14473, Potsdam, Germany, represented by Dr. Stefan Schwartze Administrative Executive Director and Prof. Dr. Reinhard Hilttl Scientific Director, hereinafter referred to as "GFZ";
- 4. Institute of Geophysics Polish Academy of Sciences [Instytut Geofizyki Polskiej Akademii Nauk] based in Warsaw, ul. Księcia Janusza 64, 01-452 Warsaw, represented by dr hab Beata Orlecka-Sikora Director, hereinafter referred to as "IG PAS";
- 5. L'Institut National de l'Environnement et des Risques, Public entity of an industrial and commercial nature, established at Verneuil-en-Halatte 60550 France, Parc Technologique ALATA B.P. n° 2, represented by Mr Raymond COINTE, duly authorised in his capacity as Managing Director, hereinafter referred to as "INERIS";
- 6. Geofyzikalni Ustav AV CR, based in Bocni II No. 14131 Praha 4, Czech Republic, represented by Pavel Hejda Director, hereinaster referred to as "IG ASCR";



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- 7. Oulun Yliopisto, based in Pentii Kaiteran Katu 1 90014 Oulu, Finland, represented by Taina Pihlajaniemi Vice Rector for Research, hereinaster referred to as "OULU";
- 8. Lulea Tekniska Universitet, based in 97187 Lulea, Sweden, represented by Prof. Birgitta Bergvall-Kåreborn Rector, hereinafter referred to as "LTU";
- 9. University of Keele, a university established by the University of Keele Act 1962 (10 & 11 Eliz. 2 Ch Xv) and the granting of a Royal Charter in 1962, of Keele, based in Staffordshire, ST55BG, United Kingdom, represented by Dr. Mark A. Bacon, Director of Engagement & Partnership, hereinafter referred to as "KU";
- 10. University of Science and Technology Academic Computer Centre Cyfronet, [Akademia Górniczo-Hutnicza im. Stanislawa Staszica w Krakowie - Akademickie Centrum Komputerowe Cyfronet] based in Cracow, ul. Nawojki 11, 30-950 Cracow, Poland, represented by prof. Dr hab. Inz. Kazimierz Wiatr - Director, Angelika Zaleska-Walterbach - Deputy Director for Economic and Financial Affairs, hereinafter referred to as "ACK UST";
- 11. Central Mining Institute [Glowny Instytut Gornictwa], based in Katowice, plac Gwarków 1, 40-166 Katowice, Poland, registered in the Trade Register kept by the District Court Katowice-Wschód, VIII Commercial Division of the National Court Register, under the number KRS0000090660 using tax identification number: NIP 634-012-60-16, REGON: 000023461, represented by prof. dr hab. Inz. Eng. Stanisław Prusek Director, hereinafter referred to as "CMI";
- 12. Polish Mining Group [Polska Grupa Górnicza S.A.], based in Katowice, ul. Powstańców 30, 40-039 Katowice, Poland, registered in the Trade Register kept by the District Court Katowice-Wschód, VIII Commercial Division of the National Court Register, under the number KRS0000709363 using tax identification number: NIP 634-283-47-28, REGON: 360615984, with a fully paid-up share capital in the amount of PLN 3 916 718 200,00 zł, represented jointly by Piotr Bojarski Vice-President of the Management Board for Production and Andrzej Paniczek Vice-President of the Management Board for Finance, hereinafter referred to as "PMG";

as member organizations of the Thematic Core Services Anthropogenic Hazard (TCS AH), also referred to as "Party" or "Parties" or "Members"

#### Preamble:

Whereas the Parties to the Thematic Core Services Anthropogenic Hazard (TCS AH) are providing data and services to the EPOS-ERIC in connection with anthropogenic hazards, in particular those

regarding the exploration and exploitation of geo-resources.

The Parties wish therefore to define their rights and obligations as part of the TCS AH in a consortium agreement, hereinafter the "Consortium Agreement"

#### IT IS THEREFORE AGREED BETWEEN THE PARTIES AS FOLLOWS:

#### **Article 0: Definitions**

- "Background" means any data, know-how, Software or information whatever its form or nature (tangible or intangible), including any rights such as intellectual property rights that:
- (a) is held by the Parties before they acceded to the Consortium Agreement or was generated by one of the Parties without any relation to performance of the Consortium Agreement, and
- (b) is needed to implement the action or exploit the results in relation to performance of the Consortium Agreement.
- "Consortium Board" or "CB" means the decision-making body of the TCS AH.
- "EPOS" (European Plate Observing System) means a long-term plan to facilitate integrated use of data, data products, and facilities from distributed research infrastructures for solid Earth science in Europe.
- "EPOS-ERIC" means the EPOS European Research Infrastructure Consortium, established on 8 November 2018.
- "Results": means any (tangible or intangible) output of the action such as data, knowledge, Software or information whatever its form or nature, whether it can be protected or not that is generated by the Parties after signing of the Consortium Agreement in relation to the performance hereof, as well as any rights attached to it, including intellectual property rights.
- "Software": Software means sequences of instructions to carry out a process, in, or convertible into a form executable by a computer and fixed in any tangible medium of expression.
- "Core Software": software belonging to a Party prior to the entry into force of the Consortium Agreement or generated by a Party after signing of the Consortium Agreement but without any relation to the performance hereof.
- "Derived Software": software developed from Core Software under the Consortium Agreement:

There are two categories of Derived Software: Adaptations and Extensions:

- "Adaptation": Derived Software using the same algorithms as the Core Software from which it is derived e.g. the same algorithms rewritten in another language.
- "Extension": Derived Software allowing for access to new functions or performance by comparison to the Core Software from which it is derived.
- "New Software": software created ex nihilo under the Consortium Agreement.
- "Work programme": Work programme means the description of the actions and resources of each Party for the TCS AH defined in Annex 2.

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#### Article 1 Parties to this Consortium Agreement

Parties are organizations contributing to the TCS AH specific tasks as defined in accordance to the Work programme (Annex 2).

#### 1.1 Admission

Any new Party shall sign the Consortium Agreement and describe its activities and resources in Annex 2 as agreed upon with the Consortium Board. The accession of any new Party shall enter into force upon the date of the signature hereof.

Any addition to the TCS AH Consortium of a new Party requires the prior approval of the Consortium Board by unanimous decision. New party admission requires signing of the amended Consortium Agreement.

#### 1.2 Withdrawal

Any Party may withdraw from the TCS AH Consortium upon request, provided that twelve (12) months' prior notice is given to the Consortium Board. The withdrawing Party undertakes to complete its commitments taken up to the date of its withdrawal regarding the joint activities and regarding its potential financial contribution.

#### 1.3 Exclusion

In the event of negligent failure to perform a Party's duties, the Consortium Board may exclude such Party. Such a decision requires the approval of the unanimity of the TCS AH Consortium Board, without the vote of the concerned representative(s).

#### Article 2 Purpose of this Consortium Agreement

2.1 This Consortium Agreement sets out organizational, managerial and financial guidelines to be followed by the Members of the TCS AH Consortium in order to cooperate with EPOS ERIC.

#### Article 3 Mission of the TCS AH and commitment of the Parties

- 3.1 The mission of TCS AH is to integrate within EPOS the research infrastructures related to studies of hazards of anthropogenic origin, in particular those caused by the exploration and exploitation of geo-resources. For this purpose, the Parties shall:
- a) maintain and develop its infrastructure resources necessary for provision of service referred to in article 3.2 hereof:
- b) maintain and develop interoperability between its infrastructure resources and the multidisciplinary e-EPOS infrastructure (hereinafter: ICS-EPOS);
- c) support international and inter-institutional cooperation in the research into the above-mentioned hazards;
- d) facilitate education and training within the above-mentioned areas;
- e) develop partnership with the industry to achieve the most complete possible synergy of

science and industry;

- provide the industry with innovative solutions (with consideration of the regulations f) regarding the state aid);
- provide the society with accurate information about the anthropogenic hazards, in particular g) those caused by and connected with the exploration and exploitation of geological resources.
- 3.2 The Parties of the TCS AH Consortium make best effort to ensure provision of the high-quality service (further on referred to as "the Service") based on the integrated research infrastructure, providing international scientific community with access to unique datasets and specialized software in the field of induced seismicity, i.e. anthropogenic induced hazards on the surface influenced by geo-resources exploration and exploitation, providing access to:
- collection of episodes covering most extensively the variety of specific cases of anthropogenic hazards and high-level services specific for the area of study,
- software services, b)
- c) high power cloud calculations,
- d) possibility for conducting own digital researches within digital episodes,
- e) scientifically proven information on anthropogenic seismicity hazards.
- educational platform and source of information for non-specialists.

#### Article 4 Organization of TCS AH Consortium

The TCS AH Consortium is composed of the following bodies:

#### 4.1 Consortium Board (CB)

The CB is the decision-making body of the TCS AH.

It is composed of one (1) authorized representative of each Party.

Each Party has one (1) vote.

The CB elects a chair among its members, hereafter referred to as the "Chair", by two third (2/3) majority. The term of its mandate is five (5) years renewable once during the duration of the Consortium Agreement.

The Chair cannot represent a Party in the CB and has no vote right. In case one of the representatives is elected as a Chair, the said Party is obliged to assign a new representative.

The CB may also elect a vice-chair, define her/his legal status in CB and entrust her/him with specific tasks from the general scope of Chair's tasks. The mandate of the vice-chair lasts for the duration of the mandate of the Chair.

The TCS AH CB's regulations are detailed in Annex 1.

#### 4.2 The Executive management

#### 4.2.1 The Director

The Director is the executive body. She/he has the overall responsibility for managing the activities decided by the CB and representing the TCS AH Consortium interests and strategy in accordance with the decisions of the CB.

The Director is elected by the CB by two-thirds (2/3) majority. The term of the mandate is five years (5) and may be renewable once.

She/he reports to the Consortium Board.

The Director cannot make any legally binding decisions on behalf of any Party.

The Director cannot represent a Party in the Consortium Board and has no vote right. In case one of the representatives is elected as a Director, the said Party is obliged to assign a new representative.

The person selected for the position of the Director shall be able ensure the proper level of coordination of the important tasks of TCS AH, therein especially the tasks connected with the services related to in Article 3.2 hereof.

#### 4.2.2. Hosting organization

The CB shall select the Party, which will be hosting the Executive management office. The selected Party shall be providing the human and financial resources for the Director position and the administrative support.

Selection of the hosting organization shall be coordinated with election of the Director and the same selection procedure shall be applied. The hosting organization operate as such for the duration of the mandate of the Director with whom it was selected.

#### 4.2.3 Sections

- 4.2.3.1 the following sections are established:
- a) Section for implementation of TCS AH Services;
- b) Administration law & accounting;
- c) Section for episodes integration and application implementation;
- d) Section for promotion and dissemination;
- e) Section for projects & partnership.

The purpose of theses sections is detailed in VI annex 2.

- 4.2.3.2 The sections are organized by each Party within its obligations indicated in Annex 2 hereof.
- 4.2.3.3 The modifications to the sections shall be introduced by the Consortium Board taken into account the needs presented by the Director. The modification to the sections does not constitute modification hereof.

#### 4.3 The User Committee

A User Committee shall be set up composed of main representatives of the community selected by the Consortium Board by two-thirds (2/3) majority. The term of the mandate of every member is five years (5) and may be renewable once.

CB defines the detailed rules regarding nomination of candidates for User Committee and the number of its members at the first meeting. CB is also entitled to amend the adopted regulation. The CB decides the above-mentioned issues with the 2/3 majority.

The User Committee shall designate a Spokesperson who shall advice the Director. She/he can be invited to attend the meetings of the CB without no rights to vote.

The User Committee shall form the policy for gaining and using User feedback concerning the Service related to in Article 3.2 hereof.

#### 4.4 The Data Provider Committee

A Data Provider Committee shall be set up composed of main representatives of data providers selected by the Consortium Board by two-thirds (2/3) majority. The term of the mandate of every member is five years (5) and may be renewable once.

CB defines the detailed rules regarding nomination of candidates for the Data Provider Committee and the number of its members at the first meeting. CB is also entitled to amend the adopted regulation. The CB decides the above-mentioned issues with the 2/3 majority.

The Data Provider Committee shall designate a Spokesperson who shall advice the Director. She/he can be invited to attend the meetings of the Consortium Board without no rights to vote.

The Data Provider Committee shall form the policy concerning requirements as to the quality of the provided data and quality control.

#### 4.5 The Innovation Advisory Committee

The Consortium Board may act in the extended composition as the Innovation Advisory Committee, including representatives of TCS AH Stakeholders from academia, industry, science, local and central administration bodies, society and others, invited by the Consortium Board.

The Innovation Advisory Committee has a consulting role in the decision making process of TCS AH.

The Chairman of the Consortium Board or one of the vice-chairs presides over the works of the Innovation Advisory Committee, calls and organizes its meetings.

#### Article 5 Work programme of the TCS AH

The Work programme and the resources of each Party are detailed in Annex 2.

The Work programme of the TCS AH Consortium will be updated annually, as well as the related resources.

#### Article 6 Rights and Obligations of the Parties

Each Party undertakes to take part in the efficient implementation of their responsibilities within the activities of the TCS AH Consortium, and to cooperate, perform and fulfil, promptly and on time,

all of its obligations as may reasonably be required from it and in accordance with Annex 2. Each Party undertakes to notify promptly, in accordance with the governance structure of the TCS AH Consortium and EPOS-ERIC any significant information, fact, problem or delay likely to affect the activities of the above. Each Party shall promptly provide all reasonably required information having bearings on other TCS AH Consortium or EPOS-ERIC activities. Each Party shall take reasonable measures to ensure the accuracy of any information or materials it supplies to the other Parties.

#### Article 7 Resources

Each Party shall be responsible for its own resources, as described in Annex 2. Any additional contribution shall be subject to a decision of the Consortium Board.

A Party may refuse to contribute additional resources beyond the contribution that would be due to meet the agreed level stated in the most recent Work programme, using veto right related to in Annex 1.

Any distribution of common funds allocated jointly to all the members of TCS AH Consortium by EPOS-ERIC or any third party and designated for realization of purposes of the TCS AH Consortium shall be subject to a decision of the Consortium Board by two-thirds (2/3) majority and to set up of the related agreements.

Any decision regarding a joint budget (i.e. the budget created from the financial contributions of the Parties) requires an unanimous vote of the Consortium Board and shall be subject to an amendment of the Consortium Agreement.

#### Article 8 Data and Intellectual Property Rights

#### 8.1. General Principles

The principles and process of handling data and intellectual property rights within the activities of the EPOS-ERIC are laid down in the data policy (Annex 3). The provisions of the policy are complemented with this article.

The rules concerning data and intellectual property rights established herein shall apply unless the Parties stipulate differently in the individual agreements regulating data and intellectual property rights to particular piece of Background or Results. If these individual agreements are not signed by all the parties of the Consortium Agreement, the drafts of these agreements shall be submitted to the Consortium Board for information before signing.

#### 8.2. Ownership of Results

#### 8.2.1 Management of Results

Results obtained in the framework of the Consortium Agreement shall belong to the Party or Parties generating it.

In case of Results generated by several Parties, hereinafter referred to as "Joint Owners", the coownership rate and intellectual property costs will be shared between the said Parties in proportion to their input.

In case of Results, the Parties may designate between them an intellectual property manager

(hereafter "IP Manager") during a meeting of the Consortium Board. The IP Manager will manage and monitor the protection of the Results. The detailed rules concerning the position of IP Manager shall be defined by CB.

In the event that, at least two French public Parties are included among the Joint Owners, such French public Parties shall designate between them a representative, hereafter « Representative », in accordance with the "Décret n°2014-1518 of 16 décembre 2014 relatif au mode de désignation et aux missions du mandataire prévu à l'article L. 533-1 du code de la recherche and Arrête du 19 juillet 2016 relatif aux modalités de prise en charge des frais engagés par le mandataire unique prévu à l'article L. 533-1 du code de la recherché".

The Parties undertake to sign in good faith any legal instrument enabling them to exercise proprietary rights over the Results in accordance with the Consortium Agreement prior to any exploitation.

It is agreed that the Parties shall proceed in the interest of the inventors, in accordance with the legislation.

#### 8.2.2 Software

The Core Software shall remain the property of the Party which holds it prior to the signing of the Consortium Agreement or who generated it after signing of the Consortium Agreement without any relevance to the Consortium.

Adaptations carried out, regardless of the author, in the framework of the Consortium Agreement, shall be the property of the Party owning the Core Software. Accordingly, where the Party having carried out Adaptations is not the owner of the Core Software, it undertakes to assign the right of use of such Adaptations, free of charge, to the Party owning the Core Software, including the right to reproduce, represent, translate, adapt, arrange, alter and market the Adaptation.

Each Party shall be the owner of the Extension produced by it within the framework of the Consortium Agreement, together with the owner of the Core Software from which such Extensions are derived in the proportions reflecting their input.

Extensions produced jointly by the Parties, regardless of which party is the initial owner of the Core Software from which such extensions are derived, shall be the joint property of the Parties who generated it.

The New Software shall be the jointly owned property of the Parties who generated it.

The rules concerning management of the Results established in the Article 8.2.1, and the rules concerning use of Results established in the Article 8.3 shall apply accordingly.

#### 8.3 Use of Results

In case of joint ownership: each of the Joint Owners shall be entitled to use their jointly generated and jointly owned research Results, whether patentable or not, for non-commercial research and teaching activities on a royalty-free basis, and without requiring the prior consent of the other Joint Owner(s). Each of the Joint Owners shall be entitled to otherwise exploit the jointly owned research Results and to grant (exclusive or non-exclusive) licenses to third parties if the other Joint Owners are given prior notice and compensation, provided that the third party offered compensation.

Subject to any third-party rights, each Party hereby grants to the other Parties a non-exclusive,

royalty-free license to use its Results for the purpose of carrying out tasks explicitly agreed upon and detailed in the Work programme under this Consortium Agreement. Each Party shall be responsible for securing rights, to the necessary extent, to such Results from its employees, students, and/or any sub-contractors

#### 8.4. Background

Each Party shall own and continue to own its Background and nothing in this Consortium Agreement shall transfer those rights to another Party. The Parties do not intend any other assignment of or license to Background than is explicitly provided for in this Consortium Agreement.

Subject to any third-party rights, each Party hereby grants to the other Parties, a non-exclusive, royalty-free license under the owning Party's Background to use the owning Party's Background for the purpose of carrying out the tasks explicitly agreed upon and detailed in the Work programme under this Consortium Agreement. Furthermore, the Parties have a royalty-free, non-assignable right to use Background for further use within the activities of the EPOS-ERIC unless it was explicitly restricted by the entitled Party.

#### Article 9 Confidentiality

#### 9.1. General Principles

All information in whatever form or mode of communication, which is disclosed by a Party (the "Disclosing Party") to any other Party (the "Recipient") in connection with the activities under this Consortium Agreement and which has been explicitly marked as "confidential" at the time of disclosure, or when disclosed orally has been identified as confidential at the time of disclosure and has been confirmed and designated in writing within fifteen (15) calendar days from oral disclosure at the latest as confidential information by the Disclosing Party, is "Confidential Information".

#### 9.2. Obligations

The Recipients hereby undertake, for a period of four (4) years after the termination of the Consortium Agreement:

- not to use Confidential Information otherwise than for the purpose for which it was disclosed;
- not to disclose Confidential Information to any third party without the prior written consent by the Disclosing Party;
- to ensure that internal distribution of Confidential Information by a Recipient shall take place on a strict need-to-know basis;
- and to return to the Disclosing Party on demand all Confidential Information which has been supplied to or acquired by the Recipients including all copies thereof and to delete all information stored in a machine-readable form. The Recipients may keep a copy to the extent it is required to keep, archive or store such Confidential Information because of compliance with applicable laws and regulations or for the proof of on-going obligations.

Notwithstanding the previous, a Party may disclose Confidential Information in order to comply with law or a court order.

The Parties are obliged to ensure preservation of the rules of confidentiality herein included by its employees delegated to tasks connected with performance of the CA.

The Hosting organization shall sign the confidentiality agreement with all the members of the CA bodies who are not employees of one of the Parties in order to assure preservation of the rules of confidentiality herein included.

#### Article 10: Dissemination

#### 10.1 General rules

For the avoidance of doubt, nothing in this Article 10 has impact on the confidentiality obligations

The dissemination of the Results and Background is regulated primarily by the rules established in Annex 3 hereto

#### 10.1 Dissemination of another Party's unpublished Results or Background

A Party shall not include in any dissemination activity another Party's Results or Background without obtaining the owning Party's prior written approval, unless given piece of Result or Background is already published.

#### 10.2 Obligation to cooperate

The Parties undertake to cooperate to allow the timely submission, examination, publication and defense of any dissertation or thesis for a degree that includes their Results or Background subject to the confidentiality and publication provisions agreed in this Consortium Agreement.

#### 10.3 Use of names, logos or trademarks

Nothing in this Consortium Agreement shall be construed as conferring rights to use in advertising, publicity or otherwise the name of the Parties or any of their logos or trademarks without their prior written approval.

#### **Article 11 Liability**

Except as otherwise specifically agreed, each Party shall only be liable towards the other Parties for direct damages, whether based on personal injury or material damage, it or the persons charged with the fulfilment of its obligations have caused through gross negligence or willful misconduct.

No Party shall be liable to any other Party for special, collateral, incidental or consequential loss or damages such as, but not limited to, loss of profit, loss of revenue, or loss of contracts.

Each Party shall be solely liable for any loss, damage or injury to third parties resulting from any breach of any of the provisions of this Consortium Agreement or arising out of the termination of this Consortium Agreement.

Each Party is liable only for its own part and the Parties do not have joint liability against third parties or the EPOS ERIC.

## Article 12 Duration of this Consortium Agreement

#### 12.1 Entry into force

This Consortium Agreement shall come into force on the last date of signature by the Parties, hereafter the "Effective Date".

#### 12.2 Expiration

Without prejudice to the 1.2, 1.3 and 12.3, this Consortium Agreement will terminate ten (10) years after its Effective Date, unless otherwise agreed unanimously by the Parties.

#### 12.3 Termination or extension

This Consortium Agreement may be extended or terminated before expiration date by an unanimous decision by the Consortium Board after a proposition by any Party, in accordance to the rules provided in Annex 1.

In case so many Parties have withdrawn or have been excluded that the minimum amount of three Parties cannot be reached anymore, this Consortium Agreement shall be considered terminated, unless the Consortium Agreement terms are confirmed by unanimous decision of the Consortium Board between the remaining Parties.

#### 13.4 Survival of rights and obligations

The provisions relating to Confidentiality, for the time period mentioned therein, as well as for Intellectual Property Rights and Liability shall survive the expiration or termination of this Consortium Agreement.

Termination shall not affect any rights or obligations of a Party leaving the Consortium incurred prior to the date of termination, unless otherwise agreed between the Consortium Board and the leaving Party. This includes the obligation to provide all input, deliverables and documents for the period of its participation.

#### Article 14 Amendment procedure

Amendment proposals may be submitted to the Consortium Board by any Party.

Amendment proposals shall be listed on the agenda communicated with the invitation to the Consortium Board.

All Annexes are an integral part of the Consortium Agreement.

Notwithstanding the foregoing, in order to modify and/or update the Annexes, it is not necessary to follow the same procedure as for amending the Articles of the Consortium Agreement. The Annexes 1, 2 and 3 can be modified and/or updated by decision of the Consortium Board in accordance to the regulations set up in Annex 1. Annex 3 may be modified by the decision of the EPOS ERIC.

#### **Article 15 Miscellaneous**

#### 15.1 Language

The Consortium Agreement is drawn up in English, which language shall govern all documents, notices, meetings, arbitral proceedings and processes relative thereto.

#### 15.2 Applicable law

In case of any dispute between the Parties arising in connection hereto, this Consortium Agreement shall be construed in accordance with and governed by the laws of the defending party. The defending party is the one indicated by the party which formally initiated (notified about) the dispute. Nothing in this Consortium Agreement shall be deemed to require a Party to breach any mandatory statutory law under which the Party is operating.

#### 15.3 Settlement of disputes

The parties shall endeavor to settle their disputes amicably within the structures of the Consortium Agreement on the forum of the Consortium Board.

In case the Parties were not able to settle the dispute on the forum of Consortium Board within 90 days from notification from one of the Party of such a dispute, such a dispute, controversy or claim arising under, out of or relating to this Consortium Agreement and any subsequent amendments of this contract, including, without limitation, its formation, validity, binding effect, interpretation, performance, breach or termination, as well as non-contractual claims, shall be submitted to mediation in accordance with the WIPO Mediation Rules. The language to be used in the mediation shall be English unless otherwise agreed upon.

If, and to the extent that, any such dispute, controversy or claim has not been settled pursuant to the mediation within sixty (60) calendar days of the commencement of the mediation, the courts of the defendant shall have exclusive jurisdiction.

Nothing in this Consortium Agreement shall limit the Parties' right to seek injunctive relief in any applicable competent court.

#### List of Annexes

Annex 1: Regulations of the TCS AH Consortium Board

Annex 2: Work Programme

Annex 3: Data policy

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## SIGNATURES:

## Istituto Nazionale di Geofisica e Vulcanologia,

Via di Vigna Murata 605, 00143 Rome, Italy,

IL PRESIDENTE Signature (Prof. Carlo-DOGMO

Date of signature:

1 5 NOV. 2019

Name of the signing person: Prof. Carlo Doglioni

Position in the organization: President

## SIGNATURES

## Centre national de la recherche scientifique

3 rue Michel-Ange, Paris 75794, France,

Signature	Date of signature:

Name of the signing person: Hélène MAURY

Position in the organization: Regional Representative of the Paris Regional Michel Ange

Division

SIG		

## Helmholtz Zentrum Potsdam Deutsches Geoforschungszentrum,

Telegrafenberg, 14473, Potsdam, Germany,

Name of the signing person: Prof. Dr. Reinhard Hüttl

Position in the organization: Scientific Director

Signature	· ·	Date of signatu	ire:
Name of the signing person: Dr. S	tefan Schwartze	,	
Position in the organization: Admi	nistrative Executiv	ve Director	
	•		
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Signature	······································	Date of signatu	re:
	8		

## **SIGNATURES**

# Institute of Geophysics Polish Academy of Sciences [Instytut Geofizyki Polskiej Akademii Nauk]

Warsaw, ul. Księcia Janusza 64, 01-452 Warsaw

Signature	Date of signature:
-----------	--------------------

Name of the signing person: dr hab Beata Orlecka-Sikora

Position in the organization: Director

### **SIGNATURES**

## Institut National de l'Environnement industriel et des RISques, [INERIS]

Parc Technologique ALATA - B.P. nº 2Verneuil-en-Halatte - 60550 France,

Signature	Date	of sig	nature:	

Name of the signing person: Raymond Cointe

Position in the organization: Managing Director

SIGNATURES:			
Lulea Tekniska Universitet	•		•
97187 Lulea, Sweden	· · · · · · · · · · · · · · · · · · ·		
~			
		-	
Signature	Da	te of signature:	
Name of the signing person: Prof. Charlotta	Johansson	•	
Position in the organization: Head of the		Mining, and Environmen	ıtaİ
Name of the signing person: Prof. Charlotta Position in the organization: Head of the Engineering Signature	Department of Civil, I	Mining, and Environment	
Position in the organization: Head of the Engineering	Department of Civil, I		

#### SIGNATURE

University of Science and Technology – Academic Computer Centre Cyfronet, AGH-UST [Akademia Górniczo-Hutnicza im. Stanislawa Staszica w Krakowie - Akademickie Centrum Komputerowe Cyfronet]

Cracow, ul. Nawojki 11, 30-950 Cracow, Poland,

Signature	Date of signature:
	A STATE OF THE STA
Name of the signing person: prof. Dr hab. Inz. Kazimierz Wiatr	
Position in the organization: Director	
4	
Signature	Date of signature:
Name of the signing person: Angelika Zaleska-Walterbach	•

Position in the organization: Deputy Director for Economic and Financial Affairs

## **SIGNATURES**

## Polish Mining Group [Polska Grupa Górnicza S.A.]

Katowice, ul. Powstańców 30, 40-039 Katowice, Poland

Signature	Date of signature:
Name of the signing person: Piotr Bojarski	
Position in the organization: Vice-President of the	Management Board for Production
	*
Signature	Date of signature:
Name of the signing person: Andrzej Paniczek	
Position in the organization: Vice-President of the	Management Board for Finance

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## Annex 1: Regulations of the TCS AH Consortium Board

#### **Powers**

The Consortium Board will in charge of namely:

- Deciding on the strategic issues related to the TCS AH;
- Deciding on admission of a new Party and/or exclusion of existing one(s);
- Deciding on extension or termination of the Consortium Agreement;
- Deciding about the amendment of the Consortium Agreement:
- Approving the Work programme;
- Appointing the Consortium Board Chair (and the vice-chairs);
- Appointing the Director;
- Selecting the host organization;
- appointing members of the Users Committee and the Data Provider Committee and the Innovation Advisory Committee and defining their working rules;
- Preparing funding strategies and other joint initiatives;
- Introducing modifications to the Sections listed in Article 4.2.3;
- Decision allocation of funds granted jointly to all the Members of TCS AH for realization of purposes of the TCS AH Consortium;
- -Decision on amendment of the Consortium Agreement in relation to creating a joint budget (i.e. the budget created from the financial contributions of the Parties);
- Approval of the tasks that will be listed in the Service Contract that each Party will sign with EPOS-ERIC.

#### Ordinary and extraordinary meetings

The CB will meet on ordinary meetings at least twice per year.

The Chair of the CB shall convene all members and observers by notice at least 30 (thirty) calendar days preceding the meeting.

The CB may meet on extraordinary meetings when necessary.

The request to call the meeting shall be filed to the Chair by 2/3 of the Parties. The Chair will organize an extraordinary meeting of the Consortium Board and define the organization of such an extraordinary meeting.

#### **Agenda**

The Chair shall set the agenda for each meeting and include it in the invitation to the meeting.

Each Party shall be entitled to add issues on the agenda until fifteen (15) calendar days before the

meeting.

Any issue which is not on the agenda may not be discussed or decided in the meeting, unless all Parties are represented and no one objects.

#### Quorum and majority rules

The Consortium Board shall validly hold a meeting only if the quorum requirements have been met.

The Consortium Board shall validly make a decision only if the majority requirements have been met.

The normal quorum requirement shall be met when at least half of the Parties, who are entitled to vote, are represented.

The special quorum requirement shall be met when at least two thirds (2/3) of the Parties, who are entitled to vote, are represented.

A simple majority shall be formed when the count of votes in favor of the decision is higher than the count of votes against.

A qualified majority shall be formed when at least the two thirds (2/3) of the votes cast are in favor of the decision.

For decisions to be made with a simple majority, a normal quorum shall suffice.

For decisions to be made with a qualified majority, a special quorum shall be required.

For unanimous decisions all Parties must be represented.

#### **Voting rules**

Unless a majority is already specified in the Consortium Agreement, the Consortium Board shall be able to decide with a qualified majority if an issue on the agenda falls under the categories that require a ballot and if it requires simple or qualified majority (subject to the express provisions of the Consortium Agreement). Such a decision may not be taken unless the special quorum requirement has been met, irrespective of whether the meeting is ordinary, extraordinary, or repeat.

Without prejudice to the above, the Consortium Board shall be competent to, namely:

- Approve, with qualified two third (2/3) majority, the Work programme;
- Decide, with qualified two third (2/3) majority, upon the distribution of common funds allocated jointly to all the members of TCS AH Consortium by EPOS-ERIC or any third party for realization of purposes of the TCS AH Consortium;
- Decide, with unanimous decision, upon any provision regarding a joint budget (i.e. the budget created from the financial contributions of the Parties) and on the content of the necessary amendment to the Consortium Agreement in relation to the above.
- Approve, with unanimous decision, the tasks to be listed in the service agreement(s) with EPOS-ERIC.
- Accept, with unanimous decision, a new party;

- Exclude, with unanimous decision a Party, without the vote of the concerned Party;
- Decide, with simple majority, its internal rules of procedure:
- Make proposal to Parties to amend the Articles of the Consortium Agreement, with unanimous vote;
- Amend Annex 2 with a qualified majority of 2/3;
- Amend Annexes 1 and 3 with a unanimous decision;
- Amend the present CA with a unanimous decision:
- Termination or extension of the TCS AH consortium with a unanimous decision.

#### Veto rights

A Party which can show that its own work, time for performance, costs, liabilities, intellectual property rights or other legitimate interests would be severely affected by a decision of the Consortium Board may exercise a veto with respect to the corresponding decision or relevant part of the decision.

A Party may refuse to contribute additional resources beyond the contribution that would be due to meet the agreed level stated in Annex 2.

In case of a deadlock, if no agreement can be reached within two (2) months after a veto, the Consortium Board may appoint an arbitration committee of three independent experts

#### Minutes of meetings

The Chair shall produce written minutes of each meeting which shall be the formal record of all decisions taken. He/she shall send the draft to all the Parties within ten calendar days of the meeting.

The minutes shall be considered as accepted if, within fifteen (15) calendar days from sending, no Party has objected to the Chair with respect to the accuracy of the draft of the minutes.

The accepted minutes shall be sent to all of the Parties of the Consortium Board and its Chair, who shall safeguard them. If requested the Chair shall provide authenticated duplicates to the Parties.

#### Repeat Meetings

If the quorum is not met, then the meeting of the Consortium Board shall be adjourned and shall be repeated within fifteen (15) calendar days, following a new invitation by the Chair.

The issues on the agenda of the repeat meeting shall be the same with the issues on the agenda of the original meeting.

In the repeat meeting of the Consortium Board, the quorum shall be considered met, irrespective of the number of Parties represented.

## Representation, Representation by Proxy, Remote Participation:

Each representative acting within the Consortium Board shall be deemed to be duly authorized to deliberate, negotiate and decide on all matters submitted to the Consortium Board.

Any Party shall be able to authorize another Party to represent it in the meeting of the Consortium Board and vote on its behalf. In such a case, the representative shall be provided with a written power-of- attorney signed by the delegate of the principal Party.

Any Party shall be able to participate in the meeting of the Consortium Board using a teleconference or videoconference system, if the technical means are available,

In urgent cases, it shall be possible to hold a Consortium Board meeting via e-mail or other means of electronic communication, if no Party objects.

#### Annex 2: Work Programme

- I. General provisions
- 1. The Work programme describes the actions and resources of each Party for the TCS AH.
- 2. The Parties to the Consortium Agreement undertake to contribute to the TCS AH the actions and resources described herein in points II-VI.
- 3. For the sake of the present document the Parties shall be hereafter referred to as:
  - a. INGV Istituto Nazionale di Geofisica e Vulcanologia;
  - b. CNRS Centre National de la Recherche Scientifique;
  - c. INERIS Institut National de l'Environnement Industriel et des RISques
  - d. CNRS-IPGS Institut de Physique du Globe de Strasbourg performing specified tasks on behalf of Centre National de la Recherche Scientifique;
  - e. CNRS-ISTerre Institut des Scientes de la Terre performing specified tasks on behalf of Centre National de la Recherche Scientifique;
  - f. GFZ Helmholtz Zentrum Potsdam Deutsches Geoforschungszentrum;
  - g. IG PAS Institute of Geophysics Polish Academy of Sciences;
  - h. IG ASCR Geofyzikalni Ustav AV CR;
  - i. OULU Oulun Yliopisto;
  - j. LTU Lulea Tekniska Universitet:
  - k. KU University of Keele;
  - 1. ACK UST University of Science and Technology Academic Computer Centre Cyfronet;
  - m. CMI Central Mining Institute;
  - n. PMG Polish Mining Group;
  - o. **CMI-PMG** jointly developed episodes by Central Mining Institute and Polish Mining Group, provided by CMI
- 4. Based on the collateral agreements, some of the tasks declared herein by Centre National de la Recherche Scientifique (CNRS), shall be performed by the linked institutions (Institut de Physique du Globe de Strasbourg and Institute des Scientes de la Terre).

#### II. IS-EPOS Platform

1. The IS-EPOS Platform is an e-environment, available at the internet address www.tcs.ah-epos.eu, which offers access to the services (Applications) operating on the data (Episodes) stored in the NODE-s.

- 2. The IS-EPOS Platform is a co-property of the Institute of Geophysics Polish Academy of Science and the University of Science and Technology of Kraków (jointly: "Platform owners") and it is organized and managed exclusively by the entities mentioned above.
- 3. The Platform owners undertake to organize, manage and maintain the IS-EPOS Platform.

#### III. The NODE-s

- 1. The NODE-s are local data centers whose specific status consists in storing and providing the IS-EPOS Platform with the data (Episodes) coming from different entities.
- 2. The Institute of Geophysics Polish Academy of Science is the owner of the NODE, situated in Poland and undertakes to organize, maintain and manage the above-mentioned NODE,
  - 3. Institut de Physique du Globe de Strasbourg is the owner of the NODE, situated in France. Centre National de la Recherche Scientifique undertakes to organize, maintain and manage the above-mentioned NODE. The aforementioned tasks shall be performed by Institut de Physique du Globe de Strasbourg, acting on behalf of Centre National de la Recherche Scientifique.
- 4. The NODE's owners will store Episodes under the contract signed by and between the Party providing given Episode and the owners of the NODE under the conditions specified in detail therein.
- 5. The NODE's owners will make available the stored Episodes to the IS-EPOS Platform users under the contract signed by and between the NODE's owner and the IS-EPOS Platform owners under the conditions specified in detail therein.

#### IV. Episodes

- 1. The Episodes are an integral and independent set of data correlated in time, describing the seismologic activity, geophysical processes, technological activity and the environment in the specified area.
- 2. Each of the Parties listed below undertakes to provide below indicated Episode/s.
- 3. The Episodes will be made available by means of the IS-EPOS Platform under the contract signed by and between the Party providing given Episode and the owners of the NODE under the conditions specified in detail therein.
- 4. The below included list of Episodes does not include the Episodes which are provided by the organizations not being Parties to the Consortium Agreement. Such Episodes shall be provided based on the supplier's letters signed by the providing organization and under the contract signed by and between the organization providing given episode and the owners of the NODE under the conditions specified in detail therein.

#### LIST OF EPISODES

LP	The episode name	The providing Party
1.	ASFORDBY: underground coal mining	KU
2.	NORTHWICH: underground salt extraction	KU

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	cavities	
3.	PREESALL MINE: underground salt extraction cavities	KU
4.	THORESBY COLLIERY: underground coal mining	KU
5.	PREESE HALL: shale gas	KU
6.	OKLAHOMA: conventional and unconventional hydrocarbon extraction and wastewater injection	KU
7.	PYHASALMI MINE: in situ underground laboratory	Oulu
8.	THE GEYSERS Prati 9 and Prati 29 cluster: Treated wastewater injection for geothermal power production	GFZ
9.	GROSS SCHOENEBECK: geothermal energy production experiment	GFZ
10,	VAL D'AGRI: water reservoir	INGV
11.	EMILIA ROMAGNA: conventional hydrocarbon extraction and fluid injection	INGV
12.	VAL D'AGRI FIELD: conventional hydrocarbon extraction	INGV
13.	GISOS-CERVILLE: underground solution mining	INERIS
14.	STARFISH: underground gas storage	INERIS
15.	BOBREK MINE: local seismicity linked to longwall mining	CMI
16.	USCB: regional seismicity and ground motion associating underground coal mining	CMI
17.	MUSE-1.1 - PIAST-ZIEMOWIT; ZIEMOWIT: underground coal mining	PMG
18.	MUSE-1.2 - RUDA- BIELSZOWICE: underground coal mining	CMI-PMG
19.	MUSE-2 - ROW-RYDULTOWY: underground coal mining	CMI-PMG
20.	CZORSZTYN: shallow water reservoir	IG PAS
21.	LGCD: regional seismicity and ground motion associating underground hard rock mining	IG PAS
22.	SONG TRANH: deep water reservoir	IG PAS
23.	LUBOCINO: Shale Gas	IG PAS
24.	LAI CHAU: water reservoir	IG PAS
25.	WYSIN: Shale Gas	IG PAS

26.	BOGDANKA: underground coal mining	IG PAS
27.	GAZLI: hydrocarbon field	CNRS-ISTerre
28.	LACQ GAS FIELD: conventional hydrocarbon extraction	CNRS-ISTerre
29.	MONTEYNARD: water reservoir	CNRS-ISTerre
30.	VOUGLANS: water reservoir	CNRS-ISTerre
31.	SOULTZ-SOUS-FORETS 1993 STIMULATION	CNRS-IPGS
32.	SOULTZ-SOUS-FORETS 2000 STIMULATION	CNRS-IPGS
33.	SOULTZ-SOUS-FORETS 2003 STIMULATION	CNRS-IPGS
34.	SOULTZ-SOUS-FORETS 2004 STIMULATION	CNRS-IPGS
35.	SOULTZ-SOUS-FORETS 2005 STIMULATION	CNRS-IPGS
36.	SOULTZ-SOUS-FORETS 2010 STIMULATION	CNRS-IPGS

#### V. Applications

- 1. The Applications are programs (software) enabling to use the IS-EPOS Platform and to use the data gathered in Episodes made available by means of the IS-EPOS Platform, including to make different calculations and operations on the data.
- 2. Each of the Parties listed below undertakes to provide the background software element (code) for the indicated Application
- 3. The background software element (code) will be provided under the contract signed by and between the Party providing given background software and the IS-EPOS Platform owners under the conditions specified in detail therein.
- 4. The below included list of Applications does not include the Applications for which background software is provided by the organizations not being Parties to the Consortium Agreement. Such background software shall be provided based on the supplier's letters signed by the providing organization and under the contract signed by and between the organization providing given episode and the IS-EPOS Platform owners under the conditions specified in detail therein.

#### LIST OF THE APPLICATIONS

Þ	The application name <sup>1</sup>	The providing Party
· 1:	Fracture Network Models - Mechanical Stresses	KU
2.	FOCI application [Moment tensor inversion]	GFZ

The Parties may decide to change a name of an application, which will not alter its functionality.

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3.	Stress Inversion [Evaluates stress axis orientation and relative stress magnitude by inverting focal mechanisms]	GFZ
4.	Inter-event Time Distribution Analysis	IG PAS
7.	[Anderson-Darling test to study the null	IG PAS
		1
	hypothesis of inter-event times exponentiality]	
5.		IG PAS
6.	Estimation of source parameters in time-	IG PAS
	varying production parameters geometry	
7.	Time dependent hazard in mining front	IG PAS
	surroundings	
8.	Time dependent hazard in selected area	IG PAS
9.	Stationary Hazard: Exceedance Probability	IG PAS
		IGIAS
10	Stationary Hazard: Maximum Credible	IG PAS
	Magnitude	•
11	Stationary Hazard: Mean Return Period	IG PAS
12	Source size distribution functions/Stationary	IG PAS
	Hazard [Estimates PDF and CDF of magnitudes	IG FAS
	assuming different models]	
12	Spectral Analysis [P and S waves spectral	202 40 20
.1.3		IG PAS
<u> </u>	levels and corner frequencies using Snoke	
<u> </u>	alghorithm]	
14	Localization [Performs localization/re-	IG PAS
	localization of seismic events hypocenters]	
15.	Autocorrelation [autocorrelation of a time	IG PAS
	series]	
16.	Coefficient of Randomness	IG PAS
17.	Cross Correlation [cross-correlation of two time	IG PAS
	series]	
18	Priestley-Subba Rao (PSR) Test [Test for a	IG PAS
21 T	time series stationarity testing]	IGIAS
19	Front Advance Histograms	IG PAS
20	Sajemia Antivity with E 4 A - Land	
20	Seismic Activity with Front Advance	IG PAS
	[combined visualization]	
21	Catalog Export [Exports a MATLAB Catalog as	IG PAS
	a spreadsheet (.xlsx) file]	
22		IG PAS
23	GDF Export [Exports a GDF MATLAB file as a	IG PAS
	spreadsheet (.xlsx) file]	
24.		IG PAS
	Seismic Catalog and a GM Catalog into a joined	A CO A CANY
	catalog]	
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25	Magnitude Conversion [establishes empirical	TCDIC
23.		IG PAS
	scaling relationships between different magnitude	•
	scales]	
26	Time Series Builder	IG PAS
27	Strong Motion Data Analysis Module	IG PAS
		IG PAS
28	Ground Motion Prediction Equations	IG PAS
29	Modelling uncertainties and interval	IG PAS
	estimation of hazard parameters	IG.IAS
30	Integrated data visualization	ACK UST
31	Catalog Time and Correlated Parameter	ACK UST
	Extractor [Extracts time column and a chosen	
	parameter from a catalog and returns them as	
	vectors]	,
32	GDF Time and Correlated Parameter Extractor	ACK UST
	[Extracts time column and a chosen parameter	ACK OSI
	from a GDF file and returns them as vectors]	
33		
33	Seed converter [Converts a SEED file (fullSEED	ACK UST
	or miniSEED) to either SAC or ASCII files]	
3.4	Seismogram Picking Tool [Performs selection	ACK UST
	of phases and picks on seismograms]	
35	Signal download tool	ACK UST
36	Waveform download tool	ACK UST
. 37	Document repository applications	ACK UST
38	Waveform-based seismic event location	INGV
	[Location of non-impulsive signal based on back-	
	propagation of seismic amplitudes]	
30	MERGER - simulator for Multi-hazard/multi-	INGV
	risk assessment in Exploration/exploitation of	111034
	Georesources	* ·
40	Stress and strain changes induced by fluid	CONTINUE TINGE
40		CNRS-IPGS
	injection and temperature change driven by	
	geothermal injection	
41	Template matching based detection algorithm	CNRS-IPGS
42	Estimate of Maximum Possible Magnitude for	CNRS-ISTerre
	reservoir triggered seismicity	OTTALS TO LUZZ
43	Earthquake interactions - georesource scale	CNRS-ISTerre
44	Earthquake interactions - mainshock scale	CNRS-ISTerre
45	Earthquake swarm: reshuffling analysis	CNRS-ISTerre
. 46	Time correlated earthquakes (Seasonal trends)	CNRS-ISTerre

#### VI. The Sections

- 1. The performance of the tasks of TCS AH is coordinated through Sections listed in art. 4.2.3 of the Consortium Agreement.
- 2. Each of the Parties listed below (Leaders of the Sections) undertakes to organize, manage and maintain a Section indicated below.
- 3. Each of the Parties listed below undertakes to join the work of the indicated Section, providing a below specified manpower.
- 4. The other Parties may join the work of a given Section on a voluntary basis, with the consent of the Leader of a given Section

#### LIST OF THE SECTIONS

LP	The name of the Section	The Leader of the Section	The Party contributing the manpower (FTE – full time equivalent)	Working plan for the Section
	Section for implementation of TCS AH Services	ACK UST	füll time equivalent) IGF PAS: 0,5 FTE INGV: 0.25 FTE GFZ: 0, 5 FTE	Evaluate technical and legal criteria and assess possible updates required to integrate new episodes and applications     Evaluate the "completeness" of the set of services implemented in the TCS AH, aiming at the identification of critical areas in which there might be an opportunity to constructively widen the available pool of services     Alter implementation to fit the new requirement from ICS-C implementation and ensure TCS AH components be presented at ICS-C in relevant manner     Ensure data policy be clearly expressed, controlled and enforced     Audit the system in respect to GDPR regulations and implement necessary means to operate privacy accordingly     Design and implement tools for easy user feedback collection; manage user feedback and maintain a list of features and improvements that can be implemented     Align AAAI mechanisms with EPOS and providers     Integrate new data nodes and monitor availability of the connected nodes     Operate the process of quality control with proactive improvements     Maintenance of technical resources and
			<sup>16</sup> γ	

	Section for	IG PAS	<del>                                     </del>	Coordination and administration of TCS AH
	Administration	10,1 A3		
	law & accounting			Consortium bodies.
		CIEG	TC DAC TOWN	1 OF: C FN
	Section for	GFZ	IG-PAS:3 FTE	1. Objectives of the section
	episodes		ACK UST: 1 FTE	a) Provide maintenance to episodes and
	integration and		CNRS-IPGS: 1 FTE	applications already integrated in the IS-EPOS e-
	application			Platform, including (meta-) data updates and
	implementation		:	updates to application (e.g. error fixes).
		). Le		b) Add and manage new episodes and new
_				applications provided by the IS-EPOS e-Platform
			•	related to anthropogenic hazards
			1	c) Harmonize the link between the Data
	·	:	i	Nodes and the IS-EPOS e-Platform (Server
				maintenance and upgrade to ensure the continuity
	•			of e-Nodes)
			,	d) Enable, coordinate and stimulate the
		. ,		communication between data providers and e-
				Nodes
	,			e) Integrate new acquired data centers into
	,			the IS-EPOS e-Platform
	1	-		f) Update legal issues of data policy and
	,			data management if required
	<u>.</u>		:	g) Continuously oversee and upgrade data
			:	format standards used within the IS-EPOS Data
				Platform in response to new data, internal and
	j			external requests from IS-EPOS partners
				h) Develop tools for data visualization on
		•	:	the IS-EPOS e-Platform (specially for GIS data)
	۸.			i) Guarantee the provision of required data
		. 4		converting tools on the IS-EPOS e-Platform for
				users and data providers
				j) Communicate with e-Platform users to
			. '	receive feedback on delivered products
,				k) Harmonize the collaboration and work
				flows of TCSs of different EPOS projects connected with the IS-EPOS e-Platform
			٠.	
			:	Collaborate with other sections     Work plan for 5 years, Strategy:
	·	·•		a) Setting up a fixed strategy to keep
	•	=		episodes integrated in the IS-EPOS e-Platform
				updated updated in the 13-BFO3 e-Fractionin
				b) Setting up a procedure to integrate new
		··		episodes and applications
		·		c) Establish procedures to regulate a
		•		common work flow for all involved Data Nodes
				d) Compile a communication procedure to
				guarantee a harmonized collaboration with
				projects connected with the IS-EPOS e-Platform
		,		in the sense of maintaining improving and
				developing quality control routines, metadata
				preparation and the standardization of data
			`*	formats
	<u> </u>	<u> </u>	<del></del>	<u> </u>

 $\mathcal{F}_{i} = \{ i \in \mathcal{F}_{i} \mid i \in \mathcal{F}_{i} \}$ 

1			e) Set up a communication strategy to
	<u>.</u>		receive IS-EPOS e-Platform user feedback on
			delivered products (e.g. Forum)
			f) Organize meetings for harmonizing work
	, .		flows:
			☐ Annual meeting of section members and
	1 ,		data providers
1			Annual meeting with all sections
			g) Participate in conferences to advertise
	1	. *	g) Fatticipate in conterences to advertise
ŀ			episodes of IS-EPOS e-Platform and to exchange
			experiences with other EPOS work packages
1	,		h) Work in close cooperation with section
		1.	for Projects & Partnership and section for
			Promotion & Dissemination to contact new data
			providers to increase the number of episodes
1			related to anthropogenic hazards and applications
<u> </u>			on the IS-EPOS e-Platform
1	Section for	CNRS-IPGS	Set up communication plan & strategy
1	promotion and		Define stakeholders categories and target
	dissemination		stakeholder organizations
1			Establish a dissemination plan for each
			of stakeholder category
			Compile dissemination materials that
		-	include video, audio, flyers, posters, etc.
			Maintain and develop existing social
			media channels (Website -TCS AH webpage,
1			Facebook, Twitter, LinkedIn, Newsletters
			EPOS, others)
			Define ethically sensitive issues
1		ł,	Trainings:
			establish strategies to engage users;
			- organise annual AH workshops
1			- establish training plan for selected
		İ	stakeholders;
		<u> </u>	i i i
		'	- develop tools to attract trainees
		[; · · · · · · · · · · · · · · · · · · ·	Participation in international events,
		<u> </u>	conferences, initiatives to improve visibility
		1	• Conduct webinars
1		.	Publications in research papers
			Regular reports of activities (once a
			year)
-	Constant C	T COST	Track and analyse of impacts/ KPI's
ļ	Section for	LTU	Aims
F	projects &	]	To establish strategic partnerships
	partnership		To establish multi-sector collaboration
		.	(universities, industry, funding agencies etc)
			To attract new partners
:	-		Partners and collaborations should be not only
<u> </u>		}	within Europe but also outside Europe
	÷	1	Strategy
			Define possible groups of partners
L		<u> </u>	Prepare strategy together with the

Promotion and dissemination section Prepare special strategy to collaborate with big organization (e.g. EAGE) and large experimental projects Prepare technical requirements for new data and software (in collaboration with the sections for Episodes Integration and Application Implementation and for implementing TCS AH services) Prepare strategy, define/adjust rules of collaboration depending on partner (academic, commercial - incl lawyers, IT, equipment companies; educational) Prepare rules for new partners to join TCS AH Consortium Consider the possible participation of the Consortium in international projects

#### VII. Final provisions

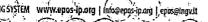
The Work programme presented in the Annex 2 shall be revised by the end of 2019



Annex 3: Data policy

## **Data policy of TCS AH Service Providers**

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7 - MANAGEMENT FOR THE TCS AH SERVICE PROVIDERS DATA POLICY	7
B – POLICY REVIEW	Ž o





### 1 - DEFINITIONS

Creative Commons (CC) Licences	See https://creativecommons.org/								
Data, Data	Measurements and/or observations of physical and chemical parameters, collections								
Products,	thereof, and information derived from such measurements and/or observations.								
Software	Data and Data Products are provided by Suppliers to European Plate Observing								
and Services	System (EPOS) Integrated Core Services (ICS) and Thematic Core Services (TCS) in								
(DDSS).	order to make them openly distributed by EPOS ERIC 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 within EPOS infrastructure 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	Both ICS and TCS (see definitions below)								
Services									
	Services provided by or in collaboration with EPOS ERIC 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.								
Services (ICS)									
Service	Entities in charge of aggregating, collecting and ensuring access to DDSS. They feed								
Providers	the EPOS Integrated Core Services (ICS) with DDSS from one or more Suppliers.								
Suppliers or Data	Entities allowing distribution of their DDSS through TCS or/and ICS by signing a letter of								
providers	intent (suppliers' letter).								
Thematic	Thematic groups of Service Providers are organized in and coordinated by Thematic								
Core	Core Services which provide the scientific expertise for EPOS infrastructure and interact								
Services	in close connection with the user community.								
(TCS)									



Thematic Core	Thematic group entrusted with organization and promotion of research and data in	٦
Service		Ì
Anthropogenic		-
Hazards (TDS	·	
AH)		1

#### 2 - GENERAL INTRODUCTION

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

The data policy of TCS AH Service providers is supplemented by the Data Management Plans established for the specific infrastructure, which provide the detailed rules concerning data management in the infrastructure operated within TCS AH. The Data Management Plans are consistent with this Data Policy.

#### 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 me	etadata in t	he adopted	standards to	discover and	allow data for
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- 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 Providers EPOS ERIC 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

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#### **5.1 OPEN ACCESS**

The services, data and data products implemented within 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 ERIC and TCS AH Service providers 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 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 TCS AH Service providers and EPOS ERIC 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 ERIC and TCS AH Service providers provide 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, TCS AH may decide to allow anonymous access, only when alternative mechanisms to track users and purposes of DDSS use is provided:
- 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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Software disseminated by TCS AH Service Providers or/and EPOS ERIC can take one of three forms:

- Acquired Software, acquired for use by TCS AH Service Providers or EPOS ERIC.
- 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 TCS AH Service Providers or EPOS ERIC shall have a license affixed to them. It is preferable to grant one default license set for all the data within DDSS, i.e. 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. It is preferable that the Generated Software within DDSS is licensed with the use of the unified open licence. The Acquired and the Contributed Software may by licensed according to the terms stipulated by the providing party.

#### 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, the Members of TCS AH shall provide a mechanism to obtain users feedback on DDSS quality. The Members of 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 ERIC and TCS AH Service providers of any liability for any use of the DDSS

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

#### 5.5 PRIVACY

- Suppliers and TCS AH Service Providers comply with all legislation regarding the protection of personal data and privacy
- TCS AH Service Providers comply with conditions agreed by users on availability/use of information relating to persons (alive or dead).

#### 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.

DDSS are made available under an appropriate license that takes into account intellectual property issues, such as copyright, acknowledgement/attribution, identification, and specific reuse conditions. The Restricted DDSS are available after the approval of the Supplier, upon which fees could be charged. The Embargoed DDSS 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, based on separate licence agreements shall provide EPOS ERIC and the relevant TCS AH Service Provider with 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. Any alteration of the above should be carefully considered within the rules of this Data Policy. 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 ERIC head office which will inform

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an ad hoc committee, whose statutes, missions and composition will be defined by EPOS ERIC general assembly.

The committee will then take a decision accordingly.

The responsibility of the implementation and monitoring of this 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 ERIC distributes their DDSS.

### 8 - POLICY REVIEW

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

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