



Interoperable solutions for implementing holistic **FLEXI**bility
services in the distribution **GRID**

Mid-term dissemination and communication report – M24

Deliverable 9.12

WP9

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	RE → Restricted to a group specified by the consortium (including the EC)
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Approvals

Company	
Author/s	CIRCE
Task Leader	CIRCE
WP Leader	CIRCE

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ABBREVIATONS

PC: Project Coordinator

CA: Consortium Agreement

CC: Communication Committee

DoA: Description of Action

EC: European Commission

GA: General Assembly

IPR: Intellectual Property Right

KPI: Key Performance Indicator

M: Month

PH: Project Handbook

R&D: Research and Development

SC: Steering Committee

TP: Technical Partner

WP: Work Package

SME: Small and Medium Enterprise

DMP: Data Management Plan

H2020: Horizon 2020

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EXECUTIVE SUMMARY

This deliverable represents the official report of the communication and dissemination activities that have been carried out throughout the project, specifically from month 1 to month 24, report that is part of **WP9 Communication and dissemination activities** and *Task 9.2 Dissemination and public communication actions*.

This deliverable is the first report on the actions taken by the consortium to promote the dissemination and communication of the results developed in FLEXIGRID. It comprehends the actions taken and the scope received from said actions from the beginning to the middle of the project, using as a guide the guidelines described in the deliverable *D9.2 Dissemination and communication plan- M18*.

The aim of the **D912. Mid-term Dissemination and Communication report** is to run the visibility and communication infrastructure of the project so that all activities carried out during the project lifetime will be widely known in Europe.

Furthermore, this document is intended to be updated and adjusted as the project progresses.

Here all the communication actions carried out up to M24 can be found as well as all the materials made available to the partners for an adequate dissemination of the project progress.

The dissemination activities have been designed to target the key audiences and stakeholders and to maximize awareness of FLEXIGRID objectives and project activities.

The Communication and dissemination activities gives an overview of all dissemination opportunities identified and actions taken through traditional communication channels such as event attendance (conferences, seminars, workshops, etc.), project publications (brochures, press releases, articles in professional journals, etc.) and project presentations (to various stakeholders and the general public).

CIRCE will coordinate and manage FLEXIGRID dissemination and communication activities. Nevertheless, all the project partners will be responsible to disseminate FLEXIGRID results through their communication channels and towards their existing communities.

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1. INTRODUCTION

As stated before, communication resources are tool supportive tools for strengthening the actions planned for the dissemination of impacts and results achieve in FLEXIGRID project, or any H2020 project. Therefore, this tool was developed and defined right at the beginning of the project through a detailed and comprehensive communication strategy which will be developed with the participation of all partners trough the course of the project.

The purpose of this deliverable is to present the actions for the communication and dissemination of the FLEXIGRID project that took place during the first half of the project, including specific events, social media and press publications.

The actions are either managed by the consortium (e.g. social media accounts, website, newsletter) or hosted by external actors (e.g. conferences, EU events, web articles). In both cases, partners of the FLEXIGRID consortium are actively involved. The deliverable is related with the Development of the Dissemination and Communication Strategy (D9.1) and its update Dissemination and communication plan-M18 (D9.2) which established and runs respectively the visibility and communication infrastructure of the project so that all activities carried out during the project lifetime will achieve maximum impact. The deliverable is an integral part of task 9.2 of the WP9.

The communication strategy will comply with art. 29 of the Grant Agreement (GA) n° 864579 and will ensure the dissemination of the project results by disclosing them to the public by appropriate means (other than those resulting from protecting or exploiting the results), including in scientific publications (in any medium). The dissemination of results will ensure protection of the beneficiaries' foreground and legitimate interests as stated in the GA.

2. DISSEMINATION AND COMMUNICATION OFFICIAL CHANNELS

FLEXIGRID project has established four ways to keep the dissemination and communication activities present and active during the life of the project.

- Official website: www.flexigrid-h2020.eu
- Hashtags
- Templates
- Communication follow up file

2.1. FLEXIGRID website

2.1.1. Content

The website of FLEXIGRID was launched in November 2019, is operated by CIRCE and will stay online for the project's duration and two more years after its completion.

The FLEXIGRID website includes the following content:

- Project Homepage – general overview of the whole website where is visible the DEMOS available, recent news and project partners.
- The Project – general information of the project (About), objectives, the solutions that are being developed in it and related projects of FLEXIGRID with a brief description of each one and the link to its website, for example: FLEXICENCY, SMARTNET, MIGRATE, IElectrix, and others.
- Partners – list of project partners including their logos, website address and a brief description.
- Demos – here we can find a total of 8 use cases for the demos that are being implemented in the project, and also the description, location, main challenges, innovations and solutions of the 4 demo sites: Spain, Greece, Croatia and Italy.
- Publications – a repository of reports/deliverables that is available to the general public (at the moment, there are 10 public deliverables that are published on the website) and dissemination material, like a picture with an overview of the project, and an informative FLEXIGRID poster that shows the solutions, use cases and demo sites.
- NEWS – update of most recent and relevant news of events and other activities that are being held.

2.1.2. Analytics

To July 2021, the site received 2,608 unique visitors from countries all over the world, 1,798 of which, were new users. March 2021 recorded the highest number of visits with 228 new users, coinciding with the Stakeholder + European Commission Event social media campaign. In total, there have been 7,114 views of the content of the FLEXIGRID project website.

Regarding the project website, Google Analytics was implemented to provide an overview of sessions and users. Below, the statistics up to July 2021 can be seen and a heating map showing the countries from where the official FLEXIGRID website has been receiving visits and clicks since its creation.



Figure 1. Analytics of visits and visitors obtained on FLEXIGRID website up to July 2021

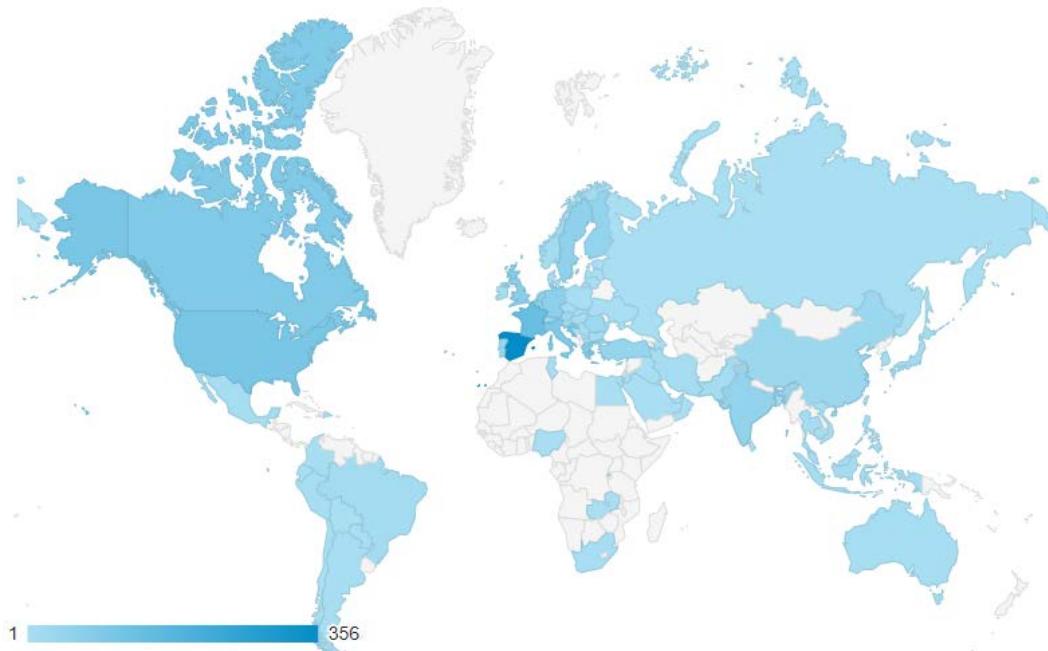


Figure 2. Heat map of the site visitors' location on FLEXIGRID website

Country	Users % of Total: 100.00% (1,804)	New Users % of Total: 100.11% (1,809)	Sessions % of Total: 100.00% (2,631)	Bounce Rate Avg for View: 55.19% (0.00%)	Pages/Session Avg for View: 2.73 (0.00%)	Avg. Session Duration Avg for View: 00:02:22 (0.00%)
1. Spain	356 (19.69%)	356 (19.66%)	690 (26.22%)	51.01%	2.79	00:02:28
2. France	140 (7.74%)	140 (7.73%)	266 (10.11%)	40.60%	3.84	00:04:38
3. United States	105 (5.81%)	105 (5.80%)	108 (4.10%)	93.52%	1.28	00:00:15
4. Croatia	92 (5.09%)	93 (5.14%)	148 (5.63%)	44.59%	2.80	00:02:06
5. Canada	90 (4.98%)	90 (4.97%)	90 (3.42%)	100.00%	1.00	00:00:00
6. Italy	90 (4.98%)	90 (4.97%)	152 (5.78%)	40.13%	3.86	00:03:32
7. Greece	81 (4.48%)	82 (4.53%)	122 (4.64%)	40.16%	2.93	00:02:49
8. United Kingdom	70 (3.87%)	70 (3.87%)	90 (3.42%)	57.78%	2.66	00:02:25
9. Germany	64 (3.54%)	64 (3.53%)	76 (2.89%)	53.95%	2.47	00:01:49
10. Netherlands	56 (3.10%)	56 (3.09%)	61 (2.32%)	54.10%	1.93	00:00:14
11. Sweden	56 (3.10%)	58 (3.20%)	78 (2.96%)	56.41%	2.50	00:01:52
12. Belgium	52 (2.88%)	52 (2.87%)	71 (2.70%)	40.85%	2.62	00:02:24
13. India	51 (2.82%)	51 (2.82%)	58 (2.20%)	74.14%	1.67	00:00:27
14. Finland	50 (2.77%)	50 (2.76%)	55 (2.09%)	45.45%	2.27	00:01:44
15. Turkey	41 (2.27%)	41 (2.26%)	61 (2.32%)	57.38%	2.80	00:01:39
16. Portugal	33 (1.82%)	33 (1.82%)	48 (1.82%)	52.08%	3.50	00:05:05
17. China	31 (1.71%)	31 (1.71%)	33 (1.25%)	75.76%	1.94	00:02:51
18. Romania	28 (1.55%)	29 (1.60%)	33 (1.25%)	54.55%	3.12	00:00:59
19. Austria	25 (1.38%)	25 (1.38%)	31 (1.18%)	45.16%	2.71	00:02:17
20. Brazil	14 (0.77%)	14 (0.77%)	14 (0.53%)	78.57%	1.57	00:00:55
21. Japan	13 (0.72%)	13 (0.72%)	19 (0.72%)	52.63%	4.84	00:04:27
22. Luxembourg	12 (0.66%)	10 (0.55%)	18 (0.69%)	50.00%	4.00	00:04:52
23. Norway	12 (0.66%)	12 (0.66%)	12 (0.46%)	66.67%	2.33	00:00:30
24. Switzerland	11 (0.61%)	11 (0.61%)	12 (0.46%)	66.67%	2.58	00:00:47
25. Denmark	10 (0.55%)	10 (0.55%)	11 (0.42%)	45.45%	8.27	00:08:06
26. Indonesia	10 (0.55%)	10 (0.55%)	12 (0.46%)	75.00%	1.25	00:00:08
27. Pakistan	10 (0.55%)	10 (0.55%)	10 (0.38%)	70.00%	1.70	00:00:41
28. Iran	9 (0.50%)	9 (0.50%)	11 (0.42%)	72.73%	1.27	00:02:17
29. Bulgaria	8 (0.44%)	8 (0.44%)	13 (0.49%)	38.46%	3.34	00:03:00
30. Mexico	8 (0.44%)	8 (0.44%)	9 (0.34%)	88.89%	1.11	00:00:04

Figure 3. List of countries with the highest number of visits to the FLEXIGRID website

2.1.3. Hashtags

On the Dissemination and Communication Plan for M18, two hashtags were established for the publications of project news and/or activities on social media (LinkedIn, Facebook, and Twitter), they were: #FLEXIGRIDproject and #FLEXIGRID.

This action was required for all of the partners that were using their personal or business account to post about the project, since it's needed to have an estimate of the publications that are being posted.

As of July 2021, 13 posts on Twitter, 10 posts on Facebook and around 15 posts on LinkedIn have been published on the consortium partners' social networks. In terms of impressions on social networks (views, likes and reposts) the current figures are as follows: 300 per post on Facebook, 900 on Twitter and 1,100 on LinkedIn.

2.1.4. Templates

Templates for news or press release to be completed were drafted and available for all partners. Once the templates were completed by partners, it was sent to the project coordinator for publication on the website. When a report was considered of interest, it was sent to all partners so that it can be translated into their native languages and sent to local media for further dissemination.


INTEROPERABLE SOLUTIONS FOR IMPLEMENTING HOLISTIC FLEXIBILITY SERVICES IN THE DISTRIBUTION GRID

Name Meeting Agenda – FLEXIGRID

Date	xx/xx/xxxx
Venue	NAME Address:

Agenda Day 1 – Month Day

ITEM	TIME	AGENDA	SPEAKER
-	09:15 h	Welcome coffee. Short description.	PARTNER Name Surname, Role
1		Item name. Short description.	
2			
3			
		Lunch	
		Closure of meeting	

1

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Figure 4. Meeting's Agenda template

 Document Press Release
 Author XXX Version 1
 Date 6/8/21

Communication Template for Press Release

Headline	TITLE OF THE EVENT /ARTICLE/ NEWS + PROJECT LOGO
Sub-Headline	Date and Venue if required
1 st Paragraph	The first line should be a summary of the event: 50-60 words containing the main message of the press-release.
2 nd Paragraph	The main information are in this paragraph. Who does organize the event, the main purpose, target groups addressed (type and number), the event layout and the main strategy pursued. You should write about 60-100 words.
3 rd Paragraph	Give some information about the main messages shared with the audience. Main results collected during the event (Max 250 words)
4 th Paragraph	Conclusion and next steps (Max 50 -60 words)

(Max. 1 page)

ATTACHMENTS

xml, Jpg, Ppt.

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Figure 5. Press release communication template



Figure 6. Presentation template

An example of a presentation that was made through these templates is the General Project Presentation that was published on the project's website, and it's being constantly updated, can be found trough this link: <http://www.flexigrid-h2020.eu/overview-of-the-project-flexigrid/>

Figure 7. Example of presentation using template

2.1.5. Communication follow up File

An excel template was drafted and available to the partners in which each partner must record all the dissemination actions carried out. This template serves as a record and follow-up of the dissemination of the project and is permanently in the files of the Microsoft TEAMS tool.

Report on FLEXIGIRD's dissemination activities					
Partner	Dissemination activity	Further specifications	Date	Link (if applicable)	Total of stakeholders reached
CIRCE	Partner social media channel	Post about project launch event	04/11/2019	https://www.linkedin.com/feed/update/urn:li:activity:6597109340887486456/	5081
CIRCE	Partner social media channel	Post about project launch event	04/11/2019	https://www.facebook.com/circe/posts/3015791375102157	
VESGO	Partner social media channel	Post about project launch event	04/11/2019	https://twitter.com/CIRCE/status/119134260502675968	
HEP-CDIS	Partner social media channel	Post about project launch event	04/11/2019	http://www.flexigrid-h2020.eu/flexigrid-interoperable-solutions-for-implementing-flexibility-services-in-the-distribution-grid/	
EDYNA	Official Press release	Launch of the first press release of the project in the framework of the Kick-Off	13/11/2019		74
CIRCE	Take part in an event (conference, stand...)	The project presents at the annual meeting of BRIDGE H2020 organized by the European Commission	02/02/2020		0
CIRCE	Partner social media channel	Post about the conference at BRIDGE	12/02/2020	https://www.linkedin.com/feed/update/urn:li:activity:6833359244815810416/	
CIRCE	Partner social media channel	Post about the conference at BRIDGE	12/02/2020	https://twitter.com/CIRCE/status/1227609239844000769	
CIRCE	Partner social media channel	Post about the conference at BRIDGE	12/02/2020	https://www.facebook.com/circe/posts/3521761201505072	223
CIRCE	News entry official website	FLEXIGRID reinforces its positioning in Smart grids with its participation in BRIDGE H2020	02/03/2020	https://www.flexigrid-h2020.eu/flexigrid-reinforces-its-positioning-in-smart-grids-with-its-participation-in-bridge-h2020/	26
CIRCE	Partner social media channel	Post about the conference at BRIDGE	09/03/2020	https://www.linkedin.com/feed/update/urn:li:activity:6833359244815810416/	

Figure 8. Communication follow up file

3. DISSEMINATION AND COMMUNICATION ACTIONS

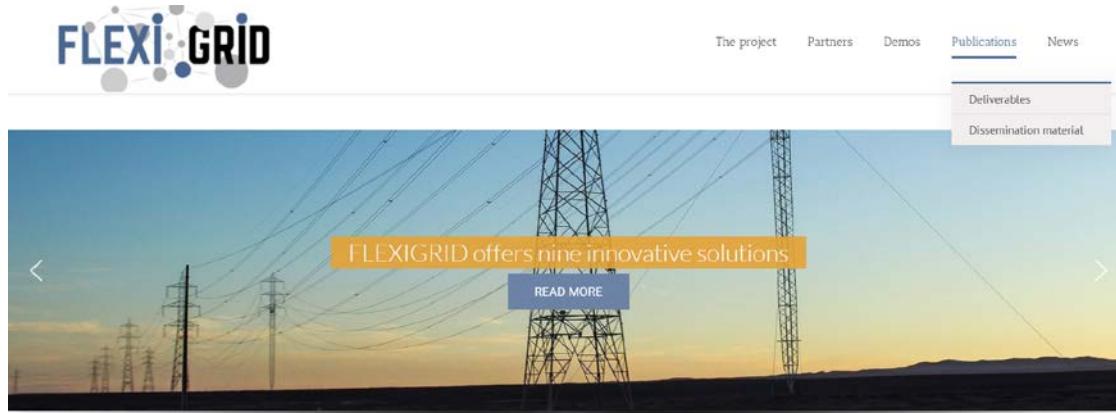
The communication and dissemination actions that have been carried out during these first 24 months of the project are described below, they will be classified by the type or channel of the action: publications on social networks, publications in the press, events, entries to the website, scientific publications, etc.

These actions are the result of implementing an effective dissemination strategy that was developed previously, at the beginning of the project, to fulfil the project proposed objectives. The strategy was deployed in the present communication and dissemination plan. The plan and the different channels, methods and tools of communication will be regularly updated to follow the progress of the project.

3.1. Website

The project website is one of the main communication tools for any EU funded project. It provides easy and quick access to the project results for a wide audience.

The main project website is available at www.flexigrid-h2020.eu and is being updated on a regular basis with the latest results and news concerning the Project.



Interoperable solutions for implementing holistic FLEXIbility services in the distribution GRID

www.flexigrid-h2020.eu/#

Figure 9. Main page of FLEXIGRID's website

The table below details the entries that have been made in the web page for the different demos, or entries on the web pages of the project partners about the FLEXIGRID project.

PARTNER	DISSEMINATION ACTIVITY	SPECIFICATIONS	DATE	LINK	STAKEHOLDERS REACHED
CIRCE	News entry official website	FLEXIGRID reinforces its positioning in Smart grids with its participation in BRIDGE H2020	02/03/2020	FLEXIGRID reinforces its positioning in Smart grids with its participation in BRIDGE H2020 – FLEXIGRID (flexigrid-h2020.eu)	26

CIRCE	News website	entry entry	official	FLEXIGRID strengthens ties between EU and Brazil at a conference to promote scientific collaboration	30/05/2020	FLEXIGRID strengthens ties between EU and Brazil at a conference to promote scientific collaboration – FLEXIGRID (flexigrid-h2020.eu)	700
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Table 1. Entries on official website

PARTNER	DISSEMINATION ACTIVITY			SPECIFICATIONS	DATE	LINK	STAKEHOLDERS REACHED
VERD	Entry on website	partner	partner	Post about project	01/10/2019	FLEXIGRID - elinverd	120
CIRCE	Entry on website	partner	partner	Information about FLEXIGRID project	01/10/2019	https://www.fcirc.e.es/horizon2020/flexigrid	200
CAP	Entry on website	partner	partner	Announce the Kick-off of the project activities	01/11/2019	https://www.cap-energies.fr/wp-content/uploads/2019/11/2.0_pres_s_release_1_final_circe-cedec.pdf	334
UNICAN	Entry on website	partner	partner	News about launch event	01/10/2019	https://web.unican.es/noticias/Paginas/2019/octubre_2019/flexigrid.aspx	-
HYPERTECH	Entry on website	partner	partner	News entry about the official kick-off of the project	26/11/2019	https://www.hyper-tech-energylabs.com/news-room/latest_news/2019nov13flexigrid_grant/	-
ATOS	Entry on website	partner	partner	Newsletter on FLEXIGRID Kick-off	15/12/2019	Private content	150
CAP	Entry on website	partner	partner	Communicate on the project implementation (target: French stakeholders)	01/04/2021	https://www.cap-energies.fr/nouveaux-projets-de-rede-et-industriels/cap-sur-europe/	134

CAP	Entry on website	partner	Highlights from the Stakeholder Event	01/04/2021	https://www.capenergies.fr/en/flexigrid-highlights-from-the-event-presenting-the-european-project-to-stakeholders-of-optimized-energy-systems/	55
UNICAN	Entry on website	partner	News about virtual panel	14/06/2021	https://www.gteanunican.es/news-flexigrid-202106/	-
UNIZG-FER	Entry on website	partner	FLEXIGRID RRI event organised by UNIZG-FER within t2.4	07/06/2021	https://www.fer.unizg.hr/zvne/news?@=2ty7f#news_135531	-

Table 2. Entries on partner website

3.2. Social Media

The table below compiles the dissemination activities that have been carried out by all partners through their company social media accounts (LinkedIn, Twitter, Facebook, etc.)

The table shows that information on the FLEXIGRID project developments and its results are being published and disseminated by the project partners through different social media channels. As the Dissemination and communication plan (M18) stated, all of the partners are more than welcome and invited to share and promote FLEXIGRID via press and social media using whether their personal or professional account. The posts in social media were encouraged to include the hashtag #FLEXIGRIDproject or #FLEXIGRID.

PARTNER	DISSEMINATION ACTIVITY			SPECIFICATIONS	DATE	LINK	STAKEHOLDERS REACHED
LINKS	Partner channel	social media		Post about project launch event	30/09/2019	https://twitter.com/LinksFoundation/status/1189535446604357632	1135
CIRCE	Partner channel	social media		Post about project launch event	04/11/2019	https://www.linkedin.com/feed/update/urn:li:activity:6597109340887486464/	5081
CIRCE	Partner channel	social media		Post about project launch event	04/11/2019	https://www.facebook.com/fcirce/posts/3015791325102157	220

CIRCE	Partner channel	social media	Post about project launch event	04/11/2019	https://twitter.com/fCIRCE/status/1191347605902675968	1490
VERD	Partner channel	social media	Post about project launch	04/12/2019	https://www.linkedin.com/posts/eelinverd-%CF%84-%CE%B1-%CE%BD%CE%B5-%CE%B1-%CE%BC%CE%B1-%CF%83-%CE%B5%CE%BB-%CE%B9%CE%BD-verd-activity-6607984814270357504-I50Q	585
LINKS	Partner channel	social media	Project opening occasion	05/11/2019	https://twitter.com/LinksFoundation/status/118953544604357632	1416
VIESGO	Partner channel	social media	Thread about start of the project	07/11/2019	https://twitter.com/Viesgo_ES/status/1192419766201401350?s=20	-
CIRCE	Partner channel	social media	Post about the conference at BRIDGE	12/02/2020	https://www.linkedin.com/feed/update/urn:li:activity:6633359244613820416/	3221
CIRCE	Partner channel	social media	Post about the conference at BRIDGE	12/02/2020	https://twitter.com/fCIRCE/status/122760922984400769	1837
CIRCE	Partner channel	social media	Post about the conference at BRIDGE	12/02/2020	https://www.facebook.com/fcirce/posts/325176210150577	223
CIRCE	Partner channel	social media	Post about the conference at BRIDGE	09/03/2020	https://www.linkedin.com/feed/update/urn:li:activity:6642758418652377088/	2556
CIRCE	Partner channel	social media	Post about the conference at BRIDGE	09/03/2020	https://twitter.com/fCIRCE/status/1236996100596412428	792

CIRCE	Partner channel	social media	Post about the conference at BRIDGE	09/03/2020	https://www.facebook.com/fcirce/posts/3311735998841020	139
CIRCE	Partner channel	social media	Brazil conference	22/05/2020	https://twitter.com/fCIRCE/status/1263800808996552705	194
CIRCE	Partner channel	social media	Brazil conference	22/05/2020	https://www.linkedin.com/feed/update/urn:li:activity:6669560724848701440/	1456
CIRCE	Partner channel	social media	Brazil conference	22/05/2020	https://www.facebook.com/fcirce/photos/a.676324879048825/3499969530017665/?type=3&theater	9
CIRCE	Partner channel	social media	Brazil post-conference	11/06/2020	https://www.linkedin.com/feed/update/urn:li:activity:6676813504764243969	134
CIRCE	Partner channel	social media	Brazil post-conference	11/06/2020	https://www.facebook.com/fcirce/posts/355388249462636	573
CIRCE	Partner channel	social media	Brazil post-conference	11/06/2020	https://twitter.com/fCIRCE/status/1271048180600385536	461
ATOS	Partner channel	social media	Video explaining project's objectives	02/07/2020	https://www.youtube.com/watch?v=oJjZQjOdDSE	251
CIRCE	Partner channel	social media	Post about "Noticia Heraldo de Aragón sobre #FLEXIGRID, un proyecto coordinado por CIRCE"	21/12/2020	https://www.linkedin.com/feed/update/urn:li:activity:6746770441915912192	3200
CIRCE	Partner channel	social media	Post about "Noticia Heraldo de Aragón sobre #FLEXIGRID, un proyecto coordinado por CIRCE"	21/12/2020	https://www.facebook.com/fcirce/posts/4136577849690160	350

CIRCE	Partner channel	social media	Post about "Noticia Heraldo de Aragón sobre #FLEXIGRID, un proyecto coordinado por CIRCE"	21/12/2020	https://twitter.com/fCIRCE/status/1341005012265263105	576
VIESGO	Partner channel	social media	Post about Stakeholders Event	26/03/2021	https://www.facebook.com/ViesgoLaEnergiadelasCasas/posts/2259690167496373	-
VIESGO	Partner channel	social media	Post about Stakeholders Event	26/03/2021	https://twitter.com/Viesgo_ES/status/1375355979085254657	-
VIESGO	Partner channel	social media	Post about Stakeholders Event	26/03/2021	https://www.linkedin.com/feed/update/urn:li:activity:6781121602110156800	-

Table 3. Social media dissemination activities

3.3. Press dissemination activities

The table below sums up the different articles and publications that have been made through different press media, such as printed newspapers, digital newspapers, radio programs, magazines, among others, activities made by different partners throughout the project.

During the first period of the project, a total of 5 press releases on newspapers, 12 articles have been published in specialized magazines, 5 news in a partners' website and official website and 1 radio interview about FLEXIGRID Project and the organization of a workshop have been carried out.

PARTNER	DISSEMINATION ACTIVITY	SPECIFICATIONS	DATE	LINK	STAKEHOLDERS REACHED
CIRCE	Official Press release	Launch of the first press release of the project in the framework of the Kick-Off	09/09/2019	https://www.intemprendadoras.net/Energia/Articulos/252921-Flexigrid-Interpreta-desarrollaran-soluciones-innovadoras-materia-Smart-Grids-mejorar.html	150
CIRCE	Official Press release	Post about project	04/10/2019	https://www.smartgridsinfo.es/2019/10/04/flexigrid-nuevo-proyecto-europeo/	-

CIRCE	Official Press release	Launch of the first press release of the project in the framework of the Kick-Off	13/11/2019	http://www.flexigrid-h2020.eu/flexigrid-interoperable-solutions-for-implementing-flexibility-services-in-the-distribution-grid/	74
CAP	Own Press release	To announce the Kick-off of the project activities	13/11/2019	https://www.cap-energies.fr/wp-content/uploads/2019/11/2.0_pres_s_release_1_final_circe-cedec.pdf	-
VERD	Official Press release	Post about project	26/11/2019	https://www.energia.gr/article/161769/h-elin-verd-sto-eyropaiko-programma-flexigrid	12.000
VERD	Official Press release	Post about project	26/11/2019	https://energypress.gr/news/	26.000
VERD	Official Press release	Post about project	26/11/2019	https://energyup.gr/sto-programma-flexigrid-i-eteria-elin-verd/	300
VERD	Official Press release	Post about project	26/11/2019	https://www.arnaa.gr/home/article/410917/Summetochi-tis-Elin-Verd-se-eyropaiko-programma-anaptuxis-exupnon-energeiakon-sustimaton-FLEXIGRID	46.000
VERD	Official Press release	Post about project	26/11/2019	https://www.businessdaily.gr/epikh-eiriseis/5571-h-elin-verd-se-eyropaiko-programma-anaptuxis-exupnon-energeiakon-sustimaton	43.500
VERD	Official Press release	Post about project	26/11/2019	https://polytechnikanea.gr/	738

VERD	Official Press release	Post about project	26/11/2019	https://bizness.gr/symmetochi-tis-elin-verd-se-eyropaiko-programma-anaptyxis-exynon-energeiakon-systimaton/	1132
VERD	Official Press release	Post about project	26/11/2019	http://portal.tee.gr/portal/page/portal/INFO_TEE/I_NFO_2019/11_19/NEWSLETTER2019126.pdf	2000
UNIZG-FER	Own press release	Post about project launch event	31/10/2019	https://www.fer.unizg.hr/zvne?@=2gsba#news_9149	-
UNIZG-FER	Own press release	Post about project launch event	15/10/2019	https://www.fer.unizg.hr/_download/repository/Glasnik_FER-a_listopad_2019.pdf	-
UNICAN	Own press release	News entry about launch event on CODDii	11/10/2019	https://coddii.org/la-universidad-de-cantabria-participa-en-el-proyecto-flexigrid-que-analiza-el-impacto-de-una-integracion-masiva-de-energias-renovables-sobre-la-red-electrica	-
ATOS	Own press release	Post about project	12/05/2020	https://atos.net/es/2020/comunicados-de-prensa-es_2020_05_12/atos-allana-el-camino-para-un-flujo-de-energia-flexible-y-sostenible-en-europa	288.060
ATOS	Own press release	Enabling flexibility for future distribution grid (Atos Global - Eng)	12/05/2020	https://atos.net/en/2020/press-release/general-press-releases_2020_05_12/atos-paves-the-way-for-flexible-and-sustainable-energy-flow-in-europe	288.060

ATOS	Official Press release	News entry about project	12/08/2020	https://www.elespanol.com/invertia/empresas/energia/20200811/flexigrid-proyecto-europeo-dara-fiabilidad-electrica-europea/512199432_0.html	17.640
ATOS	Official Press release	Newspaper article about project	28/10/2020	https://www.economiadehoy.es/atos-impulsa-el-proyecto-flexigrid-por-valor-de-8-millones-de-euros-para-aportar-fiabilidad-a-toda-la-red-electrica-europea	52.470
ATOS	Official Press release	Newspaper article about project	28/10/2020	http://unaenergia.es/proyecto-flexigrid-para-aportar-fiabilidad-a-toda-la-red-electrica-europea/	5010
ATOS	Official Press release	Newspaper article about project	28/10/2020	https://www.integradision.at/atos-promotes-the-flexigrid-project-worth-8-million-euros-to-leverage-the-fuse-platform-with-blockchain-technology/	200
ATOS	Official Press release	Newspaper article about project	28/10/2020	https://p.eprensa.com/tmp/GPS--_ATOS-20201028-larioja.com-innova-012-01-1603867053.54529.pdf	10
CIRCE	Official Press release	Newspaper article about project	17/12/2020	HERALDO_CIRCE_lidera_FLEXIGRID_para_avanzar_en_la_flexibilidad_de_la_red_2020.	2200
CIRCE	Official Press release	Podcast for radio program about project	24/03/2021	https://www.ivox.com/proyecto-europeo-flexigrid-d-samuel-borroy-audios-mp3_rf_67343452_1.html	44

Table 4. Press dissemination activities

3.4. Scientific Publications

This section shows the scientific publications that have been made about the FLEXIGRID project, those that have been published and those that are in process. It includes the authors, the title, date of publication or date of drafting, and if the information is available, the magazine, volume, page, and link to the publication.

PARTNER	DISSEMINATION ACTIVITY	SPECIFICATIONS	DATE	LINK
CIRCE and UNICAN	Scientific publication	"A. Laso; R. Martínez; M. Manana; D. Cervero; J.A. Sáez. A comparative between IEEE and EN in the transformer derating when supplying nonsinusoidal load current. A practical case. ICREPQ 2020 Granada (Spain). Volume 18."	02/09/2020	http://www.icrepq.com/icrepq20/487-20-laso.pdf
UNICAN	Scientific publication	"Bustamante, Sergio; Manana, Mario; Arroyo, Alberto; Martinez, Raquel; Laso, Alberto. A Methodology for the Calculation of Typical Gas Concentration Values and Sampling Intervals in the Power Transformers of a Distribution System Operator.Energies. volume 13. 2020. NO 22."	12/11/2020	https://www.mdpi.com/1996-1073/13/22/5891
UNICAN	Scientific publication	"Bustamante, Sergio; Manana, Mario; Arroyo, Alberto; Laso, Alberto; Martinez, Raquel. Determination of Transformer Oil Contamination from the OLTC Gases in the Power Transformers of a Distribution System Operator.Applied Sciences. Volume 10. 2020. NO 24."	13/12/2020	https://www.mdpi.com/2076-3417/10/24/8897

UNIZG-FER	Scientific publication	Martin Bollek and Tomislav Capuder, An analysis of optimal power flow based formulations regarding DSO-TSO flexibility provision, International Journal of Electrical Power and Energy Systems	26/04/2021	Waiting for approval
ZIV	Scientific publication	Analytics and Optimization Techniques on Feeder Identification in Smart Grids, L. Aranburu et al, IEEE EUROCON JULY 2021	08/07/2021	(http://eurocon2021.org/)
VERD/LINKS	Journal publication	VERD together with LINKS have submitted a journal publication which is currently under review entitled "Hybrid Forecast and Control Chain for Operation of Flexibility Assets in Micro-Grids" to the Journal "Energies"	23/08/2021	Under review

Table 5. Scientific publications of FLEXIGRID project

3.5. Events

The partners of the consortium have been participating, together or individually, in several conferences, events, fairs and meetings to promote the results and achievements of the project. Due to the pandemic, most of the event have been postponed or transferred to an online modality. Still, the Final Event of the project will be held through a conference where results will be explained. Moreover, in this final conference, the replication strategy beyond FLEXIGRID project and the real expectations concerning the new developed technologies and value chains will also be explained.

The final conference (including a webinar) will be organized in Brussel. Synergies with other EU funded projects and initiatives will be exploited to increase the outreach of potential stakeholders, organize joint events, exchange knowledge, experience and best practices, and stimulate discussions among key players, the scientific and industrial community.

Below is a table with specifics on the events that the partners have been present.

PARTNER	DISSEMINATION ACTIVITY	SPECIFICATIONS	DATE	LINK (IF APPLICABLE)	STEAKHOLDERS REACHED
IOSA	Take part in a event (conference, stand...)	Project presentation during the meeting with President of Hellenic Hotel Federation organised by the Greek National Tourist Organization at WTM 2019 LONDON	04/11/2019		7
IOSA	Take part in a event (conference, stand...)	Steering Committee Meeting organised by Greek Chamber of Hotels in Athens	22/11/2019		25
CIRCE	Take part in a event (conference, stand...)	The project presents at the annual meeting of BRIDGE H2020 organised by the European Commission	02/02/2020		-
CIRCE	Take part in a event (conference, stand...)	The FLEXIGRID project has contributed to strengthen the scientific collaboration between EU and Brazil through its participation in the conference 'Fostering STI twinning activities between EU and Brazil',	22/05/2020	https://confap.org g.br/news/cientis tas-e- autoridades-se- reunem-em- conferencia- online-e- reforcam-a- cooperacao- cientifica-entre- brasil-e-uniao- europeia/	150
CIRCE	Take part in a event (conference, stand...)	Presentation the project at Brazil - EU Cooperation in Research and Innovation	22/05/2020		-
IOSA	Take part in a event (conference, stand...)	General Assembly organised by Kavala Hotel Association in Kavala	21/01/2020		7
IOSA	Take part in a event (conference, stand...)	Meeting with General Secretary GNTO organised by Greek National Tourist Organization in TEL AVIV ISRAEL	13/02/2020		5
IOSA	Take part in a event (conference, stand...)	Meeting with Director of GNTO Office Romania organised by Greek National Tourist Organization at ROMANIAN TOURISM FAIR	20/02/2020		-

UNIZG-FER	Take part in a event (conference, stand...)	Presented FLEXIGRID in the Interreg PROSPECT2030 project workshop.	17/12/2020	https://www.interreg-central.eu/Content.Node/PROSPEC/T2030/PPL-sessions-schedule.html	160
VERD	Dissemination activities with stakeholders	Bilateral conversation with the Greek municipality of Kifissia - we communicated FLEXIGRID project to them and engaged them to participate in the european commission event as external stakeholders	16/03/2021	-	-
VERD	Take part in a event (conference, stand...)	Participated in the stakeholders + european commission event (online) to present the Greek demo site	26/03/2021	-	-
UNICAN	Take part in a event (conference, stand...)	Participated in the stakeholders + european commission event (online) to present the Spanish demo site	26/03/2021	-	-
UNICAN	Take part in a event (conference, stand...)	Participated in the European Researchers Night	27/03/2021	-	-
IOSA	Take part in a event (conference, stand...)	Meeting with the Municipality of Kavala, we comminicaate Flexigrid project and encourage them to participate in future actions	14/04/2021	-	-
IOSA	Take part in a event (conference, stand...)	Meeting with the Municipality of Naoussa and its tourism sector, we comminicaate Flexigrid project and encourage them to participate in future actions	20/05/2021	-	-
VIESGO	Take part in a event (conference, stand...)	Participated in the stakeholders + european commission event (online) to present the Spanish demo site	26/03/2021	http://www.flexigrid-h2020.eu/more-than-50-experts-in-smart-grids-gather-at-a-stakeholder-	50

[event-organized-by-flexigrid/](#)

event-organized-by-flexigrid/				
HYPERTECH	Take part in a event (conference, stand...)	Participated in the stakeholders + european commission event (online) to present the Greek demo site	26/03/2021	http://www.flexigrid-h2020.eu/more-than-50-experts-in-smart-grids-gather-at-a-stakeholder-event-organized-by-flexigrid/ 50
UNIZG-FER	Using FLEXIGRID presentation at events	FLEXIGRID RRI event organised by UNIZG-FER within t2.4	26/05/2021	http://www.flexigrid-h2020.eu/flexigrid-virtual-panel 42
HEP-ODS	Take part in a event (conference, stand...)	FLEXIGRID RRI event organised by UNIZG-FER and HEP-ODS within t2.4	26/05/2021	http://www.flexigrid-h2020.eu/flexigrid-virtual-panel 42
UNICAN + others partners	Take part in a event (conference, stand...)	Participated in POWERTECH 2021 to present the Spanish demo site	29/06/2021	https://www.powertech2021.com/index.php/program-powertech/ -

Table 6. FLEXIGRID related events

4. DISSEMINATION AND COMMUNICATION MATERIALS

4.1. FLEXIGRID poster

To promote the FLEXIGRID project to a wider audience, a trifold in English was produced in 2020. The poster includes a description of the project, budget, duration, number of partners, main goal, solutions, use cases and demo sites with title and brief description, the overall methodology of the project, as well as a list of the partners involved.

The poster can be distributed in the premises of the FLEXIGRID partners, during conferences, workshops as well as shows and is also distributed to internal staff, visitors, partners, and clients. The poster was distributed during 2019 but as limited events have taken place in 2020 the poster has not been used as much as expected in printed format.

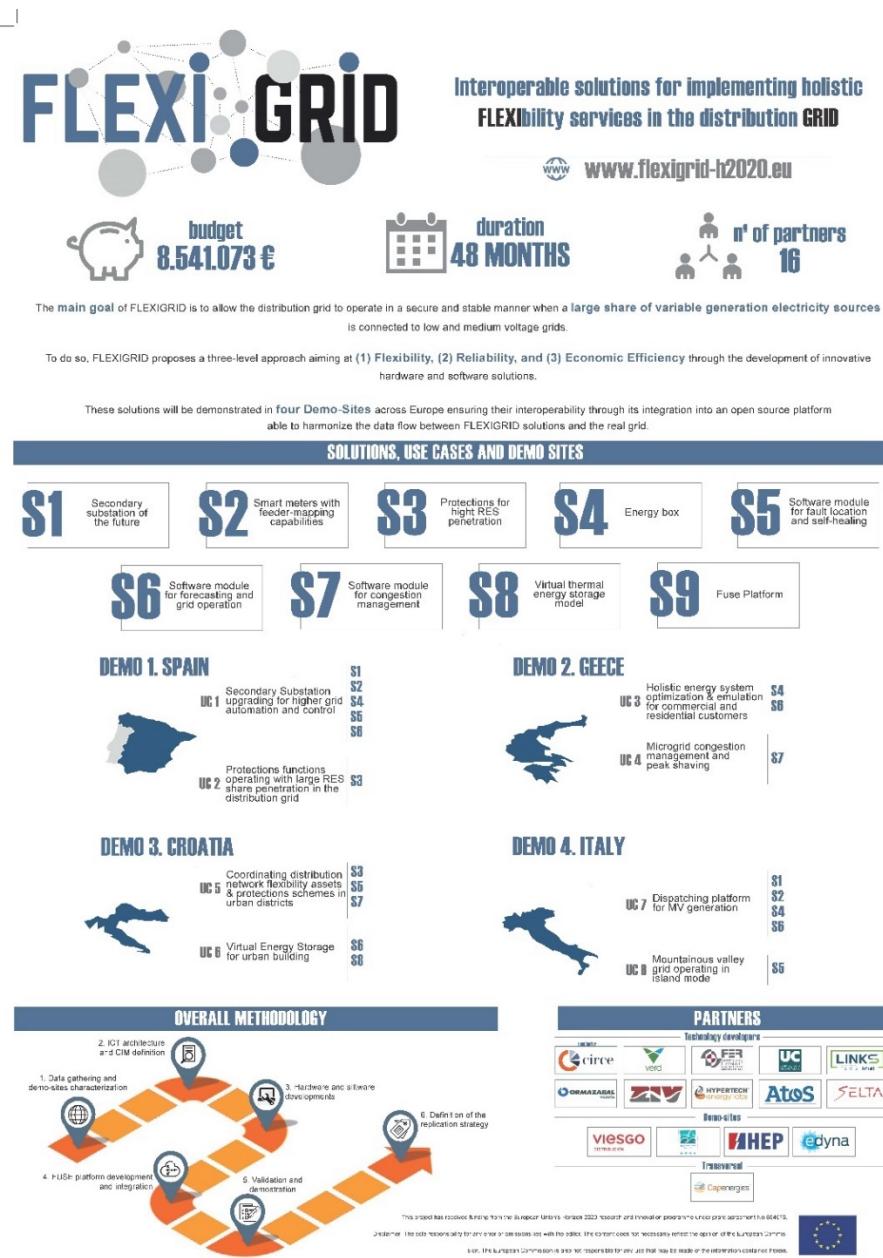


Figure 10. FLEXIGRID information poster

4.2. Presentation of FLEXIGRID objectives and impacts

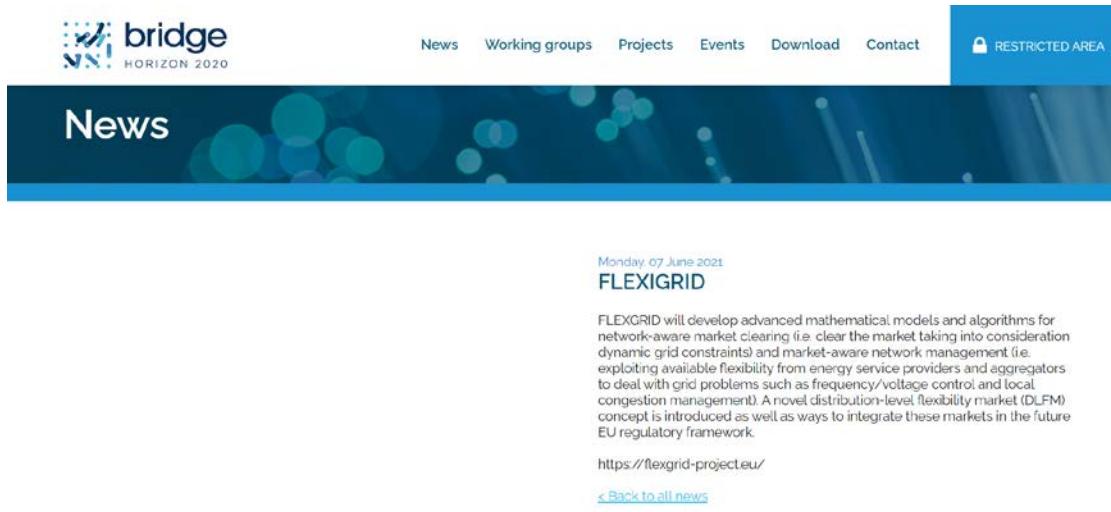
A PowerPoint presentation was made as a communication material to be distributed among all partners so they can use it in their presentation of the project to third parties, possible project clients and/or events where FLEXIGRID is being presented or discussed.

It consist of 5 slides that present and details FLEXIGRID general objective and main goal, how this objective will be approached, project's specific goals and the expected results/impact. The presentation is available in the Annex of this document.

5. SYNERGY WITH BRIDGE

FLEXIGRID project is making connections and having communication with other EU projects related to smart grids that are participating in BRIDGE, creating synergy with these projects, establishing cluster participation in events and publications, and promoting the potential of the project through dissemination activities.

During the first project period, FLEXIGRID has been presented at a BRIDGE physical event held in Brussels in 2020 by Samuel Borroy from CIRCE, where synergies and interaction with other projects of the same theme are guaranteed. A description of the project, including technical information, was also published in the official BRIDGE brochure, issued in June 2020.



The screenshot shows the BRIDGE HORIZON 2020 website. At the top, there is a navigation bar with links for News, Working groups, Projects, Events, Download, and Contact. To the right of the navigation bar is a blue button labeled "RESTRICTED AREA" with a lock icon. Below the navigation bar, there is a banner with the word "News" and a blue background with abstract shapes. The main content area displays a news article titled "Monday, 07 June 2021 FLEXIGRID". The article text discusses the development of advanced mathematical models and algorithms for network-aware market clearing and market-aware network management. It also mentions the introduction of a novel distribution-level flexibility market (DLFM) concept. Below the article text is a link to the project website: <https://flexgrid-project.eu/>. At the bottom of the news article, there is a link to "Back to all news".

Figure 11. FLEXIGRID information on BRIDGE's website June 2021

6. NEXT STEPS

In the short-term only virtual events are foreseen as the COVID-19 pandemic does not allow the organization of any physical dissemination action.

FLEXIGRID project will be presented in the ENLIT Europe through a video for their next event in Milan, Italy on November 30th - December 2nd, 2021. The project general information is already being displayed on their website.



Figure 12. FLEXIGRID information on ENLIT exhibitor's website

FLEXIGRID partners are gathering materials for the video that will be presented at ENLIT event.

Demonstration events and 4 workshops with in-person participation and agenda are expected to take place from 2022 onwards when sanitary restrictions will have been lifted, one in each of the cities with a demonstrator.

The aim is to disseminate the project results, mobilize stakeholders and establish deep ties with relevant platforms, networks, associations and other related projects. Moreover, key partners will present the project in at least 2 main national and European events related to Island issues.

At the conclusion of the project, the consortium will organize a conference where results will be explained. Moreover, in this final conference, the replication strategy beyond FLEXIGRID project and the real expectations concerning the new developed technologies and value chains will also be explained.

The final conference (including a webinar) will be organized in Brussel for 2023. Synergies with other EU funded projects and initiatives will be exploited to increase the outreach of potential stakeholders, organize joint events, exchange knowledge, experience and best practices, and stimulate discussions among key players, the scientific and industrial community.

7. CONCLUSIONS

The mid-term Dissemination and Communication Report presented the actions taken in the first half of FLEXIGRID to increase the visibility of the project outputs within the consortium and to external audiences.

The project partners have promoted FLEXIGRID through several channels:

- Website
- Social media
- Web and press articles and interviews
- Scientific/conference papers and posters
- Press kit
- EU and local events, conferences and panels
- Webinars
- Interaction with BRIDGE initiative

Due to COVID-19 the majority of actions were realized within a virtual context and therefore the Dissemination and Communication Plan had to adapt to the new conditions.

Citizen engagement activities require physical interaction which cannot be ensured before 2022. However, the FLEXIGRID consortium will work on the best alternative solutions.

FLEXIGRID partners keep an on-going work on updating the dissemination of news and results of the project, evaluating future collaborations with the media and keeping the website of the project updated with the new dissemination material that is being created. A final Dissemination and Communication Report will be published in the end of the project in M48.

8. ANNEX

8.1. Images of the dissemination and communication activities

8.1.1. Website

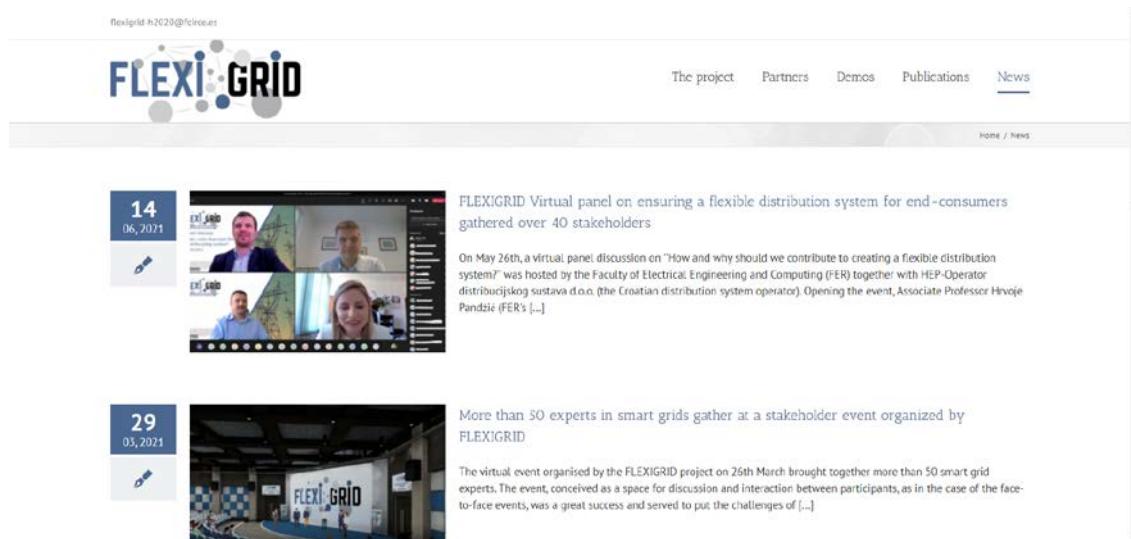


Figure 13. News page on FLEXIGRID website

The screenshot shows the CIRCE website's project information page for FLEXIGRID. At the top, there is a dark header with the word 'CONTACTO' and the CIRCE logo. Below the header, the project title 'FLEXIGRID - Interoperable solutions for implementing holistic FLEXIbility services in the distribution GRID' is displayed in large blue text. To the right of the title is the FLEXIGRID logo. Below the title, there is a list of project details with icons: a calendar for 'Fechas: Octubre 2019 – Septiembre 2023', a globe for 'Web del proyecto: <http://www.flexigrid-h2020.eu/>', a person icon for 'Lider: CIRCE', a checkmark for 'Grant agreement number: 864579', and a building icon for 'Entidad financiadora'. At the bottom left is the European Commission logo, and at the bottom right is a logo for 'Project Manager'.

Figure 14. FLEXIGRID project information on CIRCE's website



FLEXI:GRID
INTEROPERABLE SOLUTIONS FOR IMPLEMENTING INTEGRATED
FLEXIBILITY SERVICES IN THE DISTRIBUTION GRID

Objectives and impacts

CIRCE

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 814879.
Disclaimer: The sole responsibility for any error or omission lies with the editor. The content does not necessarily reflect the opinion of the European Commission. The European Commission is also not responsible for any use that may be made of the information contained herein.

Project's OBJECTIVES



The main goal of FLEXIGRID is to allow the distribution grid to operate in a secure and stable manner when a large share of variable generation electricity sources is connected to low and medium voltage grids.

To do so, FLEXIGRID proposes a three-level approach aiming at (1) Flexibility, (2) Reliability, and (3) Economic Efficiency through the development of innovative hardware and software solutions.

These solutions will be demonstrated in four Demo-Sites across Europe ensuring their interoperability through their integration into an open source platform able to harmonize the data flow between FLEXIGRID solutions and the real grid.

Project's OBJECTIVES

FLEXIGRID Specific Goals



✓ **Goal 1:** To improve the power system flexibility, enhancing the grid hosting capacity of RES through DR, P2X, storage of electricity and variable generation towards the energy network decarbonization

✓ **Goal 2:** To increase the observability, controllability and automation of the network systems for the improvement of both the security and resilience of the grid

✓ **Goal 3:** To mitigate short-term and long-term congestions in the distribution grid from an economic efficient point of view thus reducing the cost of the European energy transition

✓ **Goal 4:** To ensure the interoperability and compatibility of the developed solutions with the different platforms used by the European DSOs guaranteeing a proper and secure data management

Project's OBJECTIVES

FLEXIGRID Specific Goals

- ✓ **Goal 5:** To carry out a complete demonstration program up to TRL 8 in four different demo-sites, obtaining reliable results on its replicability and ensuring its attractiveness for European stakeholders
- ✓ **Goal 6:** To identify and analyze the **needs** and **shortfalls** of the distribution grid as well as the obstacles to innovation under the current local and international context and regulation framework
- ✓ **Goal 7:** To raise awareness among **citizens** and other relevant stakeholders of the transition towards a **low carbon economy** considering them as **active players** in the energy system
- ✓ **Goal 8:** To ensure the **exploitation** of the project results by developing a corresponding **business plan** as well as their **dissemination** by exchanging knowledge with other projects under the BRIDGE initiative

EXPECTED RESULTS/IMPACTS

- ✓ Improved **stability** and **flexibility**, reduction of **SAIDI** and **SAIFI**;
- ✓ **Curtailment decrease** thanks to the improvement of the **observability** and **control** over the grid;
- ✓ **Reduction of the reinforcement** of interconnections and **investments** needed to maintain the quality and stability of the grid;
- ✓ Improve the capability to manage **future energy loads**;
- ✓ **CO₂ emissions savings** due to the larger penetration of share RES, contributing to the 2030 Climate-Energy objectives.

Figure 15. FLEXIGRID's objectives and impacts presentation

8.1.2. Social Media

Publicaciones | Publicado por | Fecha de publicación | Ordenar por | Sector del autor | Todos los filtros

Fundación CIRCE
8,1 mil seguidores
1 mes •

...resultados. ❤️ Tanto la industria como el mundo académico son bienvenidos para reforzar su colaboración y liderar la innovación en el mundo de la energía.

Fundación CIRCE
8,1 mil seguidores
4 meses •

...total consumida) significa que más del 50% de la electricidad se generará a partir de RES, la mayoría de la cual estará conectada a las redes de MT y BT.

Fundación CIRCE
8,142 seguidores
1 mes •

⚡ #PowerTech21 es el Congreso principal de la IEEE Power & Energy Society (PES) en Europa y proporciona un foro para que los investigadores e ingenieros relacionados con la energía eléctrica y la ingeniería energética comparten ideas y resultados.

💡 Tanto la industria como el mundo académico son bienvenidos para reforzar su colaboración y liderar la innovación en el mundo de la energía.

💡 #FLEXIGRIDproject y #FARCOSSproject, dos de nuestros proyectos, están presentes durante estos días en el congreso.

💡 ¿Quieres saber cuándo?

💡 Special Session – European Projects: <https://lnkd.in/dUTEzXx>

💡 FLEXIGRID (EP02): martes 29 de junio de 10:30 a 12:00

💡 FARCOSS (EP03): miércoles 30 de junio de 10:30 a 12:00

💡 Tutorials (TT02): <https://lnkd.in/dWf.KNy>

💡 Miércoles 30 de junio de 09:30 a 12:00

Figure 16. Posts on LinkedIn with FLEXIGRID's official hashtags



Figure 17. Posts on Twitter with FLEXIGRID's official hashtags



Figure 18. FLEXIGRID posts on Facebook

8.1.3. Press


[INICIO](#) SMART GRIDS GENERACIÓN TRANSPORTE / DISTRIBUCIÓN CONSUMO ALMACENAMIENTO >SERVICIOS GUÍA EMPRESAS

[Inicio](#) > Transporte Distribución - Flexigrid, nuevo proyecto europeo para mejorar la red de distribución ante el aumento de generación renovable

SÍGUENOS:

BUSCADOR

Buscar en el sitio ...

Flexigrid, nuevo proyecto europeo para mejorar la red de distribución ante el aumento de generación renovable

Publicado: 04/10/2019



El proyecto europeo Flexigrid, que acaba de arrancar, permitirá analizar el impacto que una generación renovable masivamente distribuida tendría sobre la red de distribución en escenarios semiurbanos y rurales. 'Interoperable solutions for implementing holistic FLEXibility services in the distribution GRID (Flexigrid) es un proyecto financiado dentro de la convocatoria 'Energía segura, limpia y eficiente' del programa H2020 de la Unión Europea, con un presupuesto cercano a los 7 millones de euros, que tendrá una duración de 48 meses.

Figure 19. Digital press release

Spring 2021 European Energy Innovation
COMMUNICATION


21

FLEXIGRID

Preparing the electricity grid for the increase in renewable generation

Making the grid more flexible, reliable and cost-efficient through the development of innovative solutions. This is the objective of FLEXIGRID European Project, led by the technology centre CIRCE from Spain and 8 million funded by the European Commission.

The project is putting into practice new tools to allow the distribution grid to operate in a secure and stable manner when a large share of variable renewable electricity sources is connected to low and medium voltage grids.

Concretely, the consortium of 16 partners that make up FLEXIGRID are working on the development of innovative hardware and software solutions to improve the power system flexibility by enhancing the grid hosting capacity of renewables; to increase the observability, controllability and automation of the network systems for the improvement of both the security and resilience of the grid; to mitigate short-term and long-term congestions in the distributed grid from an economically efficient point of view; and to ensure the interoperability and compatibility of the developed solutions with different platforms used by European DSOs.

To achieve these goals, FLEXIGRID is developing four hardware solutions, including the design of transformer substations of the future, a new generation of smart meters, new grid protection devices and a multi-function Edge-computing platform capable of controlling grid assets called Energy Box. In addition, the project is developing four additional software modules



addressing fault location, selfhealing, forecasting, operation and congestion management of the grid, and optimisation of thermal energy storage. Finally, a common platform including all the necessary protocols and standards to integrate the mentioned solutions with the DSOs platforms is being developed.

In order to ensure the effectiveness of these solutions, FLEXIGRID is implementing them in eight use cases which are being demonstrated in four demo-sites: a rural and peri-urban network in the Spanish grid, a hotel in the Greek island of Thassos; an urban grid in the city of Zagreb accounting congested areas and an isolated valley in the South Tyrol region of Italy with more than 50% of hydroelectric energy.

Moreover, the project will help to

identify and analysing, through constant monitoring of the legislation, the obstacles to innovation under the current local and European regulatory framework. Last but not least, FLEXIGRID partners wish to raise awareness among citizens and other relevant stakeholders on the transition towards a low carbon economy, considering them as active players within the energy system.

The main impacts expected as a consequence of the implementation of the solutions developed and tested in FLEXIGRID Project are: improvements in stability and flexibility of distribution networks; renewable energies curtailments decreasing; reduction of reinforcements required in the grids; increase in capabilities to manage future energy loads and CO₂ emission savings. ●

www.europeanenergyinnovation.eu

Figure 20. Communication of FLEXIGRID on the European Energy Innovation website



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Framework Programme of the
European Union



13 November 2019, Brussels

PRESS RELEASE

Flexigrid:

Interoperable solutions for implementing flexibility services in the distribution grid.

In order to reach the Paris Agreement objectives and achieve a more sustainable energy system, the EU is aiming at increasing up to at least 32% the share of renewables in energy consumption. At this purpose FLEXIGRID project will develop a set of solutions to address, under a cost-efficient basis, the challenges for reliability, stability and security of supply that the electricity grid is expected to face as a result of the increasing share of variable renewables in the energy system.

Last 30th and 31st October, Zaragoza (Spain) hosted the kick off meeting of FLEXIGRID, an innovation action project funded by EU's Horizon 2020, which brings together a consortium of 16 partners, led by CIRCE, representing the whole energy value chain. Two RTOs (CIRCE and LINKS) and two universities (UNICAN and UNIZG-FER) will work together with five technology providers, counting three large companies (ATOS, ORMAZABAL and ZIV) and two SMEs (HYPERTECH and SELTA) to develop innovative solutions and deploy them in four demo sites, represented by three DSOs (VIESGO, HEP-ODS, EDYNA) and two large companies (VERD, IOSA). Finally, two associations (CAP and CEDEC) will ensure the exploitation and dissemination of the project results within the European energy community. FLEXIGRID will last 48 months and has allocated a total budget of 8.54 Million Euros.

The project aims at putting into practice new tools to allow the distribution grid to operate in a secure and stable manner when a large share of variable renewable electricity sources is connected to low and medium voltage grids. Concretely, through the development of innovative hardware and software solutions partners will seek to

- to increase the observability, controllability and automation of the network systems for the improvement of both the security and resilience of the grid
- to mitigate short-term and long-term congestions in the distributed grid from an economically efficient point of view
- and to ensure the interoperability and compatibility of the developed solutions with different platforms used by European DSOs.

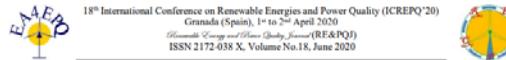
These solutions will be implemented in eight use cases which will be demonstrated in four demo-sites: a rural and peri-urban network in the Spanish grid, a hotel in the Greek Island of Thassos; an urban grid in the city of Zagreb accounting congested areas and an isolated valley in the South-Tyrol region of Italy with more than 50% of hydroelectric energy. Moreover, the project will help identifying and analysing, through a constant monitoring of the legislation, the obstacles to innovation under the current local and European regulatory framework. Last but not least, FLEXIGRID partners wish to raise awareness among citizens and other relevant stakeholders on the transition towards a low carbon economy, considering them as active players within the energy system.

The ultimate goal of the FLEXIGRID project is to develop new innovative, scalable and cost-efficient solutions to contribute to the reduction of CO₂ emissions and to the 2030 EU climate objectives.



Figure 21. Press release for CEDEC, the European Federation of Local Energy Companies

8.1.4. Scientific publications



A comparative between IEEE and EN in the transformer derating when supplying nonsinusoidal load current. A practical case.

A. Laso¹, R. Martínez^{1*}, M. Manana¹, D. Cervero² and J.A. Sáez³

¹ Advanced Electro-Energetic Technologies Group
Department of Electrical and Energy Engineering
University of Cantabria
Av. Los Castros, 39005 Santander (Spain)
e-mail: martinezr@unican.es

² CIRCE Foundation
Parque Empresarial Dinamiza, Ave. Ranillas 3D, 1st Floor
50018 Zaragoza (Spain)
Phone number: +0034 976 976 859

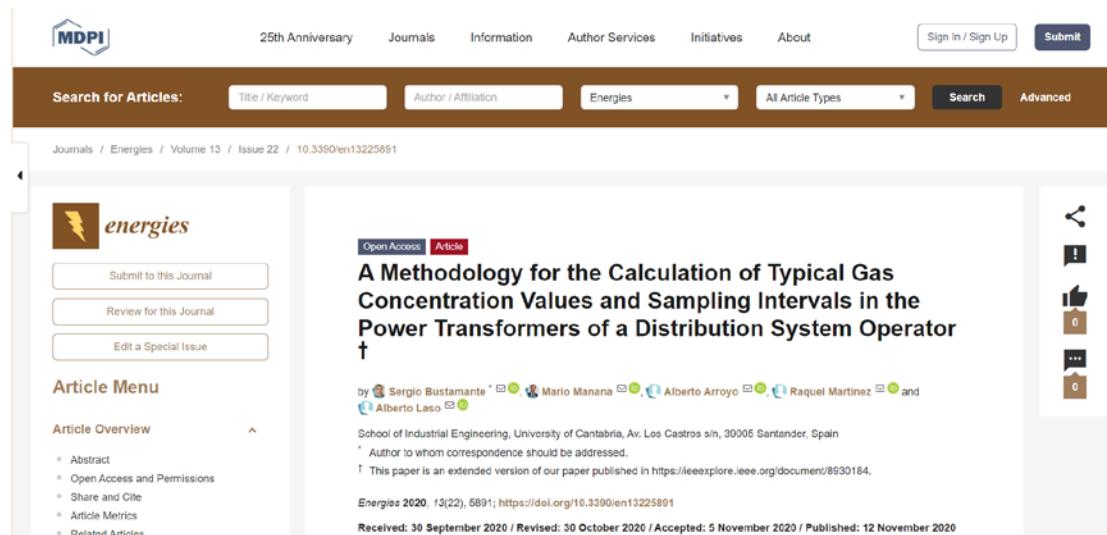
³ Viesgo Distribución Eléctrica S.L.
C/Isabel Torres, 25
39011 Santander (Spain)

Abstract. Nowadays, power quality is a challenge for the distribution companies since the new energy policies are directed to a distributed generation system with power electronic based technologies. The reduction of distribution transformers capability when supplying nonsinusoidal load currents has a major impact within capacity reduction in distribution networks produced by technical losses. IEEE Std C57.110-2018, EN. 50464-3 and EN-50541-2 define procedures to derate transformers when supplying nonsinusoidal load currents. The aim of this paper is to compare these procedures through a real case distribution transformer that suffers problems due to high levels of current distortion.

Key words. Distribution transformer derating, current harmonics, harmonic loss factor, k-factor, nonsinusoidal load currents.

these transformers operate with nonsinusoidal currents, for which are not designed. These nonsinusoidal currents are mainly produced by harmonics. The impact of these harmonics in distribution transformer is very important since increases the losses in the transformers rising their temperature. The losses of a transformer are divided into Joule losses, Eddy-current losses and stray losses. These losses and the type of cooling system will determine the temperature reached by the transformer.

In distribution transformer managing nonsinusoidal currents, Eddy-current losses will increase, producing an additional temperature rise. If this temperature achieve values above operation maximum temperature of the transformer, the thermal protection devices will trip and the life expectancy will be reduced.



The screenshot shows the MDPI Energies journal article page. The article title is "A Methodology for the Calculation of Typical Gas Concentration Values and Sampling Intervals in the Power Transformers of a Distribution System Operator". It is an Open Access Article. The authors listed are Sergio Bustamante, Mario Manana, Alberto Arroyo, Raquel Martinez, and Alberto Laso. The article was published in Energies 2020, 13(22), 6891. The page includes a sidebar with article menu options like "Article Overview", "Abstract", "Open Access and Permissions", "Share and Cite", "Article Metrics", and "Related Articles". There are also social sharing icons for LinkedIn, Facebook, Twitter, and Google+.

Figure 22. Scientific publications of results developed in FLEXIGRID

8.1.5. Events



Figure 23. Special session for the IEEE Power & Energy Society where FLEXIGRID project was presented

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Peer-to-peer learning sessions

MUTUAL LEARNING

continuously updated

We're sharing experiences and transferring knowledge! This page is dedicated to the peer to peer learning activities among project partners with similar characteristics that we're organising in order to deepen mechanisms and technicalities. Apart from the internal consortium knowledge, best practices or interesting cases will be selected in Central Europe and elsewhere, whenever useful, in order to bring external experience and increase the level of innovation in the project consortium.

Figure 24. Information about Interregional PROSPECT2030 project workshop where FLEXIGRID was presented