

il Direttore

Istituto Nazionale di Geofisica e Vulcanologia AOO INGV Protocollo Generale - U N. 0019077 del 18/12/2019

Gestione WEB

Al Dott. Antonio AVALLONE Al Dott. Massimo COCCO 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 Alla Segreteria della Presidenza

Oggetto: Pubblicità atti

Si notifica in copia l'allegata Delibera n. 264/2019 del 27/11/2019 – Allegato S al Verbale n. 10/2019 concernente: *EPOS-GNSS TCS Consortium Agreement – EPOS GNSS Supplier Letter – EPOS Data Node Letter*.

Dott. Giovanni Ilorre



Delibera n. 264/2019

Allegato S al Verbale n. 10/2019

Oggetto: EPOS-GNSS TCS Consortium Agreement - EPOS GNSS Supplier Letter-

EPOS Data Node Letter.

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), in particolare, l'art. 2, comma 5;
- 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";
- VISTA la nota del 22/10/2019 prot. n. 2367, con la quale il Responsabile delle attività nell'ambito del WP10 di EPOS IP, ha precisato che il Consortium Agreement è mirato a formalizzare la partecipazione della comunità scientifica al TCS GNSS 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, della Supplier Letter e Data Node Letter;

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- RAVVISATA la necessità di nominare un rappresentante INGV all'interno del TCS Consortium Board;
- VISTO lo schema del Consortium Agreement, della Supplier Letter e della Data Node Letter e le disposizioni in essi contenute;
- VALUTATE le esigenze scientifiche e tecnologiche dell'Istituto;
- VISTO il parere dell'Ufficio Gestione Dati reso con nota prot. n. 2713 del 25/11/2019;
- SENTITO il Collegio dei Revisori dei Conti in corso di seduta;
- Su proposta del Presidente,

DELIBERA

Art. 1

Il Dott. Antonio Avallone, Ricercatore dell'INGV, è nominato Rappresentante INGV all'interno del TCS EPOS GNSS 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 competente, trasmettendo agli stessi una relazione sulle azioni e sulle risorse che costituiscono, per ciascuna annualità, il contributo INGV al TCS *EPOS GNSS*.

Art. 2

Sono approvati lo schema del Consortium Agreement, della Supplier Letter e della Data Node Letter nell'ambito di EPOS GNSS TCS, allegati alla presente Delibera, della quale costituiscono parte integrante e sostanziale. Viene dato mandato al Presidente alla sottoscrizione definitiva degli atti.

Letto, approvato e sottoscritto seduta stante.

Roma, 27/11/2019

La segretaria verbalizzante (Sig.ra Silvana TUCCI)

IL PRESIDENTE (Prof. Carlo DOGLIONI)

EPOS-GNSS CONSORTIUM AGREEMENT

BETWEEN

1. **Bundesamt für Kartographie und Geodäsie**, located at Richard-Strauss-Allee 11, 60598 Frankfurt am Main, Germany, represented by,

hereinafter referred to as "BKG";

Centre National de la Recherche Scientifique, a public research entity having a scientific and technological nature, located at 3, rue Michel-Ange75764 Paris Cedex 16, France 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";

3. **Observatoire de la Côte d'Azur**, a public research entity having an administrative nature, located at Boulevard de l'Observatoire CS 34229 06304 Nice Cedex 4, Nice, France, represented by its Director, Mr. Thierry LANZ, hereafter referred to as the "OCA",

CNRS and OCA acting on their own behalf as well as in the capacity of the supporting authority of:

- GALILEE LABORATORY, UMS2202 (Joint Service Unit), directed by Mr. Thierry LANZ, hereinafter referred to as the "GALILEE LABORATORY"
- CNRS and OCA authorized by Université de Nice Sophia Antipolis and Institut pour la Recherche et le Développement (IRD) acting on behalf of Géoazur LABORATORY, UMR7329, (Joint Research Unit), directed by Mr Marc SOSSON, hereinafter referred to as the "Géoazur LABORATORY"
- 4. **Université Grenoble Alpes**, a public research entity having a scientifical, cultural and professionnal nature, located at CS 40700, 38058 GRENOBLE Cedex 9, France, represented by its President Patrick LEVY, hereafter referred to as "UGA",

CNRS and UGA authorized by 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), acting on behalf of ISTerre LABORATORY -UMR5275 (Joint Research Unit), directed by Mr Stéphane GUILLOT, hereafter referred to as the "ISTerre LABORATORY",

CNRS and UGA authorized by Institut Polytechnique de Grenoble (Grenoble INP), Institut Français des Sciences et Technologies des Transports, de l'Aménagement et des Réseaux (IFFSTTAR), Université Savoie Mont-Blanc, Institut pour la Recherche et le Développement (IRD), METEO FRANCE, Institut National de Recherche en Sciences et Technologies pour l'Environnement et l'Agriculture (IRSTEA), acting on behalf of OSUG- UMS832 (Joint Service Unit), directed by Mr Michel DIETRICH, hereafter refered to as the "OSUG LABORATORY", it being understood that the the CNRS acting in the name and on behalf of the six others supervisory authorities of the OSUG LABORATORY mentioned below:

Pursuant to the decision of January 25th, 2018, giving power of signatory to a Regional Delegate for the coordination of partnership agreements for a unit within his or her district, together with other units under other CNRS districts, the Paris Michel Ange Regional Delegation shall sign this agreement on behalf of the Alpes and Côte-D'Azur Regional Delegations.

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5. **Lechner Non-profit Ltd.**, Satellite Geodetic Observatory, located at H-1111 Budapest, Budafoki ut 59, Hungary, represented by its CEO, Balázs KEREKES,

herinafter referred to as "LTK";

6. **Istituto Nazionale di Geofisica e Vulcanologia**, Via di Vigna Murata 605, 00143 Roma, Italy, represented by Prof. Carlo DOGLIONI,

herinafter referred to as "INGV";

7. **Lantmäteriet**, Lantmäterigatan 2C, SE-801 82, Gävle, Sweden, represented by its head of Geodata division, Anders SANDIN,

herinafter referred to as "LM";

8. **Royal Observatory of Belgium**, av. Circulaire 3, B-1180, Belgium, represented by its General Director, Dr. Ronald VAN DER LINDEN,

herinafter referred to as "ROB";

 Universidade da Beira Interior, R. Marquês de Ávila e Bolama, 6201-001 Covilhã, Portugal, represented by its Vice-Rector for the Projects and Research Areas, Prof. José Carlos PÁSCOA MARQUES,

herinafter referred to as "UBI";

10. **Warsaw University of Technology**, Faculty of Geodesy and Cartography, located at Pl. Politechniki 1, 00-661 Warsaw, Poland, represented by its Vice-Rector for Research, Prof. Rajmund BACEWICZ,

herinafter referred to as "WUT";

hereinafter, jointly or individually, referred to as "Parties" or "Party".

WHEREAS:

The Parties wish to define their rights and obligations as part of the Thematic Core Services (TCS) EPOS-GNSS which is providing data and services to the EPOS Research Infrastructure,

NOW, THEREFORE, IT IS HEREBY AGREED AS FOLLOWS:

1 Section: Definitions

1.1 DEFINITIONS

Words beginning with a capital letter shall have the specific meaning defined in this Consortium Agreement.

1.2 Additional Definitions

"Consortium Body":

Consortium Body means any management body described in the Governance Structure section of this Consortium Agreement.

"Data, Data Products, Software and Services (DDSS)": means measurements—and/or—observations of physical and chemical parameters, collections thereof, and information derived from such measurements and/or observations

"Data Supplier": the Data Supplier is the legal contact of the GNSS tracking station w.r.t EPOS. It has the legal rights to distribute the GNSS Data of the tracking station to a third party. The Data Supplier signs the Data EPOS Supplier letter.

"Data Node": Virtualisation layer on top of one (or more) Data Centre(s). Using the GLASS software, (developed in the framework of the Grant Agreement EPOS-IP) the Data Node makes the GNSS station data at Data Centres (or Data repositories) discoverable at the EPOS GNSS data gateway.

"Data Centre": localisation of the GNSS station observation/navigation data

"Force majeure": means any situation or event that:

- prevents either party from fulfilling their obligations under the Consortium Agreement,
- was unforeseeable, exceptional situation and beyond the parties' control,
- was not due to error or negligence on their part (or on the part of third parties involved in the situation or event), and
- proves to be inevitable in spite of exercising all due diligence.

"Results": means any (tangible or intangible) output of the action such as data, knowledge or information — whatever its form or nature, whether it can be protected or not — that is generated in the action, as well as any rights attached to it, including intellectual property rights.

"Work programme": Work programme means the description of the actions of the TCS EPOS-GNSS Consortium defined in Attachment 1. The Work programme will be updated annually by the Consortium Board.

"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.

"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 and/or rewritten in another language.

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- Extension: Derived Software allowing for access to new functions or performance by comparison to the Core Software from which it is derived.

"Shared Software": software created ex nihilo under the Consortium Agreement

"EUREF": is the IAG Reference Frame Sub-Commission for Europe, founded in 1987

"IAG": International Association of Geodesy, a scientific organization in the field of geodesy which promotes scientific cooperation and research in geodesy on a global scale and contributes to it through its various research bodies.

2 SECTION: PURPOSE

The purpose of this Consortium Agreement is to specify organisational, managerial and financial guidelines to be followed by the TCS EPOS-GNSS Consortium.

The mission of TCS EPOS-GNSS is to provide, through the European Plate Observing System (EPOS), access to GNSS data, meta-data, and products in support of the Solid Earth Sciences. To achieve this goal, EPOS-GNSS:

- facilitates access to relevant GNSS data, meta-data, and data products,
- coordinates the archiving of relevant GNSS data, metadata and data products,
- promotes best practice for GNSS station operation, data quality control and data management,
- maintains and distributes open source software for GNSS data, metadata and product discoverability.
- maintains and develops GNSS data products.

These efforts are done in close partnership with EUREF, the IAG sub-commission for the European Reference Frame.

3 SECTION: ACCESSION OF A NEW PARTY, WITHDRAWAL OR REMOVAL OF A PARTY

3.1 Accession of New Entities

Entities offering pan-European Services, wishing to join the EPOS-GNSS Consortium, have to first complete a document in which they describe the proposed services and activities. This information will be used by the Consortium Board to decide by a unanimous decision if the proposed services are relevant and if the entity will become a new Party of the EPOS-GNSS Consortium.

Such accession shall have effect from the date agreed between the new Party and the Consortium Board as identified in the accession document. The activities and resources of the new Party will be described in the accession document.

3.2 WITHDRAWAL OR REMOVAL OF A PARTY

Any Party may withdraw from the Consortium upon request, provided that three (3) months' prior notice is given to the Consortium Board). The withdrawing Party undertakes to complete its

commitment taken up in the current Work programme. The Terms of withdrawal shall be fixed by a specific agreement under provisions set out in the section 7.3.3.

In the event a responsible Consortium Body identifies a breach by a Party of its obligations under this Consortium Agreement, the Consortium Board will give written notice to such Party requiring that such breach be remedied within 30 calendar days. If such breach is substantial and is not remedied within that period or is not capable of remedy, the Consortium Board may decide to declare the Party to be a defaulting Party and to decide on the consequences thereof which may include termination of its participation. The Terms of removal shall be fixed by a specific agreement under provisions set out in the section 7.3.3.

4 Section: Entry into Force, Duration and Termination

4.1 Entry into force

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

4.2 DURATION AND TERMINATION

This Consortium Agreement shall continue in full force and effect for a period of ten (10) years after the Effective Date.

This Consortium Agreement may be extended or terminated before the expiration date by the Consortium Board by unanimous decision. Any and all extension of this Consortium Agreement shall be subject to the drafting of an amendment to be signed by the Parties.

4.3 SURVIVAL OF RIGHTS AND OBLIGATIONS

The provisions relating to intellectual property rights, as well as for liability, applicable law and settlement of disputes shall survive for their own terms, notwithstanding 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.

5 Section: Responsibilities of Parties

5.1 GENERAL PRINCIPLES

Each Party makes its best efforts to efficiently execute its tasks as described in the Work programme and to perform and fulfil, promptly and on time, all of its obligations.

Each Party will notify promptly the Consortium Board, of any significant information affecting or closely related to the TCS GNSS activities.

Each Party shall promptly provide all reasonably required information having bearings on other EPOS Research Infrastructure activities.

Each Party shall take reasonable measures to ensure the accuracy of any information or materials it supplies to the other Parties.

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6 Section: Liability towards each other

6.1 No warranties

In respect of any information or materials (incl. Results and Background) supplied by one Party to another in the context of this Consortium, no warranty or representation of any kind is made, given or implied as to the sufficiency or fitness for purpose nor as to the absence of any infringement of any proprietary rights of third parties.

Therefore,

- the recipient Party shall in all cases be entirely and solely liable for the use to which it puts such information and materials, and
- no Party granting access rights shall be liable in case of infringement of proprietary rights of a third party resulting from any other Party exercising its access rights.

6.2 LIMITATIONS OF CONTRACTUAL LIABILITY

No Party shall be responsible to any other Party for any indirect or consequential loss or similar damage such as, but not limited to, loss of profit, loss of revenue or loss of contracts, provided such damage was not caused by a wilful act.

6.3 DAMAGE CAUSED TO THIRD PARTIES

A Party shall be solely liable for any loss, damage or injury to third parties resulting from the performance of the said Party's obligations by it or on its behalf under this Consortium Agreement or from its use of Results or Background.

6.4 Force Majeure

No Party shall be considered to be in breach of this Consortium Agreement if it is prevented from fulfilling its obligations under the Consortium Agreement by Force Majeure.

Each Party will notify the competent Consortium Bodies of any Force Majeure without undue delay. If the consequences of Force Majeure for the Project are not overcome within 6 weeks after such notification, the transfer of tasks - if any - shall be decided by the competent Consortium Bodies.

7 Section: Governance structure

7.1 GENERAL STRUCTURE

The organisational structure of the Consortium shall comprise the following Consortium Bodies:

- 1) Consortium Board as the ultimate decision-making body of the consortium,
- 2) Executive Board as the supervisory body for the execution of the Work programme and it shall report to and be accountable to the Consortium Board.

7.2 GENERAL OPERATIONAL PROCEDURES FOR ALL CONSORTIUM BODIES

7.2.1 Representation in meetings

Any Party, which is a member of a Consortium Body:

- should be present or represented at any meeting,
- may appoint a substitute or a proxy to attend and vote at any meeting,
- shall participate in a cooperative manner in the meetings.

7.2.2 Preparation and organisation of meetings

7.2.2.1 Convening meetings

The chairperson of a Consortium Body shall convene meetings of that Consortium Body.

`	Ordinary meeting	Extraordinary meeting
Consortium Board	At least twice a year	At any time upon written request of the Executive Board or any member of the Consortium Board
Executive Board	At least quarterly	At any time upon written request of any member of the Executive Board

7.2.2.2 Notice of a meeting

The chairperson of a Consortium Body shall give notice in writing of a meeting to each member of that Consortium Body as soon as possible and no later than the minimum number of days preceding the meeting as indicated below.

	Ordinary meeting	Extraordinary meeting	
Consortium Board	30 calendar days	15 calendar days	
Executive Board	30 calendar days	15 calendar days	

7.2.2.3 Sending the agenda

The chairperson of a Consortium Body shall prepare and send each member of that Consortium Body a written (original) agenda no later than the minimum number of days preceding the meeting as indicated below.

Consortium Board	21 calendar days, 10 calendar days for an extraordinary meeting
Executive Board	21 calendar days, 10 calendar days for an extraordinary meeting

7.2.2.4 Adding agenda items

Any agenda item requiring a decision by the members of a Consortium Body must be identified as such on the agenda.

Any member of a Consortium Body may add an item to the original agenda by written notification to all of the other members of that Consortium Body up to the minimum number of days preceding the meeting as indicated below.

Consortium Board	14 calendar days, 7 calendar days for an extraordinary meeting
Executive Board	14 calendar days, 7 calendar days for an extraordinary meeting

During a meeting, the members of a Consortium Body present or represented can unanimously agree to add a new item to the original agenda.

7.2.2.5 *Meetings*

Meetings of each Consortium Body may also be held by teleconference or other telecommunication means.

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7.2.2.6 Decisions

Decisions taken at Consortium Board meetings will only be binding once the relevant part of the Minutes has been accepted according to Section 7.2.4.

Any decision may also be taken without a meeting if the Chairperson circulates to all members of the Consortium Board a written document, which is then agreed by the defined majority of all members of the Consortium Board. These decisions shall be considered as accepted if, within 30 calendar days, no member has sent an objection in writing to the Chairperson. The decisions will be binding after the chairperson sends to all members of the Consortium Body a written notification of this acceptance.

7.2.3 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 a Consortium Body, may exercise a veto with respect to the corresponding decision or relevant part of the decision. When the decision is foreseen on the original agenda, a member may veto such a decision during the meeting only.

When a decision has been taken on a new item added to the agenda before or during the meeting, a member may veto such decision during the meeting and within thirty (30) calendar days after the draft minutes of the meeting are sent. A Party that is not a member of the Executive Board may veto a decision of the Executive Board within thirty (30) calendar days after the draft minutes of the meeting are sent.

When a decision has been taken without a meeting a member may veto such decision within 30 calendar days after written notification by the chairperson of the outcome of the vote.

In case of exercise of veto, the members of the related Consortium Body shall make every effort to resolve the matter which occasioned the veto to the general satisfaction of all Parties.

A Party requesting to leave the Consortium or subject to an exclusion procedure may not veto decisions relating thereto.

7.2.4 Minutes of meetings

The chairperson of a Consortium Body shall produce written minutes of each meeting which shall be the formal record of all decisions taken. He/she shall send the draft minutes to all members within ten (10) calendar days of the meeting.

The minutes shall be considered as accepted if, within thirty (30) calendar days from sending, no member has sent an objection in writing to the chairperson with respect to the accuracy of the draft of the minutes.

The chairperson shall send the accepted minutes to all the members of the Consortium Body and shall safeguard them. If requested the chairperson shall provide authenticated duplicates to Parties.

7.3 SPECIFIC OPERATIONAL PROCEDURES FOR THE CONSORTIUM BOARD

In addition to the rules described in Section 7.2, the following rules apply:

7.3.1 Members

The Consortium Board shall consist of the representatives appointed by each Party who will be in charge of the provision of pan-European data, data products, software, services or coordination activities. A Party can therefore have several representatives in the Consortium Board, but only one of all the representatives of each Party shall be entitled to vote. Each delegation may consist of up to 3 persons.

In the course of their common activities, OCA and CNRS only have one vote at the Consortium Board.

In Attachment 2, each Party will indicate the name of its representative who will be authorised to deliberate, negotiate and decide on all matters listed in Section 7.3.3. of this Consortium Agreement. Every change to this list will be communicated to the chairperson of the Consortium Board. The chairperson of the Consortium Board will keep the list up to date and will communicate every change to all Parties.

In addition, the Consortium Board will include two (2) representatives from the User Feedback Group and two (2) from the Data Providers Committee (see 7.5). They are non-voting members.

The Consortium Board will choose a chairperson with a term of four (4) years amongst its voting members.

The chairperson shall chair all meetings of the Consortium Board, unless decided otherwise in a meeting of the Consortium Board.

7.3.2 Voting rules and quorum

The Consortium Board shall not deliberate and decide validly unless two-thirds (2/3) of its members who are entitled to vote are present or represented (quorum). If the quorum is not reached, the chairperson of the Consortium Board shall convene another ordinary meeting within 30 calendar days. If in this meeting the quorum is not reached once more, the chairperson shall convene an extraordinary meeting which shall be entitled to decide even if less than the quorum of members is present or represented.

Unless otherwise agreed, decisions shall be taken by a two-thirds (2/3) majority of members entitled to vote that are present.

For unanimous decisions, all members who are entitled to vote must be present or represented.

7.3.3 Tasks

The Consortium Board shall be free to act on its own initiative to formulate proposals and take decisions in accordance with the procedures set out herein. In addition, all proposals made by the Executive Board shall also be considered and decided upon by the Consortium Board.

The following activities shall be undertaken by the Consortium Board:

- Supervision of the proper execution of the Work Programme
- Provide an overall leadership for the strategic direction to the consortium
- Handling disputes or conflicts
- Interaction/Coordination with EPOS- ERIC
- Appointment of the members and Chairperson of the Executive Board, and if necessary termination of their mandate before the end of the period of four (4) years,
- Appointment of Chairperson of the Consortium Board,
- Identification and adaptation, when necessary, of mechanisms for quality check of service provision and compliance check of service provision,
- Appointment and steering of the two (2) External Expert Advisory Committees (EEAC),
- Distribution of common funds allocated by any third party, subject to set up of the related agreements.
- To declare a Party to be a defaulting Party and to decide on the consequences thereof which may include termination of its participation,

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- Approval of the tasks listed in the Agreements that each Party will sign with EPOS-ERIC before the Agreement is signed,
- Approving any modification to the Work Programme (Attachment 1 of this agreement) and the EPOS data policy (Attachment 3).

The following decisions shall be taken by the Consortium Board by unanimous vote:

- Entry of a new Party to the consortium and approval of the settlement on the conditions of the accession of such a new Party,
- Removal of a Party to the consortium and approval of the agreement on the conditions of the removal of this Party. The Party subject to this procedure is not entitled to take part to this vote.
- Approval of the agreement on the conditions of the withdrawal of a Party. The withdrawing Party is not entitled to take part to this vote.
- Extension or termination before the expiration date of the Consortium.

7.4 Specific operational procedures for the Executive Board

In addition to the rules in Section 7.2, the following rules shall apply:

7.4.1 Members

The Executive Board shall consist of the chairperson of the Consortium Board plus minimally three (3) members appointed by the Consortium Board amongst its members and this for a period of four (4) years. Those members shall belong to at least three (3) different Parties. One of the members of the Executive Board should also be a member of the Party, which signs the agreement for the GNSS-TCS Office and Outreach with the EPOS-ERIC. The Chairperson of the Executive Board shall not be the same as the Chairperson of the Consortium Board.

7.4.2 Voting rules and quorum

The Executive Board shall not deliberate and decide validly unless all of its members who are entitled to vote are present or represented (quorum). If the quorum is not reached, the chairperson shall convene another ordinary meeting within 15 calendar days. If in this meeting the quorum is not reached once more, the chairperson shall convene an extraordinary meeting which shall be entitled to decide even if less than the quorum of Members is present or represented.

Each Member of the Executive Board present or represented in the meeting shall have one (1) vote. Unless otherwise agreed, decisions shall be taken by a two-third (2/3) majority.

7.4.3 Tasks

The Executive Board shall be responsible for the proper execution and implementation of the decisions of the Consortium Board. This includes the day-to-day coordination of TCS activities, the implementation of the mechanisms for quality check of service provision, and the compliance check with the EPOS data policy (Attachment 3).

The Executive Board shall also monitor the effective and efficient implementation of the Work programme, provide progress reports to the Consortium Board and propose modifications of the Work programme to the Consortium Board.

The Executive Board shall seek a consensus among the Parties.

7.5 EXTERNAL EXPERT ADVISORY COMMITTEES (EEAC)

Two (2) External Expert Advisory Committees (EEAC's) will be set up:

- The User Feedback Group:

The User Feedback Group shall be composed of main representatives of the user community. Its's members shall be appointed by the Consortium Board.

The Data Provider Committee:

Data Provider Committee shall be composed of one representative of each of the Data Suppliers listed in Attachment 4.

Every EEAC shall elect amongst its members, using a majority vote, two representatives to the Consortium Board. They will represent the interests of the EEAC as non-voting members of the Consortium Board. These representatives have four (4)-year terms, which are renewable once.

Each EEAC follows the progress of the Work Programme, advises the Consortium Board and provides recommendations to the chairperson of the Consortium Board.

The Consortium Board shall appoint amongst its members a person responsible for convening the EEAC's at least once a year, attending the EEAC meetings, and writing and safeguarding the minutes of the EEAC meetings and preparing the implementation of the EEAC's suggestions.

This person will also ensure that any representative of an EEAC sitting at the Consortium Board Meetings, and who is not a Party's employee will sign a non-disclosure agreement covering the content of the Consortium Board meeting. Its terms shall not be less stringent than those stipulated in this Consortium Agreement, and it shall be concluded no later than 30 calendar days after his nomination or before any confidential information will be exchanged, whichever date is earlier.

8 SECTION: FINANCIAL PROVISIONS

Each Party will assume on its own resources its participation in General Activities and provided Services as described in the Work Programme.

9 SECTION: DATA, INTELLECTUAL PROPERTY RIGHTS, RESULTS

9.1 GENERAL PRINCIPLES

The general principles and process of handling data and intellectual property rights within the activities of the EPOS Research Infrastructure are laid down in the EPOS data policy (Attachment 3). This data policy will also apply on all activities of this Consortium.

9.2 OWNERSHIP OF RESULTS

9.2.1 Management of Results

Results obtained in the framework of this agreement shall belong to the Party or Parties generating them.

in case of Results generated by several Parties, hereafter referred as "Joint Owners", the co-ownership rate and intellectual property costs will be equally shared between the said Parties.

In case of Results, the Parties shall 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. 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

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recherche and Arrêté 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 recherche".

The Parties undertake to sign in good faith any legal instrument enabling them to exercise proprietary rights over the Results in accordance with this agreement prior any exploitation. It is agreed that the PARTIES shall proceed in the interest of the inventors, in accordance with the legislation.

9.2.2 Software

In addition to the provisions set out in Sections 9.1 and 9.2.1, the Core Software shall remain the property of the Party which holds it prior to the signing of the Consortium Agreement.

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, regardless of which Party is the owner of the Core Software from which such Extensions are derived.

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.

The Shared Software shall be the jointly owned property of the Parties.

9.2.3 Use of Results

Prior to any industrial and commercial use of the jointly owned Results by a Joint Owner or third party, the Joint Owners shall specify the terms and conditions to exploit the jointly owned Results or to grant (exclusive or non-exclusive) licenses to third parties in a joint ownership agreement or an exploitation agreement to third party.

As of now, the Parties agree that any direct and/or indirect use of the jointly owned Results by a Joint Owner or third Party shall be subject to fair and reasonable financial compensation being paid to the other Joint Owners according to terms and conditions set forth subsequently in the abovementioned joint ownership and or exploitation agreements.

9.3 DISSEMINATION

For the avoidance of doubt, nothing in this Section 9.3 has impact on the confidentiality obligations set out in Section 10.

9.3.1 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 they are already published.

9.3.2 Cooperation obligations

The Parties undertake to cooperate to allow the timely submission, examination, publication and defence 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.

9.3.3 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.

10 Section: Non-disclosure of information

All information in whatever form or mode of communication, which is disclosed by a Party (the "Disclosing Party") to another Party (the "Recipient"), in connection with the Work Programme 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 thirty (30) calendar days from oral disclosure at the latest as confidential information by the Disclosing Party, is "Confidential Information".

The Recipients hereby undertake for a period of four (4) years after the Disclosing:

- not to use Confidential Information otherwise than for the purpose for which it was disclosed,
- not to disclose Confidential Information 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,
- to return to the Disclosing Party, or destroy, on request all Confidential Information that has been disclosed to the Recipients including all copies thereof and to delete all information stored in a machine readable form to the extent practically possible. 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 provided that the Recipient comply with the confidentiality obligations herein contained with respect to such copy for as long as the copy is retained.

The Recipients shall be responsible for the fulfilment of the above obligations on the part of their employees or third parties involved and shall ensure that they remain so obliged, as far as legally possible, during the Consortium and/or after the termination of the contractual relationship with the employee or third party.

The above shall not apply for disclosure or use of Confidential Information, if and in so far as the Recipient can show that:

- the Confidential Information has become or becomes publicly available by means other than a breach of the Recipient's confidentiality obligations;
- the Disclosing Party subsequently informs the Recipient that the Confidential Information is no longer confidential;
- the Confidential Information is communicated to the Recipient without any obligation of confidentiality by a third party who is to the best knowledge of the Recipient in lawful possession thereof and under no obligation of confidentiality to the Disclosing Party;
- the Confidential Information, at any time, was developed by the Recipient completely independently of any such disclosure by the Disclosing Party;
- the Confidential Information was already known to the Recipient prior to disclosure, or
- the Recipient is required to disclose the Confidential Information in order to comply with applicable laws or regulations or with a court or administrative order, subject to the provision Section 10 last paragraph hereunder.

The Recipient shall apply the same degree of care with regard to the Confidential Information disclosed within the scope of the Consortium as with its own confidential and/or proprietary information, but in no case less than reasonable care

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Each Party shall promptly advise the other Party in writing of any unauthorised disclosure, misappropriation or misuse of Confidential Information after it becomes aware of such unauthorised disclosure, misappropriation or misuse.

If any Party becomes aware that it will be required, or is likely to be required, to disclose Confidential Information in order to comply with applicable laws or regulations or with a court or administrative order, it shall, to the extent it is lawfully able to do so, prior to any such disclosure:

- notify the Disclosing Party,
- comply with the Disclosing Party's reasonable instructions to protect the confidentiality of the information.

11 Section: Miscellaneous

11.1 ATTACHMENTS, INCONSISTENCIES AND SEVERABILITY

This Consortium Agreement consists of this core text and:

- Attachment 1: Work programme (with description of the general activities and activities of each Party)
- Attachment 2: Representative of each party who will be authorised to deliberate, negotiate and decide on all matters listed in Section 7.3.3
- Attachment 3: EPOS data policy
- Attachment 4: Data Suppliers and Data Nodes

In case of conflicts between the attachments and the core text of this Consortium Agreement, the latter shall prevail. Any and all modifications to the Articles of this Consortium Agreement shall be subject to the drafting of an amendment to be signed by the Parties. Modifications to Attachments 2 and 4 are automatically accepted and updated at least on a yearly basis by the Executive Board. Modifications to Attachments 1 and 3 should be approved by the Consortium Board.

Should any provision of this Consortium Agreement become invalid, illegal or unenforceable, it shall not affect the validity of the remaining provisions of this Consortium Agreement. In such a case, the Parties concerned shall be entitled to request that a valid and practicable provision be negotiated that fulfils the purpose of the original provision.

11.2 NO REPRESENTATION, PARTNERSHIP OR AGENCY

Except as otherwise provided in Section 7, no Party shall be entitled to act or to make legally binding declarations on behalf of any other Party or of the Consortium Agreement. Nothing in this Consortium Agreement shall be deemed to constitute a joint venture, agency, partnership, interest grouping or any other kind of formal business grouping or entity between the Parties.

11.3 Notices and other communication

Any notice to be given under this Consortium Agreement shall be in writing to the addresses and recipients as listed in the most current address list kept by the chairperson of the Consortium Board.

11.3.1 Formal notices

If it is required in this Consortium Agreement that a formal notice, consent or approval shall be given, such notice shall be signed by an authorised representative of a Party and shall either be served personally or sent by mail with recorded delivery or telefax with receipt acknowledgement.

11.3.2 Other communication

Other communication between the Parties may also be effected by other means such as e-mail with acknowledgement of receipt, which fulfils the conditions of written form.

11.3.3 Change of persons or contact details

Any change of persons or contact details shall be notified immediately by the respective Party to the chairperson of the Consortium Board. The address list shall be accessible to all Parties.

11.4 MANDATORY NATIONAL LAW

Nothing in this Consortium Agreement shall be deemed to require a Party to breach any mandatory statutory law under which the Party is operating.

11.5 LANGUAGE

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

11.6 APPLICABLE LAW

This Consortium Agreement shall be construed in accordance with and governed by the laws of Belgium.

11.7 SETTLEMENT OF DISPUTES

The parties shall endeavour to settle their disputes amicably.

Any 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 place of mediation shall be Brussels unless otherwise agreed upon. 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 60 calendar days of the commencement of the mediation, the courts of Brussels 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 Attachments

Attachment 1: Work Programme including TCS General Activities and Services provided by each Party

Attachment 2: Representative of each Party at the Consortium Board authorised to deliberate, negotiate and decide on all matters listed in Section 7.3.3

Attachment 3: EPOS Data Policy

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ATTACHMENT 1: WORK PROGRAMME INCLUDING TCS GENERAL ACTIVITIES AND SERVICES PROVIDED BY EACH PARTY

<Once all parties have agreed upon the content of the CA, this section will contain the general TCS activities and, for each party, a description of the activities they will commit to EPOS-GNSS. The content of this Attachment can be reviewed on an annual basis.>

TCS General Activities

The mission of the GNSS Thematic Core Service (TCS) is to provide, through the European Plate Observing System (EPOS), access to GNSS data, meta-data, products, and software in support of the Solid Earth Sciences. To achieve this goal, EPOS-GNSS:

- facilitates access to relevant and validated GNSS data, meta-data, and data products,
- coordinates the archiving of relevant GNSS data, metadata and data products,
- promotes best practice for GNSS station operation, data quality control and data management,
- maintains and distributes open source software for GNSS data, metadata and product discoverability,
- maintains and develops GNSS data products
- Services provided by Parties:

The table below gives the overview of the different TCS Services and the Parties committed to perform these tasks

Pillar	Description of Services	Service Provider(s)
Governance	TCS Secretariat, Consortium board activities, and Outreach	UBI
	Harmonisation with federated GNSS data providers	ROB
Data provision	Management of data infrastructure services	OCA, CNRS
	Data Gateway	OCA, CNRS
	Data site log submission	ROB
	Data monitoring	ROB
Product provision	Management of product services	UGA, CNRS
	Products gateway	UBI
	Position products	INGV, UGA, CNRS
	Velocity products	INGV, UGA, CNRS, LTK
	Strain rate products	LM
	Products monitoring	UBI
Software	Management of software services	UBI
	Software	OCA, CNRS, UBI, INGV
EUREF	EUREF perm. netw. central bureau	ROB
	EUREF data repositories	BKG, ROB
	EUREF reference frame products	ROB, WUT, LTK

ATTACHMENT 2: REPRESENTATIVE OF EACH PARTY AT THE CONSORTIUM BOARD AUTHORISED TO DELIBERATE, NEGOTIATE AND DECIDE ON ALL MATTERS LISTED IN SECTION 7.3.3

<Up to date version of this list will be maintained by the Chairperson of the Consortium Board>

- 1. Bundesamt für Kartographie und Geodäsie, Germany: Wolfgang Söhne
- 2. Université Grenoble Alpes, France : Anne Socquet
- 3. Observatoire de la Côte d'Azur, France : Mathilde Vergnolle
- Centre National de la Recherche Scientifique, France : Mathilde Vergnolle
- 5. Lechner Non-profit Ltd., Hungary: Ambrus Kenyeres
- 6. Istituto Nazionale di Geofisica e Vulcanologia, Italy: Antonio Avallone
- 7. Lantmäteriet, Sweden: Martin Lidberg
- 8. Royal Observatory of Belgium, Belgium: Carine Bruyninx
- 9. University Beira Interior, Portugal: Rui Fernandes
- 10. Warsaw University of Technology, Poland: Tomasz Liwosz



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ATTACHMENT 4: DATA SUPPLIERS AND DATA NODES

<Up to date version of this list will be maintained by the Executive Board and will be available on-line (from https://gnss-metadata.eu/) as soon as a new Data Supplier and Data Node will be added>

The content of this Attachment will be updated on an annual basis.

<All Data Suppliers and Data Nodes that have signed resp. the <u>EPOS-GNSS Supplier Letter</u> or <u>EPOS-GNSS Data Node Letter</u> are listed here>.

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EPOS-GNSS SUPPLIER LETTER

1. In accordance with the EPOS Data Policy which is available at https://www.epos-ip.org/sites/default/files/repository/PDFFiles/EPOS%20DATA%20POLICY_July2018.pdf and the "Istituto Nazionale di Geofisica e Vulcanologica" (INGV; National Institute of Geophysiscs and Volcanology) data Policy, available at, https://data.ingv.it/docs/, the Istituto Nazionale di Geofisica e Vulcanologia - INGV allows EPOS to redistribute data from the GNSS stations identified in Annex A.

2. **INGV** confirms that:

- a. It has full Ownership Rights to these data;
- b. It is not under any obligation or disability at law. contract or otherwise. which would in any manner, or to any extent, prevent or restrict it from entering into and fully performing, this Letter;
- c. The release of these data. in accordance with the terms of this Letter. does not and will not contravene any laws;
- d. It has taken reasonable steps to maximize the quality of these data.

3. **INGV** allows:

- a. The relevant EPOS Service Provider to affix the Creative Commons 4.0 CC:BY license on any data provided with no license information. The license will be affixed on behalf of **INGV**, and by no means will this be considered as waiver to any of its Ownership Rights.
- b. If applicable, the Agency acting as Operational Centre listed in **Annex B** to maintain the GNSS station metadata at the M³G-bureau (http://gnss-metadata.eu/) according to Annex A. last column.
- c. EPOS-ERIC (European Research Infrastructure Consortium), the EPOS-GNSS Data Gateway, and the EPOS-GNSS Data Nodes listed in **Annex C** to redistribute the data without delays as soon as they are made available.
- 4. In return, the Supplier has the right to receive feedback from EPOS Users auditing system's feedback including detailed data usage and data quality control.

5. The Point of Contact(s) of **INGV** is (are):

Last name, First	Email
Avallone, Antonio	antonio.avallone@ingv.it

Rome, 21/10/2019, Stamp

Responsible person Carlo Doglioni, carlo.doglioni@ingv.it

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ANNEX A: GNSS Stations

Date: 21/10/2019

Station Name* 9-char Code	City	Country	Site log (url if available)	Approximate position*		Operational Centre (as in Annex B.
(ex. BRUXOOBEL)			Latitude*	Longitude*	column 2)**	
ACEROOITA		Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/acer.log	40.78666	15.94236	INGV
ALBI00ITA		Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/albi.log	39.94578	16.45592	INGV
ALPA00ITA		Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/alpa.log	41.72241	12.61141	INGV
AMUR00ITA		Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/amur.log	40.90726	16.60404	INGV
ANCN00ITA		Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/ancn.log	43.60715	13.53162	INGV
ANKY00GRC		Greece	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/anky.log	35.86696	23.30105	NOA
APRCOOITA		Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/aprc.log	41.75745	15.54285	INGV
AQSA00ITA		Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/aqsa.log	39.72099	16.08367	INGV
ARQT00ITA		Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/arqt.log	42.75497	13.19873	INGV
ATBU00ITA		Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/atbu.log	43.47602	12.54781	INGV
ATFO00ITA		Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/atfo.log	43.37006	12.56712	INGV
ATLO00ITA		Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/atlo.log	43.31513	12.40714	INGV
ATMI00ITA		Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/atmi.log	43.33396	12.26728	INGV
ATTE00ITA		Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/atte.log	43.19983	12.35055	INGV
AULLOOITA		Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/aull.log	44.20888	9.97294	INGV
AV0400ITA		Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/av04.log	40.90289	15.43858	INGV
BARSOOITA		Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/bars.log	42.33659	13.58159	INGV
BGDR00ITA		Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/bgdr.log	43.88906	11.89496	INGV
BIOG00ITA		Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/biog.log	41.20001	15.13258	INGV
BLGNOOITA		Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/blgn.log	44.51100	11.35057	INGV
BRAS00ITA		Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/bras.log	44.12000	11.11000	INGV
BRIS00ITA		Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/bris.log	44.22482	11.76605	INGV







BSSO00ITA	ltaly	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/bsso.log	41.54608	14.59430	INGV
BULG00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/bulg.log	40.07818	15.37770	INGV
CADM00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/cadm.log	41.07764	16.27367	INGV
CAFE00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/cafe.log	41.02808	15.23663	INGV
CAFI00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/cafi.log	43.32918	11.96623	INGV
CAGG00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/cagg.log	40.55728	15.51142	INGV
CAOCOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/caoc.log	42.28953	13.48441	INGV
CAR100ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/car1.log	39.25339	16.21140	INGV
CARO00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/caro.log	39.28625	16.21128	INGV
CASP00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/casp.log	42.79080	10.86516	INGV
CDRU00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/cdru.log	40.48970	15.30473	INGV
CELI00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/celi.log	39.40269	16.50876	INGV
CELLOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/cell.log	38.26031	15.89393	INGV
CERA00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/cera.log	41.59774	14.01797	INGV
CERTOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/cert.log	41.94910	12.98183	INGV
CESI00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/cesi.log	43.00499	12.90460	INGV
CIGNOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/cign.log	41.65419	14.90481	INGV
CLTA00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/clta.log	41.65419	14.90481	INGV
CMPROOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/cmpr.log	40.31785	15.30288	INGV
COLROOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/colr.log	40.19336	16.42220	INGV
CONIOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/coni.log	42.41174	13.39320	INGV
CORLOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/corl.log	37.89438	13.30386	INGV
CPAN00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/cpan.log	38.64276	15.07701	INGV
CRAC00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/crac.log	40.38140	16.43518	INGV
CRMI00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/crmi.log	43.79560	10.97951	INGV
CSSB00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/cssb.log	43.20928	12.24544	INGV
CTEL00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/ctel.log	42.85657	13.18799	INGV
CUCC00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/cucc.log	39.99380	15.81555	INGV
ECNV00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/ecnv.log	37.59561	14.71247	INGV
EIIV00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/eiiv.log	37.51360	15.08208	INGV



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ENAVOOITA	Italy	ttp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/enav.log	40.58231	14.33488	INGV
ESLN00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/esln.log	37.69306	14.97478	INGV
FAVR00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/favr.log	37.26700	13.66695	INGV
FRESOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/fres.log	41.97351	14.66930	INGV
FRULOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/frul.log	40.87788	14.22529	INGV
GALF00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/galf.log	37.71070	14.56652	INGV
GATE00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/gate.log	41.51395	14.90992	INGV
GBLM00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/gblm.log	37.99035	14.02614	INGV
GNAL00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/gnal.log	42.58370	13.51985	INGV
GRIS00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/gris.log	39.74047	15.85311	INGV
GRO100ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/gro1.log	41.06704	15.10093	INGV
GROG00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/grog.log	43.42630	9.89200	INGV
GROTOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/grot.log	41.07284	15.05987	INGV
GRZM00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/grzm.log	44.26483	11.14808	INGV
GUAROOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/guar.log	41.79443	13.31221	INGV
GUMA00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/guma.log	43.06284	13.33521	INGV
HAGA00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/haga.log	37.28585	15.15503	INGV
HAVLOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/havl.log	36.95976	15.12191	INGV
HCRL00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/hcrl.log	37.28305	15.03239	INGV
HLNI00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/hlni.log	37.34856	14.87194	INGV
HMDC00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/hmdc.log	36.95902	14.78311	INGV
HPACOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/hpac.log	36.70850	15.03721	INGV
HSCI00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/hsci.log	37.79380	14.70653	INGV
HSRS00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/hsrs.log	37.09301	15.22258	INGV
HVIT00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/hvit.log	37.09301	15.22258	INGV
HVZN00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/hvzn.log	37.17834	14.71546	INGV
IACLOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/iacl.log	38.53386	14.35642	INGV
IFILOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/ifil.log	38.56421	14.57529	INGV
INGPOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/ingp.log	42.38249	13.31559	INGV
INGROOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/ingr.log	41.82808	12.51480	INGV







IPRO00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/ipro.log	40.76510	14.02389	INGV
ISAL00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/isal.log	40.76510	14.02389	INGV
JOPP00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/jopp.log	38.60684	15.88566	INGV
KTHA00GRC	Greece	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/ktha.log	36.25642	23.06251	NOA
LARNOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/larn.log	41.72807	12.83305	INGV
LASP00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/lasp.log	44.07329	9.83966	INGV
LI3D00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/li3d.log	38.63889	15.11408	INGV
LICO00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/lico.log	40.87643	14.04960	INGV
LNGNOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/Ingn.log	41.50046	14.25260	INGV
LNSS00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/Inss.log	42.60285	13.04025	INGV
LOSV00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/losv.log	38.44570	14.94816	INGV
LPELOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/lpel.log	42.04686	14.18321	INGV
MAGA00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/maga.log	45.77537	10.62908	INGV
MALTOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/malt.log	35.83798	14.52620	INGV
MAON00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/maon.log	42.42818	11.13069	INGV
MARNOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/marn.log	41.77090	12.66588	INGV
MBFT00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mbft.log	41.77090	12.66588	INGV
MCEL00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mcel.log	40.32552	15.80146	INGV
MCRV00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mcrv.log	40.78260	15.16815	INGV
MCSR00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mcsr.log	38.16463	15.23011	INGV
MELA00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mela.log	41.70603	15.12710	INGV
MESSOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mess.log	38.20464	15.55440	INGV
MFUS00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mfus.log	41.05792	14.83398	INGV
MGAB00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mgab.log	42.91304	12.11145	INGV
MGRD00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mgrd.log	45.97535	12.01512	INGV
MILA00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mila.log	38.27058	15.23073	INGV
MLAG00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mlag.log	43.43090	12.77871	INGV
MMBI00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mmbi.log	43.43090	12.77871	INGV
MMME00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mmme.log	37.93523	15.25405	INGV
MMN000ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mmno.log	39.86999	15.97207	INGV



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MNOV00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mnov.log	38.02864	15.13558	INGV
MOCO00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/moco.log	41.37116	15.15857	INGV
MODE00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mode.log	44.62895	10.94871	INGV
MODROOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/modr.log	41.14605	13.88082	INGV
MONA00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mona.log	42.89677	13.33713	INGV
MONCOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/monc.log	45.07394	7.92723	INGV
MPAZ00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mpaz.log	37.95308	16.00673	INGV
MPNC00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mpnc.log	38.14650	15.35285	INGV
MRCB00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mrcb.log	38.16295	15.70319	INGV
MRGE00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mrge.log	45.76977	7.06108	INGV
MRLC001TA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mrlc.log	40.75643	15.48874	INGV
MRVN00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mrvn.log	41.06090	16.19592	INGV
MSAG00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/msag.log	41.71212	15.90969	INGV
MSFR00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/msfr.log	38.03388	14.59161	INGV
MSRU00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/msru.log	38.26382	15.50834	INGV
MT0100ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mt01.log	45.74871	12.20056	INGV
MT0600ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mt06.log	45.83128	12.13641	INGV
MT1000ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mt10.log	45.88822	11.89893	INGV
MTEROOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mter.log	42.50879	13.21435	INGV
MTMR00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mtmr.log	40.91845	15.00257	INGV
MTRZ00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mtrz.log	44.31276	11.42498	INGV
MTSN00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mtsn.log	40.26623	15.75119	INGV
MTTG00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mttg.log	38.00309	15.69990	INGV
MTTO00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mtto.log	42.45551	12.99274	INGV
MUCROOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mucr.log	38.04298	14.87388	INGV
MUR100ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mur1.log	43.26317	12.52469	INGV
MURBOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/murb.log	43.26319	12.52474	INGV
MVAL00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/mval.log	43.38211	12.40663	INGV
NEMI00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/nemi.log	41.71772	12.71764	INGV
NOCI00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/noci.log	40.78881	17.06437	INGV
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PACA00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/paca.log	40.87046	14.55640	INGV
PALZOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/palz.log	40.94391	15.96015	INGV
PAOL00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/paol.log	41.03202	14.56749	INGV
PARMOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/parm.log	44.76457	10.31219	INGV
PESA00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/pesa.log	43.94104	12.84052	INGV
PESR00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/pesr.log	43.94103	12.84053	INGV
PIETOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/piet.log	43.45072	12.40194	INGV
PIGN00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/pign.log	41.20000	14.17989	INGV
PING00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/ping.log	38.16178	13.31421	INGV
PIOB00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/piob.log	43.60750	12.52607	INGV
PIPA00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/pipa.log	39.48514	16.81578	INGV
PLAC00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/plac.log	38.44944	16.43833	INGV
PMCO00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/pmco.log	41.54404	15.12913	INGV
POFI00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/pofi.log	41.71744	13.71192	INGV
PRECOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/prec.log	42.84532	13.03986	INGV
PSB100ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/psb1.log	41.22337	14.81070	INGV
PTKG00GRC	Greece	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/ptkg.log	36.42128	22.48953	NOA
PTRJ00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/ptrj.log	41.36434	14.52889	INGV
PTRP00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/ptrp.log	40.53197	16.06079	INGV
PZIN00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/pzin.log	36.81114	11.97142	INGV
RAFF00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/raff.log	37.22256	14.36237	INGV
RDP1001TA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/rdpi.log	41.76038	12.71032	INGV
RESU00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/resu.log	37.64677	14.05683	INGV
RMPO00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/rmpo.log	41.81110	12.70322	INGV
RNI200ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/rni2.log	41.70349	14.15273	INGV
ROPI00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/ropi.log	42.33200	13.33724	INGV
ROPROOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/ropr.log	41.79449	12.76362	INGV
ROVR00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/rovr.log	45.64695	11.07206	INGV
RSMN00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/rsmn.log	43.93346	12.45074	INGV
RSPX00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/rspx.log	45.14820	7.26511	INGV



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RSTO00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/rsto.log	42,65838	14.00148	INGV
SACROOITA SACROOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/sacr.log	41.39749	14.70581	INGV
SACS00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/sacs.log	42.84904	11.90968	INGV
SALBOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/salb.log	39.87704	16.34603	INGV
SALO00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/salo.log	45.61832	10.52443	INGV
SALV00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/salv.log	39.67151	16.28159	INGV
SBPO00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/sbpo.log	45.05100	10.91977	INGV
SCHR00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/schr.log	40.19023	16.08533	INGV
SCTE00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/scte.log	40.07229	18.46722	INGV
SERS00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/sers.log	39.03594	16.68852	INGV
SGIP00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/sgip.log	44.63553	11.18272	-INGV
SGRE00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/sgre.log	42.33621	13.50105	INGV
SGRT00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/sgrt.log	41.75461	15.74385	. INGV
SGTA00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/sgta.log	41.13560	15.36531	INGV
SIRIOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/siri.log	40.18351	15.86644	INGV
SLCN00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/slcn.log	40.39109	15.63295	INGV
SNAL00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/snal.log	40.92547	15.20948	INGV
SSYX00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/ssyx.log	37.15762	15.07636	INGV
STRF00GRC	Greece	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/strf.log	37.24540	21.01563	NOA
STUE00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/stue.log	46.47221	9.34731	INGV
SVIN00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/svin.log	38.80281	15.23418	INGV
SVT000ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/svto.log	40.60441	16.44049	INGV
TEOL00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/teol.log	45.34276	11.67727	INGV
TITO00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/tito.log	40.60125	15.72370	INGV
TOLF00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/tolf.log	42.06401	11.99995	INGV
TREMOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/trem.log	42.12387	15.51082	INGV
TRIV00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/triv.log	41.76657	14.55018	INGV
UMBE00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/umbe.log	43.31116	12.32862	INGV
USIX00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/usix.log	38.70781	13.17923	INGV
USSI00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/ussi.log	42.97059	13.13351	INGV







VAGA00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/vaga.log	41.41543	14.23462	INGV
VALCOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/valc.log	43.27902	12.28488	INGV
VCSP00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/vcsp.log	38.40943	14.95157	INGV
VENTOOITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/vent.log	40.79471	13.42163	INGV
VIGG00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/vigg.log	39.98611	16.11606	INGV
VITU00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/vitu.log	41.18327	14.63006	INGV
VLSG00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/vlsg.log	38.22442	15.64149	INGV
VULT00ITA	Italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/vult.log	40.95477	15.61764	INGV
VVL000ITA	italy	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/vvlo.log	41.86965	13.62323	INGV
ZNTE00GRC	Greece	ftp://gpsfree.gm.ingv.it/SITELOG/LOGFILE/RING/znte.log	37.72005	20.73219	NOA

^{*}Mandatory

The list above can be updated on line (at https://gnss-metadata.eu/) by the Agency(ies) acting as Operational Centre (Data supplier itself or Agency(ies) listed in Annex B).

^{**}Only to be filled if different from the Supplier Agency

ANNEX B: Operational Centres*

* only to be completed if the metadata will be maintained by another agency than the Data Supplier.

The Data Supplier gives the Agencies listed in the table below the permission to act as Operational Centre on their behalf and maintain the metadata (site logs, DOI, License info, ...) of the GNSS stations in **Annex A** at the M³G-bureau (https://gnss-metadata.eu/).

Date: 21/10/2019

Operational Centre (OC)	OC Abbreviation	Contact Person (2)		
	(1)	Last name, First name	Email	
Istituto Nazionale di Geofisica e	INGV	Avallone, Antonio	antonio.avallone@ingv.it	
Vulcanologia				
National Observatory of Athens	NOA	Chousianitis,	chousianitis@noa.gr	
		Konstantinos		

All fields are mandatory

- (1) "OC Abbreviation" will be used as 'login' for the Agency account at https://gnss-metadata.eu/
- (2) "Contact person" will be contacted to activate the Agency account at https://gnss-metadata.eu/

Any change to the table above must be done by sending an updated EPOS-GNSS Supplier Letter to

Dr. Carine Bruyninx

M³G-Bureau

Royal Observatory of Belgium

Av. Circulaire 3

B-1180 Brussels

Belgium





ANNEX C: EPOS-GNSS Data Nodes

The Data Supplier grants the EPOS-GNSS Data Nodes listed in the table below the permission to make available to EPOS the data from the GNSS stations in Annex A.

Date: 21/10/2019

EPOS-GNSS Data Node (3)	
Istituto Nazionale di Geofisica e Vulcanologia - INGV	
National Observatory of Athens - NOA	

(3) Select from the list of EPOS-GNSS Data Nodes available from https://gnss-metadata.eu/. If no EPOS-GNSS Data Nodes are indicated in the table above, then all EPOS-GNSS Data Nodes listed in https://www.gnss-metadata.eu/ are permitted to distribute the GNSS data.

Any change to the table above must be done by sending the updated EPOS-GNSS Supplier Letter to Dr. Carine Bruyninx
M³G-Bureau
Royal Observatory of Belgium
Av. Circulaire 3
B-1180 Brussels
Belgium