Memorandum of Understanding between UberCloud and EGI

Background

About EGI

The EGI infrastructure is a federation of over 350 resource centres across more than 50 countries delivering integrated computing services to researchers, driving innovation and enabling new solutions to answer the big questions of tomorrow. It is based on an open federation providing uniform access to computing and data storage resources to connect researchers from all disciplines with the reliable and innovative ICT services they need for their collaborative world-class research.

EGI.eu

EGI.eu is a not-for-profit foundation established under Dutch law to coordinate and manage the EGI federation on behalf of its participants.

EGI for Business

EGI has a defined business engagement programme offering a framework for identifying areas of mutual benefit and formalising relationships with commercial organisations. Collaboration areas can range from providing computing capacity, developing or integrating software products to sharing expertise and knowledge, market intelligence and promotion.

www.egi.eu

About UberCloud

The UberCloud is the online community and marketplace where engineers and scientists discover, try, and buy Computing Power as a Service, on demand. Engineers and scientists can explore and discuss how to access and use the additional computing power in the cloud to solve their demanding design and development problems, and to identify the roadblocks and solutions, with a crowd-sourcing approach. More than 2500 companies and individuals from 72 countries are participating in the UberCloud Community, among them 50+ cloud resource providers, 80+ application software providers, and hundreds of industry end-users, consulting firms, and consultants.

Through 170+ real-life hands-on cloud experiments UberCloud found that enterprises large and small in digital manufacturing, life sciences, oil & gas, etc. can strongly benefit from technical computing in the cloud. By gaining access on demand from their desktop workstations to additional remote compute resources, their major benefits are: agility gained by making use of a variety of different resources (workstations, servers, clouds); faster product development (and time to market) by shortening product design cycles through shorter simulation run times; superior quality achieved with more sophisticated geometries and physics; and by running many more configurations and iterations to look for the best product design. These are benefits that increase a company's innovation and competitiveness.

UberCloud has developed a complete computing services ecosystem for engineers and their service providers consisting of a set of information components (case studies, articles, trainings, webinars, newsletters, etc.), an experimentation environment (to gain real hands-on insight into CAE in the Cloud), and a production infrastructure (the UberCloud Marketplace with stores offering IaaS, SaaS, and Expertise as a Service) to buy cloud services on demand and pay-per-use.

www.theubercloud.com

Article 1: Purpose

The purpose of this Memorandum of Understanding (MoU) is to define a framework of collaboration between EGI.eu and UberCloud (hereafter also referred to as "the Party" or the "Parties") for delivering the activities outlined within the Joint Work Plan (Article 3). The Parties recognise that this MoU is considering an internal pilot project, with the aim of opening of a wider and longer-term cooperation in activities, which will bring visible benefits to everyone involved.

This collaboration covers several areas of mutual benefit for both organisations, which is described in two stages: Initial activities to be carried out in the short-term, and potential future areas in the medium-term.

Collaboration Opportunities

For technical computing stakeholders HPC in the Cloud is a new (if not disruptive) computing paradigm. Users and providers alike struggle with recognising the immense value of HPC in the Cloud for their businesses and how to leverage it for making their daily work more efficient and effective, and for improving their products and services. EGI and its myriad of users and providers are no different. Here, the UberCloud becomes a valuable partner by offering its technical cloud computing ecosystem and providing HPC in the Cloud information, experimentation, and production services to support EGI and its users and partners. In line with the EGI Business Engagement Programme, a collection of ideas in the area of technical cloud computing would serve as a basis for a potential joint EGI / UberCloud collaboration. Discussions should circle around all major services/assets of both organisations and explore related joint opportunities for mutual benefits. At UberCloud, the following areas, opportunities, and examples are candidates for potential collaboration:

Area	Opportunity	Examples
Information	UC is **collecting** cloud related information from its media partners. UC is **developing** cloud related information for its community.	Feature stories, articles, case studies, newsletters, webinars, compendiums, conference presentations, video demos.
Exploration	UC has developed an experimentation environment for users and providers to explore cloud computing: 'try before you buy'.	170 end-user experiments with related case studies used for community building and dissemination.
Marketplace	Currently 35 stores for cloud infrastructure, Software as a Service, and expertise, about 20 more in the pipeline.	Marketplace offers: compute cycles, software, solution bundles, expertise, on demand, pay per use.
Technology	Docker container development for technical computing, with monitoring, reporting, billing, compression, encryption, libraries, remote viz, storage connectors, admin tools, applications.	UC Containers exist for all ANSYS products, STAR-CCM+, OpenFOAM, Gromacs, Scilib, NICE DCV, PSPP, and more in preparation.

Article 2: Definitions

For the purpose of this MoU, the following definitions are relevant:

- The terms defined in the EGI glossary[1]
- Any additional relevant definitions to this MoU not included in the EGI glossary are provided below
    - Container: Software Containers have emerged as a key open source application packaging and delivery technology, combining lightweight application isolation with the flexibility of image-based deployment methods. UberCloud Containers (based on open-source Docker) are ready-to-execute packages of software. These packages are designed to deliver the tools that an engineer needs to complete his task in hand. The ISV or Open Source tools are pre-installed, configured, and tested, in the container, and are running on bare metal, without loss of performance. They are ready to execute, literally in an instant with no need to install software, deal with complex OS commands, or configure. .

Article 3: Joint Work plan

The parties contribute to enable the vision of providing European scientists an international collaboration for sustainable distributed computing services to support their work.

In this broad context, the specific goals of the collaborations are to:

- Shape EGI service descriptions for inclusion in the UberCloud marketplace to be presented in a way that is attractive to SMEs
- Facilitate the interaction with SMEs interested
- Identify potential UberCloud application containers to run on EGI FedCloud
- Exchange experience for outreach/marketing and input to the EGI marketplace

The underlying principles are:

- Do not re-invent wheels. Make use of existing industry contacts from EU, projects and partners.
- Follow a pragmatic approach, i.e. start with low-hanging fruit.
- Do not expect too much from SMEs. They are primarily interested in their business. Their most precious good is time and human resources. This means for example that they do not want to travel just because of learning how EGI or UberCloud could help them. They want easy to understand, ready-made, low-cost services and support.
- Present the EGI offers in a very user-friendly and easy-to-understand-and-use way.

A1 - Service Development

Description of work: Services should be different and complementary from what the market already offers as a standard and reflect the strength and many years' experience of EGI. This means that EGI should focus on its existing strengths, namely consulting, development and

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[1] https://wiki.egi.eu/wiki/Glossary_V2

computing services packaged into one (expandable) 'technology transfer' solution which clearly matches the SMEs' needs (which has to be found out by interviewing SMEs). This solution should be easily scalable and customizable according to each SMEs needs. EGI's products and services should be crisp and clearly understandable to SMEs. They should cover the SMEs' pain areas and target at 'sweet spot' solutions. The EGI services site should include free and commercial offerings in the areas of learning (articles, webinars, demos, case studies, etc.), exploring (trials, experiments, etc.), and finally buying services and solutions supporting their daily design, development, and production work.

Activities:

- A1.1 (Both parties): Develop the description and presentation of EGI cloud products and services starting with targeting the Computer-aided engineering (CAE) market.

- A1.2 (UberCloud): Provide cloud related information, services and containers to EGI to be useful for the EGI community e.g. UberCloud's monthly newsletter for CAE in the Cloud.

- A3.2 (Both parties): Perform cloud experiments with EGI as a Cloud resource provider resulting in a set of case studies for activities described in A3.

A2 - SME Access

Description of work: UberCloud could be very useful in the most demanding activity of reaching out and conquering the SME community. The UberCloud Marketplace could be a one-stop place for EGI with opening an EGI Store and offering major EGI services on demand to European SMEs, in areas such as information, training, experimentation, and ready-made, scalable, and customizable services. While the EGI Service Catalogue basically exists today based on the many-years and many-people expertise within EGI, so reaching out to and approaching the SME Community to create their active interest is by far the most challenging component of this approach. The major steps to success are delivered through the following activities.

Activities:

- A2.1 (Both parties): Collect suitable SME contacts from existing database, from partners within the EU (with support from project officer) and from past and present EU projects.

- A2.2 (Both parties): EGI and UberCloud opening an EGI Cloud Store on the UberCloud Marketplace to provide visibility about EGI's cloud services.

- A2.3 (Both parties): Exploring joint opportunities by inviting SMEs to join a small trial project with an EGI partner having this specific expertise, according to the slogan "try before you buy".

- A2.4 (Both parties): Support and deliver webinars for SMEs on tailored service descriptions as a result of A1.1.

A3 - Joint Promotion

Description of work: UberCloud has a well-established community of over 3000 SMES and Research Organizations and is offering monthly newsletters with success stories and articles about HPC Cloud services, offering trainings and webinars, mentoring SMEs, which perform trials and experiments, and publishing case studies. EGI's dedicated marketing activities include case studies, periodic newsletters and two flagship events per year. These promotional channels offer high impact visibility of both organisations.

Activities:

- A3.1 (Both parties): Establish a staged step-by-step information and communication process, consisting of information (e.g. case studies from SMEs using already existing EGI services, targeted mailings with high-lighting the three major benefits of working with EGI, participating in regular webinars about examples and benefits of working with EGI, and mailing a monthly newsletter with condensed and valuable content);

- A3.2 (Both parties): EGI Federated Cloud presented and promoted on UberCloud website.

- A3.3 (Both parties): Organization names and logos will be included in major announcements and on both parties' websites.

- A3.4 (Both parties): Announcements about EGI's cloud services in the UberCloud Voice News Service and relevant articles for the EGI Inspired newsletter.

- A3.5 (Both parties): Annual 'Meetings of the Minds: UberCloud briefings, discussion, and information about HPC in the Cloud at EGI annual conferences. Especially, detailed information on challenges and best practices of HPC in the Cloud.

Article 4: Communication

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.

UberCloud will accept and comply with EGI.eu's policies and procedures that apply to the users of EGI (http://go.egi.eu/policies_and_procedures).

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.eu: Sy Holsinger sy.holsinger@egi.eu

UberCloud: Wolfgang Gentzsch wolfgang.gentzsch@theubercloud.com

Questions of principle or problems that cannot be solved at primary contact level are escalated to the EGI.eu Director or EGI.eu Technical Director and the UberCloud CEO Burak Yenier.

Article 5: 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.

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

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.

In order to reduce the impact on travel costs, face-to-face meetings should be co-located with other events where participants are likely to attend. Meeting via teleconferences should be considered when the nature of the discussion does not strictly require a face-to-face presence.

Article 6: 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 the completion of the activities identified in Article 3 (Joint Work Plan), 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. Either party may terminate this MoU for any reason or no reason upon thirty days prior written notice.

Article 7: 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 8: Annexes

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.

Article 9: Language

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

Article 10: Terms and Conditions

Governing Law

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, the MoU will be construed, interpreted, and applied in accordance with the internal laws of England and Wales (excluding its body of law controlling conflicts of law).

Dispute Resolution

Any dispute, controversy or claim arising out of or in connection with the MoU, or the breach, termination or invalidity thereof, will be finally settled by arbitration under the London Court of International Arbitration Rules, which rules are deemed to be incorporated by reference into this clause. The seat of arbitration will be London, England, and the language of arbitration will be English. The number of arbitrators will be one. The parties agree that, with respect to claims for immediate equitable relief, the courts of Brussels, Belgium will have exclusive jurisdiction. Disputes shall be resolved by amicable settlement.

Limitation of liability

Limitation on indirect liability - to the fullest extent permitted by law, neither EGI nor UberCloud and its affiliates, suppliers, and distributors will be liable under this agreement for: (i) indirect, special, incidental, consequential, exemplary, or punitive damages; or (ii) loss of use, data, business, revenues, or profits (in each case whether direct or indirect), even if the party knew or should have known that such damages were possible and even if a remedy fails of its essential purpose.

Limitation on amount of liability - to the fullest extent permitted by law, EGI's or UberCloud's aggregate liability under this agreement will not exceed €500.

Memorandum of Understanding between EGI.eu and UberCloud

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:

Yannick Legré
EGI.eu Director

Burak Yenier
UberCloud CEO

Date

Date

Annex 1 – Detailed Contact List

These contact points may be the same person. The EGI.eu Strategy and Policy Team (policy@egi.eu) is to be notified regarding any changes to the contact list.

Role	EGI.eu	UberCloud
Signing Authority	EGI.eu Director Yannick Legré yannick.legre@egi.eu	CEO Burak Yenier burak.yenier@theubercloud.com
MoU Contact Point	Senior Strategy and Policy Officer Sy Holsinger sy.holsinger@egi.eu	President Wolfgang Gentzsch wolfgang.gentzsch@theubercloud.com
Operational issues	Senior Operations Manager Peter Solagna peter.solagna@egi.eu	President Wolfgang Gentzsch wolfgang.gentzsch@theubercloud.com
Customer technical support	Technical Outreach Manager Gergely Sipos gergely.sipos@egi.eu	CEO Burak Yenier Burak.yenier@theubercloud.com
Marketing and Communication	Communications Manager Sara Coelho sara.coelho@egi.eu	President Wolfgang Gentzsch wolfgang.gentzsch@theubercloud.com