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

Project Synergies report – Month 24

Deliverable 9.9

WP9

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Approvals

	Company
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Task Leader	CIRCE
WP Leader	CIRCE

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2	17/09/2021	1st version	ATOS
3	30/09/2021	Final version	CIRCE

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
TF: Task Force
TP: Technical Partner
WP: Work Package
SME: Small and Medium Enterprise
DMP: Data Management Plan
H2020: Horizon 2020
WG: Working Group
USEF: Universal Smart Energy Framework

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EXECUTIVE SUMMARY

In the framework of WP9, this deliverable is the outcome of Task 9.3. *"Interaction and exploitation of synergies with BRIDGE and other projects/initiatives"*

The main goal of this document is to set the basis of the collaborations and interaction with the BRIDGE initiative and other relevant EU funded projects that share the same goal, to achieve a more flexible and profitable grid improving the operation of the distribution network.

This deliverable intends to provide evidence of the participation of FLEXIGRID project to the BRIDGE initiatives and meetings (2019-2020).

Meetings and activities with BRIDGE participants, and members of the Working Groups and Task Forces, are schedule during the project lifetime. The main objective is to collect and exchange information from other EU funded projects regarding demonstration in the grid flexibility thematic through the established working groups: Regulation, Business Models, Data Management and Customer Engagement.

From the beginning, FLEXGRID has stipulated the objectives, the tasks and the partners in charge, within the consortium, to carry out the said activities in order to achieve the WG´s objective and the final general objective of creating synergies with other European projects. Some of the responsibilities stablished were to participate actively in any related meetings, represent FLEXIGRID in the WGs and TFs and manage any request coming from represented WG/TF.

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1. INTRODUCTION

1.1 Scope and Objectives of Task

FLEXIGRID relies on the lessons learned from previous EU and national projects addressing the development of solutions that provide the network with the necessary capacity to cope with a large share of renewable generation Therefore, it will establish links with these projects to find synergies and collaboration opportunities, exchanging information and providing recommendations.

FLEXIGRID will make special efforts in exploiting the synergies with the BRIDGE project, so a specific task (Task 9.3) has been included in the dissemination WP for the analysis and exchange of information with this initiative as well as other of relevance for FLEXIGRID that should be taken into account in the development of the solutions.

The objective of the Task 9.3 *"Interaction and exploitation of synergies with BRIDGE and other projects/initiatives"* is to establish synergies with other projects and partners to present the project aim and to participate at internationals events and national forums of interest with the premise of disseminate the project results, mobilize potential stakeholders, to establish ties, organize or be part of joint events with them, exchange knowledge, experiences, and best practices. As well to be part of specific workshops organized on different locations across Europe, such as the events of IEE-PES Innovative Smart Grid Technologies Conference. All project partners will be encouraged to contribute to these targeted international events in order to integrate regional and national programs and initiatives and to allow other organizations, not directly participating in FLEXIGRID, to know about its objectives, evolution and conclusions.

Synergies with similar EU-funded projects through the BRIDGE initiative and other relevant EU funded projects 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. Additionally, those entities who will participate in the topic LC-SC3-ES-1-2019 will be invited to an event to identify the impacts of FLEXIGRID in future projects. Regarding EU forums, FLEXIGRID will take advantage of the relation of its partners with some of the existing associations and platforms where they have an active role; a list of them is provided in the dissemination section.

More specifically, within the frame of task T9.3 active participation in BRIDGE working groups and tasks forces will be accomplished with special focus on flexibility in the grid and energy storage.

FLEXIGRID has already been presented in the General Assembly of BRIDGE H2020 platform, chaired by the European Commission in Brussels. This served to reinforce the project position in Smart Grid and energy storage research.

The scope of this document is to resume the FLEXIGRID contributions delivered to BRIDGE and give evidence of the activities carried out so far.

2. INTERACTION WITH BRIDGE INITIATIVE

BRIDGE is a European Commission initiative which unites Horizon 2020 Smart Grid, Energy Storage, Islands, and Digitalisation Projects to create a structured view of cross-cutting issues which are encountered in the demonstration projects and may constitute an obstacle to innovation.

The BRIDGE process fosters continuous knowledge sharing amongst projects thus allowing them to deliver conclusions and recommendations about the future exploitation of the project results, with a single voice, through four different Working Groups representing the main areas of interest:

- Data Management
- Business Models
- Customer Engagement
- Regulations

These four permanent Working Groups oversee preparing reports and formulating recommendations for the European Commission on various themes linked to the future of the energy sector.

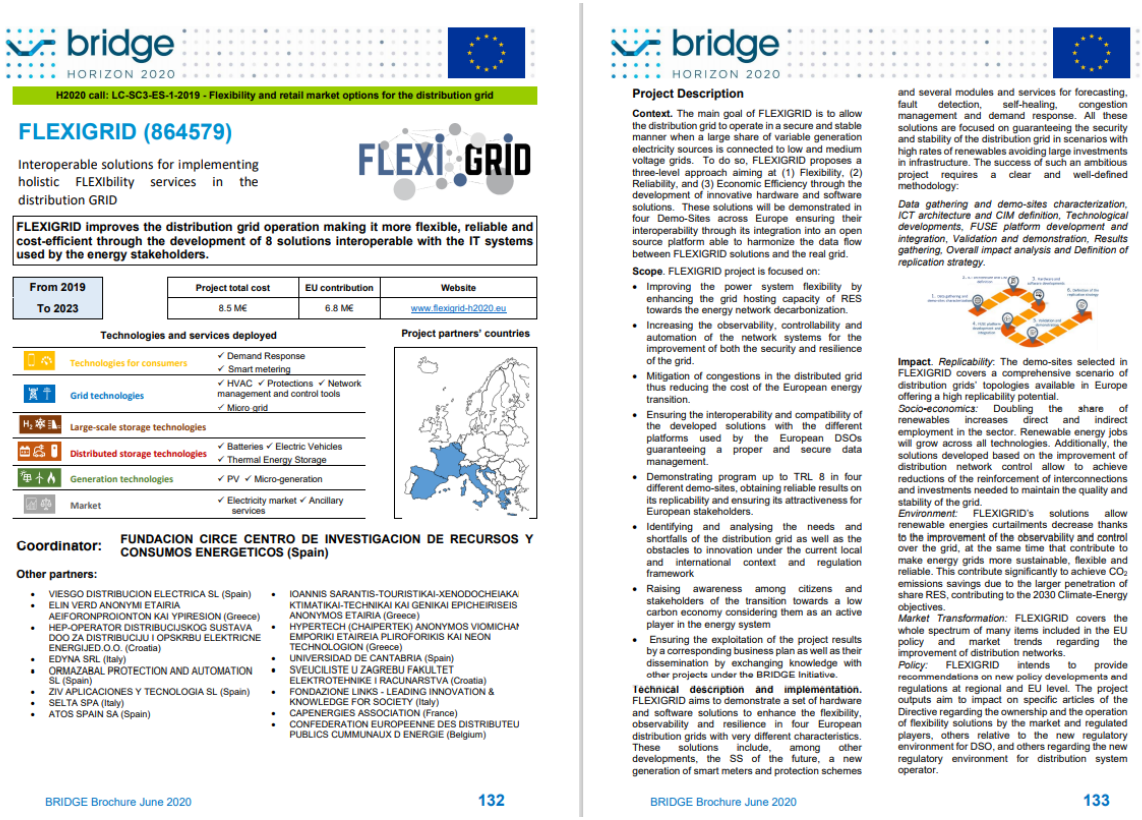
Three Task Forces have already been launched after the 2019 BRIDGE General Assembly, to work on specific topics: Energy Communities, Replicability/Scalability Analysis and Joint Communication.

Thanks to the proactive participation of FLEXIGRID partners such as UNIZG-FER, VERD, UNICAN, LINKS, ORMAZABAL, HEP-ODS, ATOS, HYPERTECH, ZIV and CIRCE, FLEXIGRID is duly represented in all of the Working Groups.

Further to this, as do all BRIDGE projects, FLEXIGRID participates in the BRIDGE R&I Challenges and Roadmap Definition, for the identification and definition of future EU R&I objectives and priorities in the framework of Smart Grid, Energy Storage, Islands, and Energy Digitalisation.

2.1 FLEXIGRID in the BRIDGE official documents

As reported in the GA, FLEXIGRID joined the BRIDGE Initiative and it has been included in the projects section on BRIDGE Website as well as in BRIDGE Brochure in its early 2020 updated version.



bridge HORIZON 2020

H2020 call: LC-SC3-ES-1-2019 - Flexibility and retail market options for the distribution grid

FLEXIGRID (864579)

Interoperable solutions for implementing holistic FLEXIbility services in the distribution GRID

FLEXIGRID improves the distribution grid operation making it more flexible, reliable and cost-efficient through the development of 8 solutions interoperable with the IT systems used by the energy stakeholders.

From 2019 To 2023	Project total cost	EU contribution	Website
	8.5 M€	6.8 M€	www.flexigrid-h2020.eu

Technologies and services deployed

Technologies for consumers	✓ Demand Response ✓ Smart metering
Grid technologies	✓ HVAC ✓ Protections ✓ Network management and control tools ✓ Micro-grid
Large-scale storage technologies	
Distributed storage technologies	✓ Batteries ✓ Electric Vehicles ✓ Thermal Energy Storage
Generation technologies	✓ PV ✓ Micro-generation
Market	✓ Electricity market ✓ Ancillary services

Project partners' countries

Coordinator: FUNDACION CIRCE CENTRO DE INVESTIGACION DE RECURSOS Y CONSUMOS ENERGETICOS (Spain)

Other partners:

- VIESGO DISTRIBUCION ELECTRICA SL (Spain)
- ELIN VERD ANONYMI ETAIRIA AEIFORONPRIOINTON KAI YPNRESION (Greece)
- HEP-OPERATOR DISTRIBUCIJSKOG SUSTAVA DOO ZA DISTRIBUCIJU I OPSKRBU ELEKTRICNE ENERGIJED.O.O. (Croatia)
- EDYNA SRL (Italy)
- ORMAZABAL PROTECTION AND AUTOMATION SL (Spain)
- ZIV APLICACIONES Y TECNOLOGIA SL (Spain)
- SELTA SPA (Italy)
- ATOS SPAIN SA (Spain)
- IOANNIS SARANTIS-TOURISTIKAI-XENODOCHEIAKA KTIMATIKAI-TECHNIKAI KAI GENIKAI EPICHEIRISEIS ANONYMOS ETAIRIA (Greece)
- HYPERTECH (CHAIPERTEK) ANONYMOS VIOMICHAI EMPORIKI ETAIREIA PLIROFORIKIS KAI NEON TECHNOLOGION (Greece)
- UNIVERSIDAD DE CANTABRIA (Spain)
- SVEUCILISTE U ZAGREBU FAKULTET ELEKTROTEHNIKE I RACUNARSTVA (Croatia)
- FONDAZIONE LINKS - LEADING INNOVATION & KNOWLEDGE FOR SOCIETY (Italy)
- CAPENERGIES ASSOCIATION (France)
- CONFEDERATION EUROPEENNE DES DISTRIBUTEU PUBLICS CUMMUNAUX D ENERGIE (Belgium)

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bridge HORIZON 2020

Project Description

Context. 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 its integration into an open source platform able to harmonize the data flow between FLEXIGRID solutions and the real grid.

Scope. FLEXIGRID project is focused on:

- Improving the power system flexibility by enhancing the grid hosting capacity of RES towards the energy network decarbonization.
- Increasing the observability, controllability and automation of the network systems for the improvement of both the security and resilience of the grid.
- Mitigation of congestions in the distributed grid thus reducing the cost of the European energy transition.
- Ensuring the interoperability and compatibility of the developed solutions with the different platforms used by the European DSOs guaranteeing a proper and secure data management.
- Demonstrating program up to TRL 8 in four different demo-sites, obtaining reliable results on its replicability and ensuring its attractiveness for European stakeholders.
- Identifying and analysing 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
- Raising awareness among citizens and stakeholders of the transition towards a low carbon economy considering them as an active player in the energy system
- Ensuring the exploitation of the project results by a corresponding business plan as well as their dissemination by exchanging knowledge with other projects under the BRIDGE Initiative.

Technical description and implementation. FLEXIGRID aims to demonstrate a set of hardware and software solutions to enhance the flexibility, observability and resilience in four European distribution grids with very different characteristics. These solutions include, among other developments, the SS of the future, a new generation of smart meters and protection schemes and several modules and services for forecasting, fault detection, self-healing, congestion management and demand response. All these solutions are focused on guaranteeing the security and stability of the distribution grid in scenarios with high rates of renewables avoiding large investments in infrastructure. The success of such an ambitious project requires a clear and well-defined methodology:

Data gathering and demo-sites characterization, ICT architecture and CIM definition, Technological developments, FUSE platform development and integration, Validation and demonstration, Results gathering, Overall impact analysis and Definition of replication strategy.

Impact. *Replicability:* The demo-sites selected in FLEXIGRID covers a comprehensive scenario of distribution grids' topologies available in Europe offering a high replicability potential.
Socio-economics: Doubling the share of renewables increases direct and indirect employment in the sector. Renewable energy jobs will grow across all technologies. Additionally, the solutions developed based on the improvement of distribution network control allow to achieve reductions of the reinforcement of interconnections and investments needed to maintain the quality and stability of the grid.
Environment: FLEXIGRID's solutions allow renewable energies curtailments decrease thanks to the improvement of the observability and control over the grid, at the same time that contribute to make energy grids more sustainable, flexible and reliable. This contribute significantly to achieve CO_2 emissions savings due to the larger penetration of share RES, contributing to the 2030 Climate-Energy objectives.
Market Transformation: FLEXIGRID covers the whole spectrum of many items included in the EU policy and market trends regarding the improvement of distribution networks.
Policy: FLEXIGRID intends to provide recommendations on new policy developments and regulations at regional and EU level. The project outputs aim to impact on specific articles of the Directive regarding the ownership and the operation of flexibility solutions by the market and regulated players, others relative to the new regulatory environment for DSO, and others regarding the new regulatory environment for distribution system operator.

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Figure 1. FLEXIGRID in the official BRIDGE brochure

2.2 FLEXIGRID participating in BRIDGE official events

On 11-12th February 2020, FLEXIGRID was officially presented by CIRCE during the annual BRIDGE General Assembly.

Mr Samuel Borroy presented the project using the Objectives and Impact presentation having the opportunity to present FLEXIGRID main goal, specific objectives and expected impact.

Figure 2. Presentation of FLEXIGRID in BRIDGE event

On the 12th FLEXIGRID's representative participated in the Parallel Session "Future R&I Priorities and BRIDGE Topics" and in the Parallel Session "TSO-DSO Cooperation#1 – Market Organisation" to discuss project experiences and policy impact or to discuss issues of joint interest for projects.

The Commission proposed the use of the USEF Taxonomy as a reference for TSO-DSO coordination projects in order to have a clearer picture of all the projects and classify them. EU

projects agreed to focus their efforts on the definition of operator's needs, standardization of services and products before opening the discussion on coordination schemes and market models. The participants agreed on this approach as otherwise solutions could be proposed which are not effective for network issues.

2.3 FLEXIGRID participating in BRIDGE WGs and TFs

FLEXIGRID partners share a tracking tool for BRIDGE related actions where all meetings, progress, presentation events, etc carried out by the partners involved are monitored by the working groups mentioned before.

Name Organisation	Name	Surname	Email address	Working group	Task Force	Activity attended [Date, Place]	Actions to be committed	Result / Comments

Figure 3. Header of the WGs monitoring tool

In addition, a specific tab in contact list file has been created including the partners involved in BRDIGE activities. For each Working Group or Task Force a representative has been defined whose responsibilities are:

- Represent FLEXIGRID project in WG/TF meetings.
- Manage the requests coming from represented WG/TF:
  - Receive the request from WG/TF (via email or meeting attendance).
  - Forward it to involved partners.
  - Collect the information needed from the project.
  - Consolidate received data.
  - Send the answer back to BRIDGE WG/TF leader or requestor.

Although BRIDGE activities management will be continuously improved, this initial solution led to a clearer picture of who does what when beneficiaries received BRIDGE requests.

For the proper execution of the objectives and responsibilities set forth above, a leader and a co-leader were defined, with the consensus and approval of all the consortium member partners, in the event that the leader for any eventuality is not available, to face the tasks and activities of the WGs and TFs.

The roles are as follows:

Final version		Main contact				Proxy			
		Name Organisation	Name	Surname	Email address	Name Organisation	Name	Surname	Email address
Working group (WG)	Data Management	LINKS	Hamidreza	Mirtaheri	hamidreza.mirtaheri@linksfoundation.com	ATOS	Medela	Arturo	arturo.medela@atos.net
	Business Models	CAP	Moreau	Laurine	laurine.moreau@capenergies.fr	CIRCE	Lostale	Aleida	alostale@fcirce.es
	Regulation	CIRCE	Borroy	Samuel	sborroy@fcirce.es	UNICAN	Laso	Alberto	lasoal@unican.es
	Customer Engagement	UNIZG-FER	Miletić	Marija	marija.miletic@fer.hr	HEP-ODS	Ostojic	Bernarda	bernarda.ostojic@hep.hr
Task Force (TF)	Energy Communities	HYPERTECH	Tsagkrasoulis	Dimosthenis	d.tsagkrasoulis@hypertech.gr	VERD	Efstratiadi	Marily	me@elinverd.gr
	Replicability & Scalability Analysis (SRA)	CIRCE	Rivas	David Miguel	dmrivas@fcirce.es	HYPERTECH	Tsagkrasoulis	Dimosthenis	d.tsagkrasoulis@hypertech.gr
	Joint Communication	*No responsible defined*				*No responsible defined*			
	Future R&I priorities	*No responsible defined*				*No responsible defined*			

Figure 4. Roles of the consortium for BRIDGE working groups and task forces

The main contact is the responsible person to perform the activities for the well execution of the groups, but the proxy must be aware of any activity in case its presence is necessary, so FLEXIGRID is always represented in every WG/TF meeting.

2.3.1 Achievements

General achievements for Task 9.3 *"Interaction and exploitation of synergies with BRIDGE and other projects/initiatives"*:

ACTIVITY	INVOLVED PARTNERS	OBTAINED RESULTS
The project presents at the annual meeting of BRIDGE H2020 organized by the European Commission	CIRCE	More than 1000 people reached on social media. The meeting was echoed by several digital newspapers. The project reinforced its position in research in Smart grids and energy storage.

Table 1. Task 9.3 general achievement

For the different BRIDGE working groups, FLEXIGRID partners have achieved the following results:

Regulation Working Group

ORGANIZATION NAME	TASK FORCE	ACTIVITY ATTENDED [DATE, PLACE]
UNICAN	Energy Communities & Self-consumption	Bridge Regulation WG survey (02/07/2020)
UNICAN	Energy Communities & Self-consumption	Demo site ID form (09/09/2020)
UNICAN	Energy Communities & Self-consumption	Regulation WG General Assembly (17/11/2020)
HYPERTECH	Energy Communities & Self-consumption	Contributed to the Regulation WG survey focusing on the topic of TSO/DSO product design, coordination models and market design by providing information relevant to the Hypertech solutions developed.
CIRCE	N/A	2021 Kick-off meeting [16/06/2021, online]

Table 2. Regulation WG activities

Business Model Working Group

ORGANIZATION NAME	TASK FORCE	ACTIVITY ATTENDED [DATE, PLACE]
VERD	Energy Communities & Self-consumption / Replicability & Scalability	Participation in the Bridge General Assembly (11-12/02/2020)
VERD, ZIV, HYPERTECH	Energy Communities & Self-consumption / Replicability & Scalability	Participation in the call "Bridge TF Replicability Scalability: launch of the next steps and call for volunteers" (22/04/2020, 15:00 – 17:00)
HYPERTECH	Energy Communities & Self-consumption / Replicability & Scalability	Provided detailed feedback on the Replicability and Scalability Survey 2020 (30/04/2020)
HYPERTECH	Energy Communities & Self-consumption / Replicability & Scalability	Attended the Energy Communities Task Force session on Day 1 of the BRIDGE General Assembly (02/03/2021)

ZIV	Energy Communities & Self-consumption / Replicability & Scalability	Participation in the call "RSA Task Force: general meeting" (11/09/2020)

Table 3. Business Model WG activities

Data Management Working Group

ORGANIZATION NAME	TASK FORCE	ACTIVITY ATTENDED [DATE, PLACE]
LINKS	Energy Communities & Self-consumption	Slide Preparation (15/06/2020, 9:00-11:00)
LINKS	Energy Communities & Self-consumption	KOM Telco Action#3 (16/06/2020, 16:00-17:00)
LINKS	Energy Communities & Self-consumption	Telco on USES Cases (29/06/2020, 13:00-14:30)
LINKS	Energy Communities & Self-consumption	Telco on USES Cases and BPMN (16/06/2020, 14:00-15:30)
LINKS	Energy Communities & Self-consumption	Work on definition of reference models for flexibility transactions (August 2020)
LINKS	Energy Communities & Self-consumption	Data Management Working Group (30/09/2020, 9:00-15:30)
LINKS	Energy Communities & Self-consumption	Action 3 update call (30/11/2020, 14:00-15:30)
LINKS	Energy Communities & Self-consumption	UC mapping call (30/11/2020, 14:00-15:30)
LINKS	Energy Communities & Self-consumption	Preparation of the UC mapping document from FLEXIGRID
LINKS	Energy Communities & Self-consumption	Telco for UC mapping results (11/01/2021, 15:00-16:00)
LINKS	Energy Communities & Self-consumption	Rework of the UC mapping document from FLEXIGRID
HYPERTECH	Energy Communities & Self-consumption / Replicability & Scalability	Contribution on work being carried out by the Data Management WG on DR Models (provided information to LINKS, incl. sequence diagrams of our UC within the Croatian pilot)
LINKS	Energy Communities & Self-consumption	TelCo For Data Mgt WG 2021 Workplan KO Meeting 5/21/2021

Table 4. Data Management WG activities

Customer Engagement Working Group

ORGANIZATION NAME	TASK FORCE	ACTIVITY ATTENDED [DATE, PLACE]
UNIZG-FER, UNICAN, VERD	Energy Communities & Self-consumption / Joint Communication	KOM meeting online (29/04/2020, 09:30 – 11:30)
UNIZG-FER	WG Consumer and Citizen Engagement	SG Organisational models meeting online (16/06/2020, 10:30 – 11:30)
UNIZG-FER	WG Consumer and Citizen Engagement	SG Organisational models meeting online (06/07/2020, 10:00 – 11:00)

UNIZG-FER	WG Consumer and Citizen Engagement	SG Assessment of engagement meeting online (15/09/2020, 15:00 – 16:30)
UNIZG-FER	Energy Communities	Webinar CEER meets BRIDGE Task Force Energy Communities online (17/10/2020, 11:00 – 12:00)
UNIZG-FER	WG Consumer and Citizen Engagement	SG Assessment of engagement meeting online (28/01/2021, 11:00 – 12:00)
UNIZG-FER	WG Consumer and Citizen Engagement	BRIDGE General Assembly online – UNIZG-FER representatives were in attendance in all sessions (02/03/2021 – 04/03/2021)
CIRCE	WG Consumer and Citizen Engagement	Follow-up meeting [24/06/2021, online]

Table 5. Customer Engagement WG activities

3. NEXT STEPS

FLEXIGRID will continue to keep up the participation on the working groups and task forces to upgrade the synergy between projects that are on the BRIDGE initiative. FLEXIGRID has already established interactions, involving most of the partners of the consortium, under the CIRCE coordination, and will participate to next physical events, webinars and virtual interactions.

The cooperation with BRIDGE will continue through various channels including invitation to BRIDGE TF/WG members to relevant FLEXIGRID public events, frequent updates of the BRIDGE documents containing FLEXIGRID news and information as it will be required by BRIDGE coordination team. FLEXIGRID aim is to ensure continuity in the delivery of concrete inputs to the BRIDGE community and working groups, by participating constantly to all the meetings organized by European Commission.

The aim of this approach is to increase the outreach of the project by organising joint events, exchanging experience and best practices, and to stimulate discussions among key players of the smart grids' communities all around EU.

Specifically for the Business Model Working Group there will be a kick-off meeting in September 2021, where the objectives, expected impacts and upcoming activities of the group will be discussed.

FLEXIGRID also wants to obtain through the participation on BRIDGE activities the following objectives:

- Get feedback from other H2020 projects related to the thematic of FLEXIGRID on the project's approach aiming at **Flexibility**, **Reliability**, and **Economic Efficiency** through the development of innovative hardware and software solutions and on the specification and practical implementation of the use cases on demo sites.
- Identify common approaches with the other H2020 projects in order to evaluate the results of the project.
- Get feedback, input and suggestions from the EC to identify priorities within the project main objectives and expected impacts for the most relevant research topics to be addressed in FLEXIGRID.
- Learn from/with other projects to improve results and create possible bonds.

As has already been done in Croatia, the demos that remain to be carried out: Spain, Greece and Italy, will be used to carry out events in synergy with other European projects that promote integration and the search for joint solutions. These events will be held in the Responsible Research Innovation (RRI) format, planned and defined in task 2.4 of the project where targeted stakeholders (consumers, associations, research institutions, energy sector representatives, etc.) and representatives of projects that are also part of BRIDGE will be invited, although not restricted only to them.

4. INTERACTION WITH H2020 PROJECTS AND INITIATIVES

FLEXIGRID is committed to create synergies and to forge communication with other on-going funded R&D projects related to smart grids, both nationally and EU funded, in particular with those participating in BRIDGE.

This interaction will promote synergies with other projects and the establishment of cluster participation in events and publications, promoting the dissemination potential of FLEXIGRID website by sharing news and links. These synergies will facilitate project partners to disseminate results to other H2020 projects, share knowledge for mutual benefit particularly on horizontal topics like regulation, business models, socio-economic assessment etc., organize joint events to facilitate project dissemination, among other results.

PROJECT NAME & LOGO	BRIEF DESCRIPTION, PARTNERS INVOLVED AND MAIN LINKS WITH FLEXIGRID
FLEXICIENCY	**Energy services demonstrations of demand response, FLEXIbility and energy effiCIENCY based on metering data** *Partner: CIRCE* The project puts in place five large-scale demonstrators for the deployment of novel services in the retail market due to a virtual ICT environment to exchange data and services and advanced monitoring and control systems. **Point of contact with FLEXIGRID:** Key results and conclusions on architectures, market opportunities and data accessibility will be transferred to FLEXIGRID for the development of WP8 and WP9.
SmartNet	**Smart TSO-DSO interaction schemes, market architectures and ICT Solutions for integration of ancillary services from demand side management and distributed generation** *Partner: EDYNA* *Website: http://smartnet-project.eu/* The SmartNet project arises from the need to find answers and propose new practical solutions to the increasing integration of Renewable Energy Sources in the existing electricity transmission network.
Nobel Grid Smart energy for people	**New cOst-effective Business modELs for flexible Smart Grids** *Partner: HYPER* *Website: https://nobelgrid.eu/* NOBEL GRID provides advanced tools and ICT services to all actors in the Smart Grid and retail electricity market to ensure benefits from cheaper prices, more secure and stable grids and clean electricity.
MIGRATE	**Massive InteGRATion of power Electronic devices** *Partner: CIRCE* *Website: https://www.h2020-migrate.eu/* MIGRATE will develop and validate technology-based solutions making possible the management of the growing penetration of power electronics-connected generation and consumption.

	Point of contact with FLEXIGRID: As a result, an easier integration of distributed generation will be achieved, which is crucial for FLEXIGRID.
wiseGRID	**Wide scale demonstration of Integrated Solutions & business models for European smartGRID** *Partner: HYPER* *Website: https://www.wisegrid.eu/* WiseGRID will provide a set of solutions and technologies to increase the smartness, stability and security of an open, consumer-centric European energy grid. The project provides services for the actors of the distribution network in different scenarios to promote more sustainable energy grids, empowering the prosumers and enabling the establishment of a near real-time pan European energy balancing market.
inteGRIDy	**Integrated Smart GRID Cross-Functional Solutions for Optimized Synergetic Energy Distribution, Utilization & Storage Technologies** *Coordinator: ATOS* *Website: http://www.integridy.eu/* inteGRIDy pursues facilitating the optimal and dynamic operation of the Distribution Grid, fostering the stability of the electricity grid and coordination of distributed energy resources, Virtual Power Plants and innovative collaborative storage schemes within a continuously increased share of renewable energy.
IElectrix	**Indian and European Local Energy CommuniTies for Renewable Integration and the Energy Transition** *Partners: CIRCE* Website: https://ielectrix-h2020.eu/ A concept composed by mobile storage systems combined with forecasting, DR programmes and islanding capabilities of local energy communities will be implemented in 4 EU and 1 Indian networks. **Point of contact with FLEXIGRID:** Main results from IELECTRIX will be used to optimize flexibility and stability of the MT-HV grid.
insulae Maximizing the impact of innovative energy approaches in the EU islands	**Maximizing the impact of innovative energy approaches in the EU islands** *Coordinator: CIRCE* *Website: http://insulae-h2020.eu/* To foster the deployment of innovative solutions for the EU islands decarbonization by developing and demonstrating at three Lighthouse Islands a set of interventions linked to seven replicable use cases, whose results will validate an Investment Planning Tool that will be then demonstrated at four Follower Islands for the development of four associated Action Plans.
UP GRID	**Real proven solutions to enable active demand and distributed generation flexible integration, through a fully controllable LOW Voltage and medium voltage distribution grid** *Partner: ZIV* *Website: http://upgrid.eu/*

	This project focuses on addressing the constraints and needs arisen from poor observability of LV grid, local accumulation of distributed generation, risks and difficulties. in managing the distribution network, aging infrastructure and social and environmental restrictions that inhibit grid development.
ENERGY SHIELD	**Integrated Cybersecurity Solution for the Vulnerability Assessment, Monitoring and Protection of Critical Energy Infrastructures** *Partner: -* *Website: https://energy-shield.eu/* EnergyShield captures the needs of Electrical Power and Energy System (EPES) operators and combines the latest technologies for vulnerability assessment, supervision and protection to draft a defensive toolkit.
SDN-µSense	**SDN - microgrid reSilient Electrical eNergy SystEm** *Partner: ATOS* *Website: https://www.sdnmicrosense.eu/* SDN-microSENSE aims at providing and demonstrating a secure, resilient to cyber-attacks, privacy-enabled, and protected against data breaches solution for decentralised Electrical Power and Energy Systems (EPES). All designed, developed, and tested technologies should consider the latest related research findings and maintain high compliance with current industrial standards (e.g., IEC standards).
PHOENIX	**People for tHe eurOpean bioENergy mIX** *Partner: ATOS* *Website: https://phoenix-h2020.eu/* The development and adoption of renewable and sustainable forms of energy has become a major priority for Europe and is an important theme in H2020. Research into new, energy-related technologies to reduce Europe's reliance on non-renewable fossil fuels is a critical need, and requires more newly qualified people in areas such as renewable-energy infrastructure management, new energy materials and methods, as well as smart buildings and transport.

5. CONCLUSIONS

In the framework of FLEXIGRID's Communication and Dissemination Activities work package and aligned with the Dissemination and Communication Plan described in D9.2, this report aim to present FLEXIGRID's work and interaction with other EU funded projects and forthcoming initiatives related to energy flexibility and smart grids, to obtain better results for the European Union.

The most relevant initiative intercepted so far in this framework is the BRIDGE initiative.

In the first year of the project, FLEXIGRID had the opportunity to get acquainted to the activities and working groups of such initiative to understand where the project has the opportunity to provide relevant inputs to the thematic and create synergy with other projects.

Participating in the events provided by BRIDGE has allow FLEXIGRID project to setup collaboration with further on going H2020 projects and be part of a bigger consortium network. D9.9 presents how FLEXIGRID has, and will continue, to take advantage of this initiative to create synergies and connections towards mutual benefit knowledge sharing and the achievement of project objectives.

6. LIST OF FIGURES