Main Findings and Recommendations

Of the Customer Engagement Working Group

May 2018

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

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

**Data management**
- Communication Infrastructure, embracing the technical and non-technical aspects of the communication infrastructure needed to exchange data and the related requirements
- Cybersecurity and Data Privacy, entailing data integrity, customer privacy and protection
- Data Handling, including the framework for data exchange and related roles and responsibilities, together with the technical issues supporting the exchange of data in a secure and interoperable manner, and the data analytics techniques for data processing

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**Business Models**
- Defining common language and frameworks around business model description and valuation
- Identifying and evaluating existing and new or innovative business models from the project demonstrations or use cases
- The development of a simulation tool allowing for the comparison of the profitability of different business models applicable to smart grids and energy storage solutions is being developed and tested by the Working Group members

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**Regulations**
- As regards energy storage, the regulatory framework needs to provide clear rules and responsibilities concerning ownership, competition, technical modalities and financial conditions, for island and mainland cases
- In terms of smart grids, regulatory challenges arise regarding the incentives for demand-side response, commercial arrangements, smart meter data, etc.

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**Customer Engagement**
- Customer Segmentation, analysis of cultural, geographical and social dimensions,
- Value systems - Understanding Customers
- Drivers for Customer Engagement
- Effectiveness of Engagement Activities
- Identification of what triggers behavioral changes (e.g. via incentives)
- The Regulatory Innovation to Empower Consumers

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Chair: Konstantinos J. Chalvatzis (UEA)
Rapporteur: Thomas N. Mikkelsen (ViennaETT)
### Overview of BRIDGE member projects

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<th>Large-scale Storage</th>
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<td><strong>2015:</strong> 2 projects, 25 M€</td>
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<th><strong>2016:</strong> 7 projects, 90 M€</th>
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Introduction

The “Customer Engagement” Working Group (WG) has been running for more than two years. Its highly technological project members meet at the European Commission premises in Brussels every 6 months approximately to discuss about issues such as the challenges in understanding and engaging customers, especially in the area of demand response.

The experience gained during this first period has enabled the group members to compile a comprehensive list of recommendations based on the shared experience of working with Customer Engagement within technically focused projects.

The following report highlights the main findings of the Working Group collected from 2016 up to April 18th 2018 where a workshop on Customer Engagement dedicated to Key Stakeholders in the area of project grants and customer engagement took place in Brussels.
Scope of the Working Group analysis

This report is a short summary of the first cycle of work conducted by Customer Engagement Working Group members. It brings together the insights and experiences of the 19 projects involved in the working group, presented in more detail below.

The group focused on two key observations common to all the participating projects; namely that (1) customer engagement needs a dynamic and flexible framework to function and (2) customer engagement should be structured in a cyclic manner where feedback loops and iterations are possible.

The working group identified 12 Customer Engagement key topics that have been organised in 4 clusters jointly represented in the below 3 sided view, with the Cycle as the bottom of the triangle, the barriers on the left, the drivers on the right and the common knowledge in the centre.

1. Definitions of energy customers and consumers
2. What customers value (ex-ante)
3. Effectiveness of the designed approach to engage customers (ex-post)
4. Cultural and geographical dimensions (segmentation, profiling)
5. Social dimension (educated customers / vulnerable customers)
6. Regulatory barriers
7. Engaging customers through information; education & training; and marketing
8. Main drivers for customer engagement
9. Raising awareness about customer to engineers – DSOs...
11. Main learnings from your project in relation to customer engagement
12. How we work together

Figure 1: The four clusters of the Customer Engagement WG organized in a mnemonic way

The work in this summary report is structured in accordance with these four clusters:

- project work which main concern was knowledge about Customer Engagement
- project work concerned with a better understanding of the field
- project work dealing with actions to speed up engagement
- project work involved in the efficiency of the process (including measurement and assessment).
1. Main Findings

Projects have observed that disengaged end-customers are largely concerned about their energy usage in relation to paying bills. In this respect the focus of their interest is on the price of energy. The well-known term “bill-shock” describes the sudden focus on energy usage that occurs when people receive their energy bill.

They are also concerned about their daily life and comfort, in particular heating and cooling since these two elements are responsible for the highest share of the energy bill. That being said, most people are unwilling to compromise on their usage of electronic equipment, have little concern for standby, are happy using old equipment and are generally (despite all efforts) somewhat ignorant of energy effective solutions.

Finally, people tend to think about energy when it is not there. Europe has a high security of energy supply, but this means that in areas where energy stability is not good, confidence in the electricity supplier is very low. The number one priority amongst customers is to secure a reliable supply of energy.

With this basic knowledge, it is possible to convey a simple value chain to create customer engagement:

- **Involve**: Understand who you are talking to. Start by simple involvement and be prepared for hesitation and questioning.
- **Engage**: Simple means to start the engagement process is benchmarking, personal incentives and segmentation.
- **Evolve**: Engagement leads to educated end-customers who expect advanced feedback. The key to engaging is to develop the communication in correlation with the development of the end-user relationship.

In terms of the key lessons learnt, projects reported that customers place a high value on energy costs, both in terms of stable prices and the possibility of earning money through participation in energy related projects. Customers appreciate environmental gains in the sense that projects allow them to contribute to increased use of renewables, optimizing their

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ongoing efforts and by making them feel they are part of larger environmental friendly movements. Customers value comfort in the sense that they want convenient solutions that either bring more comfort or maintain current levels. Customers value technological solutions that are easy to grasp, understand and easy to learn.

Customers’ engagement levels varied between projects, primarily due to factors such as the levels of awareness, interaction with energy providers and whether the technology was innovative and offered opportunities to learn.

The main findings for successful actions within BRIDGE projects have been the use of Information leaflets (cost, better design and controllability), awareness and education campaigns and user-friendly solutions with a gradual involvement of customers in the projects.

Performance indicators are primarily assessed through surveys, questionnaires and other communication channels. For Research and Innovation Smart Grids and Storage projects the indicators mostly focus on environmental concerns and social driving forces assessed through the levels of awareness and willingness to support low carbon technologies. Specific performance indicators for customer engagement identified include customer satisfaction, acceptance, consumption reduction, and number of surveys responses.

This section concludes with three main recommendations for introducing the Customer Engagement Cycle in future calls, namely: 1) introduce a dynamic view on Customer Engagement through three steps encompassing Involve, Engage and Evolve value chains; 2) a clear definition of project specific KPI’s that use mixed approaches and evaluation methods when addressing customers whilst also providing them with feedback, and finally, 3) share best practices and learn from projects failures as an opportunity to collect experience that new projects can use to better succeed in their own endeavours.

1. Barriers to Implementation and Customers Analysis

When dealing with customer engagement in demand response projects the most important lesson learnt is the need to listen to customers. Starting projects without listening to the customer can result in services being rejected because they are incompatibility with the customers’ wishes or beliefs and may have other shortcomings. Second, regulations play an important role and need further improvement. Chapter 2 of the full report provides an analysis of the potential barriers to implementation and customer involvement in demand response projects and programmes related to regulations.

BRIDGE pilot projects tend to have a relatively low level of customer engagement especially with domestic users when compared to solar and battery projects that have the opposite experience. Domestic users tend to enrol in projects with an open mind, but subsequent engagement decreases with time. Therefore, many Bridge projects face declining customer engagement over time, which is not necessarily true for industrial customers. Since projects have little or no customer segmentation or profiling, and are mostly still on-going, we cannot yet answer whether customer segmentation is of crucial importance for successful completion of project goals? Projects highlighted a lower importance of distinguishing between vulnerable and educated customers, as the focus is on listening as well as providing a variety of useful and simple information in order to have effective communication.

Market segmentation provides information on customers’ needs and marketing resources. When combined with other characteristics or dimensions, it is possible to develop several
different types of customer profiles. Useful information is provided by, for example, geographical and demographic segmentation and actively envisioning the customer’s perspective (i.e. stepping into the customer’s shoes). Since all work refers to final customers and their engagement, future projects should take into consideration the end customers’ needs or else risk providing less than satisfactory service. The suggestion is that segmentation should not replace direct ways of interaction and dialogue with customers, but should rather provide a more diversified customer engagement strategy. In BRIDGE, a common point for all pilot projects is to only include clients that are willing to cooperate. This reduces time wasted on passive customers and improves research effectiveness. Regarding the social dimension, social and educational backgrounds are important because they provide information on the most appropriate ways of communication, which are key for improving the customer engagement of different profiles. Some projects recognized that for vulnerable customers, economic value is of great importance and, regardless of social dimension, all customers like simple and visually appealing communications.

As far as regulatory barriers are concerned, BRIDGE recognized the following issues: lack of dynamic tariff systems; no access for small consumers to take part in demand response programmes; no possibility for selective grid cost pricing; obstacles to accessing consumption data; lack of standardized processes and other/market-related obstacles.

Finally, Chapter 2 ends with suggestions for methodology suitable for the selection process of targeted agents for future projects.

2. Drivers for Speeding-Up Engagement

Across all projects four key elements are being observed as main features for driving customer engagement in energy related projects:

a. **Map and profile your customers:** If you do not know whom you are talking to, you are talking to no one.

b. **Deploy drivers:** There is no single driver that has the capacity to make a decisive impact.

c. **Ongoing customer engagement:** A good planning that manages expectations; maintains the effectiveness of drivers; foresees barriers and ways to overcome them; develops a personal follow-up course; and offers appropriate communication and feedback channels is necessary for the engagement cycle.

d. **Engaged “energy citizens” ex-post are promoting agents and social influencers for new projects.** A good engagement cycle with positive attitudes ex-post can be used to drive engagement for new projects.

3. About Definitions and Best Practices

Terms like user, consumer, customer, citizen, etc. are often used in the EU H2020 funded projects and in the market without a specific analysis or appropriate intentionality. This can lead to confusion or misunderstanding amongst stakeholders as the concepts and roles of each profile may differ depending on the concrete objectives of the individual projects. This
kind of confusion is also generated when indistinctly using terms like seller, provider and supplier.

The harmonization of a common terminology that fits well with the market is highly relevant, and can support the objectives of the BRIDGE Initiative. This is the objective of the two-initial sections of Chapter 4. About definitions and Best Practices in the full report of the WG. Some projects introduce variant or additional terminology that fits better in their concrete objectives, but a common view should be kept in a transversal way for everybody to have a better understanding and take better advantage of the different projects and BRIDGE Initiative’s outcomes.

The last section of Chapter 4 presents a list of best practices, lessons learnt and recommendations coming from the different projects involved in the BRIDGE Initiative. The variety of project concepts, pilots and demonstrations meant that the feedback received by the working group was a bit messy. The feedback has been categorised into 4 concrete phases in the project time-line:

a. During the call text generation,

b. Before the customer engagement,

c. During the customer engagement and

d. After the customer engagement.

Customer engagement should be taken into consideration when the Commission prepares the call text, and allow a specific budget for guarantying their participation in an efficient manner. The projects should propose a customer engagement plan, designed with appropriate KPIs, that includes adequate communication actions and a set of participation activities that maintain the interest and involvement of the customers during the projects’ life. Once the pilot or demonstration is finished, additional actions are necessary to generate a positive experience for the customers, leading to further exploitation opportunities and research projects.
2. Recommendations

Overall the group recommends the following points to be the main observations in relation to working with Customer Engagement:

1. Address Customer Values and Their Context
   A key learning point and ‘best practice’ guideline from across all projects, is that a successful business case depends on understanding what constitutes value for the end-customer. In this respect, strengthening the role for social sciences as an integrated part of new funding calls would be highly recommended.

2. Process for Understanding What Customers Value
   Customer values become more sophisticated and complex due to their involvement and engagement with a project. Putting in place a process that allows the interactions and engagement strategies with end-customers to evolve should be developed in the early phases of the project.

3. Classifying / Segmenting Customers
   The diverse values that end-customers hold and the context in which they live means that they respond differently to the approach adopted by the project. The project should therefore develop a system that can classify or segment end-customers, that goes beyond the identification of basic consumption levels. It is a recurring finding from all projects that segmentation should have been done as part of the project to understand why the same approach can have different outcomes for different customer segments/groups.

4. Engage End-Customers Early
   Involve participants in the project at the early stages to explain what is going to happen and how people will be involved. This approach creates better results and can be part of a learning loop, where pilot customers give continuous feedback to the project.

5. Rebalance the Technical Focus of Projects
   It is observed that the emphasis of the current projects are focused on technical solutions and the installation and running of effective pilots. Not much room has been given for research into different implementation views and the preferences of end-consumers. Space to develop best practice platforms for customer engagement would be highly beneficial.
3. Conclusions

Customer Engagement is not a finite task. It is a process, with models to explore and implement in coming projects and calls. Hence the work on Customer Engagement will supposedly never end but should be foreseen to constantly monitor and document the processes in which we communicate and engage with customers, when it comes to participating in energy savings, optimization or the transition to smarter and greener energy usage.

The recommendations given in part 2 of this summary reports thus represents a number of important observations, critical for engaging customers in the current context. Both the context and the customer perception will change. Hence the work in WG will for the next period focus on how to establish a platform to secure that important knowledge is not lost in the process and how to enable monitoring of which elements are most important to focus on in the next years.

In this respect it is foreseen, that the scope of the WG in the next years will evolve as follows:

A. Best Practices turns into: **Working with KPI’s**: “Developing a tool for measuring Customer Engagement targets”

B. Barriers to implementation and customers’ analysis turns into: **Engage End-Customers Early**: “Developing a process for segmenting, involving and engaging customers early in the project”

C. The Customer Engagement Cycle turns into: **Addressing customer’s values**: "Establish a Process for Understanding What Customers Value and how to address it during the project - as it will change over time"

D. Drivers speeding-up engagement turns into: **Establishing a CE Help Desk and enabling Knowledge Sharing**: "How to make room in the WG for help and support among different projects"

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More information and to download the full report, please visit [https://www.h2020-bridge.eu/](https://www.h2020-bridge.eu/)