



**Memorandum of Understanding
between
EGI-InSPIRE and CHAIN**



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BACKGROUND

The “Integrated Sustainable Pan-European Infrastructure for Researchers in Europe” project (hereafter referred to as “EGI-InSPIRE”) supports the transition from a project-based system to a sustainable pan-European e-Infrastructure, by supporting ‘grids’ of High-Performance Computing (HPC) and High-Throughput Computing (HTC) resources. EGI-InSPIRE, supported by EGI.eu, the central organisation that provides a coordinating hub for European DCIs and will also be ideally placed to integrate new Distributed Computing Infrastructures (DCIs) such as clouds, supercomputing networks and desktop grids, to benefit the user communities within the European Research Area (ERA). A summary of EGI-InSPIRE is attached as Annex 1.

The CHAIN project aims to coordinate and leverage the efforts made over the past 6 years to extend the European e-Infrastructure (and particularly Grid) operational and organisational principles to a number of regions in the world. CHAIN uses their results with a vision of a harmonised and optimised interaction model for e-Infrastructure and specifically Grid interfaces between Europe and the rest of the world. The project will elaborate a strategy and define the instruments in order to ensure coordination and interoperation of the European Grid Infrastructure with those emerging in other regions of the world (Asia, Mediterranean, Latin America and Sub-Saharan Africa).

The CHAIN consortium, consisting of leading organisations in all the regions addressed by the project, will ensure global coverage, European leadership, and most efficient leveraging of results with respect to preceding regional initiatives. A summary of CHAIN is attached as Annex 2.

Institutions common to both projects are CESNET, CIEMAT, GRNET, and INFN. The CHAIN project has partners in the following regions: Africa-sub-Sahara (UbuntuNet), North Africa, Middle East and Gulf, Asia (IHEP, PSA), Latin America (CLARA).

ARTICLE 1: PURPOSE

The purpose of this Memorandum of Understanding¹ (MoU) is to define a framework of collaboration between EGI-InSPIRE and CHAIN (hereafter also referred to as “the Party” or the “Parties”). The Parties recognise, by this MoU, the opening of a wider and longer-term cooperation in activities that will bring visible benefits.

ARTICLE 2: DEFINITIONS

For the purpose of this MoU:

- (a) The term LA means Latin America and the Caribbean region
- (b) The term ASREN means Arab States Research & Education Network
- (c) The term VRC (Virtual Research Community) is defined as an organisational grouping that represents a community of users with common interests. The EGI VRC model brings together the stakeholders within a standard, flexible, persistent and sustainable structure. A VRC must be a self-organising group that collects and represents the interests of a focussed collection of researchers across a clear and well-defined field. Named contacts are agreed upon by the VRC to perform specific roles and these then form the communication channel between the VRC and EGI.eu
- (d) The term EGI (European Grid Infrastructure) refers to the production infrastructure – the federated resources brought together by the participants within EGI.eu, or made accessible to the VRC through various MoUs that EGI.eu coordinates on behalf of the EGI community

¹ An MoU is a written agreement that clarifies relationships and responsibilities between two or more parties that share services, clients, and resources.



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ARTICLE 3: JOINT WORK PLAN

The specific areas of the collaboration are:

1. Interoperations and integration of Regional Grid Infrastructures
2. Interoperation of operational tools
3. Open standards adoption in relation to Grid Resources
4. Dissemination
5. Training
6. VRC Coordination
7. NGI know-how exchange and related information

The specific activities to be carried out in the framework of the collaboration are²:

<p>A.1 Interoperation and Integration of Regional Grid Infrastructures</p> <p>Parties Involved: EGI-InSPIRE (Tiziana Ferrari, EGI.eu Chief Operations Officer, Sergio Andreozzi, EGI.eu Policy Development Manager), CHAIN (<u>Ludek Matyska</u>, WP4 Manager)</p> <p>Description of work: The objective of this activity is to coordinate the definition of a proposed roadmap for interoperation and integration between EGI and other Regional Grid Infrastructures represented in CHAIN to support shared use and operation.</p> <p>Expected outcome:</p> <ul style="list-style-type: none">• A roadmap for the interoperation and integration aligned with the EGI model and based on CHAIN's understanding of Regional Grid Infrastructures and their possible evolution• Participation of EGI.eu staff in the CHAIN meetings and feedback from the EGI Council on the project's findings and proposals
<p>A.2 Interoperation of operational tools</p> <p>Parties Involved: EGI-InSPIRE (Peter Solagna, EGI.eu Operations Officer), CHAIN (<u>Roberto Barbera</u>, Technical Manager, <u>Ludek Matyska</u>, WP4 Manager)</p> <p>Description of work: The objective of this activity is to propose a roadmap on the usage of existing operational tools and on their future evolution to meet the needs of the Regional Grid Infrastructures represented in CHAIN.</p> <p>Expected outcome:</p> <ul style="list-style-type: none">• A roadmap to improve the integration of operational tools supported by EGI that are used in the different Regional Grid Infrastructures represented in CHAIN, including an implementation plan identifying what is missing and what should be modified and by whom.• Rationalisation and the reduction of duplication in the operational tools used within EGI by the Regional Grid Infrastructures in CHAIN
<p>A.3 Open standards adoption in relation to Grid Resources</p> <p>Parties Involved: EGI-InSPIRE (Sergio Andreozzi, NA2.3 Task Leader), CHAIN (<u>Giuseppe Andronico</u>, Member of the Regional Executive Board)</p> <p>Description of work: The objective of this activity is to discuss and coordinate the adoption of open standards to access grid resources (using the current EGI-InSPIRE Standards Roadmap) in the existing and emerging Regional Grid Infrastructures.</p> <p>Expected outcome:</p> <ul style="list-style-type: none">• Survey of the current middleware platforms used in the CHAIN Regional Grid Infrastructures

² Party leading the activity is underlined.



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and the current adoption of open standards within these Regional Grid Infrastructures

- Gap analysis on existing issues and other barriers that prevent the adoption of open standards identified in the EGI Standards Roadmap
- Roadmap on the alignment to the EGI Standards Roadmap by the regional infrastructures covered by CHAIN

A.4 Dissemination

Parties Involved: EGI-InSPIRE (Catherine Gater, EGI.eu Dissemination Manager), CHAIN (Federico Ruggieri WP5 Ad Interim Manager, Alberto Masoni Member of the Regional Executive Board)

Description of work: The objective of this activity is to maximise the impact of both CHAIN and EGI-InSPIRE through the efficient coordination of dissemination. This will involve establishing contact points for communication channels. The parties will collaborate and help each other in the production of dissemination material and also disseminate the progress and results from the collaboration within their respective communities. Scientific/academic publications by CHAIN that benefited from the usage of EGI should also be reported.

Expected outcome:

- Advertise the start of the collaboration in each party's website with a dedicated static page and news article
- Joint sessions at EGI-InSPIRE and CHAIN events will be planned in order to disseminate the progress and results of the collaboration
- Report on dissemination activities including the list of publications issued by CHAIN that benefited from the usage of EGI

A.5 Training Support

Parties Involved: EGI-InSPIRE (Steve Brewer, EGI.eu Chief Community Officer, Marios Chatziangelou, IASA, AppDB Team), CHAIN (Roberto Barbera, Technical Manager)

Description of work: EGI-InSPIRE will provide access to the training marketplace and the CHAIN partners will contribute training material, documentation and presentations that they develop to the marketplace. EGI-InSPIRE will also provide access to the Applications Database (AppDB) and CHAIN will propose the introduction of new applications discovered and adapted to run on EGI resources. A possible extension and evolution of the AppDB will be discussed jointly by both projects in order to provide a single instance to all communities.

Expected outcome:

- EGI-InSPIRE will offer access and support for the usage of both the training marketplace and application database by CHAIN users
- CHAIN partners will contribute training material to the training marketplace and a report will be provided to EGI-InSPIRE
- CHAIN will contribute applications to AppDB that their users have adapted to run on EGI and report will be provided to EGI-InSPIRE
- Extension and update of AppDB and support to VRCs (optional)

A.6 VRC Coordination

Parties Involved: EGI-InSPIRE (Steve Brewer, EGI.eu Chief Community Officer), CHAIN (Rafael Mayo WP3 Manager)

Description of work: CHAIN will foster the contacts of the research communities with the VRCs; the EGI-InSPIRE User Community Support Team will provide support via the EGI Web portal to enable the discovery of VRCs and to engage them. CHAIN will encourage and support users associated with the project to make use of the EGI support services either directly or through their National or



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Community gateways.

Expected outcome:

- Report to CHAIN about the identification of research groups that are part of EGI VRCs and active in CHAIN’s regions of interest
- CHAIN user communities discover and connect to related communities in Europe through the EGI services
- CHAIN research groups connect with their local Resource Infrastructure Providers

A.7 NGI Know-How Exchange

Parties Involved: EGI-InSPIRE (Sergio Andreozzi, NA2.3 Task Leader, Tiziana Ferrari, Chief Operations Officer), CHAIN (Ognjen Prnjat WP2 Manager)

Description of work: CHAIN will exchange with EGI-InSPIRE the information and know-how related to NGIs, including but not limited to existing/published and emerging NGI guidelines, NGI organisational & operational structure, sustainability plans, computing and storage resources available, the contacts of the responsible persons and organisations leading the Grid Infrastructures in the various regions. CHAIN will disseminate the EGI documentation to their related NGIs about operations (<https://wiki.egi.eu/wiki/Documentation>) and about policies and procedures (http://go.egi.eu/policies_and_procedures).

Expected outcome:

- EGI-InSPIRE feedback regarding CHAIN questionnaire
- CHAIN providing NGI guidelines documentation to EGI-InSPIRE
- CHAIN reporting to EGI-InSPIRE about the identification of new and emerging NGIs that could interoperate with EGI
- CHAIN disseminating EGI documentation and policies /procedures towards their NGIs

ARTICLE 4: TIMELINE AND REPORTING

The EGI-InSPIRE NA2.3 Policy Development Team (PDT)³ will coordinate the periodic review of the progress of the activities defined in Article 3 (Joint Work Plan), follow-up the milestones defined below and distribute reports to both Parties. Special meetings between the points of contact designated under Article 5 (Communication) shall be held, as often as necessary, to examine the progress in the implementing of this Agreement. When applicable, actions will be written as part of the parties’ respective project deliverables and reciprocal contributions and reviews are expected.

Date	Milestone	Additional Information
07/2011	M4.1	The milestone is achieved by advertising the start of the collaboration
07/2011	M3.1	Survey of the current middleware platforms used in Regional Grid Infrastructures and the current adoption of open standards within the Regional Grid Infrastructures (roadmap led by CHAIN, Giuseppe Andronico)
09/2011	M6.1	Report to CHAIN about the identification of research groups that are part of EGI VRCs and active in CHAIN’s regions of interest (report led by EGI-InSPIRE, Steve Brewer)

³ The Policy Development Team is part of the task NA2.3, project EGI-InSPIRE



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09/2011	M1.1	Requires a roadmap for interoperation and integration aligned with the EGI Model and based on CHAIN's understanding of Regional Grid Infrastructures and their possible evolution (roadmap led by CHAIN, Ludek Matyska)
09/2011	M4.2	Joint session at EGI Technical Forum
10/2011	M2.1	A roadmap to improve the integration of operational tools supported by EGI that are used in the different Regional Grid Infrastructures represented in CHAIN, including an implementation plan identifying what is missing and what should be modified and by who (roadmap led by CHAIN, Roberto Barbera).
11/2011	M3.1	Gap analysis on existing issues and other barriers that prevent the adoption of open standards identified in the EGI Standards Roadmap (roadmap led by CHAIN, Giuseppe Andronico)
11/2011	M4.3	Requires a report on dissemination activities including the list of publications issued by CHAIN that benefited from the usage of EGI (report led by CHAIN, Federico Ruggieri)
12/2011	M7.1	Report from CHAIN to EGI-InSPIRE on: 1) identification of new and emerging NGIs that could interoperate with EGI; 2) NGI guidelines documentation (report led by CHAIN, <u>Ognjen Prnjat</u>); 3) reuse of EGI documentation in new/emerging NGIs
03/2012	M3.2	Roadmap on the alignment to the EGI Standards Roadmap by the regional infrastructures covered by CHAIN (roadmap led by CHAIN, Roberto Barbera)
Spring/2012	M4.4	Joint session at EGI User Forum
Autumn/2012	M4.5	Joint session at EGI Technical Forum
11/2012	M4.6	CHAIN contribution to the EGI and Collaborating Projects Achievements Booklet (report led by CHAIN, Federico Ruggieri)
11/2012	M5.1	Report on application contribution on AppDB, training material into the training market place and extension of AppDB (report led by CHAIN, Roberto Barbera)
11/2012	M6.2	Report on CHAIN user communities integration with EGI VRCs and with their local Resource Infrastructure Providers (report led by EGI-InSPIRE, Steve Brewer)
11/2012	M7.2	Report from CHAIN to EGI-InSPIRE on: 1) identification of new and emerging NGIs that could interoperate with EGI; 2) NGI guidelines documentation (report led by CHAIN, <u>Ognjen Prnjat</u>); 3) reuse of EGI documentation in new/emerging NGIs
As required	M7.3	EGI-InSPIRE to provide feedback about CHAIN Questionnaire

ARTICLE 5: COMMUNICATION



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The Parties shall keep each other informed on all their respective activities and on their progress and shall consult regularly on areas offering potential for cooperation.

Joint working groups may be established to examine in detail proposals in areas assigned to them by the Parties referred to in Article 3 (Joint Work Plan) and to make recommendations to the Parties.

Each Party shall designate a “point of contact” that shall be responsible for monitoring the implementation of this MoU and for taking measures to assist in the further development of cooperative activities. Such points of contact shall be the ordinary channel for the Parties' communication of proposals for cooperation.

The primary point of contact for each Party is:

EGI-InSPIRE: Sergio Andreozzi, sergio.andreozzi@egi.eu

CHAIN: Ludek Matyska, ludek@ics.muni.cz

Questions of principle or problems that cannot be solved at primary contact level are escalated to the EGI-InSPIRE Project Director and the CHAIN Project Director.

ARTICLE 6: RIGHTS AND RESPONSIBILITIES

The procedure is set out in Annex 3.

ARTICLE 7: FUNDING

Each Party shall bear the costs of discharging its respective responsibilities under this MoU, including travel and subsistence of its own personnel and transportation of goods and equipment and associated documentation, unless otherwise agreed in this MoU.

Each Party shall make available free of charge to the other Party any office/meeting space needed for the joint activities.

The Parties' obligations hereunder are subject to their respective funding procedures and the availability of appropriated funds. Should either Party encounter budgetary problems in the course of its respective internal procedures that may affect the activities carried out under this MoU, that Party shall notify and consult with the other Party in a timely manner in order to minimise the negative impact of such problems on the cooperation. The Parties shall jointly look for mutually agreeable solutions.

ARTICLE 8: ENTRY INTO FORCE, DURATION AND TERMINATION

This MoU will enter into force when signed by the authorised representatives of the Parties and shall remain in force until completion of the activities identified in Article 3 (Joint Work Plan), or upon termination of at least one of the projects in which the Parties participate, or upon three (3) months prior written notice by one Party to the other. In the event of termination, the parties shall endeavour to reach agreement on terms and conditions to minimise negative impacts on the other Party. In the event of the continuation of the present cooperation, the Agreement may be extended and/or amended by mutual agreement in writing.



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ARTICLE 9: AMENDMENTS

The MoU may be amended by written agreement of the Parties. Amendments shall be valid only if signed by the authorised representatives of the Parties.

ARTICLE 10: ANNEXES

Annexes 1, 2, 3 and 4 attached hereto have the same validity as this MoU and together constitute the entire understanding and rights and obligations covering the cooperation accepted by the Parties under this MoU. Annexes may be amended following the provisions of Article 9 (Amendments).

ARTICLE 11: LANGUAGE

The language for this MoU, its interpretation and all cooperative activities foreseen for its implementation, is English.

ARTICLE 12: GOVERNING LAW - DISPUTE RESOLUTION

The terms of this MoU shall be interpreted in accordance with their true meaning and effect independently of national and local law. Provided that if and insofar as this MoU does not stipulate, or any of its terms are ambiguous or unclear reference shall be made to the substantive laws of Belgium. Disputes shall be resolved by amicable settlement or failing which by arbitration in accordance with the procedure set out in Annex 4.



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IN WITNESS WHEREOF, the Parties have caused their duly authorised representatives to sign two originals of this Memorandum of Understanding, in the English language.

The following agree to the terms and conditions of this MoU:

**Dr. Steven Newhouse
EGI-InSPIRE Project Director**

**Prof. Federico Ruggieri
CHAIN Project Director**

11/7/11

Date

05/07/2011

Date



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Annex 1 EGI-InSPIRE

Background to EGI-InSPIRE

To support science and innovation, a lasting operational model for e-Infrastructure is needed – both for coordinating the infrastructure and for delivering integrated services that cross national borders.

The EGI-InSPIRE project will support the transition from a project-based system to a sustainable pan-European e-Infrastructure, by supporting ‘grids’ of high-performance computing (HPC) and high-throughput computing (HTC) resources. EGI-InSPIRE will also be ideally placed to integrate new Distributed Computing Infrastructures (DCIs) such as clouds, supercomputing networks and desktop grids, to benefit the user communities within the European Research Area.

EGI-InSPIRE will collect user requirements and provide support for the current and emerging user communities. Support will also be given to the current heavy users of the infrastructure, such as high energy physics, computational chemistry and life sciences, as they move their critical services and tools from a centralised support model to one driven by their own individual communities.

Objectives

The objectives of the project are:

- The continued operation and expansion of today’s production infrastructure by transitioning to a governance model and operational infrastructure that can be increasingly sustained outside of specific project funding.
- The continued support of researchers within Europe and their international collaborators that are using the current production infrastructure.
- The support for current heavy users of the infrastructure in earth science, astronomy and astrophysics, fusion, computational chemistry and materials science technology, life sciences and high energy physics as they move to sustainable support models for their own communities.
- Interfaces that expand access to new user communities including new potential heavy users of the infrastructure from the ESFRI projects.
- Mechanisms to integrate existing infrastructure providers in Europe and around the world into the production infrastructure, so as to provide transparent access to all authorised users.
- Establish processes and procedures to allow the integration of new DCI technologies (e.g. clouds, volunteer desktop grids) and heterogeneous resources (e.g. HTC and HPC) into a seamless production infrastructure as they mature and demonstrate value to the EGI community.

The EGI community is a federation of independent national and community resource providers, whose resources support specific research communities and international collaborators both within Europe and worldwide. EGI.eu, coordinator of EGI-InSPIRE, brings together partner institutions established within the community to provide a set of essential human and technical services that enable secure integrated access to distributed resources on behalf of the community.

The production infrastructure supports Virtual Research Communities – structured international user communities – that are grouped into specific research domains. VRCs are formally represented within EGI at both a technical and strategic level.



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Consortium:

The EGI-InSPIRE consortium has 51 partners with representatives of 42 National Grid Initiatives (NGIs) and European International Research Organisation (EIROs) in geographical Europe, and eight Asia Pacific partners, coordinated by EGI.eu a dedicated organisation established to provide an integrated sustainable pan-European Infrastructure for all researchers in Europe.

Duration: 48 months

EC Contribution: 25,000,000 €

Total Budget: cca. 72,000,000 €

Total Manpower: 9,241 Person Months



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Annex 2 CHAIN Description

The CHAIN project aims to coordinate and leverage the efforts made over the past 6 years to extend the European e-Infrastructure (and particularly Grid) operational and organisational principles to a number of regions in the world. CHAIN uses their results with a vision of a harmonised and optimised interaction model for e-Infrastructure and specifically Grid interfaces between Europe and the rest of the world. The project will elaborate a strategy and define the instruments in order to ensure coordination and interoperation of the European Grid Infrastructure with those emerging in other regions of the world (Asia, Mediterranean, Latin America and Sub-Saharan Africa).

The CHAIN consortium, consisting of leading organisations in all the regions addressed by the project, will ensure global coverage, European leadership, and most efficient leveraging of results with respect to preceding regional initiatives.

Objectives:

The objectives of CHAIN project can be divided into three main areas:

1. Define a strategy and a model for external collaboration, in close collaboration with EGI.eu, which will enable operational and organisation interfacing of EGI and external e-Infrastructures. This strategy will take into account current organisational models, while, regarding operational models, a peering model will be defined between Europe and other continents.
2. Validate this model, as a proof-of-principle, by supporting the extension and consolidation of worldwide Virtual Research Communities, which work on common areas (Bioinformatics, Chemistry, etc.) and/or increasingly require distributed facilities (e.g., large instruments, distributed data and databases, digital repositories, etc.) across the regions for trans-continental research. The limited support for such existing communities will be complemented by a coordinated activity of support for the international expansion to other prospective communities that have not exploited yet the full benefits of large intercontinental e-Infrastructures.
3. Propose and explore concrete steps forward towards the coordination with other projects and initiatives (e.g., EGI-InSPIRE, EUMEDGRID-Support, EUIndiaGrid2, LinkSCEEM, PRACE, Indian National Knowledge Network, GISELA, etc.). The project will act as a worldwide policy-watch and coordination instrument, by exploring and proposing concrete steps for the coordination with other initiatives and studying the evolution of e-Infrastructures towards not only Grids and HPC but also Cloud Computing, Virtualisation, Desktop and Voluntary Computing and other trends that may emerge. This interaction with other e-Infrastructures will also imply a strong commitment to standards' adoption.

Action plan:

First, the project will define a coherent operational and organisational model, where a number of EU countries/regions will act, in collaboration with EGI.eu, as bridges/gateways to other Regions/Continents. Further, the project will validate this model by supporting the extension and consolidation of worldwide virtual communities, which increasingly require distributed facilities (large instruments, distributed data and databases, digital repositories, etc.) across the regions for trans-continental research. Finally, the project will act as a worldwide policy-watch and coordination instrument, by exploring and proposing concrete steps for the coordination with other initiatives and studying the evolution of e-Infrastructures.

Coordination and/or support activities:

The project will assess the current state of the art, and produce a set of guidelines that will support the start-up or continuity of e-Infrastructures depending on the particular region. The activity will promote the emergence of agreed solutions for interoperation and, possibly, interoperability with countries and regions that are presently using different middleware solutions. At the same time it will study and propose a coherent scheme of cooperation and interoperation of EGI.eu with external e-



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Infrastructures taking into consideration the specificities of the different regions. The study will provide the assessment of the existing services, and will suggest the necessary services to support interoperation. CHAIN will as well deploy a large activity of dissemination focused on different targets by means of the organisation of thematic workshop, with real intercontinental participation, on topics of large scientific and/or social impact that are, or could be, better addressed by the adoption of e-Infrastructures and, at the same time, promote the stability of existing and emerging e-Infrastructures and gathering of feedbacks by means of a limited number of high-level conferences.

User communities:

CHAIN will leverage on the cross-region communities and applications and promote inter-regional, e-Infrastructure based, research collaborations. A limited number of reference communities will be chosen, but the activity will also aim to promote the continuity of support to the large spectrum of communities that are already supported by the existing regional projects.

International aspects:

The project will perform a wide-spectrum investigation on the existing and potential trans-continental communities, scientific and technical collaborations, collecting requirements, commonalities, challenges and possible synergies producing a study of the necessary steps for e-Infrastructures to fulfil the requirements of present and emerging virtual research communities with trans-continental span.

Consortium:

The CHAIN Consortium is currently composed by the following partners:

	Organisation	Country
1.	INFN	IT
2.	CIEMAT	ES
3.	GRNET	GR
4.	CESNET	CZ
5.	UBUNTUNET	MW
6.	CLARA	UY
7.	IHEP	CN
8.	PSA	IN

Start Date: 1 December 2010

Duration: 24 months

EC Contribution: 1,100,000 €

Total Budget: cca. 1,500,000 €

Total Manpower: 281 Person Months



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Annex 3 Rights and Responsibilities

A. GENERAL

1. CHAIN agrees to adhere to applicable policies and procedures relating to the use of the production infrastructure.
2. A Party which makes material, equipment or components available to the other Party, for the purposes of activities under this MoU shall remain the proprietor of such material, equipment or components.
3. Each Party shall remain fully responsible for its own activities, including the fulfilment of its obligations under any grant agreement with the European Commission or under any consortium agreement related thereto.

B. PERSONNEL

1. Each Party shall be solely responsible for any personnel hired to carry out work under this MoU.
2. In case personnel employed by one Party temporarily carries out work under this MoU on the premises of another (hereafter referred to as "secondment"), the following provisions shall apply:
 - (a) The persons seconded shall be subject to all regulations, including, in particular, safety regulations, applicable on the site of the Party they are seconded to.
 - (b) The personnel seconded by a Party to another shall remain employees of the Party having seconded them and such Party, as employer, shall bear exclusive responsibility for the payment of salary and for the procurement of adequate social security and insurance, including third party liability insurance and health insurance.
 - (c) Unless otherwise agreed by the Parties concerned, Intellectual Property Rights generated by personnel seconded by a Party to another shall be owned by the Party having seconded such personnel.

C. INTELLECTUAL PROPERTY RIGHTS AND LICENSE

1. "Intellectual Property Rights" shall mean all intellectual creations including but not limited to inventions, know-how, layouts, drawings, designs, specifications, computer programs, reports, processes, protocols, calculations and any other matter and protected by intellectual property rights, whether registered or not, including patents, registered designs, copyrights, design rights and all similar proprietary rights and applications for protection thereof.
2. Intellectual property rights generated by a Party under this MoU shall be the property of that Party who shall be free to protect, transfer and use such Intellectual Property Rights as it deems fit.
3. Notwithstanding the foregoing each Party shall grant the other a non-exclusive royalty free, perpetual license to use the Intellectual Property Rights generated by it under this MoU for use within its project or for the exploitation the results thereof. Such license shall include the right to sublicense the entities involved in the project.

D. JOINTLY OWNED RESULTS

1. Results that were jointly generated by both Parties will be jointly owned by the Parties, hereinafter referred to as ("Jointly Owned Results") and each of the Parties shall be free to use these Jointly Owned Results as it sees fit without owing the other Party any compensation or requiring the consent of the other Party. Each Party, therefore, for example and without limitation, has the transferable right to grant non-exclusive, further transferable licenses under such Jointly Owned Results to third parties. Each Party shall be entitled to disclose such Jointly Owned Results without restrictions unless such Jointly Owned Results contain a Joint Invention in which case no disclosure must be made prior to the filing of a priority application.
2. With respect to any joint invention resulting from this MoU (i.e. any invention jointly made by employees of both Parties), the features of which cannot be separately applied for as Intellectual Property Rights and which are eligible for statutory protection requiring an application or registration (herein referred to as "Joint Invention"), the Parties shall agree on which Party will carry out any



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filling as well as any further details with regard to persecuting and maintaining of relevant patent applications.

E. PUBLIC RELATIONS

1. Any publication by a Party resulting from the activities carried out under this MoU shall be subject to prior agreement of the other Party not be unreasonably withheld.
2. EGI-InSPIRE and CHAIN may each release information to the public, provided it is related only to its own part of the activities under this MoU. In cases where the activities of the other Party are concerned prior consultation shall be sought. In all relevant public relations activities, the contribution of each Party related to activities covered by this MoU shall be duly acknowledged.

F. CONFIDENTIALITY OF INFORMATION

1. The Parties may disclose to each other information that the disclosing Party deems confidential and which is (i) in writing and marked “confidential”, or (ii) disclosed orally, and identified as confidential when disclosed, and reduced in writing and marked “confidential” within fifteen (15) days of the oral disclosure (hereafter referred to as “Confidential Information”). Confidential Information shall be held in confidence and shall not be disclosed by the receiving Party to any third party without the prior written consent of the disclosing Party.
2. Notwithstanding the foregoing a Party is entitled to disclose Confidential Information which it is required by law to disclose or which, in a lawful manner, it has obtained from a third party without any obligation of confidentiality, or which it has developed independently from any Confidential Information received under this MoU, or which has become public knowledge other than as a result of a breach on its part of these confidentiality provisions.

G. LIABILITY

1. Each Party shall use reasonable endeavours to ensure the accuracy of any information or materials it supplies to the other Party and of any other contribution it makes hereunder and promptly to correct any error therein of which it is notified. The supplying Party shall be under no obligation or liability other than as stated above and no warranty or representation of any kind is made, given or to be implied as to the sufficiency, accuracy or fitness for a particular purpose of such information, materials or other contribution or as to the absence of any infringement of any proprietary rights of third parties through the possession or use of such information, materials or other contribution. The recipient Party shall be entirely responsible for its use of such information, materials or other contribution and shall hold the other Party free and harmless and indemnify it for any loss or damage with regard thereto.
2. Except in case of gross negligence or wilful misconduct, neither Party shall be liable for any indirect or consequential damages of the other Party, including loss of profit or interest, under any legal cause whatsoever and on account of whatsoever reason.

H. PARTICIPATION IN SIMILAR ACTIVITIES

1. Parties are not prevented by this MoU from participating and activities similar to those described in this document with third parties. There is no obligation to disclose any similar activity to the other party. However, when considered of mutual benefit, both parties are encouraged to involve the other party in similar activities to the goal of disseminating the knowledge about EGI-InSPIRE.



**Memorandum of Understanding
between
EGI-InSPIRE and CHAIN**



Annex 4 Settlement of Disputes

1. All disputes or differences arising in connection with this MoU which cannot be settled amicably shall be finally settled by arbitration in accordance with the procedure specified below which shall be adapted in the light of the number of Parties involved.
2. Within thirty (30) calendar days of written notification by a Party to the other Party of its intention to resort to arbitration, the first Party shall appoint an arbitrator. The second Party shall appoint an arbitrator within three (3) months of the appointment of the first arbitrator. The two arbitrators shall, by joint agreement and within ninety (90) calendar days of the appointment of the second arbitrator, appoint a third arbitrator, who shall be the Chairman of the Arbitration Committee.
3. If the second Party fails to appoint an arbitrator or the two arbitrators fail to agree on the selection of a third arbitrator, the second or, as the case may be, the third arbitrator, shall be appointed by the President of the Court of Justice of the European Communities.
4. Unless otherwise agreed by the Parties concerned within thirty (30) calendar days of the provision of notice referred to in Article 12 above, the arbitration proceedings shall take place in Brussels and shall be conducted in English. The Parties shall within one month of the appointment of the third arbitrator agree on the terms of reference of the Arbitration Committee, including the procedure to be followed.
5. The Arbitration Committee shall faithfully apply the terms of this MoU. The Arbitration Committee shall set out in the award the detailed grounds for its decision.
6. The award shall be final and binding upon the Parties, who hereby expressly agree to renounce any form of appeal or revision.
7. The costs including all reasonable fees expended by the Parties to any arbitration hereunder shall be apportioned by the Arbitration Committee between these Parties.