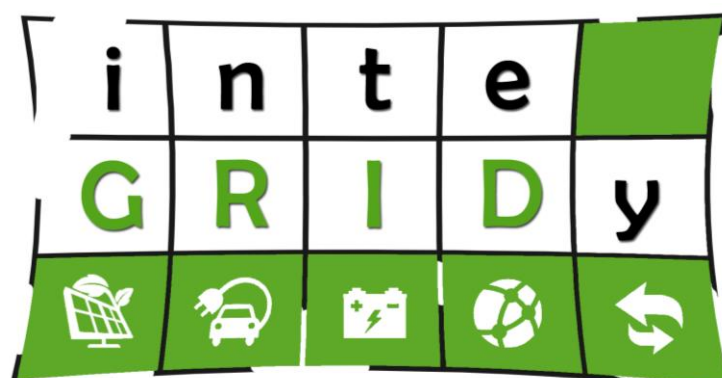


Innovation Action



inteGRIDy

integrated Smart GRID Cross-Functional Solutions for
Optimized Synergetic Energy Distribution, Utilization
& Storage Technologies

H2020 Grant Agreement Number: 731268

**WP9 – Dissemination, Exploitation and
inteGRIDy Outreach**

**D9.3 - Report on Dissemination &
Communication Activities**

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Authors

Full Name	Beneficiary / Organisation	Role
María Guadalupe Rodriguez	ATOS	Editor
Javier Valiño	ATOS	Contributor
Andrea Rossi	ATOS	Contributor
Marco Merlo	POLIMI	Contributor
Chrysovalantou Ziogou	CERTH	Contributor
Dimitris Trigkas	CERTH	Contributor
Giuseppe Paternó	ENG	Contributor
Marilena Lazzaro	ENG	Contributor
Marco Maccioni	UNIROMA1	Contributor
Symeon Parcharidis	SUNLIGHT	Contributor
Rene Bohnsack	UCP	Contributor
Alina Margolina	UCP	Contributor
Luigi Dorianò	E@W	Contributor
Aleksandra Kkrivoglazova	PH	Contributor
Adib Allahham	UNEW	Contributor
Carlos Raposo	E-Nova	Contributor
Hamish Wilson	M7	Contributor
Tommaso Bragatto	ASM	Contributor
Vladimir Vukovic	TEES	Contributor
Otilia Bularca	SIVECO	Contributor

Reviewers

Full Name	Beneficiary / Organisation	Date
Marilena Lazzaro	ENG	11.06.2018
Alina Margolina	UCP	27.06.2018
Javier Valiño	ATOS	29.06.2018
Thanasis Tryferidis	CERTH	29.06.2018



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Executive Summary

This report is the outcome of the first period (M1-M18) coordination of dissemination activities and project results to potential adopters of the inteGRIDy results, but also to the international scientific and technical community and the general public.

This was achieved through the promotion of the project during events (conferences, workshops, etc.), paper submission to national and international conferences, preparation of pre-commercial and commercial brochures and newsletters to potential industrial and scientific users.

This deliverable also relies on inteGRIDy D9.1 to report on the process followed to establish and conduct the overall Web and Social Media presence of the project:

- (i) The project portal, which contributes to creating awareness about the inteGRIDy project and its objectives.
- (ii) Exploitation of popular web 2.0 channels and social media and engaging the web community as multipliers of the knowledge. The project's Twitter Profile, LinkedIn page and YouTube channel are among the instruments that will contribute to the project's wider and effective dissemination.
- (iii) A Project Leaflet and poster produced including the necessary information.
- (iv) A Project dissemination pack (in electronic format) will be produced at the end (M48) presenting the project results and outcomes.

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List of Acronyms and Abbreviations

Term	Description
CA	Consortium Agreement
DCM	Dissemination & Communication Manager
DSO	Distribution system operators
DR	Demand Response
EC	European Commission
EGVI	European Green Vehicles Initiative
EM	Exploitation Manager
FSM	Finite State Machine
F2F	Face to Face
GA	General Assembly
H2020	Horizon 2020
ICT	Information and Communication Technologies
IM	Innovation Manager
KPI	Key Performance Indicator
PC	Project Coordinator
PEM	Pilot Manager
PMO	Project Management Office
PO	Project Officer
QCB	Quality Control Board
QCM	Quality Control Manager
RES	Renewable Energy Sources
R&D	Research and Development
SME	Small and Medium Enterprises
SMR	Semi-annual Management Report
SNS	Social Network Services
STM	Scientific & Technical Manager
TL	Task Leader
WP	Work Package
WPL	Work Package Leader



1. Introduction

1.1 Scope and objectives of the deliverable

This deliverable will report the dissemination & communication activities of project results to potential adopters of the inteGRIDy results, but also to the international scientific and technical community and the general public.

1.2 Structure of the deliverable

In section 2, collects detailed information on the dissemination materials and dissemination activities performed by project partners during the first period of project (M01- M18).

In section 3, the results achieved so far are compared to the ones foreseen at the beginning of the project according to the KPI established in D9.1 Plan for dissemination, exploitation & communication of results, section 5. This will allow us to evaluate the effectiveness of the dissemination tools implemented. In section 4, the objectives for the second project year are revised and updated where applicable.

Finally, the main conclusions during this first period are outlined in section 5.

1.3 Relation to Other Tasks and Deliverables

The dissemination activities went in parallel to the rest of the project activities carried out. The partners must consider dissemination as an essential activity to maximise the project impact in the global audience. In this sense, the dissemination is related to all the activities carried out in the project.

The dissemination materials designed and the dissemination activities carried out must be coherent with the dissemination and communication plan defined in the D9.1 Plan for dissemination, exploitation & communication of results, with which this deliverable is intimately related.

2. Dissemination & communication activities performed in the reported period

In this section, all the dissemination & communication activities performed during first official period report (M1-M18) are reported, namely

- Design of dissemination material;
- Project website and social media profiles updates;
- Newsletter;
- Press Releases;
- Publications;
- Conferences, exhibitions and workshops;
- Liaison activities with other project and initiatives;
- Other dissemination activities.

2.1 Dissemination material

In order to maximize the project impact and promote the recognition on the target audience identified, focused dissemination and communication materials have been designed for use throughout the project life. This material includes different templates for documents, general presentations and logo design.

In D9.1, section 4, presented the main corporate dissemination materials design made at the beginning of the inteGRIDy project: project logo, poster, roll-up, slide-set presentation and brochure.

In January 2018, as a complement to these materials, a first introductory video was added in order to deliver an idea about the potential of inteGRIDy project. The video describes the framework in which the project is included, the aims and objectives. Demonstration pilot sites are also mentioned.

The video is uploaded on a dedicated YouTube channel [YOU18], which was opened for the project. It is also published on the project's webpage (www.integridy.eu):

For M1-M8, this material has been used to promote inteGRIDy project in different events. The following list summarizes the most relevant ones:

- inteGRIDy space in EUW17, October 2017



Figure 1. inteGRIDy space in EUW17

- The representative team of inteGRIDy distributed the dissemination material in the project space in INNOGRID2020+, May 2018



Figure 2. Dissemination material of inteGRIDy in INNOGRID2020+

- The inteGRIDy roll-up banner was located at the entrance and it was used in several relevant conferences and workshops aiming to present main information about the project and to provide a simple form of familiarization to the public.



Figure 3. inteGRIDy roll-up in entrance Electricity Authority of Cyprus and Politecnico di Milano

2.2 Project website and social media

The project website and social media networks are created as a central point for dissemination purposes with the main information regarding the project partners, project objectives, demonstration pilot sites, etc.

2.2.1 Website presence

2.2.1.1 inteGRIDy website

The project website (www.integridy.eu) was launched at the beginning of project (January 2017) and it was established as the main communication tool for the project and the primary information source for inteGRIDy target audience.

The work related to inteGRIDy website development and maintenance is led by ATOS.

Starting from its very launch, the website traffic has been monitored through Google Analytics. According to the information provided, the number of visits has been irregular over the months, being linked to the activity of the project of each period. (Figure 4).

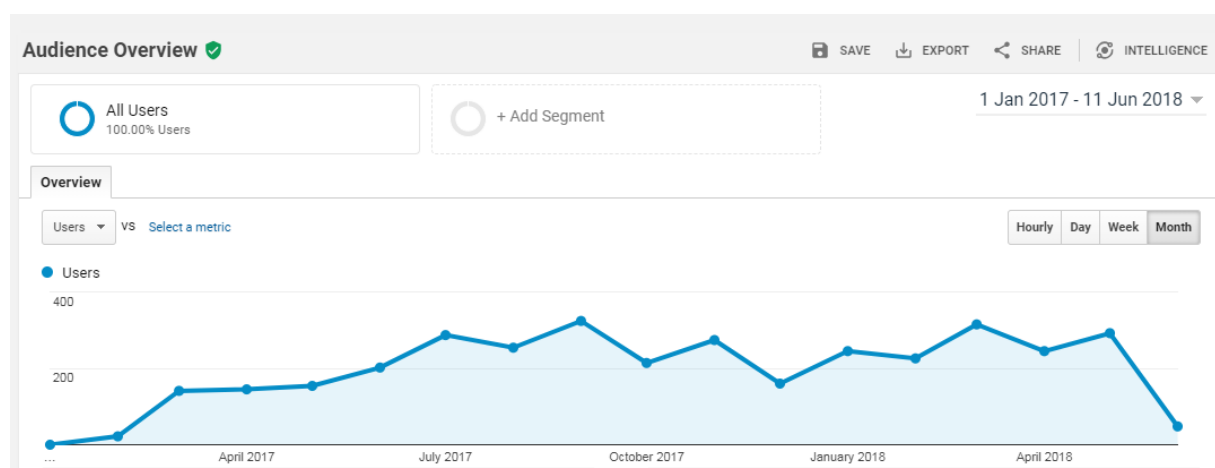


Figure 4. inteGRIDy website traffic from M1 to M18

Figure 5 shows other data provided by Google Analytics as number of sessions, user, page views, pages/sessions and the average session duration:

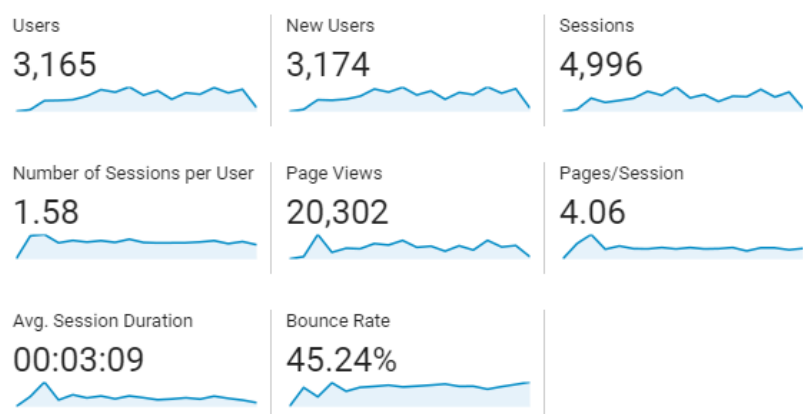


Figure 5. Web site Google Analytic information

Google Analytics also provides data regarding the geographical location of visitors. In the map shown in Figure 6, the dark blue shows the countries (e.g. Italy) where most of the visits come from, while the light blue represents the countries with the lowest number of visits.

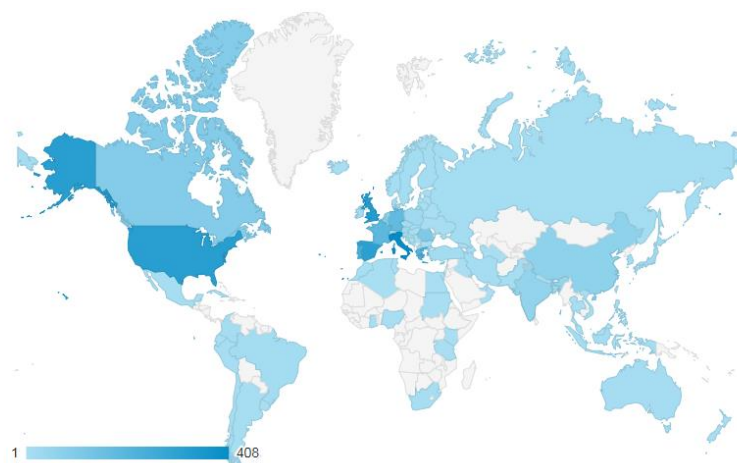







Figure 6. Location of visitor's heat map

Top 10 countries with higher number of visits can be found in Table 1. The first countries, in general, correspond to those in which there are partners in the projects. However, it should be noted that United States is in third place and Canada the tenth, which reflects the interest in the project outside of the European Union.

Table 1. Top 10 Countries of visits

		3.132 % del total: 100,00 % (3.132)	3.132 % del total: 100,00 % (3.132)
1.	 Italy	408	 12,80 %
2.	 United Kingdom	328	 10,29 %
3.	 United States	319	 10,01 %
4.	 Spain	311	 9,76 %
5.	 Portugal	240	 7,53 %
6.	 Greece	218	 6,84 %
7.	 France	189	 5,93 %
8.	 Germany	176	 5,52 %
9.	 Romania	104	 3,26 %
10.	 Canada	94	 2,95 %

The particular page rank within the complete site is shown at Table 2:

Table 2. Trends of the visits

Page	Percentage of visits
Home	22,31%
Partner Description	8,79%
Piot sites Description	6,04%
Concept	5,64%
Deliverables	3,88%
News	3,58%
Resources	3,14%

2.2.1.2 Corporate websites, social channels

In addition to the project website, most partners have published communications through corporate websites and/or social channels.

- Corporate websites

Page 15

- Corporate social channels

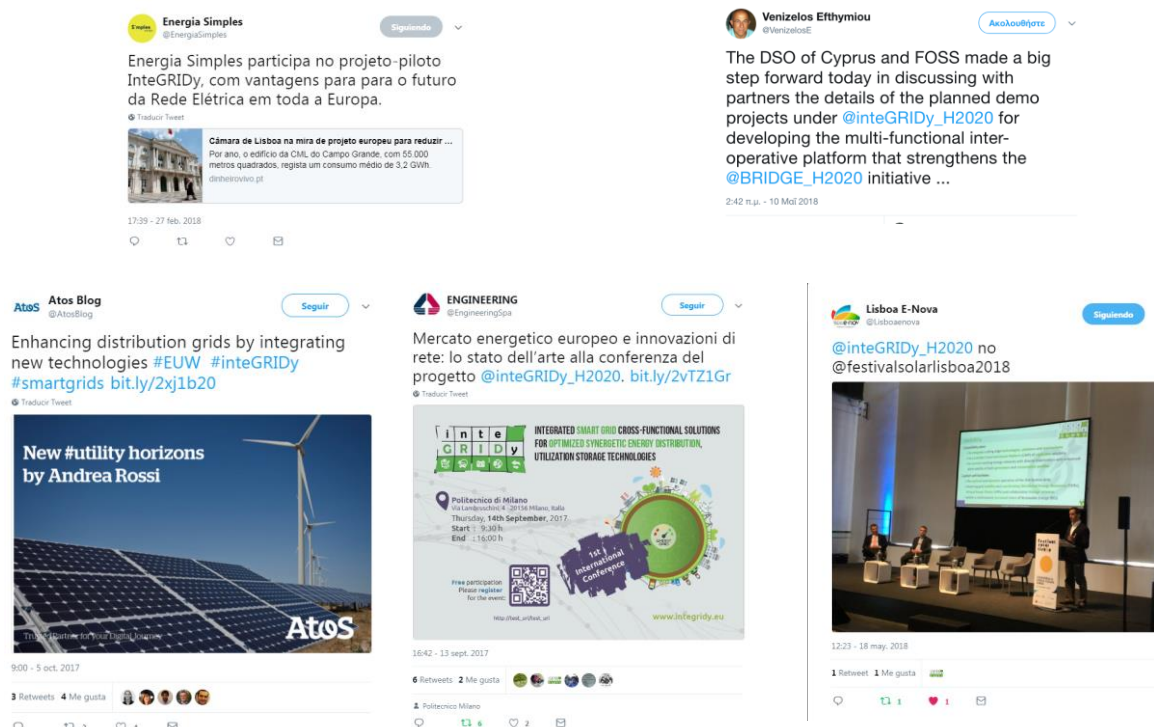


Figure 8. inteGRIDy project in corporate social channels

Finally, inteGRIDy project was published in the CORDIS database for related projects in H2020 [COR17].

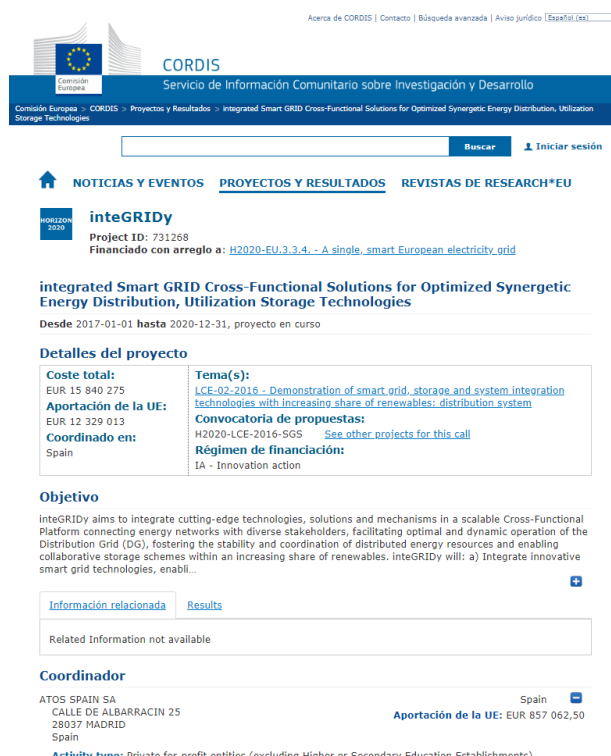


Figure 9. inteGRIDy in CORDIS database

2.2.2 Twitter

inteGRIDy Twitter (@inteGRIDy_H2020) is mostly being used to share updates on the project status and news on real-time or upcoming meetings and events in parallel with inteGRIDy website.

The impact generated by the 84 tweets and 110 retweets published on the 1st of first June 2018 is shown in the Figures below. In Figure 10, can see the impressions numbers, i.e. how many times the tweet showed up in people's feeds.

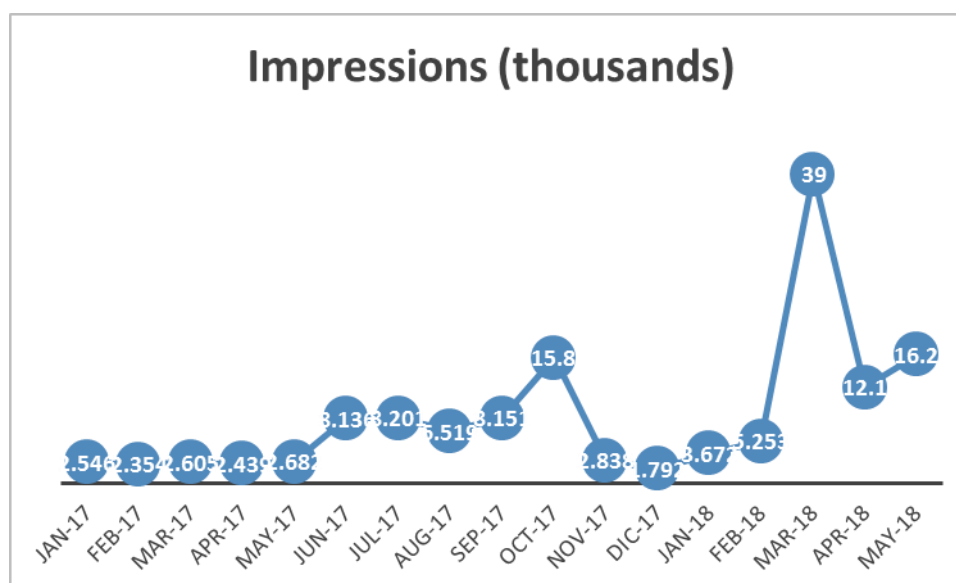


Figure 10. Impressions

Figure 11 shows the relation into tweets published and new followers. It can be clearly seen that these data are fully correlated. This indicates that the publication of new tweets in this medium arouses the interest of new followers.

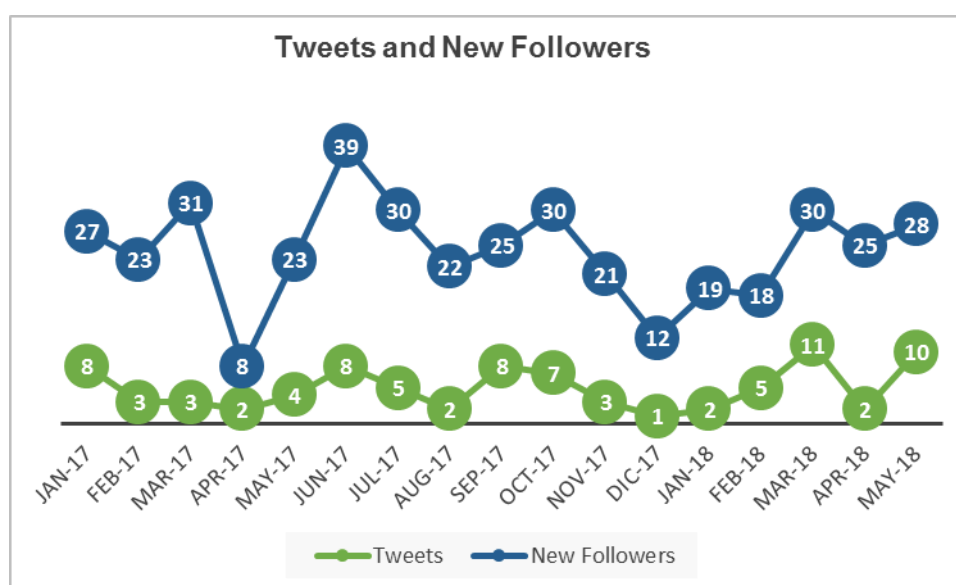


Figure 11. Relation into tweets published and new followers

Finally, Figure 12 shows the number of visits to profile and mentions in other Twitter accounts.

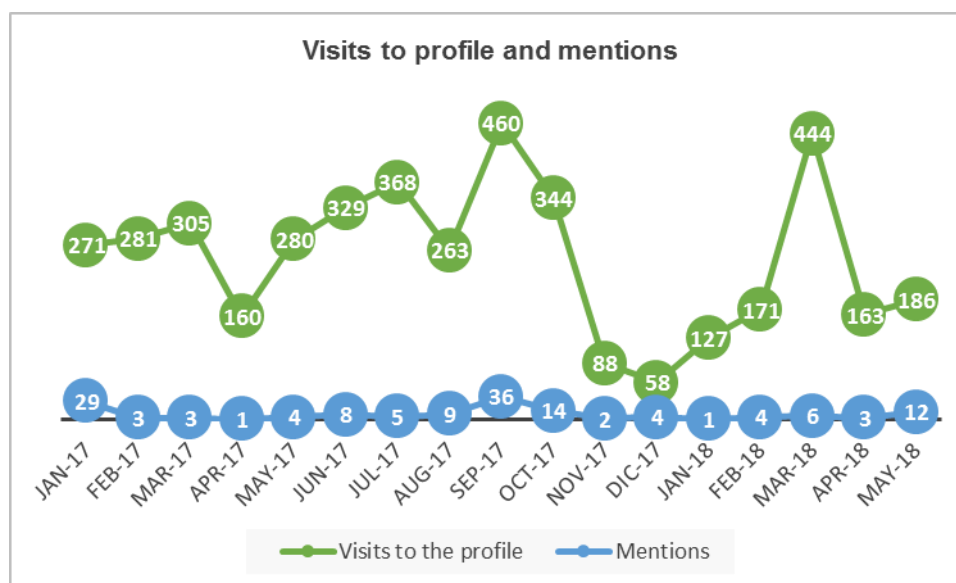


Figure 12. Visits to profile and mentions

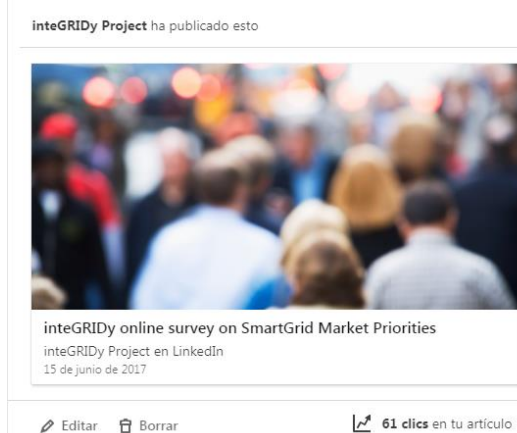
The Table 3. Twitter impacts Table 3 summarize the Twitter impacts:

Table 3. Twitter impacts

M1-M18	Tweets	Impressions	Visits to the profile	Mentions	New Followers
Total	84	140.288	4298	144	411

2.2.3 LinkedIn

A profile and group was created on LinkedIn with the main objective of connecting with other research groups that can contribute to the inteGRIDy project. With this goal, both information related to the project and articles related to the theme of the project or other related projects have been published. So far, the experience has been satisfactory because the account has 230 followers at the time of writing this report, each article receiving an important number of recommendations.



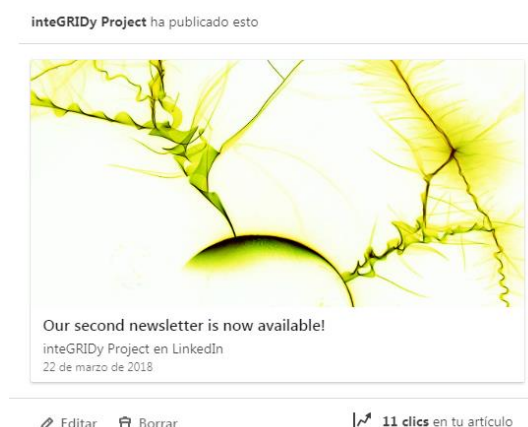


Figure 13. inteGRIDy LinkedIn

2.2.4 Flickr

As reported in D9.1, “*Flickr account was created [FLI17] to more efficiently manage and diffuse the produced, visual material and information*”.

Currently, inteGRIDy Flickr account is made up of 4 different albums, registering different project events. The concrete number of visits per album is shown at Table 4.

Table 4. Flickr visits

Album	Visits to the profile
Kick-Off	48
InteGRIDy Team	194
Kick-Off WP3	106
Dissemination Material	25

Given this acceptance, one of the priorities for the next phase is to update this network with the existing material. This will allow granting access to the dissemination material, in the form of pictures and photographs, of already finished dissemination events, while keeping up to date track of new ones.

2.3 Newsletter

inteGRIDy released two newsletters so far, being the first one issued in M7 and the second one in M15. The purpose of these publications is to provide information on project progress and results, as well as on stakeholder activity.

The first issue was focused on the overall project view, providing basic information about the inteGRIDy project. inteGRIDy's first newsletter introduced five project partners (starting in alphabetical order) and presented all ten pilot sites. This issue also provided information about the dissemination events up to M9 (See D9.1, Annex II [INT91]).

The second issue was focused on the current project progress. It includes two articles about inteGRIDy first architecture specification and inteGRIDy business modelling activities, news

about activities carried out and upcoming events. The next five partners (with respect to newsletter 1) were also presented in alphabetical order.

Both Newsletters are available on the inteGRIDy website [NEW18] for download and have been publicized through the project social networks, partner's corporate websites and channels and through BRIDGE initiative.

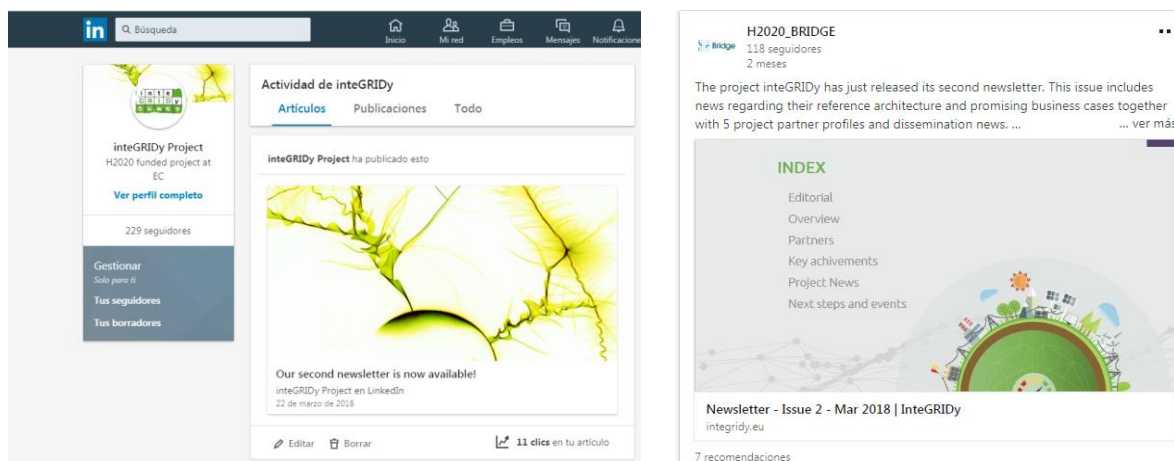


Figure 14. Dissemination of inteGRIDy Newsletters

2.4 Press releases


At the beginning of the project, an initial press release was launched; which is available in on D9.1, Annex II.

This press release appeared in various media and has served to different media to echo the project. The Table 5 collects press releases. These is mainly related to GAS Natural Fenosa because the kick-off was celebrated in their facilities.

Table 5. Media that published initial press release



Media	Link	
Aldia.cat	https://www.aldia.cat/espanya/noticia-gas-natural-fenosa-participa-proyecto-europeu-integridy-emmagatzematge-energia-distribuida-20170111185059.html	
Bolsamania	http://www.bolsamania.com/catalunya/noticies/economia/gas-natural-fenosa-participa-en-el-proyecto-europeu-integridy-sobre-emmagatzematge-i-energia-distribuida-2440596.html	
Capital Madrid	https://www.capitalmadrid.com/2017/1/12/44847/gas-natural-fenosa-participa-en-el-proyecto-europeo-integridy-sobre-almacenamiento-y-energia-distribuida.html	

Media	Link	
Catalunya Press	https://www.catalunyapress.cat/texto-diario/mostrar/562485/gas-natural-fenosa-participa-projecte-europeu-sobre-emmagatzematge-i-energia-distribuida	
CincoDías	http://cincodias.com/cincodias/2017/01/11/empresas/1484129131_464037.html	
Expansión	http://www.expansion.com/agencia/europa_press/2017/01/11/20170111182414.html	
Europa Press	https://www.invertia.com/es/-/economia-gas-natural-fenosa-participa-en-el-proyecto-europeo-integridy-sobre-almacenamiento-y-energia-distribuida	
InnovaSpain	https://www.innovaspain.com/integridy-gas-natural-aiguasol-atos-europa/	
Invertia	https://www.invertia.com/es/-/economia-gas-natural-fenosa-participa-en-el-proyecto-europeo-integridy-sobre-almacenamiento-y-energia-distribuida	
ITE	http://www.ite.es/en/gas-natural-prueba-barcelona-la-generacion-energia-pequenos-clientes/	
Telecinco	http://www.telecinco.es/informativos/economia/GasNaturalFenosaInteGRIDyalmacenamiento_0_2306325792.html	
SmartGridSpain	http://smartgridspain.org/web/blog/2017/01/17/atos-lidera-proyecto-integridy-nuevo-modelo-energetico-europeo/	



Media	Link	
Solarnews	http://www.solarnews.es/2017/01/17/atos-lidera-el-proyecto-integridy-el-nuevo-modelo-energetico-europeo-financiado-con-12-millones-de-euros-por-la-ue/	

On the first inteGRIDy International Conference held in Millan in September 2017, a second press release was published, directed mainly at Italian media.

Table 6. Media that published second press release

Media	Link	
La mia finanza	https://www.lamiafinanza.it/it/sala-stampa/13116-l-italia-in-prima-linea-nello-sviluppo-delle-reti-elettriche-intelligenti	
Lab parlamento	http://www.labparlamento.it/thinknet/litalia-linea-nello-sviluppo-delle-smart-grid/	

The information that partners published the press release can follow (Figure 15)

L'ITALIA IN PRIMA LINEA NELLO SVILUPPO DELLE RETI ELETTRICHE INTELLIGENTI

A Milano la prima conferenza internazionale del progetto INTEGRIDY sullo stato dell'arte del mercato energetico europeo e sulle innovazioni di rete

Milano 6 settembre 2017. Il 14 settembre a Milano, si terrà la prima conferenza Internazionale organizzata dalla start-up italiana Energy@work dal titolo "Integrated Smart GRID Cross-Functional Solutions for Optimized Synergistic Energy Distribution, Utilization & Storage Technologies". Durante l'incontro ospitato dal Politecnico di Milano e che vedrà la partecipazione di esponenti dei governi europei e delle autorità di regolamentazione dell'energia dei vari Paesi, si discuterà delle più importanti innovazioni tecnologiche sviluppate sulla rete elettrica, delle problematiche relative alle disomogeneità normative nei vari Stati e di come queste dovranno recepire le recenti proposte legislative europee. Sarà poi presentato "INTEGRIDY" il progetto europeo, nato nell'ambito di Horizon 2020, che ha l'obiettivo di sviluppare piattaforme innovative che consentano di ammodernare e rendere più efficiente la rete elettrica europea. Il progetto, coordinato da Atos, vede la partecipazione di multinazionali e start-up innovative. Tra le italiane partecipano la multinazionale Engineering e la start-up Energy@work.

"In termini di sviluppo delle cosiddette Reti Intelligenti - dichiara Luigi D'Orlando Direttore di Energy@work - l'Italia è sicuramente uno dei paesi europei più avanzati. I problemi sono normativi, con una confusione tra quelle che sono le normative dei vari Governi europei, le direttive comunitarie e gli attuali sviluppi tecnologici".

La conferenza si terrà il 14 settembre dalle ore 9.00 Presso il Politecnico di Milano in via Lambruschini, 4 (in allegato il programma dell'evento)

Figure 15. inteGRIDy second press release

This press release appeared in other partner webpages, such as on Engineering site.



Figure 16. Second press release in Engineering webpage

2.5 Publications

In this first period (M1-M18), the consortium has produced the following articles for dedicated journals and magazines to share the progress of the project with the scientific community, interested stakeholders and targeted audience. The publications are shown in the following sub-chapters in chronological order.

2.5.1 New Utilities Horizons

Author: Andrea Rossi (ATOS).

Type: Articles, journals and books.

Article published in Atos Blog [ATO17] by the coordinator of inteGRIDy project where he presented the project as one of the H2020 projects that will help supporting a reliable sustainable and competitive energy system.

2.5.2 Internet of Things (IoT) for the Supervisory Control and Management of Smart Grids with RES and Batteries

Authors: Spyros Voutetakis (CERTH), Chrysovalantou Ziogou (CERTH), Symeon Parcharidis (SUNLIGHT), Simira Papadopoulou (CERTH).

Type: Articles, journals and books.

Paper presented in 2nd Energy Technologies Workshop held in Athens, Greece in on November 2017.

Abstract: *"This work presents an integrated methodology for managing and supervisory control of small-scale smart grids and it is implemented using flexible Energy Management Strategies (EMS). The grid networks into consideration are powered by Renewable Energy Sources (RES) and have local energy storage using batteries and / or hydrogen. The objective of the EMS is to efficiently exchange energy between the smart grid stations to maximize the use of available stored energy at the network level and to exploit the overall*

power produced by RES. To achieve this goal, the behaviour of the involved systems is modelled and the requirements for energy management in a dynamic and distributed environment are determined. It also demonstrates the implementation of Internet of Things architecture (IoT).

The reference system which is used as a motivating example of autonomous smart grids is in SUNLIGHT's premises, is a stand-alone intelligent power grid that includes three stations with local energy storage capability using lead-acid batteries. Each station has an array of photovoltaic, wind turbines and a diesel generator for safety reasons. Also in one of the stations there is a Polymer Electrolyte Membrane (PEM) Fuel Cell and a PEM electrolyser for the utilization and production of hydrogen, respectively. As the network is autonomous the main objective is to minimize the use of the diesel generator. The operation of the isolated network is controlled by a Supervisory Control and Data Acquisition System (SCADA), while the Machine to Machine (M2M) communication is IoT enabled using a respective middleware. Finally, the preliminary results of the smart grid's response are presented. The analysis of the operation scenarios shows that an appropriate EMS can increase network flexibility and dynamic energy routing can significantly improve the use of available resources".

2.5.3 Participação de Portugal no projeto europeu inteGRIDy

Author: Aleksandra Krivoglazova (PH).

Type: Articles, journals and books.

This article was published in Renováveis magazine 32 4. quarterly of 2017 (pag. 34 35) [REN17] in Portugal. This publication includes Scientific articles for non-technical people.

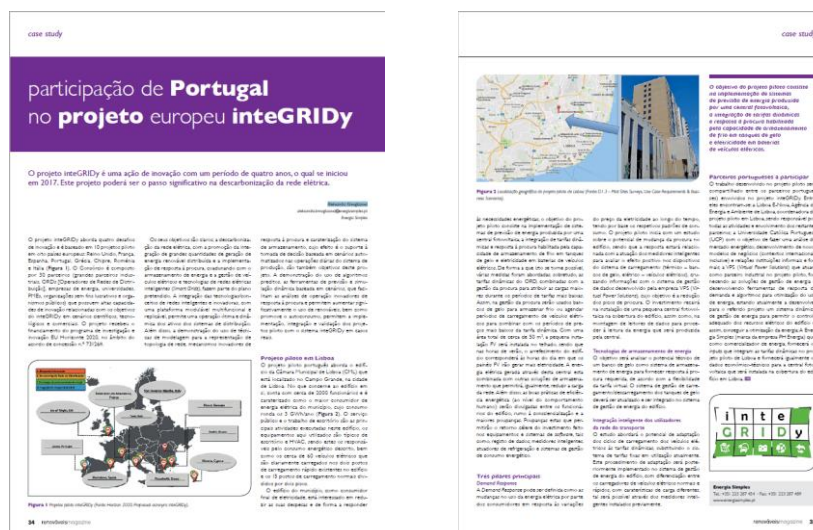


Figure 17. inteGRIDy in Renováveis magazine

2.5.4 Business model adaptation mechanisms in the internationalization process: The case of energy firms

Authors: Holzner, L & Bohnsack, R (UCP).

Type: Submitted papers.

Paper presented in 43rd European International Business Academy Conference (EIBA) held in Milan and published in proceedings[EIB17]. December 2017.

According abstract in proceedings: "This paper explores business model adaptation mechanisms of firms in the internationalization process. It addresses the role of local embeddedness and host country market designs. Based on interviews with ten European

energy firms and secondary data, five mechanisms are distilled that firms adopt to adapt their business models in the internationalization process. Based on the findings, an ontology in the form of a market design canvas is suggested’.

2.5.5 Câmara de Lisboa na mira de projeto europeu para reduzir consumo energético

Author: Barbara Silva (PH).

Type: Articles, journals and books.

Article in Portuguese, published in Newsletter Dinheiro Vivo[DIN18], addressed to the general public, in February 2018 about how inteGRIDy will help reduce energy consumption in Lisbon.



Figure 18. inteGRIDy in Dinheiro Vivo Newsletter

2.5.6 inteGRIDy – Plataforma habilitadora de la transformación de las Smart Grids

Authors: Andrea Rossi, Javier Valiño, María Guadalupe Rodríguez (ATOS).

Type: Articles, journals and books.

Article in Spanish published in SmartGridInfo [SMA18] on February 2018 with the communication presented in “IV Congreso Smart Grid” held in Madrid on November 2017. This article explains the main objective of inteGRIDy project.



Figure 19. inteGRIDy project in SmartGRIDInfo



Abstract: “The goal of inteGRIDy is to facilitate the optimal and dynamic operation of the energy distribution network, promoting its stability while coordinating the inclusion of distributed energy sources, virtual generation plants and innovative and collaborative energy storage schemes, with an increasing percentage of renewable energy inclusion. inteGRIDy connects the innovative services, technologies and emerging mechanisms of smart grids through the use of a scalable, replicable and inter-functional platform. This platform will allow the connection of the current energy network with the different market players, as well as providing improved capabilities for monitoring consumption and generation profiles”.

2.5.7 San Severino Marche Smart Grid Pilot within H2020 InteGRIDy project

Authors: D. Falabretti, M. Moncecchi, F. Bovera, M. Mirbagheri, M. Delfanti, M. Fiori, M. Merlo (POLIMI).

Type: Submitted papers.

Paper presented in IRES 2018 - International Renewable Energy Storage Conference [EUR18] held in Dusseldorf, Germany on March 2018 in the session “Applications and Case Studies” where the role, the potential and the benefits of various energy storage technologies in different countries and regions of applicability was discussed.

The paper will be published on a CD with the proceedings of the conference.

2.5.8 Modelling and simulation of a SmartGrid architecture for a real distribution network in the UK

Authors: J Yi, C Pages, A Allahham, D Giaouris, C Patsios (UNEW).

Type: Submitted papers.

This paper was presented in 9th International Conference on Power Electronics, Machines and Drives [PEM18] held in Liverpool, UK on March 2018 and it will be published by the institution of engineering and technology (IET) – IEEE Xplore on 2018.

According explanation in the abstract “As part of the inteGRIDy project, funded by the European Commission, an investigation is carried out on a real distribution network, where high penetrations of distributed generations (DG) exist, in the UK. In this paper, a model of this network is built. In this model, additional energy storage systems (ESS) are located in the network close to distributed generations to represent a future SmartGrid architecture. This architecture is proposed to reduce the power import and export between this network and the grid. Four test cases are designed to explore the impacts of DG and the benefits of ESSs.”.

2.5.9 Flexibility services to power systems from smart rural microgrid prosumers

Authors: Giuseppe Paternò (ENG), Marilena Lazzaro (ENG), Tommaso Bragatto (ASM), Francesca Santori (ASM), Marco Paulucci (ASM), Fabio Massimo Gatta (UNIROMA1), Alberto Geri (UNIROMA1), Stefano Lauria (UNIROMA1), Marco Maccioni (UNIROMA1).

Type: Submitted papers.

This paper was presented in 18th International Conference on Environment and Electrical Engineering (IEEE EEEIC18)[EEE18] held in Palermo, Italy in June 12-15, 2018 and will be submitted to IEEE Xplore. The Proceedings will be published on electronic support.

Abstract: “The innovation proposed by modern grid paradigms forces to create cutting-edge solutions for managing and integrating software microgrid technologies, as well as hardware ones. In this paper, a smart ICT platform for the management of the flexibility provided by the actors of a microgrid is proposed. Its architecture, functionalities and tools

are presented and widely discussed, along with its implementation in a real-life demonstrator located in Terni, Italy”.

2.5.10 Smart Grid and Microgrid Cooperation in a Real Distribution Network under Emergency Conditions

Authors: Marco Maccioni (UNIROMA1), Tommaso Bragatto (ASM), Fabio Massimo Gatta (UNIROMA1), Alberto Geri (UNIROMA1), Massimo Cresta (ASM), Marco Paulucci (ASM), Federico Carere (UNIROMA1), Stefano Lauria (UNIROMA1).

Type: Submitted papers.

This paper was presented in 18th International Conference on Environment and Electrical Engineering (IEEE EEEIC18) held in Palermo, Italy in June 12th -15th, 2018 and will be submitted to IEEE Xplore. The Proceedings will be published on electronic support.

Abstract: “The paper presents a feasibility study regarding the ability of an existing rural microgrid to supply an islanded portion of the MV distribution network. Based on load and generation measurements in a six-month period, a statistical parametric analysis is carried out with the aim to check the ability of the microgrid to carry out such a service whenever requested. Also, the possibility to supply the islanded portion of the MV grid during the whole six-month period is investigated. The existing microgrid is currently off-grid but in the near future will be connected to the MV distribution grid”.

2.6 Conferences, exhibitions and workshops

2.6.1 SP2017 - Sustainable Places 2017

This Sustainable Places 2017 [SUS18] held in Middlesbrough, UK on June 28-30, 2017. In this event, representing InteGRIDy have participated Lena Holzner and Rene Bohnsack (UCP) with a keynote named “Business models challenges for sustainable energy firms”.

In addition, Vladimir Vukovic (TEES) provided a general inteGRIDy presentation during the Smart Grid and Storage Workshop.

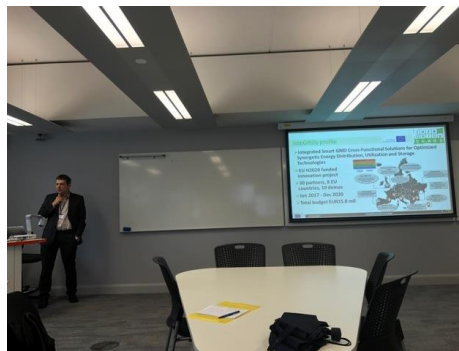


Figure 20. Vladimir Vukovic presenting inteGRIDy project in SP2017

SP2017 is part of the official EU Sustainable Energy Week (EUSEW) Energy Days initiative and it brought together key stakeholders on Energy Efficient Buildings and Smart Grids to further commercial, technological and scientific advancements across interdisciplinary fields.

2.6.2 Res Demand Response

The Res Demand Response [IHU18] event is a national event held in Thessaloniki, Greece on June 13, 2017. In this event, Konstantinos Arvanitis (WVT) presented a general overview of inteGRIDy project.

2.6.3 EUW17 - European Utility Week 2017

inteGRIDy participated at the European Utility Week held in Amsterdam on October 3-5, 2017 in collaboration with BRIDGE initiative.

The coordinator of inteGRIDy, Andrea Rossi, presented also the project in the Hub sessions H2020: EU Research and Innovation. He introduced the main highlights of the project, a technical description of the project's framework and a description of all pilots.



Figure 21. inteGRIDy in EUW17

2.6.4 UK Construction Week

Minus 7 (M7), representing inteGRIDy project, participated in UK Construction Week [COR17] held in Birmingham, UK on October 10th-12th, 2017 with a poster communication.

UK Construction Week is a National event that brings together all stakeholders within the built environment across every facet of design, build and product innovation.

2.6.5 IV Congreso Smart Grids

This event held in Madrid, Spain on November 13th, 2017 is the main professional forum for the sector of Smart Electric Networks in Spain. It is a multidisciplinary event including all stakeholders and a multi-sectors approach, integrating different aspects.

ATOS represented inteGRIDy project in this event with the communication "inteGRIDy – Plataforma habilitadora de la transformación de los Smart Grids". This communication was published in proceedings[SMA18b]. pg. 155-160.

2.6.6 2nd Energy Technologies Workshop

This event was held in Athens, Greece on November 23-25, 2017. inteGRIDy was represented by CERTH and SUNLIGHT.

During this 2nd Energy Technologies Workshop, Dr. Spyridon Voutekatis presented his team's work on integrated methodologies for managing and supervising small-scale smart grids. It is implemented using flexible Energy Management Strategies (EMS).

The reference system which is used as a motivating example of autonomous smart grids is located in SUNLIGHT's premises is a standalone intelligent power grid that includes three stations with local energy storage capability using lead-acid batteries.



Figure 22. Presentation of Dr. Spyros Voutekatis

The target audience of this event is energy operators, end users and facilitators and the estimative number of attendance was around 150 people.

2.6.7 EIBA2017 - 43rd European International Business Academy Conference

UCP represented inteGRIDy project in this event held in Milan, Italy on December 14th -16th 2017.



Figure 23. First slide of presentation in EIBA2017 by UCP partners

According webpage [EIB17b], “*EIBA aims to serve as a core network for the promotion of global communication, knowledge transfer, and exchanges of ideas, within the greater field of International Business (IB)*”. The estimate number of attendance at this event was 500 people.

2.6.8 Ecobuild 2018

This event was held in London, UK on March 6th-8th, 2018. Minus 7 represented inteGRIDy with a poster communication.

Ecobuild 2018 [ECO18], leading event within the built environment, brought together 26,590 visitors, over 450 British and international exhibitors, exclusive features and inspirational speakers.

2.6.9 IRES 2018 – 12th International Renewable Energy Storage Conference

This conference was held in Dusseldorf, Germany on March 13th -15th, 2018, with the participation of POLIMI (Politecnico di Milano) team. POLIMI presented the communication “San Severino Marche Smart Grid Pilot within H2020 inteGRIDy project” focused on one of the inteGRIDy pilots. The Smart Grid architecture deployed in San Severino Marche Pilot was presented and the algorithm adopted to optimize the MV feeder was detailed.



Figure 24. Announcement of the communication of the inteGRIDy project in IRES 2018

The target audience of this event was mainly academics and energy operators and the estimative number of attendance of this communication was around 40 people. According IRES webpage[EUR18], "IRES aims to promote a cohesive overview of the world of storage technologies that can enable the complete transition to a decentralized renewable energy system. The focus of the conference was expanded beyond just the current state of specific technologies to case studies, applications, country scenarios and comprehensive trends"

2.6.10 5th International Conference on Control, Decision and Information Technologies (CoDIT)

Representatives from Chemical Process Engineering Research Institute, Centre for Research and technology, Hellas (CERTH) participated in the 5th International Conference on Control, Decision and Information Technologies held in Thessaloniki, Greece on April 10th-13rd, 2018. They presented the paper "Supervisory Control of Energy Distribution at Autonomous RES-powered Smart-grids using Finite State Machine Approach". This paper will be submitted for inclusion into IEEE Xplore.



Figure 25. Dimitris Trigkas in CoDIT

This work addresses the issue of energy distribution between stations of an autonomous small-scale SmartGrid network using a replicable and up scalable methodology that relies on a Finite State Machine (FSM) approach. The development of the FSM approach involves the modelling of all systems (nodes) of the autonomous network and the identification of the needs and the

requirements for energy management in a dynamic and distributed environment where Renewable Energy Sources (RES) are used as the main source of power to the grid. Furthermore, applicability of FSM approach is a main issue, since the final objective is its online implementation to the supervisory control system that derives and supplies the operations-related actions to the involved nodes of the network relying on industrial-grade software. Some indicative results are presented that demonstrate the response of the proposed method to a smart grid network with RES and hydrogen production, usage and storage.

2.6.11 PEMD 2018 - 9th International Conference on Power Electronic, Machines and Drives

Representatives from Newcastle University (UNEW) participated in the 9th International Conference on Power Electronic, Machines and Drives held in Liverpool, UK on April 17th-19th, 2018. They presented the paper “Modelling and simulation of a SmartGrid architecture for a real distribution network in the UK”.



Figure 26. Presentation in PEMD 2018 event

“PEMD is a world-leading forum for industry and academia to meet, publish results of research and technical advances and share knowledge in the power electronics, machines and drives community”.[PEM18].

2.6.12 Workshop for Grundfos Company (Denmark) “Discover the Smart City”

Alina Margolina (UCP) participated, representing inteGRIDy project, in Workshop “Discover the Smart City” held in Lisbon, Portugal on April 30th – May 1st, 2018 with a poster presentation.



Figure 27. Alina Margolina in Grundfos Workshop

The estimative number of attendance was 100 people.

2.6.13 INNOGRID2020+

The inteGRIDy project participated in INNOGRID2020+[INN18], event held in Brussels on May 15th -16th, 2018. InteGRIDy project had a space in the place of the conference, where documentation related to the Project was distributed by inteGRIDy representative partners among the assistants.

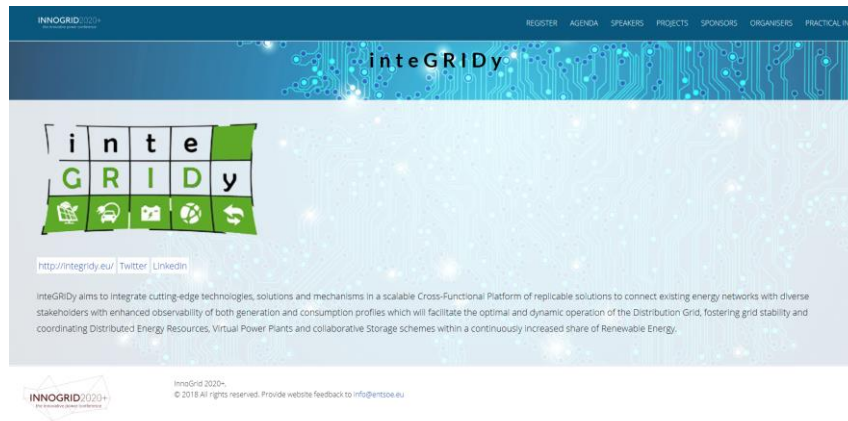


Figure 28. inteGRIDy project information in INNOGRID2020+ website

The inteGRIDy project participated also in Digitalization session, represented by Juan Rico, Deputy Head of Energy sector of ATOS Research and Innovation, with others innovation project.

2.6.14 Business modelling workshop with a group of MBA students from the University of San Diego, California

Alina Margolina (UCP) participated, representing inteGRIDy project, in Workshop with a group of 20 MBA Student from University of San Diego held in Lisbon, Portugal on May 31st, 2018 with a communication about Business modelling.

2.6.15 2nd Business Model Conference

The 2nd Business Model Conference held in Florence on June 6th-7th 2018.

This event, is a scholar conference dedicated to research on business models where to have constructive discussions on researching and teaching business models [BMC18] .

Representing inteGRIDy project, Alina Margolina (UCP), participated in this event with the communication "Smart Business Modeler"

The attendance to event was 28 people.

2.6.16 18th International Conference on Environmental and Electrical Engineering and 2nd Industrial and Commercial Plover System Europe (EEEIC)

The international conference "2018 IEEE 18th International Conference on Environment and Electrical Engineering (EEEIC 2018)" held in Palermo on June 12th-15th 2018.

Representing inteGRIDy project, UNIROMA1 and Engineering, participated in this event with the presentation of two papers "Flexibility services to power systems from smart rural microgrid prosumers" and "Smart Grid and Microgrid Cooperation in a Real Distribution Network under Emergency Conditions".



Figure 29. Giuseppe Paternò in IEEEIC18 conference

2.6.17 EGVI – European Green Vehicles Initiative

“The European Green Vehicles Initiative (EGVI) is a contractual public-private partnership dedicated to delivering green vehicles and mobility system solutions which match the major societal, environmental and economic challenges ahead” [EGV18] .

The EGVI organized the event “EGVIA workshop on EVs and their integration into the grid: State of play and challenge”, held in Brussels, on June 20th, 2018, where the inteGRIDy project was presented by the coordinator Andrea Rossi (ATOS) during the Session 1: Electric Vehicles: challenge and opportunities for the grid.



Figure 30. Andrea Rossi in EGVIA Workshop

The estimative number of attendance was 100 people.

2.6.18 MED 2018 – 26th Mediterranean Conference on Control and Automation

This conference was held in Zadar, Croatia on June 19-22, 2018, with the participation of a member of the CERTH/CPERI team. The presented paper's title is "Energy Management Strategy in a Residential Battery Energy Storage System" and it is related with one of the pilots of the inteGRIDy project. The paper was presented at the invited session "Control in Smart Cities".

The target audience of this event was mainly academics and energy operators and the estimative number of attendance of this communication was around 400 people.

The 26th MED'18 is organized by the [Mediterranean Control Association \(MCA\)](#). The Mediterranean Control Association (MCA) is in charge of the coordination and supervision of the annual Mediterranean Conference on Control and Automation. The main interests of the MCA are in the broad scientific areas of Systems, Control, and Automation.

2.6.19 Workshop Smart Metering for Smart Cities

The workshop about Smart Metering for Smart Cities held in University Politehnica of Bucharest on 26th June, 2018.

Representing inteGRIDy project, SIVCO and ELECTRICA, participated in this event with a inteGRIDy project summary presentation and a communication about Ploiesti Pilot and opportunity of Demand Response in Romania.



Figure 31. inteGRIDy in Workshop Smart Metering for Smart Cities

The results of the project will be published in "Energetica Magazine" in the following weeks.

The number of attendance this event was 25.

2.7 First inteGRIDy International Conference

The First inteGRIDy International Conference was hosted by Politecnico di Milano (POLIMI) on September 14th, 2017.

In the organization of this event, other Italian partners also collaborated, such as Engineering (ENG) or Energy@Work (E@W), helping on activities such as press release photo and video making during the conference, arrangement of the room for the event, technical assistance, registration service, and dissemination material as folders, pens and bloc-notes.



Figure 32. First inteGRIDy Conference - Organization

Also, ATOS as coordinator was responsible for preparing the invitations, coordinating the agenda and promoting the event.



Figure 33. Invitation to First InteGRIDy Conference

The event was aimed at the following target groups: system operators, market operators, governance and policy bodies and Final users and other external that does not produce but participate to the market in a subsidiary way. It offered the opportunity to dialogue between the ongoing European H2020 R&I projects on innovative technologies for smart grid on MV/LV in the topics of Demand Response, intelligent distribution grid and storage technologies, sharing novel ideas on how to enable the flexibility on the smart grid. It was also discussed with the National Energy Authorities how new regulatory plans can affect technical innovations in energy systems.



Figure 34. First inteGRIDy Workshop.

The event was mainly organized into three sessions:

- Session 1. Discussion on the EU ongoing and future policies for the European energy market.
- Session 2. Roundtable with speakers from National Energy Authorities.
- Session 3. Presentation of related EU projects which can foster, from the technological point of view, the flexibility on the smart grid, underlining their commonalities with inteGRIDy.

The estimate attendance was 70 people.

2.8 Liaison activities with other projects and initiatives: BRIDGE

inteGRIDy project was presented and participated in the BRIDGE Working Group[BRI18] and Coordination meetings in Brussels in January 2017.

BRIDGE is a European Commission initiative which gathers more than 30 Horizon 2020 Innovation Actions in the field of smart grids and Energy storage. BRIDGE initiative aims at identifying and structuring cross-cutting issues encountered in the demonstration projects that may constitute obstacles to innovation.

There are four different Working Groups representing the main areas of interest: Data Management, Business Models, Regulations and Customer Engagement.

In the third newsletter of BRIDGE initiative (April 2017), information about inteGRIDy project was published [BRI17].

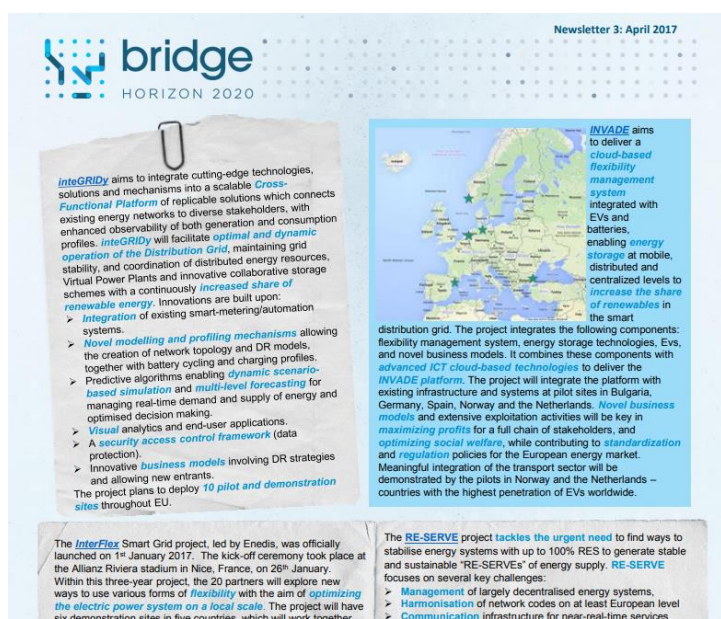


Figure 35. inteGRIDy in BRIDGE Newsletter

The BRIDGE initiative participated in the EU Sustainable Energy Week 2017 (EUSEW17)[EUS17] in June 2017 with a session focused on the legislative proposals of the European Commission “Clean Energy for All European” published in November 2016 and with the seminar “BRIDGE – Smart Grids and Storage deployment by removing barriers to innovation” where the initiative and its activities presented. inteGRIDy project participated in all this activities with the presence of coordinator Andrea Rossi.



Figure 36. inteGRIDy with BRIDGE initiative at the EUSEW2017

At the BRIDGE coordination meeting held in Brussels in November 2017, inteGRIDy members participated for the first time in the Working Groups. The representatives were:

- Tracey Crosbie (Teesside University) represented inteGRIDy on the Regulations Working Group acting as Standardization, Analysis, and Regulations & Privacy Policy leader.
- René Bohnsack (Universidade Catolica Lisboa) represented inteGRIDy on the Business Modelling Working Group on regulation and international scale up



Figure 37. René Bohnsack representing inteGRIDy project in BRIDGE initiative

- Javier Valiño (ATOS) represented inteGRIDy on the Data Management Working Group acting as Project Management leader.
- Andrea Rossi (ATOS) represented inteGRIDy on the Coordination session acting as project coordinator.

2.9 Other dissemination activities

2.9.1 Participation in Lisboa Solar Fest

Lisboa E-Nova organized, together with the Municipality of Lisbon and EDP, the “Lisbon Solar Fest”, an event that registered in the Sustainable Energy Week and focused on the Sun.

The event was held at the Electricity Museum area, next to Tagus River in Lisbon, on May 17th -20th, 2018 and consisted of a variety of activities/workshops related to the solar use (including solar boats and cars), a small sustainable house showing smart solutions to manage the consumptions and the energy production, etc.

On Friday, April 27, 2018, there was a conference in the morning where a presentation of inteGRIDy project was made next to another H2020 project Sharing Cities.

2.9.2 Internal presentation in EAC

inteGRIDy's concepts, goals, approach and impact are presented within the organization through public folders that reach more than 2000 employees, EAC's webpage and social media. The objectives and actions of the project are promoted via mail list to research stakeholders, public organizations and private companies of the energy sector.

2.9.3 Presentation of the Business Modeling Tool to the delegation from the Imperial College London

The UCP-SCIL team introduced the delegation from the Imperial College London to a unique methodology at the heart of the Business to Modelling Tool and gave practical examples of how the platform enables business model innovation.

3. Dissemination KPI achieved

In D9.1, a set of KPI was defined to evaluate the effectiveness of dissemination tools implemented by the project. These metrics, referring to the whole project duration and assessed as its current M18 status, are shown at Table 7.

Table 7. inteGRIDy dissemination KPIs.

Dissemination	KPI	Planned Values	Achieved Values
Web page	Yearly visits	1.500	20.191* (18 months)
	Visit duration	2 min (avg)	3 min 10 sec (avg)
Publications	Submitted papers	15	8
	Articles, journals and books	6	4
Events	Attended	10	19
	Organized	2	1
	Workshop attendees	30	70
Newsletters	Subscriptions	75	47

Dissemination	KPI	Planned Values	Achieved Values
Brochures	Number	3	1
Social Network	LinkedIn contacts	150	230
	Twitter followers	200	411

Analysing the zds, it is clear that those KPIs related to webpage and social network and workshop attendees have exceeded the expectations. On the other hand, in this first period, Newsletter subscriptions are still lacking behind. Although the overall value has not yet been met, the newsletters being available on social networks and the website have made it possible for many stakeholders to download them directly. In addition, newsletters have been also sent by e-mail to all project partners who have distributed them through their channels.

In the following period, new dissemination material will be designed, enabling further compliance with the initially defined KPIs. In addition, the presentation of the events achievements and their publication in journals of interest will be promoted by partners.



4. Objectives for the next reporting period

During the first reporting period of dissemination activities every planned action has been performed and in most of the cases, expected results have been considerably improved. It could be stated that so far, the objective for the first period has been achieved.

A wide range of communication channels and dissemination materials must be produced and implemented to ensure that the results of the project reach the maximum audience maintaining the quality.

The actions lines planned by next period to improve inteGRIDy dissemination activities are the following:

- Promote the increase in the production of scientific publications and participation in relevant and sectorial events
- Update the dissemination material: general poster, reference presentation
- Create new dissemination material focused on pilot's sites
- Publication of partner-specific whitepapers, where they will explain inteGRIDy-related activities and achievements
- Publishing new Newsletters according to the plan for dissemination and communication
- Keep the website and social networks of the project updated
- Preparation of webinars and workshops.

5. Conclusions

The content provided in this report backs up the dissemination activities within the project carried out in the first- period (M1-M18). The overall assessment is that they were performing as expected.

A wide set of dissemination material has been designed, aiming at supporting partners during their target dissemination events. This material is oriented to describe and promote the project main objectives. Its ultimate goal is to reach a broader and heterogeneous audience. During the next period, new dissemination material will be designed and made available for project partners, with the focus mainly put on pilot site promotion.

The dissemination activities done through the project website and social media have been very positive considering the results achieved in terms of views, subscribers and navigation time spent.

Social media has contributed to goal the project's wider and effective dissemination and inteGRIDy website contributes to creating awareness about the inteGRIDy project and its objectives.

Although the consortium has contributed to various publications, conferences and exhibitions, making the inteGRIDy project visible in the European scenario, the proportion of these contributions is expected to raise significantly as the project progresses and the level of maturity of the expected results increases.

Through BRIDGE initiative, inteGRIDy has established preliminary liaison activities with projects working on similar topics. This liaison will be reinforced in next period to promote mutual knowledge sharing.

Finally, although many of the results achieved exceed the KPI value envisaged for the total project lifetime, these results are expected to continue peaking while project moves into a more advanced stage, with tangible results, which will, for example, produce attractive publications for the most relevant journals in the field and/or make it possible for partners to participate in relevant conferences.



6. References

- [ATO17] Atos Blog <https://atos.net/en/blog/new-utilityhorizons>
- [BMC18] Business Model Conference <http://www.businessmodelconference.com/>
- [BRI17] BRIDGE Newsletter https://www.h2020-bridge.eu/wp-content/uploads/2017/04/BRIDGE_newsletter_April_2017.pdf
- [BRI18] H2020 BRIDGE cluster initiative web site <https://www.h2020-bridge.eu/>
- [COR17] CORDIS database H2020 projects web site https://cordis.europa.eu/project/rcn/207020_es.html
- [DIN18] Newsletter Dinhero Vivo <https://www.dinheirovivo.pt/economia/camara-de-lisboa-na-mira-de-projeto-europeu-para-reduzir-consumoenergetico/>
- [ECO18] Ecobuild 2018 <https://www.ecobuild.co.uk/welcome>
- [EEE18] International Conference on Environment and Electrical Engineering (IEEE EEEIC18) <https://www.eeeic.net/eeeic/>
- [EGV18] European Green Vehicles Initiative <https://egvi.eu/about-the-egvi-ppp/presentation>
- [EHO17] UK Construction Week, Birmingham, UK, October 10-12, 2017 <https://events.ciob.org/ehome/200174576>
- [EIB17] 43rd European International Business Academy Conference (EIBA) http://www.eiba2017.polimi.it/wp-content/uploads/2018/02/Proceedings_EIBA.pdf
- [EIB17b] EIBA web page <http://www.eiba.org/r/home>
- [EUR18] IRES 2018 - International Renewable Energy Storage Conference, Dusseldorf, Germany, March 2018 <https://www.eurosolar.de/en/index.php/events/ires-conference-eurosolar>
- [EUS17] EU Sustainable Energy Week 2017 (EUSEW17) June 2017 <http://eusew.eu/bridge-%E2%80%94accelerating-smart-grids-and-storage-deployment-removing-barriers-innovation>
- [FLI17] InteGRIDy Flickr account <https://www.flickr.com/photos/integridy/albums>
- [IHU18] Res demand Response event, Thessaloniki, Greece, June 13 2017 <http://www.ihu.edu.gr/index.php/news-events/item/1223-rae-conference-renewable-south-east.html>
- [INN18] INNOGRID2020+, Brussels, May 15-16, 2018 <https://www.innogrid2020.eu/>
- [INT91] inteGRIDy D9.1. Plans for the dissemination, exploitation and communication of project results
- [NEW18] inteGRIDy newsletters online <http://www.integridy.eu/category/5>.
- [PEM18] 9th International Conference on Power Electronics, Machines and Drives, Liverpool, UK, March 2018 <https://events.theiet.org/pemd/>
- [REN17] Magazine Renováveis magazine <http://www.renovaveismagazine.pt/>
- [SMA18] inteGRIDy in SmartGridInfo, February 2018 <https://www.smartgridsinfo.es/comunicaciones/integridy-plataforma-habilitadora-transformacion-smart-grids>



- [SMA18 b] “inteGRIDy – Plataforma habilitadora de la transformación de los Smart Grids”
<https://www.smartgridsinfo.es/biblioteca/libro-comunicaciones-4-congreso-smart-grids>
- [SUS18] Sustainable Places 2017, Middlesbrough, UK, June 28-30, 2017
<http://www.sustainableplaces.eu/>
- [YOU18] inteGRIDy Youtube channel
https://www.youtube.com/channel/UC_KCFZZuKYIdMe-LVT68IMQ



<http://www.integrity.eu>