



Dissemination & Standardization Activities V2

START DATE OF THE PROJECT

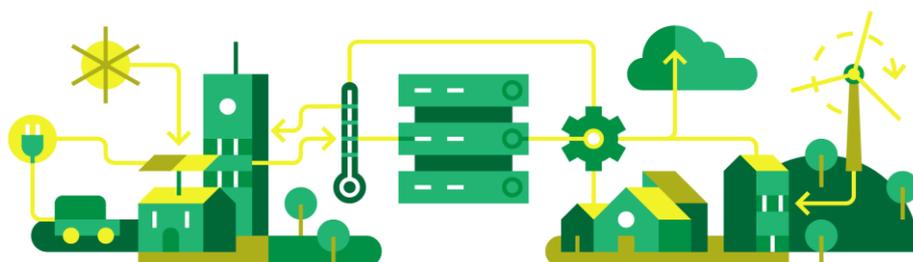
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List of Acronyms

AIOTI	Alliance for Internet of Things Innovation
BSI	British Standards Institution
CEN	European Committee for Standardization
CENELEC	European Committee for Electrotechnical Standardization
CIGRE	Council on Large Electric Systems
DC	Data Centre
DR	Demand Response
EC	European Commission
ETIP	European Technology and Innovation Platform
GDC-SG	Green Data Centres Stakeholders Group
IEC	International Electrotechnical Commission
JRC	Joint Research Center
KPI	Key Performance Indicator
SDO	Standards Development Organizations
SEDC	Smart Energy Demand Coalition
USEF	Universal Smart Energy Framework
WP	Work Package



Executive Summary

This deliverable reports the dissemination and communication activities undertaken by the CATALYST consortium during the second year of the project. Also, it shows the current status of standardization activities highlighting the Standards Development Organizations (SDOs) to which the project may contribute for standards development.

Following the CATALYST multi-channel, multi-stakeholder communication and dissemination strategy presented in detail in reports D8.3 [1] and D8.5 [2] to raise awareness about the project results, this report summarizes the main achievements during the second year of the project. The dissemination activities are grouped in several categories depending of their nature: online presence (website), social media, articles in journals and magazines, attended events and conferences, special issues and GDC-SG news. The document also shows the updates to the plan of action KPIs as a measure of comparing the targeted awareness levels with the reached ones. Also, future events are presented as a main plan for next dissemination activities.

Using the study carried out to identify and understand existing SDOs to which CATALYST may contribute in D8.5 [2], the deliverable presents the current status of interaction with SDOs. Also, the main ongoing standardization activities are described even if they are still in progress and the consortium is working to move forward in different ways and explore different topics with each organization.

Further updates on dissemination will be included in report, D8.12, by the end of the project in September 2020.



1 Introduction

This report provides an overview of the CATALYST dissemination activities during the second year of the project. In detail, Section 2.1 reports all the dissemination initiatives until September 2019, classified by their nature and highlighting the main outcomes while in Section 2.3 we envision future events where the CATALYST consortium can disseminate project results. In addition, the report summarizes the activities carried out in the first project year (reported in deliverable D8.5 in month 12) creating a consistent overview over the current awareness level of CATALYST activities. Also, the targeted Standards Development Organizations (SDOs) to which the project intends to promote new work items and contribute to standards development are discussed while focusing on the ongoing standardisation activities.

1.1 Intended audience

The intended audience of this report is the CATALYST consortium and the European Commission (EC) representatives tasked with reviewing the project and its progress towards meeting the specified milestones and raised awareness. Other stakeholders interested in studying and promoting the CATALYST results may also find D8.9 useful.

1.2 Relations to other activities

Work Package (WP) 8 main objective is to raise awareness about original and remarkable outputs of the projects, exploiting feedback from other CATALYST work packages which collectively develop the overall CATALYST technological framework in conjunction with the business framework. This deliverable reports the scientific dissemination and standardization activities and directly affects all deliverables. WP8 interacts with WP2, providing business/market feedback to CATALYST design, and also with WP3-WP7 to get significant outputs and properly disseminate/communicate them, according to the defined Dissemination and Communication Strategy (see Figure 1).

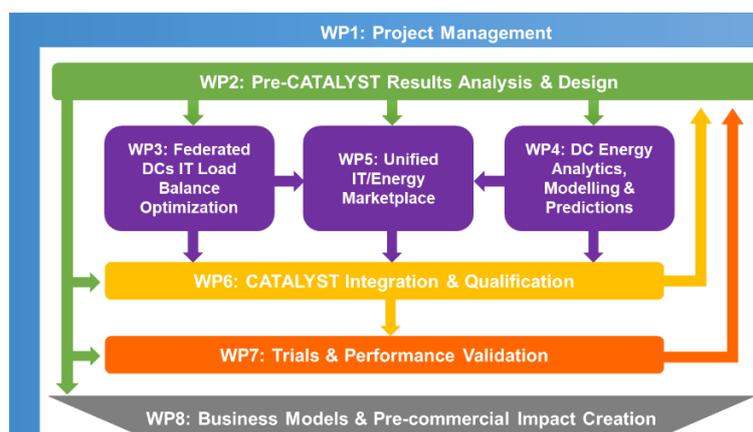


Figure 1 – WP8 relation with other work packages

1.3 Document overview

The remainder of the report is organized as follows:

- Chapter 2 provides an update of the CATALYST communication and dissemination activities focusing on past and future events while creating a snapshot of the current awareness through the targeted dissemination KPIs;
- Chapter 3 outlines the targeted SDOs highlighting CATALYST envisioned contribution and shows the ongoing standardization activities;
- Chapter 4 concludes the report.



2 Communication and dissemination updates

CATALYST uses a multi-channel, multi-stakeholder communication and dissemination strategy that leverages on the right combination of media channels and the most suitable mix of promotional tools and material at the right time within the CATALYST project lifetime. This strategy was presented in detail in report D8.3 [1]. In this report we focus on showing the outputs of the used dissemination strategy as events and publications during the second year of the project.

2.1 Past and current dissemination activities

The sub-sections below report all dissemination initiatives undertaken by partners in the second year of the project classified by their nature while highlighting the main outcomes.

2.1.1 Online presence & social media

The website, www.project-catalyst.eu, as of the 13th September 2019 had received in total 63,776 visits from a total of 25,034 visitors. The top 10 countries for visits are presented in table below.

Rank	Flag	Country	Visitor Count
1		United States	3,913
2		India	1,689
3		France	1,285
4		Brazil	880
5		Romania	782
6		United Kingdom	704
7		Italy	686
8		Philippines	643
9		Germany	641
10		Netherlands	624

Table 1 – Visitors overview

The twitter account @catalyst_dc has 106 followers and 263 tweets relating to the project events and other relevant material.

2.1.2 Journals & magazines

CATALYST consortium partners are working on disseminating the project results in Europe and worldwide via publications in highly ranked international scientific journals and industry magazines. Following the general open strategy of CATALYST, the open access publishing option is pursued for scientific journals and conferences to maximize the target audience and the impact of the relevant publications.

Table 2 shows the journals, magazines and online articles that have been published during the second project year.

Publication media	Title	Authors	Publication type
DatacentersWorks, October 2018 [3]	Is uw datacenter al 'capture ready'?	Vasiliki Georgiadou (GIT)	Online Industry Magazine article
Computable, October 2018 [4]	Datacenters worden wellicht 'energy hubs'	Vasiliki Georgiadou (GIT)	Online Industry Magazine article
Datacenter Restwarmte & Innovatie report, November 2018 [5]	CATALYST case study presentation	GIT	Online Industry Report
Dotmagazine, December 2018 [6]	New toolkit helps data centers assess their environmental impact	Robbert Hoeffnagel (GIT)	Online Industry Magazine article
DCA Journal, December 2018 [7]	Tool Kit to help Data Centres assess their environmental impact	Vasiliki Georgiadou (GIT)	Online Industry Magazine article
Computable, January 2019 [8]	Nieuwe toolkit helpt Amsterdam aan nieuwe datacenters	Jaak Vlasveld (GIT)	Online Industry Magazine article
DCW Media, April 2019 [9]	Data Centers as players in energy networks	Vasiliki Georgiadou (GIT)	Online article
Information Sciences, February 2019 [10]	Exploiting data centres energy flexibility in smart cities: Business scenarios	Tudor Cioara, Ionut Anghel, Ioan Salomie, Marcel Antal, Claudia Pop (TUC) and Massimo Bertoncini, Diego Arnone (ENG)	Journal article
Energies, March 2019 [11]	Reuse of Data Center Waste Heat in Nearby Neighborhoods: A Neural Networks-Based Prediction Model	Marcel Antal, Tudor Cioara, Ionut Anghel, Claudia Pop, Ioan Salomie (TUC) and Radoslaw Gorzenski, Radoslaw Januszewski, Ariel Oleksiak, Wojciech Piatek, Wojciech Szeliga (PSNC)	Journal article
Simulation Modelling Practice and Theory, May 2019 [12]	MoSiCS: Modeling, simulation and optimization of complex systems–A case study on energy efficient datacenters	Marcel Antal, Claudia Pop, Teodor Petrican, Andreea Valeria Vesa, Tudor Cioara, Ionut Anghel, Ioan Salomie (TUC)	Journal article

Table 2 - Performed publications in journals/magazines/online

In the following, more detailed information about the scientific publications is provided:

- “Exploiting data centres energy flexibility in smart cities: Business scenarios”, is published in Information Sciences ISI journal, with a *high 2018 impact factor, 5.524*, included in quartile category Q1. This is a highly ranked journal and we expect to create significant awareness with this article. Since its publication, the article collected 25 reads and 2 citations.
- “Reuse of Data Center Waste Heat in Nearby Neighborhoods: A Neural Networks-Based Prediction Model” was published in Energies journal which has a *2018 impact factor of 2.707*. Since its publication, the article collected 515 views and 410 downloads.

- “MoSiCS: Modeling, simulation and optimization of complex systems–A case study on energy efficient datacenters” was published in Simulation Modelling Practice and Theory journal which has a 2018 impact factor of 2.426, included in quartile category Q2. Since its publication in May 2019, the article collected 5 reads and 1 citation.

2.1.3 CATALYST special issues

In order to allow the CATALYST consortium to disseminate the scope and objectives of the project as well as the first results and ideas, TUC partner organized a *Special Issue* [13] to the ISI quartile category Q2 journal *Sustainability* which has 2018 impact factor of 2.592. The special issue guest editors are: Assoc. Prof. Tudor Cioara and Assoc. Prof. Ionut Anghel from TUC and Dr. Massimo Bertoncini and Dr. Diego Arnone from ENG. Entitled “Decentralized Management of Flexible Energy Resources in Smart Grid”, the special Issue aims to explore new and innovative solutions in this emerging context, contributions being expected that address, but are not restricted to, the following topics:

- Smart grid flexibility management;
- Blockchain for decentralized management of DR programs;
- Flexibility assessment and forecasting;
- DC energy management for optimal smart grid integration;
- DCs as aggregators of themselves;
- VPP construction and management;
- Blockchain-enabled infrastructures for decentralized energy grid control;
- Energy assets decentralized coordination;
- Energy markets operation and coordinated clearance mechanisms

Also, ENG partner organized and chaired a *Special Session* of the IEEE International Conference on Environment and Electrical Engineering entitled: “Energy prosumers flexibility for future smart grids”. One of the topics proposed in the call for paper was: “Data Centers as energy flexibility providers” and this allowed the consortium to submit a paper [14] and present the CATALYST project to a wide audience coming from academic institutions and industrial companies.

2.1.4 Networking & events

CATALYST is being represented in several international relevant scientific, technical and industrial level conferences and symposiums in the field of Energy Efficiency, specific workshops co-located within planned conferences, or exhibitions or fairs. Table 3 below shows the CATALYST consortium relevant events undertaken in the second project year.

Date	Event	Presenter, title/objectives	Type
10 Oct 2018	Datacenter Restwarmte & Innovatie event	GIT, Share and discuss views on heat reuse & innovation	Industry event, EU
11 Oct 2018	Amsterdam Smart City delegation	GIT, Present CATALYST to trade association BITCOM - Focus on smart city innovation	Industry event, EU
13 Nov 2018	IT Room Infra	GIT, Catalyst toolkit & GDC-SG	Industry event, NL
14 Nov 2018	ICTFootprint.eu project	Vasiliki Georgiadou (GIT), Webinar on toolkit and GDC-SG	Industry event, NL

27 Nov 2018	Datacenter World Paris	Vasiliki Georgiadou (GIT), Data centres as flexible energy hubs	Industry conference, EU
04 Dec 2018	IMAGINE18: ICT 2018 Networking Session	Jaak Vlasveld (GIT), CATALYST pitch on the Toolkit	EU commission conference, Pitch event
07 Feb 2019	Boden Type Data Centre One Inauguration event	Vasiliki Georgiadou (GIT). Presented CATALYST to consortium members and discussed collaboration opportunities	Industry event, EU
13 Feb 2019	Bruxelles workshop	Diego Arnone (ENG). Roadmaps are ready: now what?? Exploring the realities of the heat transition	Industry event, EU
26 Feb 2019	GIT Participants Meeting	GIT. CATALYST was presented and discussed to GIT participants	Industry event, NL
28 Feb 2019	eco association event	Vasiliki Georgiadou (GIT). CATALYST WORKSHOP – Converting Data Centres in Energy Flexibility Ecosystems	Organized CATALYST focused workshop
12 Mar 2019	DCW London 2019	Vasiliki Georgiadou (GIT). Is PUE the best we can do?	Industry event, EU
22 Mar 2019	PRO INVENT 2019	Ioan Salomie (TUC), CATALYST project overview	Scientific and industry conference, RO
Apr 2019	Coordination Group on Green Data Centre Association CEN/CENELEC	GIT, Toolkit presentation	Industry event, EU
5 April 2019	Data Center Forum - Oslo	GIT, CATALYST overview	Industry event, EU
25 May 2019	Data Centre Forum - Helsinki	GIT, CATALYST overview	Industry event, EU
18 July 2019	DCD Bangalore	GIT, CATALYST overview	Industry event, EU
Sept 2019	Stockholm Study Visit	GIT, CATALYST and Stockholm Data Parks	Industry event, EU
5-7 Sept 2019	Conference: ICCP2019	TUC, CATALYST prediction engine presentation	International scientific conference, EU
9 Sept 2019	Contractors meeting on Waste Heat/Cold Utilisation	ENG, TUC, ENEL	Industry event, EU
10 Sept 2019	2nd Green Data Centre Stakeholder Group Meeting	GIT, ENG, ENEL, POPs Follow-up event on GDC-SG activities	Organized CATALYST focused event
11 September 2019	DCA DC Retransformation Manchester	GIT, CATALYST overview	Industry event, EU
26 September 2019	Data Center Forum - Copenhagen	GIT, CATALYST overview	Industry event, EU

Table 3 - CATALYST list of past and current relevant events

The involvement of a critical mass of stakeholders around the project is a crucial point that will guarantee the creation of strong impact around CATALYST. In this respect, significant effort is dedicated to attracting and collaborating with the existing initiatives, working groups and international consortia.

In this context the CATALYST project has been presented during a workshop held in Bruxelles on February 2019 and held by the H2020 project ReUseHeat. The two project coordinators considered interesting to

share information and to collaborate for a paper, at least as first collaboration. This can be considered as the first step of a collaboration between the two research initiatives in compliance to the request of reviewers and thanks to the support of the CATALYST Project Officer. Also, connections and collaborations have been established with the following initiatives:

- USEF (Universal Smart Energy Framework) [14]. USEF framework was adopted in CATALYST.
- eDREAM (enabling new Demand REsponse Advanced, Market oriented and secure technologies, solutions and business models) [15]. H2020 EU project, ENG as coordinator, TUC as partner.
- ECO2CLOUD (Technologies for efficient management and scheduling of cloud resources in cloud for reducing Alpis data centre energy consumption) [16]. RO Research and Development project, TUC as coordinator.
- Euroheat & Power EHP [17]. International network for District Energy promoting sustainable heating & cooling in Europe & beyond.

2.1.5 GDC-SG updates

The GDC-SG had an event in Manchester on the 10th September 2019 [19] co-located with the Data Centre Alliance's Data Centre Retransformation Event. Despite over 20 people registering to attend, travel problems and meeting overruns (advised to project team members prior to the event), meant that we had a small number of attendees, however the quality of these members and their vast experience meant that the feedback was of excellent quality and more information on this will be provided in the deliverable D8.6 [20].

The agenda was as follows:

- Introduction
- CATALYST project Update
- Green Data Centre Assessment Tool v1 Review and Workshop for v2
- Green Data Centre Network (Roadmap) Review and Workshop
- CATALYST Business Models overview

The next GDC-SG event will take place in *Dublin* on the 20th November 2019 co-located with DC Ireland, where we have also arranged to present an overview on the CATALYST project as well as attend a panel discussion. The agenda for the event will be:

- 11:10 - 12:55 Heat Networks and the Data Centre
- 11:15 – 11:40 Heat Networks, CATALYST Project & Data Centres, John Booth CATALYST Project Lead Green IT Amsterdam
- 11:40 – 12:00 Initial Results from the CATALYST project pilots, TBA
- 12:00 – 12:20 The Tallaght Project and our plans for heat recovery from DCs around Dublin, Donna Gartland Senior Energy Planner - Codema
- 12:20 – 12:55 Panel Discussion – District Heat Networks, Dr Mattias Vesterlund – RI:SE SICS North, John Booth – CATALYST Project Lead - Green IT Amsterdam, Donna Gartland

We have a CATALYST GDC-SG Meeting scheduled between 14:00 – 16:00, this event will cover the same agenda as the Manchester GDC-SG with the addition of the results from one of the pilot projects.

2.1.6 Press & traditional media

The consortium members have issued press releases and contacted traditional media such as newspapers, magazines and so on, to raise awareness about the project's outcomes to a wider audience. Table 4 summarises the actions undertaken in the second project year by the CATALYST consortium.

Publication media	Title	Authors	Type
Datacenter Restwarmte & Innovatie aftermovie, Nov 2018 [20]	CATALYST position on heatreuse	GIT	Video/Film
Business wire, December 2018 [21]	CyrusOne Expands in the Netherlands to Develop Next-Gen Data Center at PolanenPark in Partnership with SADC	GIT	Press release/Newsletter
Market Watch, December 2018 [22]		GIT	Press release/Newsletter
SADC website, December 2018 [23]		GIT	Press release/Newsletter
Data economy, December 2018 [24]	CyrusOne Buys Land for Its Second Major Holland Facility This Year	GIT	Press release/Newsletter

Table 4 - CATALYST list of past and current relevant press releases/newsletters

2.2 Plan of action update

This section provides a snapshot of the current status of dissemination activities already undertaken during the first two years of the project. Table 5 provides an overview of the initially established quantifiable communication impact metrics alongside the corresponding updates related to their success indicators, as of writing.

Media	Success Indicator	Coverage	Status
Online Presence			
Website	>5000 (unique) accesses per year; >300 downloads	World-wide; general and target group specific audience	25000 visitors
Social media: Twitter & LinkedIn	>=20	Mostly Europe	106 followers on twitter, 263 tweets
Green Data Centres Stakeholders Group (GDC-SG) Newsletter	>=5	Europe	3
Journals & Magazines			
Publication in highly ranked international journals	>3	World-wide	4
Organization of special issues	>2	World-wide	2
Articles on industry-oriented magazines	>5	World-wide	9
Networking & Events			
Contribution to peer reviewed conferences and workshops	>8	World-wide; specific audience	5

Participation to industry innovation events	>5	Europe	21
Organization of CATALYST focused workshops & events	>=3	Europe	5
Press & Traditional Media			
Press releases	>=2	Europe	12

Table 5 - Quantifiable communication and dissemination impact metrics for the first 24 months

The following table provides an overview of the estimated number of persons reached, as of writing.

Audience type	How it is measured	Estimated no. persons reached
Scientific Community (Higher Education, Research)	No. participants at attended scientific conferences; no. scientific articles reads/downloads/citations; no. students/academic staff attending CATALYST presentations, etc.	3000
Industry	No. participants at attended industry events, organized workshops, etc.	2500
Civil Society	No. reads for newsletters, followers, conferences participants.	800
General Public	No. reads for newsletters; no. non-scientific and non-industry events participants, followers, article readers, etc.	15000
Policy Makers	No. policy makers participants at industry events, organized workshops, etc.	200

Table 6 - CATALYST awareness overview

2.3 Future activities

As updates for the envisioned dissemination plan, the consortium has identified future dissemination activities that are summarized in the following table.

Estimated date	Publication media / Event	Partners	Description / Audience
November 2019	DC Ireland	GIT	CATALYST project overview + Tool/Roadmap
November 2019	Data Center Forum - Stockholm	GIT	CATALYST project overview
End of 2019 - Early 2020	Journal article regarding DC Electricity and Thermal DR Prediction findings	TUC	Journal article. International scientific audience.
End 2019	Organization of special issue in international journal	ALL	Organization of special issues. International scientific audience.

Table 7 - Envisioned dissemination activities

3 Standardization

3.1 Current status of interaction with SDOs

SDO	Contribution status	CATALYST Partner(s)
Smart Grids European Technology Platform EDSO	<ul style="list-style-type: none"> Contact established [Mr. Robert Bissel Gareth] CATALYST presentation shown during an internal meeting Next step under evaluation 	ENEL
Smart Energy Demand Coalition (SEDC) smartEN	<ul style="list-style-type: none"> Contact established [Mrs. Layla Sawyer] CATALYST presentation shown by CATALYST partners Feedback received Potential attending of Mrs. Layla at the workshop expected at the next Utility week in Paris 	ENEL
IEC and CEN-CENELEC	<ul style="list-style-type: none"> Contact established CATALYST presentation shown GIT will participate at next CENELEC meeting to present on the Green DC Assessment Tool & Network Map 	GIT
Council on Large Electric Systems (CIGRE)	<ul style="list-style-type: none"> Contact established CATALYST presentation shown Feedback received 	ENEL
Alliance for Internet of Things Innovation (AIOTI)	<ul style="list-style-type: none"> Contact established [Mrs. Natalie Samovich] Remote meeting definition in progress 	ENG
ETIP SNET	<ul style="list-style-type: none"> Contact established [Mr. Robert Bissel Gareth] CATALYST presentation shown Potential participation of CATALYST at next ETIP SNET Regional workshop expected at the next Utility week 	ENEL
USEF	<ul style="list-style-type: none"> Contact established [Mr. Bram Sieben] Several interactions both remotely and F2F Feedback and suggestions received 	GIT, ALD
OpenStack	<ul style="list-style-type: none"> Investigating how to integrate an extension of the CATALYST migration tool in OpenStack 	POPs

Table 8 – Current status of interaction activities with SDOs

3.2 In progress standardization activities

The most relevant interactions with SDOs are summarized here after. Some of these are still in progress activities and the consortium is working to move forward in different ways and exploring different topics with each organization.

A remote meeting took place on April 2019 between two members of the CIGRE C5 working group. The latter mainly deals with the energy market and relative regulation. Several CATALYST partners attended the meeting (ENEL, ENG, TUC, SiLO, ALD) and the main topic was the marketplace under development along the project and the role of the main stakeholders involved. The first suggestion we received from CIGRE was about the role of the DSO in the CATALYST flexibility market. It seems important to consider the DSO, at least for some extent, as the marketplace operator whereas in the CATALYST vision any third party can operate the market. The second suggestion was about the time allocation of congestion management service trading.

Usually, congestions occur in real-time so, real time market sections should be considered within the flexibility marketplace, according to CIGRE participants. Since today the DSO does not know where congestions take place, due to the current energy market features. Considering technical constraints at DSO level could solve congestions also in the day-ahead and intraday markets. Nevertheless, it moves away from the scope of CATALYST. Finally, yet importantly, CIGRE suggested basing the flexibility pricing on the location of resources in the grid. This means using objective optimization function willing to promote, for instance, the minimum of grid losses or the maximum power quality while the CATALYST marketplace follows a market clearing mechanism not affected by technical constraints. Maybe such optimization function could be adopted when the third party operating the market is facing a specific need for the local grid. Therefore, in this way this adoption may be a customization of the proposed marketplace as a dedicated value proposition.

In March 2019 ENEL arranged a remote meeting with the co-chair of ETIP SNET WG1 showing the vision of the project and the main objectives. The direct participation in a workshop held by this organization seems a feasible and interesting option and Mr. Robert invited us to present CATALYST initial results from pilots during the next Western and South Eastern regions workshop. The workshop will be held in Paris during the Utility week in the middle of November 2019. It is expected that relevant outcomes from the presentation and the following roundtable section could be included in the next ETIP SNET white paper. ENEL and ETIP SNET are currently working to make this possibility reality.

The CATALYST project has been thoroughly shown to a member of smartEN, working there as business analyst, in June 2019. Immediately we received positive feedback and as an evidence of the raised interest Mrs. Layla promised to mention the CATALYST project in a report (which is expected to be published in the fall 2019) about new prosumers business models since considered very compliant with it. Moreover, ENEL invited Mrs. Layla to attend the workshop organized by ETIP SNET. We believe that the participation of smartEN at this workshop and the related open roundtable can be an interesting interaction opportunity. Currently, Mrs. Layla gave us her availability in attending.

As a committee member of British Standards Institution (BSI) TCT73 GIT has recently boarded the working group engaged in the EN50600 series development.

The interaction with CEN – CENELEC will move forward with a meeting that will take place in Brussels the next October 2019 involving the CLC/TC 215 technical group and a representative from GIT. The technical group 215 deals with electrotechnical aspects of telecommunication equipment and is notably responsible for the 50173 series on Information Technology – Generic cabling systems (for office spaces, industrial spaces, homes, data centres, and distributed building services). The presentation will focus on the Green DC Assessment tool and the DC Network Map.

ENG is in touch with the leader of the AIOTI working group related to smart Energy, Mrs. Natalie Samovich. ENG and AIOTI have long been involved in EU commission workshops about Open Energy Marketplace and are investigating about dedicated interactions between AIOTI itself and CATALYST. The first remote meeting definition is in progress.

Recently POPs started planning a proposal for an extension of the CATALYST migration tool to be integrated into OpenStack.

Lastly, it deserves to be mentioned the active participation of CATALYST, by means of one of its consortium partner, in the EU Code of Conduct for Data Centres Best practices committee, managed by the Joint Research Center (JRC). The next meeting engaging also a representative of CATALYST will be held at Ispra, in Milan at October the 24th.



4 Conclusions and future work

In this deliverable we have presented an overview of the dissemination activities undertaken by the CATALYST consortium during the second year of the project. We have focused on listing both past dissemination activities and planned future events. Based on previously established quantifiable communication impact metrics all dissemination actions undertaken in the first two project years were assessed and evaluated. The deliverable also presents several SDOs where CATALYST may contribute and describes the ongoing standardisation activities.

The main achievements of the dissemination activities after two project years are:

- A remarkable number of followers and tweets on the CATALYST Twitter account. At the end of February 2019, the project account reached more than 80 followers and 170 tweets. This social media proved to be a useful interaction tool, more than other, like LinkedIn.
- Several publications in high impact journals.
- Participation to multiple industry events.
- Organization of several CATALYST focused workshops and GDC-SG event.

Further updates on dissemination will be included within report, D8.12, by the end of the project in September 2020.



References

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