

Meter Installation Workshop – S3C Project

Executive Report

August 2015

Disclaimer

The Meter Installation workshop was conducted by TNS for EDP Distribuição on its position as active partner on the work package 5 of S3C, an European Union FP7 funded project. EDP Distribuição tested it's meter installation process and the tools and guidelines developed by S3C for this effect in the following InovGrid test sites: Alcochete, Évora (Guadalupe), Parque das Nações, Lamego and São João da Madeira In the meter installation initiative, EDP Distribuição tested the following guidelines (which were developed in deliverable 4.1 of the S3C project):

- Meter installation
- Training Installers
- · FAQ during installation process

About the S3C project

S3C - Smart Consumer, Smart Customer, Smart Citizen - paves the way for successful long-term end user engagement by acknowledging that one typical smart consumer does not exist and uniform solutions are not applicable when human nature is involved. Beyond acting as a passive consumer of energy, users can take on different positions with respective responsibilities and opportunities. In order to promote cooperation between users and the energy utility of the future, S3C addresses the end user on three roles:

The Smart Consumer is mostly interested in lowering his/her energy bill, having stable or predictable energy bills over time and keeping comfort levels of energy services on an equal level.

The Smart Customer takes up a more active role in future smart grid functioning, e.g. by becoming a producer of energy or a provider of energy services.

The Smart Citizen values the development of smart grids as an opportunity to realize 'we-centred' needs or motivations, e.g. affiliation, self-acceptance or community.

The S3C project (2012-2015) has received funding from the European Union's Seventh Program for research, technological development and demonstration under Grant Agreement No. 308765. For more information on the S3C project, please visit the <u>project website</u>.



Project Objectives and Methodology

Main Project Objectives:

- Understand the process of Smart Meters installation, namely explore the interaction between the installers and the consumers
- Identify challenges during the installation process mainly in terms of the interaction and relation with consumers
- Identify ways of improving the installation process focusing on the relationship with the consumer.

Methodology:

• Workshop was done with the duration of approximately 3 hours with Services Providers Managers Responsible for the EDP Distribuição Smart Meter Installation Process.



Global Overview

- 1. EDP Distribuição should increase InovGrid project and EDP Box awareness through continue communication and follow-up and should optimize the installation process using PDA full capabilities.
 - a) Continue to communicate the InovGrid project and EDP Box benefits to overcome the main challenges regarding Smart Meter installation, with a simple, clear, direct and engaging message and layout.
 - b) In this sense, installers consider that it is fundamental that they
 - Continue to deliver the InovGrid leaflet after smart meter installation since consumers not always pay attention to installers' explanation or even might forget it. In this context, the leaflet is an important information/ communication vehicle (for consumer to enhance its knowledge about EDP Box and InovGrid project and clarify some doubts) and therefore, in installers opinion, should always be deliver to the consumer after the smart meter installation, as today.
 - But also, enhance in terms of layout and message (with EDP Box main benefits) the previous informative letter sent to the consumer before the smart meter installation. Even though a letter is sent not all consumers read the letter/pay attention to it and/ or not all consumers understand the information stated in the letter notifying the Smart Meter installation. Also, and for some installers, the letter is perceived as not really appealing and probably unable to engage consumers in Installers point of view (a letter similar to the invoice letter doesn't stand out).



Global Overview

- 1. EDP Distribuição should increase InovGrid project and EDP Box awareness through continue communication and follow-up and should optimize the installation process using PDA full capabilities.
 - c) In Installers Opinion, the InovGrid Project and the Smart Meter Installation cannot be conveyed just in one contact and conversation, requires previous information, ongoing communication and follow-up. In this context, it is also important to communicate and reinforce that all information and frequent questions (FAQ's) regarding InovGrid Project and EDP Box is present online (EDP, EDP Distribuição e InovGrid website).
 - d) To use the full capabilities of PDA. For instance, installers suggest that the serial number of the meter stamp should be read by the PDA and automatically introduced in the system to save time.



Global Overview

2. To be efficient and less intrusive, installers think that some challenges need to be overcome.

Efficient Installation	
Quality & Quantity	
Relational Challenges	Technical Challenges
- Low knowledge of EDP Box and Inovgrid main benefits	- Not all the necessary information regarding smart meter
- Access consumer' house	installation is provided in one single file/ "system"
- Answer consumer questions and expectations	- The service order for smart meter installation is sent in the same file that the other service orders
	- No use of PDA full capabilities
Journey	
Ongoing Inovgrid and EDP Box communication	Provide the needed information through a unique file/ "system"
External Communication	Use a different code for Smart Meter Installation Service Order
	Use PDA full capabilities
	Internal Communication
Objective Enhance the Smart Meter Installation	
Less intrusive	
More efficient	
"Everybody wins"	



Challenges prior to Smart Meters installation

- 1. Some consumers are not receptive to EDP Box installation and/ or to let the installer enter their home. This challenge is related with:
 - a) Consumers resistance to change and to implement technological novelties.
 - b) To low knowledge of EDP Box main benefits (for instance, increasing consumption control and reducing costs, etc.). Although a letter is sent, not all consumers tend to read it or pay attention to it.
 - c) Negative word-of-mouth due to the idea of unfulfilled promises that tend to generate some mistrust namely regarding:
 - Cost: for some consumers the costs with electricity has increased due to the real reading of the meter or power adjustments
 - Readings: during a certain period of time, people still need to continue communicating the electric readings

"One question that is necessary to realize on a commercial level is the fact that some of the readings are not read, are an estimate. The fact of making the replacement of a new equipment, even if it is not an EB, it may be another meter, there is an effective reading with a correction of the estimate, and can happen one of two aspects: either the estimate was higher and the customer will pay less, or was lower and he will pay more. It is as simple as that. And people associate this directly to the change. And it may happen that even though the consumption is more or less constant, it can have been miscalculated, and the customer will always have to pay more. And that can be the major challenge: the person is faced with the idea that in the previous equipment the consumption was stabilized and in this one it isn't. The initial impact is that the person becomes more aware to the differences in the bill."



Challenges prior to Smart Meters installation

- d) The person that is at home is not the responsible/owner of the house and sometimes some consumers are not comfortable with letting a stranger enter their home.
- e) Some consumers aren't simply at home to allow meter installation since they aren't aware of the installation or aren't available to be at home. This is especially frequent in houses that are only used during the holidays.

"The consumer is confronted with the presence of an unfamiliar person at their doorstep to do something inside their house that they don't know exactly what it is ... communication would be important in these situations."

[usually] "Who opens the door is the housekeeper or an elderly person who is not the responsible person for this kind of issues or is not so open to technologies, or it's a condominium or there is no one there because it's a vacation house."

2. To overcome these challenges it is important to:

- a) Continue communicate InovGrid Project and EDP Box main benefits highlighting:
 - The innovation and technological forward-thinking that InovGrid and EDP Box represent.
 - The project main benefits: more control over energy consumption, transparency in the billing process since the readings are based in real energy consumption instead of estimates, cost reduction emphasizing the behaviours necessary to generate it.



Challenges prior to Smart Meters installation

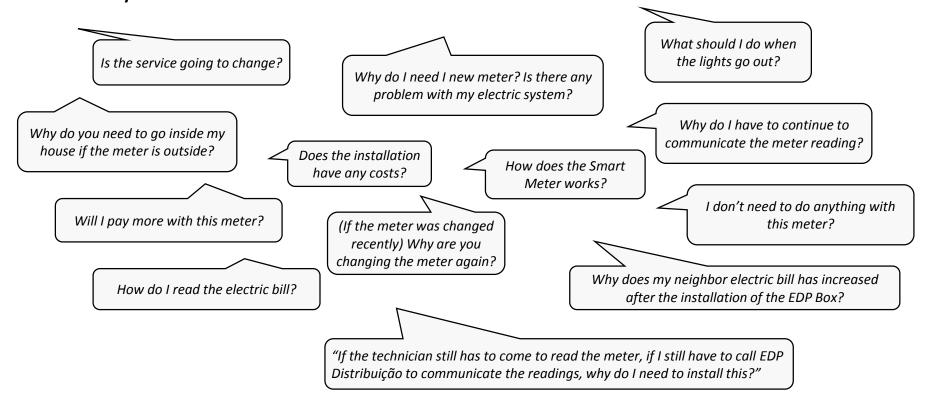
2. To overcome the challenges prior to Smart Meters installation it is important to:

- Continue to send a letter with information regarding InovGrid project, reinforcing that it's a national project, explaining the process, and all the changes and benefits for the consumer, specifying the date of the meter replacement/smart meter installation. Enrich this letter layout in order to be more appealing and engaging (including images of the EDP Box) highlighting the reasons for the meter replacement.
- c) Send a technician to do the reading of the meter one or two months before the Smart meter installation replacement. This will prevent the association of the Smart Meter Installation with cost increase.
- d) At the week of the meter Installation, call or send an SMS as a reminder of the installation date to assure that someone will be present to open the door and preferably that person will be the most suitable one.



Challenges during Smart Meters installation

3. The main challenge during the installation of Smart Meters tends to be managing consumers' several questions, that are not always easy to answer and are time consuming. Sometimes the person receiving the information is not the most informed / knowledgeable one. Besides this, some expectations need to be managed during Smart Meter installation that are mainly related with the activation of the service.





Challenges during Smart Meters installation

- 4. To optimize the Smart Meter installation it's necessary to provide the installers all the tools necessary to manage consumers' relationship and to gather and fill information easily.
 - a) Provide a script with specific information and FAQ's adjusted to the challenges of specific regions (ex. urban vs. rural): the service is at a transition phase, and it will not be immediately available, so it is necessary to continue communicating the readings. This action seems to have potential to manage client's expectation regarding the service activation.
 - b) Improve data gathering and transmission using PDA capabilities, namely using the PDA camera or optic reading. Create an integrated system that simplifies the communication between the installer and the service provider. Namely using the camera or optic reading of the installers' PDA and introducing all the information in the PDA only once (without having to duplicate the data in different systems and to fill in information manually)..

Challenges after Smart Meters installation

- 5. Installers need to fill all the information regarding the smart mater installation in their PDA (readings, older meter,...) but also fill the same information by hand. A similar procedure needs to be done regarding the meter "Auto de Retirada". Although perceived as necessary procedures, they are time consuming. The expectation is, in the near future, to fill this information directly on their PDA and for instance take a picture with their PDA as evidence of the meter' reading, serial number, etc.
- 6. The leaflet is perceived as an important information/ communication tool since consumers not always pay attention to installers' explanation or even might forget it. In this context, after meter installation it's important to continue to deliver the leaflet and magnet (as they do today) but also to communicate and highlight the FAQ section on InovGrid website to clarify potential doubts.

Challenges after Smart Meters installation

- 2. To overcome these challenges it is important to:
 - a) Continue to deliver the leaflet and magnet.
 - A leafletwith clear and simple and simple, yet visually appealing information regarding InovGrid Project and EDP Box main benefits (as the current one), adding instructions that consumers can rely on when they need to interact with the Smart meter and in case they have any problems (egg.: out of electricity).
 - A magnet with InovGrid contact number since it is a very useful toll that consumers can easily use in case of any problems/doubts.
 - b) But also to communicate and highlight the FAQ section on InovGrid website to clarify potential doubts and create a direct link to the FAQ section on EDP Distribuição website.





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