

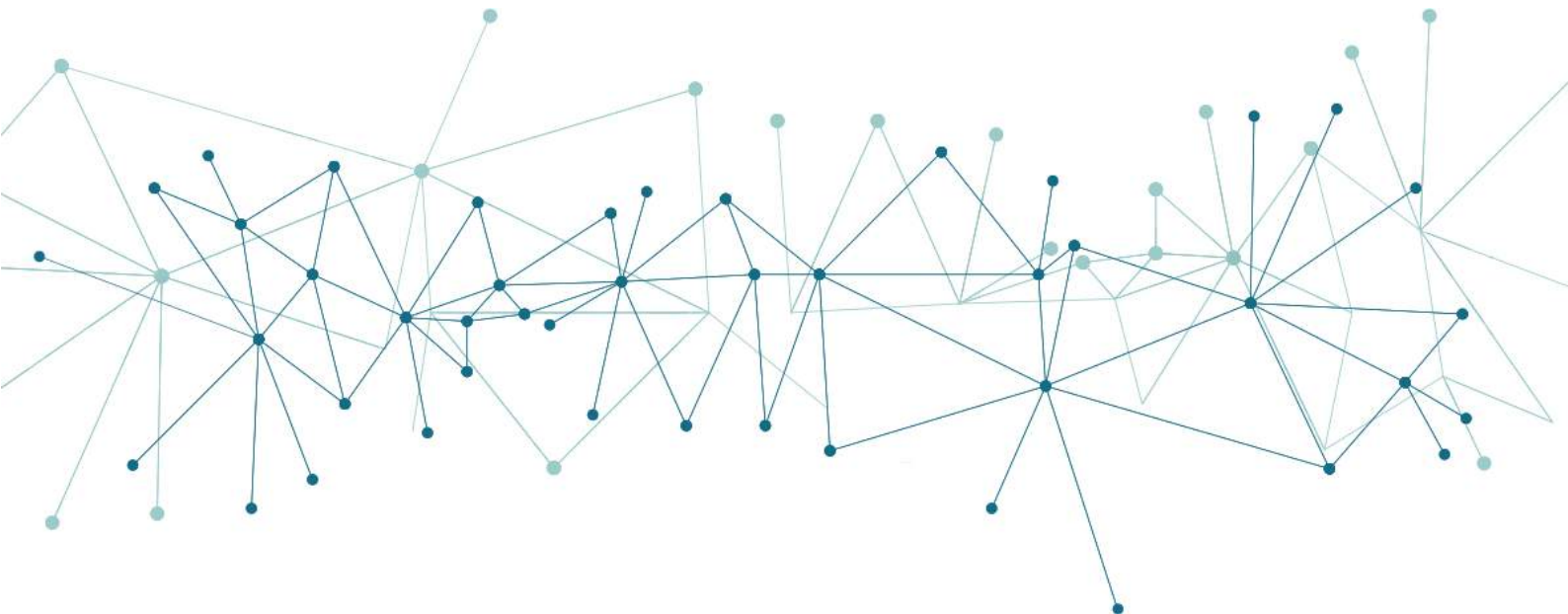


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**DELIVERABLE: D8.1 Plans for the dissemination, exploitation & communication of project results**

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## Executive Summary

Deliverable 8.1, “Plans for the dissemination, exploitation & communication of project results”, include the plans and strategies to be applied in order to achieve a high level of visibility of the project outcomes and to transfer knowledge and results.

This document is closely related to the other documents produced by WP8, in particular to D8.4 “Exploitation Report and IPR Protection Plan V1” and D8.8 “Exploitation Report and IPR Protection Plan V2” which will include detailed exploitation plans and reports, and to D8.3 “Report on Dissemination Activities V1”, D8.5 “Report on Dissemination Activities V2” and D8.7 “Report on Dissemination Activities V3” for detailed reports on the dissemination activities carried out during the different phases of the project.

The European IPR Helpdesk<sup>1</sup> defines Communication as “a strategically planned process that starts at the outset of the action and continues throughout its entire lifetime, aimed at promoting the action and its results”, Dissemination as “the public disclosure of the results” and Exploitation as “the utilisation of results in further research activities [...], or in developing, creating and marketing a product or process, or in creating and providing a service, or in standardisation activities”.

Following these guidelines, deliverable D8.1 presents:

- The communication and dissemination plan for the eDREAM project including target stakeholders, communication channels, activities and strategy, key performance indicators, in order to raise awareness, share knowledge and attract potential users. (Chapter 2)
- Exploitation approach for eDREAM project which combines both the overall project expected impact and the individual exploitation perspectives of each partner. (Chapter 3)

Key stakeholders of the eDREAM target audience have been grouped into three categories: energy sector, end users and facilitators. A more in depth description about targeted stakeholder is given in Chapter 2.3 of this document and also in Deliverable 2.1 which is the first version of user group definitions, end-user needs, requirement analysis and deployment guidelines.

The project consortium will use different communication and dissemination activities via various channels, such as website and social media to scientific publication and conferences and more, to achieve a high visibility of the project and to transfer knowledge and results of the project to the target stakeholders.

The idea underpinning the dissemination strategy (Table 1) is to take key external stakeholders through a three stage process of awareness, understanding and interest, action.

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<sup>1</sup> [https://www.iprhelpdesk.eu/sites/default/files/EU-IPR-Brochure-Boosting-Impact-C-D-E\\_0.pdf](https://www.iprhelpdesk.eu/sites/default/files/EU-IPR-Brochure-Boosting-Impact-C-D-E_0.pdf)

The eDREAM Communication strategy is structured in three main stages.

Table 1. Dissemination Strategy

Stage	Description	Main Communication Channels
<b>Awareness</b> Stage 1 – Preliminary Project Promotion Phase (M1 – M12)	Aims at: <ul style="list-style-type: none"> <li>• Agreeing upon the communication strategy and future activities;</li> <li>• Creating initial awareness in the markets related with the Project’s objectives and scope.</li> <li>• Creating a first contact with the stakeholders through questionnaires collected in collaboration with other projects.</li> </ul>	Project Website Social Media Press Release Leaflets Posters Partners social media channels and websites Presentations about project scope and objectives at industrial exhibitions, conferences & workshops / Presentations at scientific, technical & policy conferences and workshops Organization of a joint workshop with DELTA project
<b>Understanding and interest</b> Stage 2 – Project Pre-Commercialisation Phase (M12 – M30)	Aims at: <ul style="list-style-type: none"> <li>• Create more “targeted awareness” regarding eDREAM technologies with key players and potential users;</li> <li>• Inform the target market about the technological benefits of eDREAM.</li> <li>• Adjust the requirements collected in in collaboration with other projects and collect additional needs and requirements coming from a number of stakeholders much higher than the stakeholders involved in the first stage.</li> </ul>	Project website Press release Presentations at industrial exhibitions, conferences & workshops Presentations at scientific, technical & policy conferences and workshops Journal & conference papers Organization of an international conference
<b>Action</b> Stage 3 – Business Strategy Phase (M30 – M36)	Aims at: <ul style="list-style-type: none"> <li>• Maximizing target market awareness regarding the eDREAM solution;</li> <li>• Thus contributing to ensure the project sustainability and full exploitation.</li> </ul>	Project website Press release Presentations at industrial exhibitions, conferences & workshops One to one meetings Presentations at scientific, technical & policy conferences and workshops Journal & conference papers Final project Brochure

In order to measure the impact of the dissemination and communication activities a list of key performance indicators will be set, during the three years of the project.

Exploitation outcomes of the eDREAM project are based on three main inputs: the market context, the project capabilities and constraints and the individual partner’s interests and opportunities.

The eDREAM exploitation will be split into two paths. The first path will seek to define a longer-term vision for eDREAM which partners can shape as they see fit (joint exploitation). The second path will seek to enable each partner to take the project results and exploit them to their own ends (individual exploitation).

In order to define the joint exploitation, while maximising the eDREAM impact, the subsequent steps will be followed:

- Definition of the overall eDREAM value proposition;
- Identification of potential business models;
- Analysis of the possibility, likelihood, pitfalls and benefits of each model;
- Reconciliation of the model with the joint sustainability plan and individual plans;
- Reconciliation of the model with the technical plan;
- Definition of a business plan for the solution delivery.

Exploitation progress will be reported in D8.4 Exploitation Report and IPR Protection Plan V1 and D8.8 Exploitation Report and IPR Protection Plan V2.

## List of Acronyms and Abbreviations

E@W	Energy@Work
eDREAM	enabling new Demand Response Advanced, Market oriented and secure technologies, solutions and business models
ENG	Engineering Ingegneria Informatica S.p.A.
SEO	Search Engine Optimization
SVT	Servelect
TUC	Technical University of Cluj-Napoca
WP	Work Package
ESCO	Energy Service Company
DOSs	Distribution system operators
TOSs	Transmission Service Operator
TU	Teesside University
CERTH	The Centre for Research & Technology
EMOT	Emotion
R&D	Research and Development
IPR	Intellectual property
EU	European Union
EC	European Commission
H2020	Horizon 2020
KPI	Key Performance Indicators
DR	Demand Response
BM	Business Models
ROI	Return on Investment
NPV	Net Present Value
IRR	Internal Rate of Return
EBIT	Earnings Before Interest & Tax
EBIAT	Earnings Before Interest After Taxes
RTD	Research and Technological Development
MGT	Management
VPP	Virtual Power Plants
DER	Distributed Energy Resources
IP	Intellectual Property
EP	External Partners
PR	Press release

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## Preface

eDREAM aims to research, validate and bring into pre-commercialization phase a near-real time closed-loop Demand Response framework, fully autonomous, secure (through an enhanced blockchain ecosystem) and based on decentralized decision making functional model.

In order to achieve this, a Dissemination, Communication and Exploitation Plan have been set up and is presented in the following sections.

## 1 Introduction

### 1.1 Scope and Objectives of the Deliverable

This deliverable presents the communication, dissemination and exploitation plan which identifies, organises and defines the management of the promotion of the eDREAM project. It is based on the preliminary dissemination and exploitation plan drafted on the project proposal, adding relevant material on the dissemination and communication strategy.

The deliverable objectives are to establish:

- The relevant target stakeholder for communication and dissemination activities;
- The communication and dissemination strategy and timeline.
- The communication and dissemination channels and activities to be applied in order to reach an optimal dissemination level in all geographical areas relevant to the project;
- Key Performance Indicators (KPIs) used to monitor the implementation of the dissemination strategy;
- The exploitation approach for eDREAM project which combines both the overall project expected impact and the individual exploitation perspectives of each partner.

The implementation of the plan will be presented in the periodic reports of the project as described below:

For the communication and dissemination plan:

- D8.3 “Report on Dissemination Activities V1”
- D8.5 “Report on Dissemination Activities V2”
- D8.7 “Report on Dissemination Activities V3”

For the exploitation plan:

- D8.4 “Exploitation Report and IPR Protection Plan V1”
- D8.8 “Exploitation Report and IPR Protection Plan V2”

### 1.2 Structure of the Deliverable

The document is set up and covers the following topics:

- Chapter 2 presents an overview of the communication and dissemination strategy, outlining the target stakeholders, dissemination media and channels used in the project and communication timeline and activities. It also gives an overview of the Key Performance Indicators (KPIs) used to monitor the implementation of the dissemination strategy. Finally, a dissemination guidelines & toolkit is presented.

- Chapter 3 provides an overview of the exploitation approach for eDREAM project which combines both the overall project expected impact and the individual exploitation perspectives of each partner.

### 1.3 Relations to other activities in the project

The development and execution of the communication and dissemination strategy is supported by the task 8.1 – Dissemination, Exploitation & Communication Plan.

The development of the project communication and dissemination strategy is a horizontal activity which spans the work of WP2, WP3, WP4, WP5 and WP6, as presented in the Figure 1.

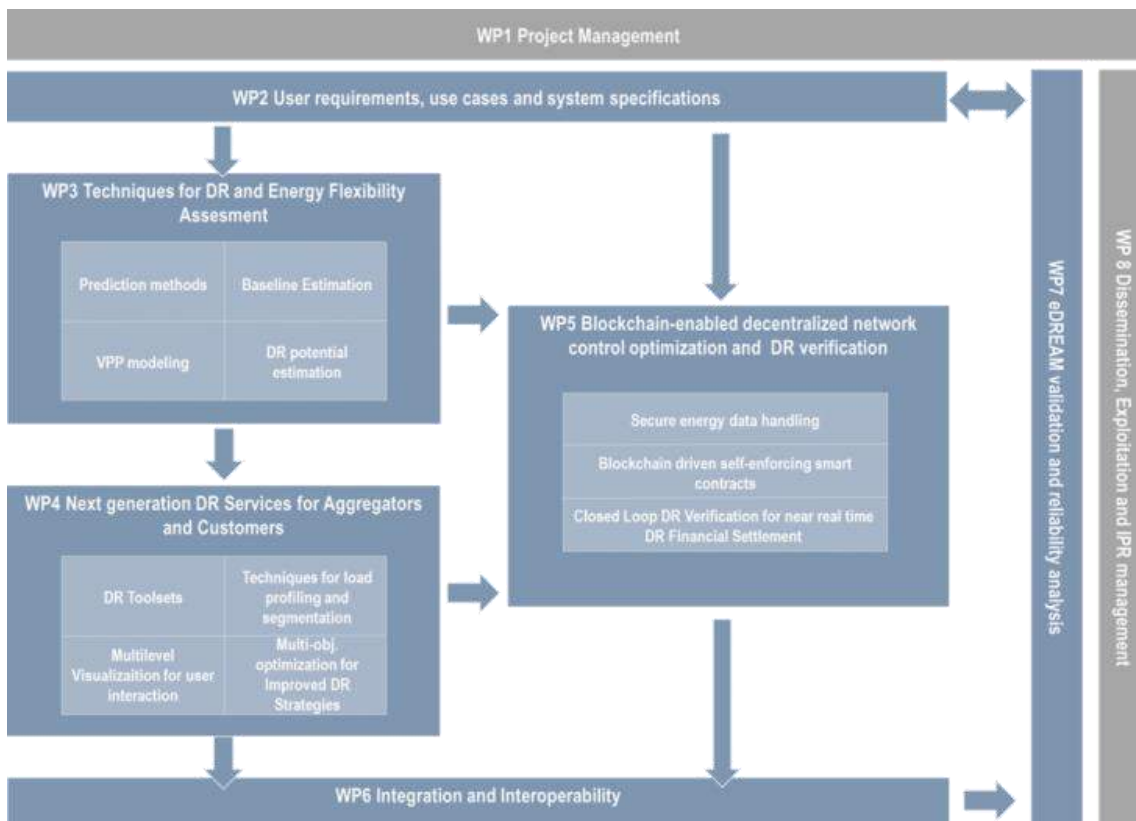


Figure 1. Interaction with other WPs

## 2 Communication and dissemination plan

### 2.1 Aims and objectives

The Dissemination & Communication Strategy will ensure that appropriate activities are envisaged in order to inform, engage, create awareness and promote information about the project, including its aims, its funding source, its outputs and impacts, as well as the wider societal implications of the proposed eDREAM project, its results and impacts.

The objectives for all communication actions are consistent with the relevant EU policy and are as follows:

- Create awareness, understanding and interests about the scope, objectives and results of the project.
- Promote the innovative character and unique part of this project.

- Maximize the impact of project activities and ensure that all the derived outcomes will be widely spread among the appropriate stakeholders.
- Engage the stakeholders and drive them to adopt and implement the project results.
- Demonstrating how the outcomes of the eDREAM project are relevant to the everyday lives of European citizens.

Providing the wider relevant public with advance notice of possible future plans and actions, it also strengthens collaboration links with partners and helps to establish and reinforce a wider networking activity.

The high visibility of the project and the promotion of active interaction with key stakeholders are necessary elements to build project awareness, maximize exploitation potential and promote accountability and to justify the project's value to invest public money to support this Research and Innovation Action.

## 2.2 Message (What to disseminate and communicate)

In order to create a high impact the following project information will be communicated to the relevant audience:

- Vision (objectives, strategic relevance) and key facts: messages will follow an evolution from the start of the project to the aftermath and therefore, they will be reviewed periodically in the course of the project;
- News (achievements and results): Personalized experiences will illustrate the impact of the project and will give a human dimension that can catalyze end-users' acceptance; for example, partners will exhibit how eDREAM delivers real value to its target groups and how it improves people's lives.
- Participation in conferences and workshops;
- Ready for use eDREAM solution, along with lessons-learned and recommendations;
- The technology verification, validation and reliability reports, delivered with the purpose to disseminate the outcomes to respective stakeholders.

## 2.3 Targeted groups and stakeholders

The aim of the eDREAM project is to develop new solutions for DSOs, as well as improving decision making of aggregators and energy retailers, it is important to consider their needs from the very beginning of the project up to the release of the first consolidated prototype. The influence of the stakeholders on a project can vary greatly from one to another, so the possibility of involvement can be immense. For example, the project could involve people who pay for the system, customers, people who design the components, system users etc.

Therefore, in deliverable D2.1 "User group definitions, end-user needs, requirement analysis and deployment guidelines V1", the key stakeholders of the eDREAM target audience have been grouped in two target groups: Energy Sector and End user. They will be involved in the Requirements Elicitation (RE) process where business and user needs are identified and captured. Besides these two groups, a third group have been identified as being relevant to the project communication and dissemination strategy: Facilitators, which can act as promoters, key actors in driving innovation and knowledge transfer or produce technical standards that are intended to address the needs that will rise up from the development of eDREAM (for example Standardisation Bodies).

Table 2. Key stakeholders group identified as target audience of eDREAM

Energy sector	End user	Facilitators
<ul style="list-style-type: none"> <li>• Energy retailers</li> <li>• DSOs</li> <li>• TSOs</li> <li>• Distributed Generation Providers</li> <li>• Centralized Generation Providers</li> <li>• Energy Aggregators and brokers</li> <li>• ESCOs</li> <li>• Technology Providers</li> <li>• Scientific community</li> </ul>	<ul style="list-style-type: none"> <li>• Building Occupants</li> <li>• Facility managers &amp; owners</li> <li>• System operators</li> <li>• Commercial and Residential Customers</li> <li>• Stakeholders at the Pilot Sites</li> <li>• Municipalities with pools of buildings</li> <li>• Universities with pools of buildings</li> <li>• Energy professional associations</li> <li>• General Public</li> </ul>	<ul style="list-style-type: none"> <li>• EU Institutions (EC, European Science Foundation, MEPs)</li> <li>• National public authorities (industrial committees, ministry and regional councils)</li> <li>• Standardisation Bodies (such as CEN, DIN)</li> <li>• Related EU-funded projects</li> <li>• Organizations &amp; EU Alliances in topics addressed by eDREAM</li> <li>• European Technology Platforms and respective clusters</li> <li>• Public Bodies &amp; Environmental Organizations</li> </ul>

As mentioned in “D2.1 User group definitions, end-user needs, requirement analysis and deployment guidelines V1”, it is important to pay attention to the role of these different groups of stakeholders within the eDREAM project, as to achieve the project objectives it is necessary to understand the individual actors potentially affected and envisioned by the system and project results, identify their needs and recognize synergies among them.

## 2.4 Communication and Dissemination Strategy

### 2.4.1 Dissemination channels and activities

#### A. eDREAM website

The eDREAM website ([www.edream-h2020.eu](http://www.edream-h2020.eu)) will serve as a major dissemination tool in terms of project’s concept, objectives and outcomes and report uploading. Within the “News” section on the website, partners can publish articles about intermediate results, events etc.

In addition, the 43 public deliverables will be uploaded on the website. Each of these represents an opportunity for external dissemination. The public deliverables are listed in Table 3.

The Website appearance will be coherent with the brand and the general communication strategy. Periodically updates of the Website will be carried out. The website activity will be monitored through Google Analytics in order to gather information about the website traffic and how visitors interact with the website. Moreover, in order to assure a good visibility in search engines (such as Google) on page and off page SEO actions will be taken. The eDREAM website is further described in D8.2 Project website.

Table 3. Public deliverables

Deliverable	Delivery date
D2.1 User group definitions, end-user needs, requirement analysis and deployment guidelines V1	M8
D2.2 Use Case analysis and application scenarios description V1	M8
D2.3 eDREAM standardization report and regulatory roadmap	M12
D2.4 Requirement-Driven System Development V1	M12
D2.5 Requirement-Driven System Development V2	M18
D2.6 User group definitions, end-user needs, requirement analysis and deployment guidelines V2	M20
D2.7 Use Case analysis and application scenarios description V2	M20
D2.8 User group definitions, end-user needs, requirement analysis and deployment guidelines V3	M30
D2.9 Use Case analysis and application scenarios description V3	M30
D2.10 Requirement-Driven System Development V3	M30
D3.2 Recommendations for baseline load calculations in DR programs V1	M16
D3.3 Consumption flexibility models and aggregation techniques V1	M17
D3.4 Arial 3D models and simulation procedures for DR estimation V1	M17
D3.6 Recommendations for baseline load calculations in DR programs V2	M28
D3.7 Consumption flexibility models and aggregation techniques V2	M29
D3.8 Arial 3D models and simulation procedures for DR estimation V2	M29
D4.1 Specification for Improved Decision Making and DR Optimization toolsets V1	M16
D4.2 Load profiles and customer clusters V1	M17
D4.4 Interactive Visualization framework for improving DR strategies V1	M16
D4.5 Specification for Improved Decision Making and DR Optimization toolsets V2	M28
D4.6 Load profiles and customer clusters V2	M29
D4.8 Interactive Visualization framework for improving DR strategies V2	M28
D5.1 Blockchain platform for secure and distributed management of DR programs V1	M17
D5.2 Self-enforcing smart contract for DR tracking and control V1	M17
D5.3 Consensus based techniques for DR validation and financial settlement	M28
D5.4 Blockchain platform for secure and distributed management of DR programs V2	M29
D5.5 Self-enforcing smart contract for DR tracking and control V2	M29
D7.1 Validation Plan V1	M17
D7.2 Technology Verification Report V1	M19
D7.3 Technology Validation Handbook V1	M30
D7.4 Business and Financial Validation Report	M36
D7.5 Reliability report	M36
D7.6 Validation Plan V2	M25
D7.7 Technology Verification Report V2	M31
D7.8 Technology Validation Handbook V2	M36
D8.1 Plans for the dissemination, exploitation & communication of project results	M12
D8.2 Project Website	M3
D8.3 Report on Dissemination Activities V1	M12

D8.4 Exploitation Report and IPR Protection Plan V1	M18
D8.5 Report on Dissemination Activities V2	M24
D8.6 Policy Recommendations & Best Practices for Internal Electricity & Retail Market	M36
D8.7 Report on Dissemination Activities V3	M36

## B. Social media

eDREAM project has an online presence in social media channels such as LinkedIn and Twitter.

eDREAM has created a profile on LinkedIn platform and joined several groups (within relevant content about the project will be shared) as follows:

- Smart Grids - Energy & Water
- Distributed Energy Resources (DERs)
- Energy Flexibility – Storage, Electric Vehicles (EVs), Demand Response (DSR) & Grid Technologies
- Energy Efficiency Professionals

A Twitter profile has been created and used to provide short news updates or items for the project, interact with other H2020 projects, in parallel with the LinkedIn profile. This can be followed at @eDREAMh2020.

## C. Collaboration with other H2020 projects

Since the first months of the project, eDREAM has had a close collaboration with other H2020 Projects. Other H2020 project consortia have been involved for internal consultation, in order to collect needs and requirements. Information has been collected by administering specific surveys to the ELSA, DR-BOB and Integridy projects meetings.

Moreover a Joint workshop was organized in collaboration with DELTA project, in November.

## D. Organization of an International conference

An international conference will be organized in the second year of the project in order to disseminate the project and especially to collect needs and requirements coming from the identified target groups and to adjust the requirements defined in the first version of the deliverable 2.1 “User group definitions, end-user needs, requirement analysis and deployment guidelines V1” and collect additional needs and requirements coming from a number of stakeholders much higher than the stakeholders involved in this first stage of the task. The conference will target more than 100 stakeholders around Europe.

Even though the International Conference was initially set up in month 9 of the project, after a closer analysis it was decided that, from a strategic point of view, it will have a higher impact on eDREAM project, if it is organized on the second year of the project. In the meanwhile collaboration with other H2020 projects was exploited to gather stakeholder feedback for the first period such as via questionnaire submitted to stakeholders from ELSA, DR-BOB and Integridy projects.

## E. Presentations at of industrial exhibitions, conferences & workshops.

eDREAM consortium members will contribute to relevant International or National conferences and events through posters, flyers, presentations, in order to raise key stakeholders’ awareness and facilitate knowledge sharing, thus increasing the project impact. Targeted events include events organised by the EU Commission’s

Unit supervising the project, other EC Conferences and thematic clustering meetings, annual events organised under the aegis of the EC.

Example of relevant conferences includes:

- European Utility Week
- Energy Storage Europe
- EU Sustainable Energy Week
- Energy storage Innovation
- Blockchain Expo Europe
- International Conference on Power and Energy Engineering

A calendar of upcoming relevant conferences and fairs will be maintained throughout the project duration.

#### **F. One-to-one**

Strategically important target organisations, such as key clients and product / service providers, will receive information on a one-to-one basis through personal visits and emailing. For example, Servelect as an Energy Auditor and ESCO will promote eDREAM to its stakeholders and partners.

#### **G. Presentations at Scientific, Technical & Policy conferences and workshops**

eDREAM consortium members will contribute to relevant Scientific, Technical & Policy conferences and workshops in order to raise awareness and facilitate knowledge sharing, thus increasing the project impact, addressing scientific and research community, through conference papers.

Example of relevant conferences includes:

- IEEE/CPS Europe
- IEEE CANDO EPE 2018 Conference
- International Conference on Intelligent Computer Communication and Processing

#### **H. Scientific publications**

Both European and national journals will be targeted by joint authored papers from the project consortium. For example: Sensors Journal.

#### **I. Press media, articles and other platforms**

To maximize the impact, eDREAM will use existing popular websites, blogs and social media groups and feeds. For example:

- **Research Gate** - A social networking site for scientists and researchers to share papers, ask and answer questions, and find collaborators.
- **Energynomics** - is the sole online platform dedicated to the energy sector in Romania that serves both as news channel and business to business gateway.
- **European Energy Innovation** - is the communication platform designed with one purpose in mind: to put energy and transport stakeholders in touch with each other.

#### **J. eDREAM partners' websites, social media feeds and newsletters**

eDREAM partners’ official existing social media feeds will be used, through internal PR and communication departments, to relay eDREAM news and updates. Available Social Media feeds per organisation are listed in the Table 5 from Individual dissemination plan section.

The Consortium is formed by a well-balanced group (enterprises from energy and ICT sector, SME, research institutes, universities, innovative non-profit organisation, public utility company, ESCO), from different regions of Europe (Italy, UK, Romania, Greece, Spain), thus it is able to reach a diversified audience from all geographical areas relevant to the project.

**Table 4. eDREAM channels and target stakeholders**

Channel	Target Stakeholders expected to be reached
Website	ALL
Social Media	General public – primary; Energy sector, End user, Facilitators – Secondary
Collaboration with other H2020 projects	Related EU-funded projects
Organization of international conference	Energy sector, End users
Presentations at industrial exhibitions, conferences & workshops.	ALL
One-to-one	Energy sector, End users
Presentations at scientific, technical & policy conferences and workshops	Scientific community, Facilitators
Scientific publications	Scientific community
Press media, articles and other platforms	ALL

### 2.4.2 Individual Dissemination Plan

Dissemination and exploitation of project results are important targets of the eDREAM consortium for ensuring the scientific progress beyond the state-of-the art in the course of the project and for a sustained economic yield after finishing the project (adapting the project to received feedback).

Thus, the whole consortium is fully engaged in creating awareness, understanding and interests about the project. In the Table 5 below are listed the available social media feeds per organisation.

**Table 5. Individual dissemination plan**

Channel	Partener	ENG	CERTH	TU	KIWI	ATOS	E@W	ASM	TUC	SVT	EMOT
Blog		x								x	
Newsletter			x	x	x	x				x	
Twitter		x			x		x				
LinkedIn		x	x	x		x	x		x	x	
Company Website		x	x	x			x	x	x	x	x
Journals			x	x			x	x	x	x	
Other (please specify)				EP	EP					PR	



## 2.4.3 Communication timeline

The eDREAM Communication strategy is structured in three main stages.

Table 6. eDREAM communication strategy and timeline

Stage	Description	Main Communication Channels
<p><b>Awareness</b> Stage 1 – Preliminary Project Promotion Phase (M1 – M12)</p>	<p>Aims at:</p> <ul style="list-style-type: none"> <li>• Agreeing upon the communication strategy and future activities;</li> <li>• Creating initial awareness in the markets related with the Project’s objectives and scope.</li> <li>• Creating a first contact with the stakeholders through questionnaires collected in collaboration with other projects.</li> </ul>	<p>Project Website Social Media Press Release Leaflets Posters Partners social media channels and websites Presentations about project scope and objectives at industrial exhibitions, conferences &amp; workshops / Presentations at scientific, technical &amp; policy conferences and workshops Organization of a joint workshop with DELTA project</p>
<p><b>Understanding and interest</b> Stage 2 – Project Pre-Commercialisation Phase (M12 – M30)</p>	<p>Aims at:</p> <ul style="list-style-type: none"> <li>• Create more “targeted awareness” regarding eDREAM technologies with key players and potential users;</li> <li>• Inform the target market about the technological benefits of eDREAM.</li> <li>• Adjust the requirements collected in in collaboration with other projects and collect additional needs and requirements coming from a number of stakeholders much higher than the stakeholders involved in the first stage.</li> </ul>	<p>Project website Press release Presentations at industrial exhibitions, conferences &amp; workshops Presentations at scientific, technical &amp; policy conferences and workshops Journal &amp; conference papers Organization of an international conference</p>
<p><b>Action</b> Stage 3 – Business Strategy Phase (M30 – M36)</p>	<p>Aims at:</p> <ul style="list-style-type: none"> <li>• Maximizing target market awareness regarding the eDREAM solution;</li> <li>• Thus contributing to ensure the project sustainability and full exploitation.</li> </ul>	<p>Project website Press release Presentations at industrial exhibitions, conferences &amp; workshops One to one meetings Presentations at scientific, technical &amp; policy conferences and workshops Journal &amp; conference papers Final project Brochure</p>

## 2.5 Project internal coordination

The eDREAM consortium will keep track of all dissemination and communication activities relevant to the consortium via a “Dissemination Matrix”, managed by the WP8 Leader, that will contain at least the following fields:

Table 7. Dissemination matrix

Medium type	Action Type	Medium name	Status	Responsible partner	Completion date	Reach stats
Type of communication medium	Type of communication action	Name of the medium used, i.e. external articles provide website name of medium	Status of the dissemination activity	Indication of which project member is responsible and credited for activity	Provide date to match with project timeline	Input for reporting purposes: number of attendees, number of views etc.

This file will be updated every 6 months and will also include future dissemination activities and events as planned by each partner.

## 2.6 Key performance indicators

KPIs to measure the dissemination performance are summarised in Table 8 below. The WP 8 Leader (SVT) is in charge of monitoring the progress of the dissemination activities against the KPI targets in Table 8 and informing the consortium of that progress. The consortium members are responsible for recording their dissemination actions and reporting them to the dissemination matrix.

Table 8. Key performance indicators

Dissemination Channel	KPIs	Stakeholders addressed	Year 1 KPI target	Year 2 KPI target	Year 3 KPI target
Website	No. of visitors to the eDREAM website (per year)	ALL	800	1500	2000
	No. of blog post on eDREAM website “News” section	ALL	8	10	12
Social media	No. of posts on social media platforms via eDREAM channels (LinkedIn & Twitter)	ALL	8	10	12
Partners’ websites, social media channels & other online activities	No. of articles / posts in consortiums’ newsletter / website / social media / other communication platforms	ALL	4	5	6
Press media & articles	No. of press releases & articles (online & printed)	ALL	2	3	4
Scientific publications	Journal papers	Academia / scientific community	1	2	2
	Conference papers	Academia / scientific community	2	3	4
Events	No. of Scientific, Technical & Policy conferences and workshops at which partners will promote eDREAM	Academia / scientific community - Research groups, other H2020 projects and initiatives	10	12	14
	No. of Industrial exhibitions, conferences & workshops at which partners will promote eDREAM	Energy market sector, End users, Facilitators	7	8	10

	Organization of one international conference	Energy market sector, End users	N/A	1	N/A
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eDREAM will monitor the proper advancement regarding dissemination activities using key performance indicators (KPIs) oriented to quantify and manage all forms of communication and dissemination, focusing specially on results and their inherent quality.

## 2.7 Dissemination Guidelines & Toolkit

### 2.7.1 Visual identity

#### A. Logo

The eDREAM logo is an important graphic element which was created at the beginning of the project in order to create a common visual identity to all of the work arising from the project. It is used on all materials and communications issued by members of the project. The graphical elements within the logo were design in order to express the project vision. A more detailed explanation about the eDREAM logo is provided in Deliverable 8.3 Report on dissemination activities V1.



Figure 2. eDREAM logo

#### B. Templates

Templates are available on the Liferay workspace platform in Templates folder, for:

- Project Deliverables
- PowerPoint Presentations

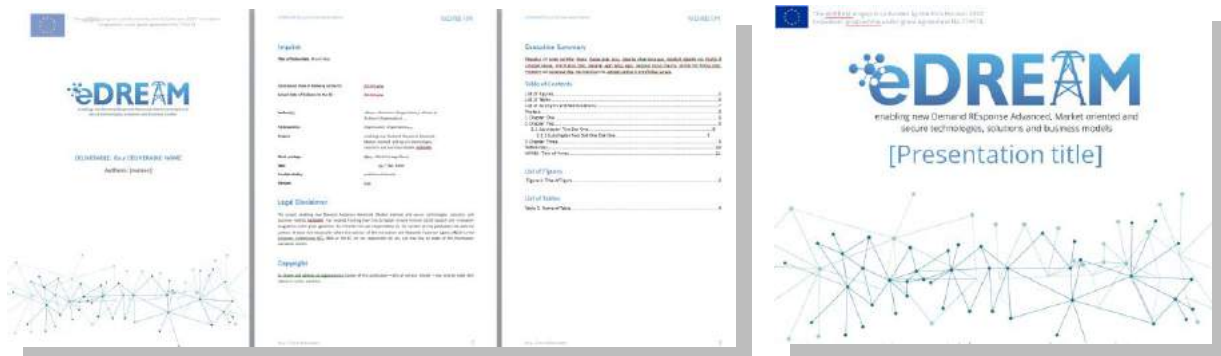


Figure 3. Project templates

## 2.7.2 Dissemination toolkit

In order to support the dissemination and communication activities a dissemination toolkit has been developed. It consists of the following (see also Annex I):

- The website [www.edream-h2020.eu](http://www.edream-h2020.eu) which plays an important role in dissemination and communication activities. The website is described in D8.2 Project website.
- A project roll-up poster to be used at industrial, academic exhibitions and conferences (Figure 6).
- A project tri fold brochure that is graphically eye catching and gives an overview about the project (Figure 7).
- A project general presentation to which each partner can add information to this presentation according to their needs, context or event they are attending. The presentation will contribute to the identity forming and making the project recognisable (Figure 8).

According to European Commission guidelines all dissemination materials issued by eDREAM consortium have to include the EU emblem and acknowledgement, see Figure 4.



This project has received funding from the European Union's Horizon 2020 research & innovation programme under grant agreement n°774478

Figure 4. EU emblem and acknowledgement

The eDREAM project logo should be included in all dissemination materials, including the public and internal websites, brochures, flyers, presentations, roll-up, posters, both printed and online etc.

It is also recommended to include in those materials the logo of each consortium member and they should all be of about the same size.

### 3 Exploitation plan

eDREAM goal is to achieve the widest possible development and validation of technologies and methodologies in order to enable the possibility for a pre-commercial exploitation upon successful demonstration. The following table (Table 9) resumes a preliminary analysis of the potential exploitable outputs.

Table 9. Preliminary exploitation plan

Exploitable results	Type of result	Owner(s)	IPR Strategy/ Foreseen Exploitation
eDREAM Integrated solution	Platform	ALL	
Tools for demand response optimal programs design, including DR forecast, profiling, segmentation and load forecasting	Tool	ENG, CERTH, TU, ATOS, TUC, KIWI, E@W	Potential patent application / Part of joint exploitation plans or adaptation for new RTD, innovation or pre-commercial projects.
Blockchain DR verification and financial settlements	Application	ENG, TUC, ASM	Part of joint exploitation plans or adaptation for new RTD, innovation or pre-commercial projects.
Blockchain Services for Electronic Registration, Transacting and Processing of Assets	Software	ENG, TUC	Copyright / Part of joint exploitation plans or individual exploitation for commercial purposes.
Graph-based analytics for Closed-Loop DR optimal scheduling and Hypothesis Testing	Application	CERTH	Potential patent application / Part of joint exploitation plans or adaptation for new RTD, innovation or pre-commercial projects.
Community-based VPP	Application	CERTH, ENG, TUC, ASM, KIWI	Part of joint exploitation plans or individual exploitation for commercial purposes.
Business models for DR	Methods	E@W, SVT	Part of joint exploitation plans or individual exploitation for commercial purposes.

The overall dissemination and exploitation strategy is based on and leads to specific plans per partner. All of these plans contribute to the overall exploitation strategy.

#### 3.1 Exploitation Strategy

Exploitation outcomes of the eDREAM project are based on three main inputs: the market context, the project capabilities and constraints and the individual partner’s interests and opportunities.

The market context helps identify and evaluate opportunities for the exploitation, puts the project in context with respect to other initiatives (commercial or research) and leads to a strong market position towards potential competitors. The market analysis will focus on the specific areas of opportunity for eDREAM exploitation and will evolve through time, both as the market in general will develop and as the project will identify clear areas for exploitation.

Capabilities and constraints of the technology determine what can and cannot be done and the innovation of the solution provides the uniqueness which will give project potential results in a commercial environment. Also included in this input are the limitations of the licensing decisions taken by the Consortium and the ability of the partners to form commercial endeavours after the project end.

Finally, individual partner's interests and opportunities will drive eDREAM exploitation: if eDREAM will not fall within the broad strategy of the project members, it would be impossible to secure investment. However, in the course of defining the exploitation it has not been limited to immediate opportunities but the potential for a more collaborative exploitation. This latter exploitation will be explored jointly but reflecting each partner's position. Consequently, the strategy for individual partners is driven by the near-term goals of those partners and the broader term project vision shaped by the partner's long term strategies. This long-term vision is as important as the near-term vision for leading eDREAM towards maximum value and impact creation.

In light of above, the eDREAM exploitation will be split into two paths. The first path will seek to define a longer-term vision for eDREAM which partners can shape as they see fit (joint exploitation). The second path will seek to enable each partner to take the project results and exploit them to their own ends (individual exploitation).

In order to define the joint exploitation, while maximising the eDREAM impact, the subsequent steps will be followed:

- Definition of the overall eDREAM value proposition;
- Identification of potential business models;
- Analysis of the possibility, likelihood, pitfalls and benefits of each model;
- Reconciliation of the model with the joint sustainability plan and individual plans;
- Reconciliation of the model with the technical plan;
- Definition of a business plan for the solution delivery.

Exploitation progress will be reported in D8.4 Exploitation Report and IPR Protection Plan V1 and D8.8 Exploitation Report and IPR Protection Plan V2.

### 3.1.1 Value Proposition

eDREAM will constitute a multi-disciplinary framework with benefits for a variety of stakeholders' groups.

We can identify the eDREAM unique selling proposition as a novel blockchain based Demand Response decentralized ecosystem, aimed at either alleviating power grid local network constraints in real time caused by the imbalances or optimizing nearby energy management.

eDREAM will build its flexibility offer to the interested stakeholders (local DSOs, aggregators and prosumers) through uniquely combining and optimizing generation capability with load shifting techniques.

The eDREAM offering will be conveyed and made available through local marketplaces:

- Local flexibility marketplaces, tailored specifically to DSOs and aggregators stakeholders;
- Local peer-to-peer energy marketplaces tailored to prosumers and aggregators.

As a result, eDREAM aims at delivering a rich and diverse set of functionalities stimulating interest on different groups of potential adopters.

The eDREAM value proposition will be further analysed through value proposition canvas, to understand the customer's needs helping design products and services they want, in conjunction with the Business Model Canvas.

### 3.1.2 eDREAM Offering

The eDREAM offering will consist of both tangible and intangible results.

The tangible results will be determined from the services and tools provided by the platform and will be analysed in depth once developed.

The intangible results of the eDREAM project will be mostly based on the knowledge and experience gained during the course of the project, as example:

- Project deliverables;
- Methodology;
- The user community.

### 3.1.3 Market analysis

A detailed market analysis of eDREAM-related will be introduced in D8.4 and reported in detail in D8.8, it will identify the target for promoting the eDREAM solution in the energy and smart grid market. The analysis will include SWOT analysis, the identification of potential customers and related goals, incentives and interests, current competitors and potential future competitors.

### 3.1.4 Sustainability plan

The terms and conditions for using the eDREAM solution will be defined in D8.8 in order to provide a good balance between openness and opportunities for commercial exploitation of results.

### 3.1.5 Business model

A Business Model describes how an organisation creates, delivers, and captures value. The Business Model Canvas is a strategic management template for developing new or documenting existing business models. The process of identifying one or more possible business models may become laborious. The canvas, quite simple and intuitive to use, facilitates discussion and work and supports in remaining focused on the main elements of a Business Model.

The business model canvas is dividing into 9 blocks, as follows:

- Customer Segments

- Value Propositions
- Channels
- Customer Relationships
- Revenue Streams
- Key Resources
- Key Activities
- Key Partnerships
- Cost Structure

Exploiting the potentialities of the Business Model Canvas, formal description of the business from the consortium point of view will be done. An initial example is reported in the following figure:

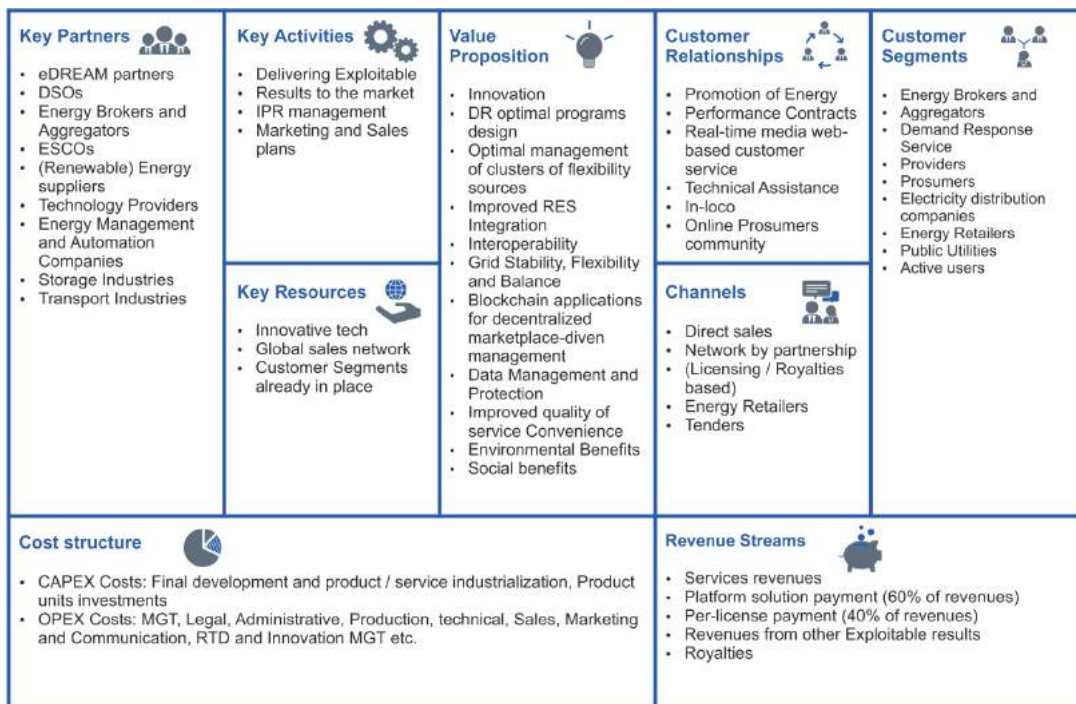


Figure 5. eDREAM Business Model Canvas

### 3.1.6 Financial assessment

An early stage of financial projection was made, taking into account a projection of the market for the next 10 years and assuming the enablement of DR Market following the legislative proposals included in the Winter Package. One of the main key elements of the consortium is its capability to offer an integrated service for the targeted Customers. Under this premise, below is reported an example of a potential preliminary estimation of the financial projections related to the customer segment “Electricity Distribution Companies”, one of the seven identified Customers in the BM Canvas. Referring to one of the possible exploitation strategies –the one implying a joint action of the partnership-, if the outcomes of the project will be as expected the described Business Model will provide an high gain but will require a reasonable amount of investment to reach the final customers, as well as a significant effort to build a business partners network in order to increase market penetration (the SMEs participating in eDREAM are already active in the Energy market). Part of this investment could be covered by the participants and additional funds could be obtained by equity from private investors, venture capital funds



and business angels. Furthermore, the consortium will actively seek for public/private funding through national and international programmes and initiatives.

Table 10. Preliminary financial forecast

		Y0	Y1	Y2	Y3	Y4
<b>Revenues</b>						
<b>Total revenues</b>		€ -	€ 800.000,00	€ 3.600.000,00	€ 10.400.000,00	€ 20.800.000,00
<b>Costs</b>						
<b>Total personnel</b>		€ 190.000,00	€ 495.000,00	€ 978.600,00	€ 2.010.685,00	€ 3.896.712,00
<b>Operational</b>		€ 47.500,00	€ 123.750,00	€ 244.650,00	€ 502.671,25	€ 974.178,00
<b>Other Marketing Costs</b>		€ 100.000,00	€ 120.000,00	€ 360.000,00	€ 416.000,00	€ 8032.000,00
<b>Other RTD and Inn MGT Costs</b>		€ -	€ -	€ 360.000,00	€ 1.040.000,00	€ 1.456.000,00
<b>External Services</b>		€ -	€ 100.000,00	€ 450.000,00	€ 1.300.000,00	€ 2.600.000,00
<b>Total Costs</b>		€ 337.500,00	€ 838.750,00	€ 2.393.250,00	€ 5.269.356,25	€ 9.758.890,00
<b>EBIT (Operating Profit)</b>		€ - 337.500,00	€ - 38.750,00	€ 1.206.750,00	€ 5.130.643,75	€ 11.041.110,00
<b>EBIAT (Operating profit after taxes)</b>	€ -5.000.000,00	€ -337.500,00	€ - 38.750,00	€ 603.375,00	€ 2.565.321,88	€ 5.520.555,00
<b>NPV (8% rate)</b>						€ 776.041,78
<b>IRR</b>						11,33%
<b>ROI</b>						240,05%

### 3.2 Partner specific exploitation plans

This section provides the eDREAM partners' individual exploitation plans. The organisations have been categorised into four groups, in line with the original proposal:

- Research and academia partners: TU, CERTH, TUC
- IT Service and Technology provider: ENG, ATOS, E@W
- DOSs: ASM
- Aggregators and ESCOs: KIWI, SVT, EMOT

Table 11. ENG Individual exploitation plan

<b>Partner</b>	ENG
<b>Organisation profile</b>	Entreprise
<b>Strategic focus areas</b>	IT Services
<b>How is eDREAM project relevant to your organisation</b>	Engineering has a dedicated business unit for the Energy & Utilities market and has developed also it's own software suite for the Utilities market. eDREAM project outcomes could be part of the suite.
<b>What content could be exploited?</b>	<ul style="list-style-type: none"> <li>• Both material (platform tools)</li> <li>• And immaterial assets (knowledge, methodologies, requirements etc.)</li> </ul>
<b>Approach to exploitation</b>	Start a technology transfer process towards the dedicated Business Unit, describing the identified scenarios, business requirements and stakeholders.

Table 12. CERTH individual exploitation plan

<b>Partner</b>	<b>CERTH</b>
<b>Organisation profile</b>	Research Institute
<b>Strategic focus areas</b>	Energy and ICT sector
<b>How is eDREAM project relevant to your organisation</b>	Contribution to the design of innovative algorithms, techniques and visualization tools concerning data analysis of microgrids and market operation and interaction with stakeholders.
<b>What content could be exploited?</b>	<ul style="list-style-type: none"> <li>• Deep learning techniques for electricity consumption/production forecasting;</li> <li>• Aerial survey techniques for DR estimation;</li> <li>• DR Optimization and Scheduling toolkit;</li> <li>• We will examine synergies with National &amp; European stakeholders (we already talk with Energy Utilities and DSOs in Greece and Germany) for further exploitation;</li> <li>• Open Days at CERTH premises, Participation in Researchers Night (yearly) and HELEXPO (yearly);</li> <li>• Strategic participation in Energy related Events.</li> </ul>
<b>Approach to exploitation</b>	<p>The development of quite accurate forecasting algorithms concerning the energy related data will enable us to deliver powerful tools for the energy market stakeholders. Aggregators will be able to forecast the electricity demand and supply of the registered prosumers by using these tools, so as to apply efficiently the proper DR strategy. These techniques will provide the possibility of pre-assessment for Demand Response programs. It will be a useful tool for utility companies for identifying possible prosumers with remarkable production potential examining the building assets.</p> <p>eDREAM allows CERTH to investigate different techniques to improve the Front-End part of platforms dedicated to energy market. The focus area is the creation of multi-level and multi-factor visualization framework for energy market stakeholders (aggregators, DSO, prosumers etc.) towards improving their portfolio management. Through the research activities during DREAM project, CERTH will improve its correlation algorithms for multi-factor analysis and will evolve existing Augmented Reality (AR) tools. These research and development processes will extend the specialization areas of CERTH in the visualization part of ICT platforms enabling us to collaborate with relevant enterprises in the energy sector.</p> <p>All the above techniques and tools will be also fully exploited in the Digital Innovation Hub of Smart Home at CERTH's premises.</p> <p>Possible ways for the exploitation can be through licensing (royalties), either through the creation of spin-offs, either through existing spin-offs.</p> <p>During these activities, the research results concerning the advanced techniques and tools for the energy market can be diffused to relevant stakeholders.</p>

Table 13. TU Individual exploitation plan

<b>Partner</b>	<b>TU</b>
<b>Organisation profile</b>	Public University
<b>Strategic focus areas</b>	Smart energy systems
<b>How is eDREAM project relevant to your organisation</b>	eDREAM provides funding for a PhD student and staff working on demand-response optimisation, baseline definition and prediction, augmented reality visualisation of energy performance and aerial surveying of demand response potential.
<b>What content could be exploited?</b>	<ul style="list-style-type: none"> <li>• Patentable developments are related to LiDAR and AR integration in aerial surveying equipment.</li> <li>• Additional exploitable results are related to aerial surveying services for demand response potential estimation, baseline determination and demand prediction using optimisation, interface to generic optimisation tools.</li> </ul>
<b>Approach to exploitation</b>	<p>TU will follow internal procedures for IP and patent protection of its exploitable results. eDREAM project beneficiaries will be offered preferential treatment in accessing and commercialising exploitable results before exploring commercial opportunities on the open market, in accordance with the Consortium Agreement.</p> <p>Such opportunities include but are not limited to software licensing, licenced manufacturing, service offering accreditation etc.</p>

Table 14. KIWI Individual exploitation plan

<b>Partner</b>	<b>KIWI</b>
<b>Organisation profile</b>	Demand Response aggregator
<b>Strategic focus areas</b>	Flexibility services Energy Markets Turnkey solutions for Energy Management
<b>How is eDREAM project relevant to your organisation</b>	Any tools or services designed and developed to enhance the use of flexibility in the balancing markets and ancillary services are of interest as this will allow KiWi to maximise revenues for its existing and future customers and maximise profits for its shareholders. Also KiWi is now a technology provider, licensing its platform to partners through Europe.
<b>What content could be exploited?</b>	<ul style="list-style-type: none"> <li>• Deep learning techniques for electricity consumption/production forecasting.</li> <li>• Aerial survey techniques for DR estimation.</li> <li>• Interactive Visualization Framework for DR strategies.</li> <li>• DR Optimization and Scheduling toolkit</li> </ul>
<b>Approach to exploitation</b>	<p>Better forecasting tools for energy consumptions and loads modelling will allow KiWi to improve assets availability declarations in each commercial programme thus increasing revenues and reducing the risks of penalties for underperformance. Price prediction algorithm for wholesale market and imbalance market will allow KiWi to apply the best monetisation strategies for its flexibility portfolio and maximise revenues for end users.</p> <p>This tool can potentially fit into KiWi's sales funnel process, enabling quick initial assessment of large industrial and commercial areas and saving time and money on</p>

	<p>costly site surveys.</p> <p>This tool can help potential customer better and quicker understand the flexibility potential and how that can be monetised. In addition, it can help clients such as Distribution Network Operators (to which KiWi is already a platform provider) to assess the best network constrain management strategies based on available flexibility in each area.</p> <p>This toolkit will provide innovative visual clustering techniques, correlation with relevant KPIs and multi-objective analysis. It will be a very informative tool for aggregators helping them in improving long-term the applied DR strategies.</p>
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Table 15. ATOS Individual exploitation plan

<b>Partner</b>	<b>ATOS</b>
<b>Organisation profile</b>	IT
<b>Strategic focus areas</b>	Energy
<b>How is eDREAM project relevant to your organisation</b>	Contribute to the provision of cutting edge solutions in the emerging digitalised energy sector.
<b>What content could be exploited?</b>	<ul style="list-style-type: none"> <li>• Clustering tools</li> <li>• Framework integration</li> </ul>
<b>Approach to exploitation</b>	<p>eDREAM allows Atos to dig into the different clustering tools that can be applied. The main focus of Atos is to work on assessing scalability finding the most suitable solution to be integrated in the FUSE platform. Additionally, the analysis and integration of the clustering tools will extend the expertise of Atos in the identification of Data Analysis to the energy sector of the research department enabling us to strength the collaboration with the business lines in this area.</p> <p>The integration activities that Atos will be leading in eDREAM supports the work the research department is doing developing FUSE framework. One of the main aspects to be covered in the preparation of tools and solutions for the digital energy environment is the collaboration among heterogeneous technologies, devices and data sets. Besides the work on clustering techniques that is developed in the project, the creation of common space for supporting the whole data value chain plus the integration of cutting-edge technologies like Blockchain, will strength Atos in the reliability and scalability of its solutions</p>

Table 16. E@W Individual exploitation plan

<b>Partner</b>	<b>E@W</b>
<b>Organisation profile</b>	Innovative non-profit start-up organisation
<b>Strategic focus areas</b>	The core of the E@W activities is focused essentially on the development of services for the Energy Management. E@W designs and develops software solutions for the efficient and intelligent management of building automation systems and energy storage. Other main activities are related to the management of user interactions with the electricity grid with a particular focus on the design and development of Demand Response

	<p>services.</p> <p>In the last 3 years, E@W has investigated and mastered the appropriate open technologies and artificial intelligence algorithms to be applied to the energy efficiency sector, with the aim to develop a stable and robust solution able to implement energy-saving strategies at the building level.</p> <p>In particular, the company solution under development optimizes the operation of the systems commonly present in large buildings (air conditioning, lighting, shading), achieving up to 20% of energy savings with limited investments taking also in consideration the user comfort.</p> <p>A system prototype, consisting of a network of sensors able to monitor user activities, environmental parameters and consumption, has been already demonstrated in the operational environment (TRL7).</p>
<p><b>How is eDREAM project relevant to your organisation</b></p>	<p>The E@W on-going activities are aimed to integrate Demand Response functionalities into the company solution to ensure further savings by appropriately triggering of an efficient response from an input signal such as a change in the renewable production curve, where present (or, in the future, a price curve).</p> <p>In particular, thanks to the relevant experience gained in the context of H2020 eDream project, it will possible to integrate in the solution these specific services such as services for the optimal management of storage systems combined with renewable sources.</p> <p>These activities will lead to an evolution of the system, in accordance with the E@W business and development plans and with the relevant regulations.</p> <p>Among the expected results, the company solution must be able to interact with the loads and with the inverters of the renewable energy systems implementing on the field the energy saving and energy storage management services already under development. The future integration of these functionalities will enhance the possibility to include in the business model any profits obtained through the involvement in the DSO's DR programs.</p>
<p><b>What content could be exploited?</b></p>	<ul style="list-style-type: none"> <li>• Electricity Production/Consumption forecasting tools</li> <li>• Baseline load estimation in DR programs</li> <li>• Decision Making and Optimization for Improving DR</li> <li>• Big Data Clustering techniques for load and generation profiling</li> <li>• Multi-level Visualization for enhanced user interaction</li> <li>• Secure blockchain-based applications for DR management, control and financial settlement</li> </ul>
<p><b>Approach to exploitation</b></p>	<ul style="list-style-type: none"> <li>• Definition of primary and secondary customers;</li> <li>• Customer involvement through bilateral meetings or promotion events;</li> <li>• Territorial partnership agreements with complementary companies such as ESCO, System integrators and / or Building Automation - Companies, Facility Management companies;</li> <li>• International agreements with partners of the H2020 network;</li> <li>• Exploitation of the LegaCoop channel to intercept potential large customers such as COOP, CONAD etc.;</li> </ul> <p>Investor search for accelerated company development.</p>

Table 17. ASM Individual exploitation plan

<b>Partner</b>	<b>ASM</b>
<b>Organisation profile</b>	Public utility company
<b>Strategic focus areas</b>	<ul style="list-style-type: none"> <li>• Electric power distribution</li> <li>• Innovation</li> <li>• Water distribution and waste water treatment</li> <li>• Waste management</li> </ul>
<b>How is eDREAM project relevant to your organisation</b>	eDREAM project is relevant to ASM in terms of new tools and services to make the distribution power network more stable and secure. The high penetration of DER in the Terni’s area has led to a significant increase of the reverse power factor in the substations and number of congestions. Matching consumption with production through secure and efficient DR strategies using blockchain technology represents nowadays one of the most promising approaches for the DSO’s grid management.
<b>What content could be exploited?</b>	<ul style="list-style-type: none"> <li>• Know how</li> <li>• Community based VPP</li> <li>• DR blockchain based technologies</li> </ul>
<b>Approach to exploitation</b>	<p>Concrete measures will be planned by ASM TERNI to enhance the innovation capacity and integration of eDREAM knowledge and results in its strategic focus areas. Due to its role as DSO and eDREAM pilot site, ASM TERNI is definitely committed to the eDREAM project with respect to the utilisation of the smart grid solutions developed throughout the project, both for other demonstration/innovation actions and/or for research purposes. However, in case of large scale deployment, these solutions have to meet a number of key criteria, such as to be economic and very secure, not jeopardizing power continuity. Finally they must support applications that contribute to a positive business case in terms of grid control.</p> <p>Moreover, for a DSO the route to the market is complex and the availability of suitable network elements for deployment is probably the least difficult issue. More complex is the strategic decision to develop networks and especially secure mobile networks capable of supporting the blockchain-based DR systems proposed by eDREAM. Equally complex is the design of an operational network architecture suitable for mass heterogeneous equipment deployment, providing the necessary security operations systems and capabilities of integration with existing SCADA, IT and security systems.</p>

Table 18. TUC Individual exploitation plan

<b>Partner</b>	<b>TUC</b>
<b>Organisation profile</b>	University
<b>Strategic focus areas</b>	<ul style="list-style-type: none"> <li>• Teaching;</li> <li>• Research and innovation actions.</li> </ul>
<b>How is eDREAM project relevant to</b>	Raise awareness about university R&D activities; Establish new potential partnerships

<b>your organisation</b>	with different stakeholders/companies/organizations; Disseminate research results in highly ranked journals/conferences; Create services for consultancy and technological transfer of research into production.
<b>What content could be exploited?</b>	<ul style="list-style-type: none"> <li>• Electricity production / consumption forecasting techniques and tool;</li> <li>• Consumption flexibility models and aggregation techniques;</li> <li>• Blockchain-enabled decentralized network control optimization and DR verification technologies.</li> </ul>
<b>Approach to exploitation</b>	<p>The research and technical outcomes are exploited by publishing papers in conferences and journals related to project domain.</p> <p>In terms of teaching, specific presentations describing the project outcomes were made for students during academic teaching activities and to university members. Currently 5 Master theses and 2 PhD theses are carried out in the university based on the eDREAM outcomes and future developments.</p> <p>In terms of technological transfer of research into production, TUC expects to be involved in the future with consultancy activities to stakeholders for adopting, implementing and using the innovative techniques and algorithms developed within the project.</p>

Table 19. SVT Individual exploitation plan

<b>Partner</b>	<b>SVT</b>
<b>Organisation profile</b>	ESCO
<b>Strategic focus areas</b>	<ul style="list-style-type: none"> <li>• Energy efficiency solutions and services</li> <li>• Energy services in buildings</li> <li>• DRaEMS - Demand Response as an Energy Management Service</li> </ul>
<b>How is eDREAM project relevant to your organisation</b>	<p>Open new frontiers on digitalization's grid; gives an integrated big picture about local communities energy profile, related to the whole urban area. This is strictly related to energy efficiency, which is our core business.</p> <p>Helps in the optimization of the energy and cost saving, if Demand Response applied. It can be a digitalized energy service provided by ESCOs.</p>
<b>What content could be exploited?</b>	<p>SVT will leverage project results to complement its original market positioning (ESCO) with innovative flexible load aggregation services.</p> <p>DR architecture, BEM Systems implementation and digitized solutions to implement DR in buildings.</p> <p>In collaboration with TUCN, we can test technologies in its public buildings, as it has an operational BEMS and Demand Response system in place.</p>

**Approach to exploitation**

Develop cluster tools for grid digitalization in order to have predictability and scalability of the energy load local grid.

Find the actors / See which stakeholder are interested to invest in Energy efficiency.

TUCN can use its assets, systems and experience in Demand Response in a pilot project to test and prove the objectives of eDREAM.

SVT can implement systems and operate eDREAM solution, including in energy service packages for buildings.





The eDREAM project is co-funded by the EU's Horizon 2020 innovation programme under grant agreement No 774478

Table 20. EMOT Individual exploitation plan

Partner	EMOT
Organisation profile	SME
Strategic focus areas	• Electric Mobility
How is eDREAM project relevant to your organisation	Emotion will be part of the Italian pilot providing monitoring and management services for electric vehicles and charging stations. Collaboration with the other partners of the eDREAM project for testing Demand Response campaign in order to provide flexibility to DSO will allow Emotion to refine their skills and enrich their knowledge, being able to take advantage of this learning after the end of the project.
What content could be exploited?	EMOT will use its involvement in the eDREAM project to gain knowledge on Demand Response mechanisms using Blockchain technology, with the aim of verifying if it is possible to implement this approach to its business activities.
Approach to exploitation	Emotion will use the involvement in the eDREAM project to improve the ability of its employees and increase its contribution to the European projects in which it participates, such as WiseGRID ( <a href="http://www.wisegrid.eu/">http://www.wisegrid.eu/</a> ), SOFIE ( <a href="http://www.sofie-iot.eu/">http://www.sofie-iot.eu/</a> ), NRG-5 ( <a href="http://www.nrg5.eu/">http://www.nrg5.eu/</a> ), and those to which it will participate. In addition, the acquired knowledge will be exploited to increase its business, offering to the market products and services enhanced during the project, with the aim of giving strength to electric mobility, for a cleaner mobility, allowing an increasingly massive deployment of electric vehicles and charging stations and an increasingly intense use of renewable photovoltaic energy that is mainly produced at lunchtime, when consumption is lower and when the vehicle could be parked in charge.

## 4 Conclusions

This report presents the Dissemination, Communication and Exploitation Plans for eDREAM project. This plan identifies, organises and establishes the channels and activities used in order to promote eDREAM objectives and results.

The implementation of this plan will be monitored and reported in the following deliverables:

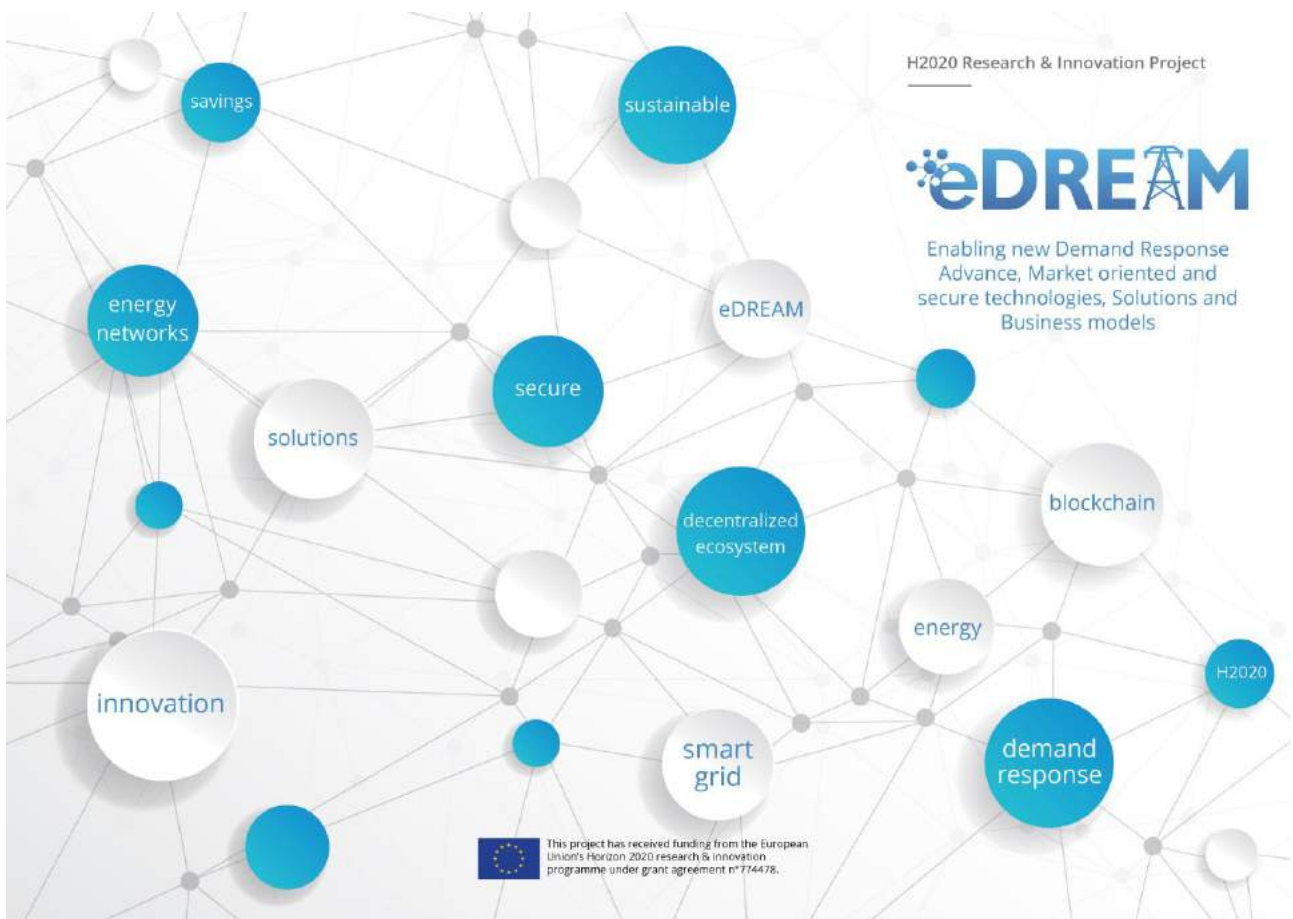
- D8.3 Report on dissemination activities V1 – due M12
- D8.4 Exploitation Report and IPR Protection Plan V1 – due M18
- D8.5 Report on dissemination activities V2 – due M24
- D8.7 Report on dissemination activities V3 – due M36
- D8.8 Exploitation Report and IPR Protection Plan V2 – due M36

## Annex 1

### Project roll—up poster



Figure 6. Project roll-up Poster



**CONTEXT**

The European Commission strategic framework seeks for an improved and modernized European energy market, targeting to achieve secure, sustainable, affordable and decentralized energy networks.

**SOLUTION**

eDREAM aims to research, validate and bring into pre-commercialization phase a near-real time closed-loop Demand Response framework, fully autonomous, secure (using Blockchain technology) and based on decentralized decision making functional model.

**CHALLENGE**

There are very few examples of the successful deployment of Demand Side Response technologies that consider Virtual Power Plants as well as decentralized approaches towards achieving a reduction in peak grid demand and real savings for final consumers.

**IMPACT**

Boost the flexibility of energy users and the smartness of the grid, enabling a smooth integration of renewables, generating 10% emission savings demonstrated and 25% cost saving and energy reduction for customers.

Find out more  
[www.edream-h2020.eu](http://www.edream-h2020.eu)  
[contact@edream-h2020.eu](mailto:contact@edream-h2020.eu)  
 Twitter:  
 @eDREAMh2020

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Figure 7. Trifold flyer

enabling new Demand Response Advanced, Market oriented and secure technologies, solutions and business models

**A novel Blockchain based Demand response decentralized ecosystem**

**Project overview**

- **Action:** Horizon 2020 Research & Innovation programme
- **Project length:** 36 Months
- **Coordinator:** Engineering – Ingegneria Informatica SPA
- **Partners:** 10 - Italy, Spain, Greece, UK, Romania

**Project overview**

- Context:** The European Commission through Framework 7 and Horizon and Horizon 2020 research programmes, targeting real-time secure, sustainable, flexible and secure energy networks.
- Challenge:** There are very few examples of the successful deployment of DRS technologies that provide DRS as well as distributed generation assets in a single production to provide demand response services for local consumers.
- Aim:** eDREAM project is a novel near real-time Closed Loop optimal Blockchain based Demand response ecosystem.
- Impact:** Real time flexibility strategy based on the use of flexible and distributed energy resources, enabling distributed generation and demand response services in a secure and efficient manner.

**eDREAM objectives**

- Develop innovative tools for demand response system performance analysis, including real time pricing, aggregation and load balancing.
- Investigate and develop suitable smart control strategies for managed aggregators to actively manage clusters of flexibility assets.
- Develop and demonstrate Blockchain applications for distributed generation, demand response and control of DSOs in real time operations. Real-time closed loop near real time DR performance and secure data handling.
- Develop Blockchain and other smart contract based systems for demand response and energy markets.
- Validate the developed technology in a number of use cases and live demonstration sites.
- Research and validate innovative smart design and control solutions for real-time operation and control of the demand and generation distributed resources.

**eDREAM vision is for:**

- a novel near real time Closed Loop optimal blockchain based Demand Response ecosystem,
- where Distribution System Operators (DSO) and Aggregators cooperate within a novel yet appropriate market framework,
- with a view to exploit to the largest possible extent the flexibility potential of a large variety of heterogeneous third party stationary and mobile load assets,
- while keeping system reliability within prescribed limits and preserving continuity and security of supply.

**eDREAM Vision**

**Traditional processes in the current Energy Market**

**Evolution of Concept for Closed-Loop, Secure and Optimized DRS in a demand-driven manner**

**eDREAM pilot use cases**

**Pilot case DR**

- Novel DR potential
- Customer Segmentation and Clustering
- DR Strategic Positioning
- Community-based Virtual Power Plants

**Pilot case Italy**

- Secure Blockchain Agreement of DRS
- Blockchain DR aggregation and Financial settlement
- Feasibility Analysis of Distributed Generation and Energy Resource Storage, VPP and VPP2G
- Active Micro Grid for DSO system flexibility services

**Project consortium**

**Find out more**  
[www.edream-h2020.eu](http://www.edream-h2020.eu)

**Follow us:**  
 Twitter: @eDREAMh2020

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Figure 8. General presentation print screen