

D6.4 – THIRD ANNUAL REPORT ON COMMUNITY BUILDING

Grant Agreement	676547
Project Acronym	CoeGSS
Project Title	Centre of Excellence for Global Systems Science
Topic	EINFRA-5-2015
Project website	http://www.coegss-project.eu
Start Date of project	October 1, 2015
Duration	36 months
Deliverable due date	01.10.2018
Actual date of submission	11.10.2018
Dissemination level	Public
Nature	Report
Version	1.0
Work Package	WP6
Lead beneficiary	TOP-IX
Responsible scientist/administrator	Leonardo Camiciotti (TOP-IX)
Contributor(s)	Leonardo Camiciotti (TOP-IX) Luca Cicchelli (TOP-IX) Andrea Rivetti (TOP-IX)
Internal reviewers	Alexandra Gens (DIA) Bastian Koller (HLRS)
Keywords	Community Building, Dissemination, Stakeholders
Total number of pages:	24

Copyright (c) 2016 Members of the CoeGSS Project.



The CoeGSS (“Centre of Excellence for Global Systems Science”) project is funded by the European Union. For more information on the project please see the website <http://coegss-project.eu/>

The information contained in this document represents the views of the CoeGSS as of the date they are published. The CoeGSS does not guarantee that any information contained herein is error-free, or up to date.

THE CoeGSS MAKES NO WARRANTIES, EXPRESS, IMPLIED, OR STATUTORY, BY PUBLISHING THIS DOCUMENT.

Version History

	Name	Partner	Date
From	Andrea Rivetti	TOP-IX	
First Version	Andrea Rivetti	TOP-IX	Sept. 25, 2018
Second Version	Andrea Rivetti	TOP-IX	Oct. 11, 2018
Reviewed by	Alexandra Gens Bastian Koller	DIA HLRS	Sept. 26, 2018
Approved by	ECM		Oct. 15, 2018
Final review	Andrea Rivetti	TOP-IX	Dec. 28, 2018

Abstract

This document covers the activities aimed at community building carried out in the Task 6.1 of the Work Package 6 during the third 12 month period of activity of the CoeGSS project starting from October 2017.

The work package on Awareness Creation and Community Support is the keystone to secure the project success and aims at establishing a self-sustaining interface between stakeholders (politics, business, public) and experts in the fields of Global Systems Science (GSS) and High Performance Computing (HPC) fields.

This deliverable is about building the community within (see also Annex to D 2.4) and around the CoeGSS Project.

This effort is connected to the progress of the other WPs, identifying those areas where the modelling techniques developed by GSS can effectively avail of the huge computational power of HPC infrastructures. In particular, the goal is to find the “magic spot” where the two communities deem it unique and useful to combine and leverage their knowledge and expertise in order to tackle unsolved global challenges.

For these activities the document describes the general objectives (section 2 and section 3), the current implementation in terms of approach, tools and resources (section 4 and section 5) and summarizes the achievements of the Community Building activities during the complete lifetime of CoeGSS (section 6).

Table of Contents

1	Introduction	3
2	The pillars of the Community Building Strategy	4
3	Definition of the CoeGSS Community	5
4	Community building Tools.....	7
5	Community Building Actions.....	14
6	Conclusions	20
7	List of figures.....	22
8	List of tables.....	23
9	References.....	24

1 Introduction

This deliverable presents the progress during the period from Oct. 2017 until Sept. 2018 of task T6.1 (Community Building, CoeGSS Brand and Website) in WP6 "Awareness Creation and Community Support", with specific focus on activities aimed at (CoeGSS) Community Building.

This task is closely related to other tasks within Work Package 6 given that, for example, community building can occur through awareness creation which is one aspect of dissemination (e.g. in the form of a newsletter) or through personal engagement which is a form of collaboration with other people, projects, or institutions.

This deliverable is therefore closely related with D6.7 "Third annual report on training, standardisation, collaboration, dissemination, and communication". In order not to overlap information completely, there will be references to D6.7 whenever necessary.

Similarly, as the WP6 activities are key to the project's aim of establishing a self-sustaining Centre of Excellence for Global Systems Science, this deliverable is closely related to D2.2 "Final Sustainability Model" and D2.4 "Sustainability Report" and will therefore reference them, instead of repeating information, whenever possible.

The following chapters provide a description of the pillars of the community building strategy (section 2) and a classification of stakeholders in the CoeGSS Community (section 3). Then, a description of the tools used is provided (section 4) followed by the actions done in the third year of the project activity (section 5). The final chapter (section 6) wraps up the whole Community Building process summarizing the results reached during the complete lifetime of CoeGSS.

For the sake of clarity and completeness, many parts of this deliverable summarize and repeat also concepts and activities described in different documents during the past three years.

The CoeGSS project brings together the power of high-performance computing and some of the most promising (applied) science on Global Systems in order to improve decisions in business, politics and civil society. It aims at establishing a Centre of Excellence for Global Systems Science that provides advanced decision-making support in the face of global challenges availing of High Performance Computing to empower Global Systems Science to address extremely complex societal and scientific problems.

Further information about synthetic information systems, or the three pilot studies of the Centre of Excellence for Global Systems Science – Health Habits, Green Growth, and Global Urbanization – referred to as "pilots" in this document, can be found in the deliverables by Work Package 4 of the project.

2 The pillars of the Community Building Strategy

The CoeGSS project defined a strategy to grow a community interested in the disciplines of High Performance Computing (HPC) and Global Systems Science (GSS).

The strategy CoeGSS is following to build its community is an integral part of the 3-years roadmap to reach the sustainability of the Centre of Excellence described in deliverable D2.1 - section 7.4 which includes steps to define business models, evaluate the markets where the Centre can offer commercial services and leverage the stakeholders in order to assess which proposals are more viable based on feedback from the community of stakeholders.

The three main pillars on which it is based are:

- definition of the CoeGSS Community
- implementation of the tools needed to engage the identified target audiences
- definition (and implementation) of the actions through which the community is created and grown.

The different target audiences identified within the definition of the Community are engaged starting from the internal community of project participants and extending the Community Building actions progressively towards the audience outside the project, consistently with the description of the CoeGSS ecosystem by WP2 in deliverable D2.1 - section 3.

The following section of this document details the definition of the target audiences and lists the set of tools, which are subsequently used as categories to organize and describe the related implemented actions.

3 Definition of the CoeGSS Community

The CoeGSS community has been created by the project around the GSS and HPC expertise of the project participants and has been expanded throughout the life of the project. The Centre of Excellence can engage the diverse set of stakeholders in the Community in order to have the expertise and know-how needed to offer complete solutions to its potential end users.

The CoeGSS Community has also been expanded in order to include the potential end users of the services of the Centre of Excellence. Then a description of different tools used in the community building is provided followed by a description of the actions performed.

As detailed in D2.1, the approach of the project takes into consideration two categories of stakeholders:

- **Internal Stakeholders:** the different groups of project partners, which are involved in the CoeGSS concept development (as representative members of GSS/HPC groups) and directly linked to project success and further exploitation. As the dissemination activities are running this group will be constantly extended with key partners.
- **External Stakeholders:** further groups of stakeholders who are not directly in charge of the project execution but somehow are interested in its results (eg. they are considering to join project exploitation and might also contribute towards the development or spreading of the CoeGSS concept/portal). Some of the external stakeholders are:
 - Other European and Global projects such as other Centres of Excellence, projects related to HPC and/or GSS.
 - Communities and networks of HPC and GSS researchers, users, providers, etc.

Individuals such as experts, researchers, etc. who can bring in their expertise.

End users (potential customers) are also considered part of the CoeGSS Community and are divided into two subgroups:

- Commercial customers (for profit users).
- Academic institutions, government agencies, civil society organizations (not-for-profit users).

Stakeholders are also categorised on basis of the nature of their interest in participating in the CoeGSS community:

- **Commercial:**
Business/industrial sector including large companies and SMEs.
- Consulting concerning global challenges.

- Scientific

Scientific and research communities / networks.

EU-funded projects, networks and initiatives related to e-Infrastructure, Centres of Excellence, Future Emerging Technologies, etc.

- Political

Policy makers in Governments and European Commission services (like commonwealth agencies, international organisations including the United Nations and the World Bank, crisis agencies).

Not-for-profits who require social research, training and policy advice.

- Social

Anyone interested in how new scientific approaches can support policy making, crisis management, global sustainability.

The Community Building actions during the first year of activity of CoeGSS created awareness of the project aims and efforts among entities working and researching in the fields of HPC and GSS. During the second year, the Community Building actions widened their focus towards entities that might not be directly involved in the GSS and/or HPC fields but have an interest in evaluating what the simulation techniques of GSS can achieve when scaled to fully avail of the power of HPC infrastructures. In the third and last year of the project, material has been created and distributed through online channels and at live events to document the results of the CoeGSS pilots focusing on the possibilities unlocked by scaling GSS Agent-Based Modelling techniques to take full advantage of HPC systems. Indeed, given its high “technicality”, the subject is far from being mainstream, both as far as skills and background scientific culture is concerned. Therefore, the highest engagement has been reached with those stakeholders already familiar to some extent either with the GSS or the HPC field. However, signals are emerging that complexity of decision-making in all sectors is pushing different players to focus attention towards these emerging approaches (i.e. modelling run on high-performance computing resources), in order to understand whether new practices can be set that help closing the loop between the sophisticated analysis of complex challenges carried out at scientific level and the definition and practical implementation of high social impact policies.

4 Community building Tools

The community as defined in the previous section is addressed on an ongoing basis using the tools described in this chapter.

Each tool represents a channel used to publish content and to get feedback about the activities of the CoeGSS project.

4.1 Project Web Site

This is the main online presence of the project, information in its sections has been constantly reviewed and updated.

The Web site is available at the URL: <http://coegss.eu>

The website structure has been constantly modified according to the project evolution and the content published has been updated periodically. At the third year it is organised in the following sections:

- Front page
Form to subscribe to the CoeGSS newsletter, synthetic description of the project.
- About us
Description of the mission of the project and the methodology used, list of CoeGSS partners.
- Resources
Archive of published Deliverables.
Links to Training material.
Glossary of GSS and HPC terms.
Media Kit.
List of relevant Publications in the GSS and HPC fields.
- HPC-GSS
Info about CoeGSS Pilots.
Links to GSS and HPC projects, initiatives and networks.
- Event - News
CoeGSS News.
Archive of published Newsletter issues.
Twitter feed.
- Community
Link to the Medium.com blog.
Link to the Service Portal
Archive of videos
Link to the internal project wiki.
- Contact us

Contact form.

Website statistics are collected using Google Analytics and the features provided by Google to identify access by automatic scripts and bots are used to create a filtered view that provides a more accurate evaluation of real visitors.

The metrics taken into consideration from the Google Analytics report are the “Users” and “Pageviews” counters. The Users counter represents a conservative measure of the number of visitors of the website and corresponds to the “Visits” number reported in the KPI. The “Pageviews” counter evaluate how active the visiting users have been accessing the pages of the CoeGSS website and is also reported in the KPI table.

Analysis of the statistics shows that the interest in the CoeGSS website is stable also when access by bots and other automatic tools is filtered out [Figure 1].

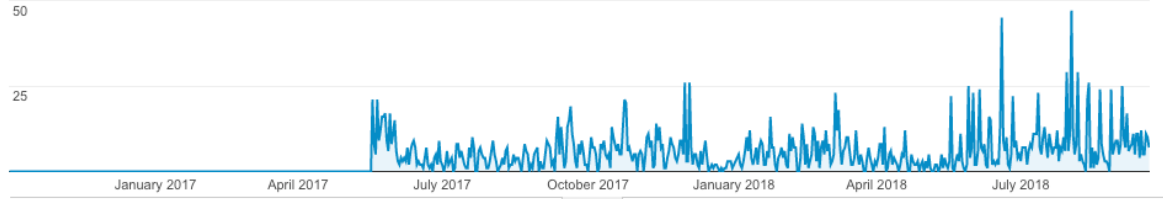
All Users 100.00% Users
+ Add Segment
Oct 1, 2016 - Sep 20, 2018

Overview

Sessions vs. [Select a metric](#)

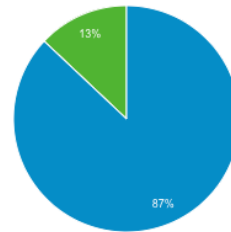
Hourly Day Week Month

Sessions



Users 1,871	New Users 1,840
Sessions 2,991	Number of Sessions per User 1.60
Pageviews 6,189	Pages / Session 2.07
Avg. Session Duration 00:02:33	Bounce Rate 54.30%

New Visitor Returning Visitor



Demographics

- Language
- Country
- City
- System**
- Browser
- Operating System
- Service Provider
- Mobile**
- Operating System
- Service Provider
- Screen Resolution

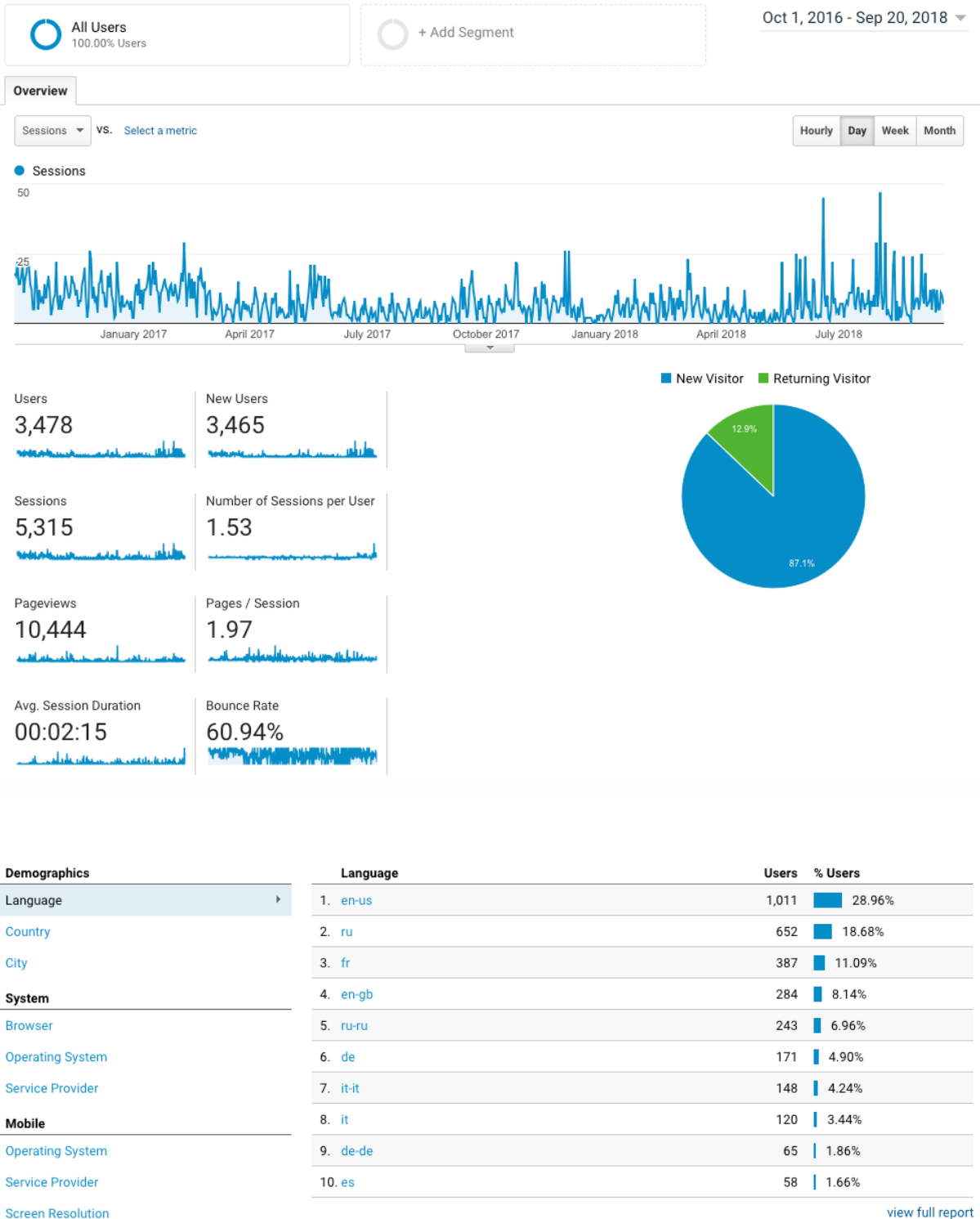
Language

Language	Users	% Users
1. en-us	643	34.18%
2. fr	365	19.40%
3. en-gb	197	10.47%
4. it-it	113	6.01%
5. de	108	5.74%
6. it	74	3.93%
7. de-de	39	2.07%
8. es-es	39	2.07%
9. (not set)	36	1.91%
10. es	33	1.75%

[view full report](#)

This report was generated on 9/21/18 at 4:36:19 PM - [Refresh Report](#)

Figure 1: filtered data (excluding bots)



This report was generated on 9/21/18 at 4:56:34 PM - Refresh Report

Figure 2: unfiltered raw access data

In addition to these visitors, the library of videos published on the CoeGSS website and hosted on youtube.com had 764 views in total.

4.2 Internal Project Wiki

A Wiki system based on Dokuwiki is available to CoeGSS members for internal use. The system is being used to share material, collaborate on documents and keep information updated (lists, tables, etc.) in a collaborative manner.

The system has been extended installing plugins that suit the needs of the user.

A plugin for collaborating on structured information bases has been introduced to maintain a database of publications shared across all users.

The system can be accessed by CoeGSS participants at <http://wiki.coegss.eu>.

4.3 Twitter account

CoeGSS is maintaining a Twitter account as a channel to advertise its activities and establish connections with other entities who can be involved in the Community.

Part of the Dissemination work of WP6 is to keep the CoeGSS Twitter feed alive with posts relevant to both HPC and GSS. All project partners have been involved in creating content for the CoeGSS Twitter channel in order to successfully create a social media channel focused on both fields. CoeGSS also follows many relevant influencers (projects, initiatives, events, etc.) in order to get involved in a Social Media community around both HPC and GSS.

The count of followers of the CoeGSS user currently stands at 322.

4.4 Newsletter

The Newsletter is another tool used to develop a dissemination plan and to foster the community building process.

The Newsletter serves as a periodic appointment to update users about project news, to increase community loyalty and to recommend GSS/HPC events and workshops.

CoeGSS started issuing newsletter during the first year and 6 issues have been published in total:

- July 2016 Mailing list 75 recipients opened 28 times, CoeGSS partners 52 recipients opened 26 times.

- Feb 2017 Mailing list 82 recipients opened 29 times, CoeGSS partners 77 recipients opened 32 times.
- May 2017 Mailing list 82 recipients opened 27 times, CoeGSS partners 84 recipients opened 37 times.
- Oct 2017 Mailing list 82 recipients opened 31 times, CoeGSS partners 94 recipients opened 35 times.
- Feb 2018 Mailing list 81 recipients opened 24 times, CoeGSS partners 100 recipients opened 35 times.
- Sept 2018 Mailing list 76 recipients opened 21 times, CoeGSS partners 108 recipients opened 50 times.

The issues published are sent to the CoeGSS mailing list and published in the “Events - News” section of the website.

4.5 Feedback forms

CoeGSS is using feedback forms as a tool for Community Building in order to:

- Evaluate progress in community building.
- Identify issues and areas where additional effort is needed to achieve better integration and suggest corrective actions.
- Highlight which of CoeGSS activities and services are more likely to attract the interest of potential stakeholders.

Feedback forms have been collected after project meetings, at conferences, at training events open to the general public.

More information in section 5.1.4 “Internal evaluation poll for member organizations” of this document, in D2.4 - Annex “Final Report Task 2.3” and in D6.7.

4.6 Partner Events

4.6.1 International Conference on Computing Power for Global Challenges, Lucca, Italy Oct 2017

The CoeGSS project co-organized the Conference together with IMT and the Dolfins project. The program of the two-day event included a conference on the first day followed by a full day of workshops on the second day.

Workshops covered scenarios in which technologies and modelling techniques have been applied to study complex problems and went into the technical details of HPC applications and modelling of Complex Systems.

The conference was open to the general public while the workshop was mainly oriented towards CoeGSS members with some participants from research institutions not part of the project.

<http://cpgc.coegss.eu/>

The conference has been a good chance to meet and interview different stakeholders, related at different levels with the HPC, GSS or decision-making communities. This has given the project the opportunity to create a large amount of video material, in the form of talks and interviews, where current and future challenges and opportunities of CoeGSS have been addressed and analysed.

4.7 “EXA Future Global Systems” blog on medium.com

The blog has been created by the CoeGSS project with the explicit idea to position it as an neutral space related to CoeGSS but with an independent life, where the challenges and potential breakthroughs related to bringing together GSS and HPC are discussed.

The CoeGSS project appears as an author and the blog welcomes other contributors not part of the Consortium. Apart from being interesting for researchers in the GSS and HPC field, the blog aims at becoming relevant for any entity interested in the possibilities opened up by reaching the objective of scaling advanced complex models to take advantage of large exa-scale HPC infrastructures. Indeed the main idea of the blog is to foster the reasoning about the “magic spot” where HPC and GSS meets, which means where HPC unleashes and makes possible GSS applications which would be impossible or less efficient to be carried out through less powerful computing resources.

<https://medium.com/exa-future-global-systems>

Published articles at the end of third year are:

- GSS and HPC (September 2018)
- Green Growth & Electric mobility (March 2018)
- City: a challenge of the future (March 2018)
- Modelling smoking prevalence with supercomputers (December 2017)
- How High Performance Computing can help SMEs & GSS (October 2017)
- The purpose of the CoeGSS is to prepare for a quantum leap (June 2017)
- International Conference on Synthetic Populations: an inspiring event (May 2017)
- High Performance Computing meets Global Systems Science (May 2017)

5 Community Building Actions

5.1 Actions toward internal stakeholders

5.1.1 Project Website

The website is the authoritative source of information about project participants and their role in CoeGSS. The content of the website has been regularly updated and the Wordpress software upgraded. Sections frequently updated include Resources (Deliverables, Training, Publications), HPC - GSS (crosslinked projects), Event - News, Community (Videos).

The website design and the structure of the information proved to be effective in making the information about the status of CoeGSS available, to present “dynamic” content such as social media feeds (Twitter, medium) and to be easy to maintain and adapt throughout the life of the project.

5.1.2 Internal Project Wiki

The wiki provides a means to share information between project participants and collaborate on documents and information bases. It has been expanded to include tools to manage structured information in a database used to keep track of publications.

Wiki has been accessed by 49 registered users belonging to all the partners of CoeGSS. Content has been created for all Work Packages and it quickly became an important tool to share and keep track of information and collaborate on documents.

5.1.3 Newsletter

The newsletter requires an ongoing effort in order to collect proposals for articles from all project participants, edit the content, manage the subscriptions and finalize the layout for each issue. It represents an effective way to communicate the status of the project and what it focusses on.

As the other channels, the newsletter has been instrumental in keeping a communication open with individual people who expressed interest in CoeGSS and wished to be kept updated.

5.1.4 Internal surveys for member organizations

Due to differences within the involved disciplines in interdisciplinary projects like CoeGSS (perspective of the issue to be investigated, language, methods...), communication is not trivial. Therefore, Task 2.3 was introduced to have a closer look on how results can be generated if several disciplines newly work together on answering relevant and complex questions. This task observed, documented and analysed the communication and collaboration between the project members. Furthermore, it identified lessons learned and recommendations for future projects.

Interdisciplinary projects differ from disciplinary or multi-disciplinary projects in several respects: Interdisciplinary research is 'based on active interaction across (scientific) disciplines' (Edelenbos et al. 2017, p. 453). 'Separate bodies of specialized data, methods, tools, concepts, or theories are often integrated' (ib.) to provide 'a new framework for understanding' (Holm et al. 2013, p. 28) a complex issue. In this sense, Edelenbos et al. (2017, p. 454) define interdisciplinary research as 'a way of working among researchers with different disciplinary backgrounds aimed at developing a synthesis view on a given topic (...)'.

The means for data collection within T 2.3 included two questionnaire-based surveys and participatory observations of meetings (technical and plenary meetings in months 22, 25, 29, 30 and 32). The first survey among CoeGSS partners (one returned questionnaire per institution) was conducted in month 21 of CoeGSS to support the internal community building, which did not evolve as deeply as expected at this stage. A systematic literature review on collaboration within interdisciplinary contexts served as background information. The primary aim was to gain an understanding of the state of the specific situation within the project and to identify the challenges pressing at that moment.

An analysis of this first survey and of notes prepared during the observation of a technical meeting in month 22 (with the aim to learn about the communication and collaboration) was conducted. Based on the literature review and the results of this analysis, the most relevant factors for cooperation and community building were identified and clustered (see Annex to D 2.4). These findings were fed back to the consortium (presentation of the analysis of the first survey during the plenary meeting in month 25, presentation of the above mentioned factors at the plenary meeting in month 29 and within the second survey in month 28) to enable a more efficient internal community building process.

Within the second survey between months 28 and 30 these factors and their manifestation within the project consortium were investigated with the focus on systematic data acquisition (again, one answer per institution). Again, an analysis was performed. The findings were reported back to the consortium using an internal report distributed in month 33.

One of the main “results” is the recognition that the interdisciplinary character is the ‘fabric’ of the project. It influences the expected benefits and the starting situation of the project (differences between disciplines on several levels such as approaches, research questions, style of communication, work routines, language etc.) and it opens up the need to jointly define the boundaries of the project, i.e. to ensure joint aims and a joint vision of the participants, develop a meta-approach, align the cognitive maps of the disciplines and agree on the type and degree of integration and on a common understanding of the roles of the involved disciplines (the last three should be clear before the project starts).

The related expectations need to be made explicit and aligned. Furthermore, the interdisciplinarity requires that the project partners need to coalesce in terms of internal community building (communication, self-reflexivity and relationships) and in terms of integrating knowledge and building a common ground.

To be successful under these circumstances, it is important to communicate the interdisciplinarity and its consequences within the project, e.g. via a dedicated task, which is connected to the management. Taking interdisciplinarity into account is important already before the start of the project.

The main means of facilitation are to detail the interdisciplinary synergies, to develop a meta-approach, to foresee more time and resources for face-to-face meetings (including small group discussions and dedicated sessions to a topic) compared to other projects, to foresee more consideration in aligning the working steps compared to other projects, to ensure sufficient bridging people / ambassadors and to agree on a common language.

For more information please see the Annex to D 2.4.

5.2 Actions toward external stakeholders

- Project Website

Information about project status has been constantly kept updated. This included:

- List of Deliverable documents.
- Links to Training material.
- List of Publications relevant for CoeGSS.
- Directory of other GSS and HPC projects that link to CoeGSS with their description.
- Updates about upcoming Events.
- News in the GSS and HPC fields.
- Video material produced by CoeGSS. Video communication has been deemed as the most immediate means in order to reach a wider audience, potentially interested in engaging with such a subject.

- Newsletter

The newsletter is advertised to potential external stakeholders by all CoeGSS members as a simple channel to get updates about the project.

- Medium Blog

A blog on medium.com has been created with the focus on the specific subject of the potential of getting advanced GSS models to scale on large HPC infrastructures. The focus of the articles is not necessarily limited to matters relevant in the GSS or HPC fields but is directed more towards issues, problems and challenges where the synergy between GSS and HPC can become a game-changer.

- The blog is hosted on the medium.com platform in order to increase visibility and to make it easier to involve other authors apart from CoeGSS who are interested in contributing.
- A series of interviews was started with the idea to follow a “chain of nomination” asking the experts being interviewed to “nominate” other experts who can extend the matters being discussed and keep a sort of conversation going. Actually, after the blog has been opened, it has been deemed appropriate to feed it with posts regarding the project activities and the related outcome. This will allow, through an additional platform, to have a synthetic overview of the different activities carried out within the project in the form of an “easy to read” blog post. The final goal is to maximize the audience exposed to the concepts and goals of the project.

- Curated Twitter feed

The credentials of the CoeGSS twitter user are available to all project participants to post content and keep the twitter feed active with relevant content.

The channel has been used since the beginning, several partners contributed by posting content and it has also been instrumental in establishing contacts with other researchers, especially in Academy.

- Presence at relevant GSS and HPC conferences and events, details in D6.7
- Website crosslinking

This activity has been carried out mostly during the first and second year of activity starting from the list of projects and research entities in deliverable D2.1 “Stakeholder context and initial sustainability model” that has been used as an initial contact list containing 62 entries. Contact info has been verified to be actually reachable, 7 addresses have been found not reachable.

- A standard format for the contact email requesting a reciprocal publishing of links between CoeGSS and the project being contacted has been reviewed by the other CoeGSS partners.
- The entities with which an agreement has been reached have been published on the CoeGSS website in the “HPC-GSS” section with the

description provided and the presence of a link to CoeGSS on the entity website has been verified.

- Projects that accepted to cross-link with our website have been also sent an email advertising updates such as the video material published after the workshops during the Lucca events.
- CoeGSS offline communication material
- Flyers, posters and roll-ups have been produced on the first year to present CoeGSS and its aims at HPC conferences and at GSS events.
- As the project progressed a set of “information packages” have been created and maintained for each of the three pilot projects. Each package contains a description of the challenges faced by each pilot and how CoeGSS contributed to achieve the results. A further package takes the point of view of CoeGSS describing the studies that the project enabled. This information has been used as a source to produce flyers describing each pilot on one side and describing the achievements of CoeGSS on the other.

5.3 Actions toward potential end users

CoeGSS co-organized events have been valuable occasions to engage potential stakeholders outside of CoeGSS addressing conference attendees and workshop participants:

CoeGSS with the IMT School of Advanced Studies and other partners organized the “Computing Power for Global Challenges” conference (<http://cpgc.coegss.eu/>) in October 2017 in Lucca, a 2-day conference to explore how the task of understanding and mastering global societal challenges and High Performance Computing can benefit from each other. This conference follows up on the International Conference on Synthetic Populations (<https://icspconference.wordpress.com/>), organized in February 2017.

A series of discussion workshops considered four global challenges:

- developing a sustainable and resilient global financial system,
- addressing the daunting risks of pandemics,
- transforming the fossil-fuel based global mobility system,
- creating forms of democracy adequate to the age of digitalization

The two-day conference has been followed by a two-day CoeGSS internal meeting in order to take advantage of the output of the conference and plan the steps forward for the project.

IMT also organized a satellite event “Statistical Physics for Financial & Economics Networks” at NetSci 2018 in Paris in June 2018 as a CoeGSS partner (<https://sites.google.com/imtlucca.it/spfen3-netsci2018/home>).

A stakeholder workshop has been organized by CoeGSS in Turin in June 2018 where the MoTMo model used for the Green Growth pilot has been presented to an audience of representatives of local research institutions and regional government bodies. Follow-up meetings have been held in September with IRES (a research institution based in Turin created by the local regional administration to provide support to policy-making), members of which had been among the workshop audience, to further discuss about the application of ABM-based simulations running on HPC systems.

More information about the events mentioned is available in D6.7, Section 2.1.

6 Conclusions

Table 1: WP6 KPI

KPI	GSS		HPC		Total	
	Target: 36 months	Current state	Target: 36 months	Current state	Target: 36 months	Current state at M36
Scientific Papers					20	26 (of which 17 from previous periods)
Presentations	15	30	10	16	25	46 (of which 26 from previous periods)
Website					6000 visits	raw data: 21200 page views 7260 Unique visitors bots filter: 13760 page views 3180 Unique visitors
Newsletter					6	6
Press Releases	3	5	3	4	6	9
Twitter followers					200	322
Training courses offered	4	4,5	4	4,5	8	9 (3 courses on the CoeGSS)

						approach, methods, tools and examples are counted as 1,5 each in the two fields)
Training participants per course	15	32	25	54	40	86 (including online attendance)

While KPIs were initially set for publications, presentations, press releases, and training courses in GSS and HPC separately, the project worked on bringing the two fields together. Therefore, for large parts of the work done it does not make sense to categorise it as strictly belonging to only one of the fields.

The effort of creating and extending the CoeGSS Community progressed throughout the life of CoeGSS reflecting the development of the other WPs. Community Building and Dissemination activities based on the communication of achievements of CoeGSS such as the results from the pilots, the development of the portal and the research around the software solutions to define models, create simulations and run them on HPC systems to engage a community and identify potential commercial stakeholders.

The work of WP6 in general and of the Community Building activities in particular concentrated more and more during the last year on identifying those areas where the modelling techniques developed by GSS can effectively benefit from the huge computational power of HPC infrastructures. Technical challenges have been identified and solutions have been studied where the software layers that are used to run tasks on HPC systems do not fit the requirements of GSS simulations in an effective way and where GSS models are unable to scale effectively on HPC architectures.

WP6 also contributed to the design of the Service Portal (WP5) in order to develop a user support system that is consistent with the overall strategy followed by WP6 in engaging the Community. It also collaborated with the Business Model development (WP2) in order to focus the efforts on the potential stakeholders the proposed business models are aimed at.

7 List of figures

- Figure 1: filtered data (excluding bots)
- Figure 2: unfiltered raw access data

8 List of tables

- Table 1: WP6 KPI

9 References

- D2.1 "Stakeholder context and initial sustainability model"
- D2.2 "Final Sustainability Model"
- D2.2 - Annex "Task 2.3"
- D2.4 - Annex "Final Report Task 2.3"
- D6.7 "Third annual report on training, standardisation, collaboration, dissemination, and communication"