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<b>Author(s):</b>	<b>Cristina Murillo and Cristina Urtiaga</b>
<b>Participants(s):</b>	<b>Partners 1,2,3,4,5</b>
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**Abstract:**

This deliverable gives an overview of the showrooms identified by the partners as a way to demonstrate applied embedded technologies in the smart areas identified. It will also include the work performed producing a video which includes a description, directed to the wider public, of what a Smart City is.

**Keyword list:** Demonstrator, Showroom, Living Lab, Video.

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# 1 Executive Summary

The deliverable D7.7 Final Report on showrooms and Demonstration Activities: Three Success Cases (visual material) is a public document delivered in the context of WP7 “Showroom and Dissemination”, Task 7.3 – Dissemination & Showrooms to regional, national and European public administrations for the CLINES project.

As part of the showrooms, selected demonstrators developed in other projects have been described in order to visualize potential applications of embedded systems technology and thereby generate further innovative project ideas. The following application areas are addressed: Smart Environment, Smart Living, Smart Mobility, Smart Economy and Smart Governance.

We have extended that information in a visual way through a video that showcases 3 singular projects and a general vision of smart cities.

## 2 Introduction

The idea is to provide a set of project demonstrators that can be informative, interesting and easy to approach, and at the same time can be inspiring for further progress or cooperation between the cluster’s companies involved in the project and other organizations.

The project partners expectations go much further than an enumeration of relevant examples but want to show visually how the use of embedded systems can help to build future Smart Cities. For that reason, we have decided to develop a video on the conviction that if a picture is worth a thousand words – then a video must be a million!

At the same time we have continued conducting visits to some showrooms, such as the ones listed below:



*Visit to Living Tomorrow in Brussels on 13/6/2014*



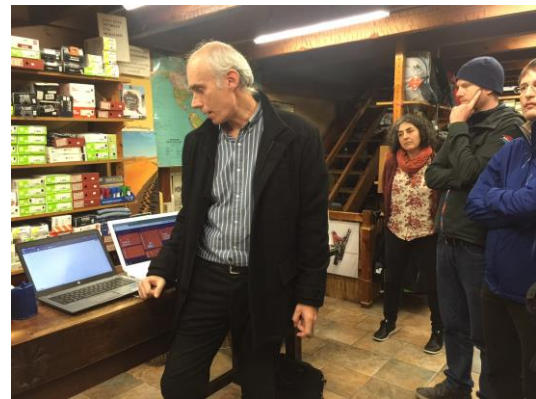
*Visit to Kubik in Zamudio on 9/2/2015*

*Visit to Smart Energy Showroom in Zamudio on 9/2/2015*



*Presentation Adaptive City Mobility in Munich on 10/26/2015*

*Presentation Adaptive City Mobility in Munich on 10/26/2015*




*Visit to Smart Kalea in San Sebastian on 4/25/2016*

*Visit to Smart Kalea in San Sebastian on 4/25/2016*

The CLINES consortium will develop an ecosystem to foster innovation within the application areas Smart Home&Buildings, Smart Mobility and Smart Environment (focusing on Smart Energy), and by following this structure we present the identified showrooms.

## 2.1 Smart Environment Showrooms

### 2.1.1 Bidelek Showroom – ES

<b>Name:</b>	Bidelek Showroom
<b>Topic</b>	Smart Environment: Smart Energy
<b>Specialization Activity Description</b>	<p>BIDELEK SAREAK has set up an exhibition area containing part of the real and operative equipment used in the deployment promoted by the Basque Energy Agency (EVE), Iberdrola Distribución Eléctrica and other companies involved in this project. In this show room, the main technological innovations introduced in the electric network, as well as applications and benefits for the electric system and users can be shown to other electric companies, equipment manufacturers, public administrations and other national or international institutions. This space is also a way of demonstrating the technological capability of Basque companies in the electric and smart grid development sector.</p> <p><b>Layout</b> The Show Room is divided in two different areas:</p> <ul style="list-style-type: none"> <li>• Auditorium Area: This area surrounded by glass walls, is equipped with a video wall system and a central control station. This allows the participating companies to show visitors the main information about BIDELEK SAREAK project as well as the control and supervision capacity of the equipment installed in the Showroom</li> <li>• Exhibition Area: In this area, the equipment of the manufacturing companies involved in the Show Room has been installed and interconnected in order to show an exact copy of the operative system developed in the BIDELEK SAREAK project</li> </ul>
<b>Location</b>	Zamudio - Basque Country - Spain
<b>Website</b>	<a href="http://bidelek.com/en/">http://bidelek.com/en/</a>
<b>Video</b>	<p>(Spanish) <a href="http://bidelek.com/en/show-room/">http://bidelek.com/en/show-room/</a></p> <p>(English) <a href="https://www.youtube.com/watch?v=4BoUSMoViC8">https://www.youtube.com/watch?v=4BoUSMoViC8</a></p>
<b>Photo</b>	

### 2.1.2 Smart Energy Living Lab - DE


<b>Name</b>	Smart Energy Living LAB at the fortiss institute
<b>Topic</b>	Smart Environment: Smart Energy
<b>Specialization /Activity Description</b>	In this project a real, self-balancing Smart Grid node demonstrator is developed and already deployed, which is integrated into the fortiss office environment. It combines different classes of devices from various areas of technology including energy (e.g. EnOcean actuators and sensors), intelligent electricity meters from multiple vendors (Ipswitch, Sentron Pac), photovoltaic systems, and solar batteries.
<b>Location</b>	Munich – Bavaria - Germany
<b>Website</b>	<a href="http://www.fortiss.org/en/research/projects/smart_energy_living_lab/">http://www.fortiss.org/en/research/projects/smart_energy_living_lab/</a>

### 2.1.3 ISARE Microgrid - ES

<b>Name</b>	ISARE Microgrid
<b>Topic</b>	Smart Environment: Smart Energy
<b>Specialization /Activity Description</b>	Creation of an efficient, reliable and secure interoperable microgrid that serves as a test bench to develop and validate the status of different distributed renewable generator (micor- wind turbine, PV converter, fuel cell) and storage technologies (super capacitors, flywheel, Li-ion battery)
<b>Location</b>	Martutene – Basque Country - Spain
<b>Website</b>	<a href="http://www.i-sare.net/">http://www.i-sare.net/</a>
<b>Video</b>	<a href="https://www.youtube.com/watch?v=F9ez5oUmZmg">https://www.youtube.com/watch?v=F9ez5oUmZmg</a>



### 2.1.4 Bird Living Lab - ES

<b>Name</b>	Bird Living Lab
<b>Topic</b>	Smart Environment
<b>Specialization /Activity Description</b>	<p>Urdaibai Bird Centre is a project of high naturalistic and environmental interest that studies and explains the migration of birds in a privileged area like Urdaibai. It is an applied research center where visitors can watch birds and participate in research projects. Urdaibai Bird Centre combines: research, tourism, training and environmental education, all this with the support of new technologies with the goal of developing innovative projects.</p> <p>It combines technological development for the analysis of bird migrations through European-based emerging technologies in the field of geo-localization with the creation of a living-lab to launch an emerging economic sector, by monitoring nature</p>
<b>Location</b>	Urdaibai – Basque Country - Spain
<b>Website</b>	<a href="http://www.beingbird.com/">http://www.beingbird.com/</a>
<b>Photo</b>	

### 2.1.5 CISS Smart Energy Demonstrators - DK

<b>Name</b>	CISS smart energy demonstrators
<b>Topic</b>	Smart Environment, Smart Energy
<b>Specialization /Activity Description</b>	<p>The lab contains a set of demonstrators illustrating potential energy savings when introducing intelligent embedded systems to control energy consuming devices. The demonstrators originate from a number of European and national projects where CISS has been a leading partner.</p>
<b>Location</b>	Aalborg – Denmark
<b>Website</b>	<a href="http://www.ciiss.dk">www.ciiss.dk</a>
<b>Video</b>	<a href="http://www.lsv.fr/~markey/tmp/CASSTINGweb">http://www.lsv.fr/~markey/tmp/CASSTINGweb</a>



## 2.1.6 Energy Atlas Bavaria - DE

<b>Name</b>	Energy Atlas Bavaria
<b>Topic</b>	Smart Environment: Smart Energy
<b>Specialization /Activity Description</b>	<p>The central interactive portal of the Bavarian Government for energy saving, energy efficiency and renewable energy.</p> <p>The maps section includes a comprehensive (and impressive) view on all the projects of renewable energy (bio mass, geothermal, solar, water, wind, waste heat) currently installed in Bavaria at countless locations.</p>
<b>Location</b>	virtual
<b>Website</b>	<a href="http://www.energieatlas.bayern.de/">http://www.energieatlas.bayern.de/</a>


## 2.1.7 Energiedorf Wildpoldsried - DE

<b>Name</b>	Energiedorf Wildpoldsried – Energy Village Wildpoldsried
<b>Topic</b>	Smart Environment: Smart Energy, Renewable Energy
<b>Specialization /Activity Description</b>	<p>Wildpoldsried is a village that produces more renewable energy than it consumes making it an ideal testbed for smart energy projects. For example, currently the IRENE project sets up a self-organizing energy automation system for which Siemens is implementing a newly developed software. This software is designed to optimize the timing of power generation from the large number of photovoltaic, wind, hydroelectric and biogas systems connected to the electricity grid, as well as power consumption patterns and the storage of energy generated from renewable sources.</p>
<b>Location</b>	Wildpoldsried – Bavaria - Germany
<b>Website</b>	<a href="http://www.wildpoldsried.de/index.shtml?photovoltaik">http://www.wildpoldsried.de/index.shtml?photovoltaik</a>

## 2.2 Smart Living Showrooms

### 2.2.1 KUBIK - ES

<b>Name</b>	KUBIK Showroom
<b>Topic</b>	Smart Living: Smart Building
<b>Specialization /Activity</b>	The KUBIK Building is an international outstanding and unique experimental facility for R&D aimed at developing new concepts, products and services to

<b>Description</b>	<p>improve energy efficiency in buildings.</p> <p>The relevant uniqueness of KUBIK resides in its capacity of generating realistic scenarios for the research on energy efficiency coming from the interaction among construction solutions, the smart management of heating/conditioning and lighting systems, and the power of using renewable energies.</p> <p>The infrastructure present consists of a maximum of 500 m2 building, which can be distributed over a basement and up to three more upper floors. Energy supply is based on the combination of conventional and renewable energies (geothermic, solar and wind).</p> <p>The building is equipped with a monitoring and control system that provides all necessary information for the development of related R&amp;D activities, as well as innovative services in the line of Smart Living.</p> <p>Finally, the showroom is located at Tecnalia’s premises in the Bizkaia Science and Technology Park, next to building 700.</p>
<b>Location</b>	Zamudio - Basque Country - Spain
<b>Website</b>	<p>Photo sequence of the construction works and phases:</p> <p><a href="https://www.flickr.com/photos/28618409@N07/sets/72157621871755662/show/">https://www.flickr.com/photos/28618409@N07/sets/72157621871755662/show/</a></p>
<b>Video</b>	<p>KUBIK YouTube channel: <a href="https://www.youtube.com/user/kubikbytecnalia">https://www.youtube.com/user/kubikbytecnalia</a></p>
<b>Photo</b>	

### 2.2.2 Living Tomorrow - BE


<b>Name</b>	Living Tomorrow
<b>Topic</b>	Smart Living: Smart Home, Smart Building
<b>Specialization /Activity Description</b>	<p>"Living Tomorrow" is Flanders' largest and world-renowned facility demonstrating concepts of "Smart Living" to the general public, and also offering several spaces for meetings and events. It was created in 1995, and extended over the years with new elements reflecting the evolution in the domain. The first project, the 'House of the Future', was inaugurated by the then Chairman of Microsoft, Bill Gates in Brussels in March 1995. Over ten years ago Bill Gates</p>

clearly understood the long-term importance of the project: "...I think a project like Living Tomorrow - where you are brainstorming about what is possible and you're getting people to come, look, and talk about what this all means - is really fantastic... I am certainly impressed with what I've seen...". Back then the project only consisted of the 'House of the Future' and an information complex. The success of this first project convinced the founders to accelerate their ambitions and create a real innovation platform and not only for B2C but also for B2B. A whole new project building, Living Tomorrow 2, was created next to the initial building. During this second project, the idea evolved to become the 'House and Office of the Future' from 2000 to 2005. The project had developed to show not only how we will live but also how we will work in the future. At the end of 2003, Living Tomorrow exhibited its first international project in Amsterdam, the Netherlands. This third venture received a vast amount of press attention. Continuing on the success of its Dutch project, Living Tomorrow started its 3rd edition in Brussels: 'The House, Office and the Creative Industries of the Future' was built in 2007 as an extension to the existing Living Tomorrow 2, where it has become an established innovation and networking platform for local, regional and international companies. Over 1000m<sup>2</sup> of extra innovation space was added to the 3500 m<sup>2</sup> building. Sticking with tradition, this venture also ran for 5 years until 2012. With this, Living Tomorrow has expanded to include concepts - which are a part of daily life but not directly associated with living or working environments. The ten Living Tomorrow themes that reflect economical, technological and social trends are Technology and Automation, Services, Energy, Environment & Health, Security and Safety, Mobility, Design & Arts, Building & Architecture, Leisure & Education and Media & Information.

Living Tomorrow now presents its next generation innovation and demonstration platform: "Living Tomorrow - Vision 2020". The project targets professionals and consumers. Thanks to its participants, the project will stimulate innovation, creativity and synergies between companies, governments, research centers and consumers. Over 500.000 visitors will discover the project, its participants and their products, services & visions during its 5 years expo. Our participants connect with "their future" and - catalyzed by Living Tomorrow - initiate strategic synergies between partners

Since its launch, over 400 companies (including e.g. Colruyt, ENI, ABB, Bpost, Eandis, Elia) have been involved in showcasing their innovations and more than 3,000,000 people have visited the complex. This makes Living Tomorrow an ideal platform for companies to introduce their latest products and/or services to mass audiences and to get in contact with, observe and learn from their stakeholders and customers. Social, economical and technological developments have been observed and transformed into tangible applications. The showcase of tomorrow's technology literally allows visitors to get acquainted by touching, hearing or using products and services that will make their lives easier in the future.

Endeavoring to make lives easier, one of Living Tomorrow's goals is to maintain ongoing discussions with consumers and companies to learn what they consider to be important in their future lives. The initiative also aims to impress the general public with the possibilities of technology. The objective is communication with people and learning from their feedback. In this way, Living

	<p>Tomorrow not only highlights the possibilities that today's and tomorrow's technologies can offer; it also invites people to exchange ideas, and provide feedback on their experiences during the project, while using a product or while stepping into the future on one of the tours around the complex.</p> <p>The companies behind the scenes see Living Tomorrow as a demonstration platform that strengthens their image and reputation, while also providing a venue for PR activities and events such as conferences, debates and product launches. Their products or services on show are characterized by their well-founded view on rapidly evolving social and economic trends.</p> <p>Living Tomorrow also has a "TomorrowLab", where they offer innovation services to companies (360° Innovation Program, Ideation &amp; Inspiration, Future Exploration, Strategy Mapping, Future Customer Insights, targeted SME Programs).</p>
<b>Location</b>	Vilvoorde – Brussels - Belgium
<b>Website</b>	<a href="http://www.livingtomorrow.com">www.livingtomorrow.com</a>
<b>Photo</b>	

### 2.2.3 Join-In: Fun Social Network for Senior Citizens - DE

<b>Name</b>	Join-In: Senior Citizens Overcoming Barriers by Joining Fun Activities
<b>Topic</b>	Smart Living: AAL
<b>Specialization /Activity Description</b>	Join-In developed a comprehensive social networking platform for elderly citizens to encourage and support communication and socialising. The platform includes messaging, memory games, and a challenge to use fitness machines (exergame).
<b>Location</b>	virtual
<b>Website</b>	<a href="http://www.join4fun.eu">http://www.join4fun.eu</a> , <a href="http://www.join-in.hu">http://www.join-in.hu</a>

## 2.2.4 Carehome of the Future - BE

<b>Name</b>	Carehome of the Future
<b>Topic</b>	Smart Living: Smart Home
<b>Specialization /Activity Description</b>	<p>In 2013, Living Tomorrow (see above) created a second facility in a different location (Heusden-Zolder, integrated in a service home for the elderly) in Flanders, called "the Care Home of the Future". It is yet another unique open-innovation centre, but the themes are now care, wellness, comfort and health. As opposed to Living Tomorrow itself, the Care Home of the Future is not open to the general public, but only to professionals and decision makers.</p> <p>The project intends to realize a real-life environment focused on quality of life, comfort, care and health enabled by new technologies, products and services.</p> <p>Together with its 60 partners and contributors, each leading in their field of expertise, the project will be open for 3 years (2013-2016) for professionals and decision makers in healthcare (health centers, companies, knowledge centers, government, care workers, doctors, pharmacists,...). It will act as an innovation demo-platform, a living lab, and a synergy &amp; meeting platform supporting visions, new-market introductions and market development. The intention is to attract at least 10.000 visitors per year.</p> <p>The Care Home of the Future defines 12 themes, in collaboration with strong partners, experts on those fields of expertise: Services, Technology, communication and automation, Security, Energy, Environment and garden, Food, Health and wellness, Media, education and information, Arts and leisure, Construction and architecture, (Interior) design, Mobility.</p>
<b>Location</b>	Heusden – Zolder - Belgium
<b>Website</b>	<a href="http://www.carehomeofthefuture.com">www.carehomeofthefuture.com</a>
<b>Photo</b>	<a href="http://www.carehomeofthefuture.com/democenter.php?id=3&amp;page=9">http://www.carehomeofthefuture.com/democenter.php?id=3&amp;page=9</a>

## 2.2.5 PRoF: P-Rooms of the Future - BE

<b>Name</b>	PRoF: P-Rooms of the Future
<b>Topic</b>	Smart Living: Ambient Assisted Living
<b>Specialization /Activity Description</b>	<p>PRoF is a unique concept in the domain of care innovation. It is a think tank of about 300 members (companies, research institutions, architects,...), created in 2009 by Jan Van Hecke (a Flemish entrepreneur in the furniture world) as a spontaneous bottom-up initiative to create and demonstrate innovative concepts of care for the future. Since 2010, PRoF has come up with 4 new concepts: Patient Room of the Future (PRoF1.0 2010), Personalized Residence of the</p>

	<p>Future (PRoF2.0 2011), Private-care Room of the Future (PRoF3.0 2012), Patient Recovery Room of the Future (PRoF4.0 2014). These concepts are created with a specific innovation methodology, going from a keyword brainstorm all the way to the creation of a concrete solution by a core team of architects and designers from the consortium. In the facilities in Poperinge, the concepts are concretely demonstrated in a number of rooms equipped with furniture and technology. PRoF honors 8 values that are important in the care context of the future: minimal comfort, privacy, security, anti-loneliness, non stigmatising solutions, inter-generational, respect, flexibility.</p> <p>PRoF welcomes visitors (some 3000 per year) on a regular basis to inspire them about the future living environment in a care context. PRoF operates under the patronage of Mrs. Herman Van Rompuy, wife of the former President of the European Union, and has received a lot of attention (both nationally and internationally). PRoF also awarded a Chair for Research in Care to the University of Ghent in 2014, with the intention to stimulate local and international collaboration among universities. PRoF also has a tradition of handing out awards at the occasion of the introduction of its latest concept (award for care organisation, for research institution, for product/service innovation).</p>
<b>Location</b>	Poperinge - Belgium
<b>Website</b>	<a href="http://www.prof-projects.com">www.prof-projects.com</a>

## 2.2.6 eHealth Musterwohnung Heidberg - DE

<b>Name</b>	eHealth Musterwohnung Heidberg .- AAL demonstration flat
<b>Topic</b>	Smart Living: Ambient Assisted Living
<b>Specialization /Activity Description</b>	The flat/showroom in Braunschweig demonstrates solutions for a self-determined living in seniority: technical systems as well as assistant solutions. Visitors get ideas on how to model their own living environment.
<b>Location</b>	Braunschweig – Lower Saxony - Germany
<b>Website</b>	<a href="http://www.w-punkt.eu">http://www.w-punkt.eu</a> and <a href="http://www.smarthome-deutschland.de/smarthe-orte/orte-finden/ehealthbraunschweig-musterwohnung-heidberg.html">http://www.smarthome-deutschland.de/smarthe-orte/orte-finden/ehealthbraunschweig-musterwohnung-heidberg.html</a>

## 2.2.7 Smart Cities Platform - BE

<b>Name</b>	Smart Cities Platform
<b>Topic</b>	Smart Living, Mobility, Environment,

<b>Specialization /Activity Description</b>	<p>The Smart Cities Platform starts with the Smart Cities Challenge on the 3rd of May 2016 in ‘Het Pand’ in the city of Ghent. During this Challenge smart city concepts and prototypes will be presented by corporate partners in 7 strategic areas. They will be challenged by start ups, researchers, students, politicians, citizens and other important stakeholders.</p> <p>The Smart Cities Platform ends the weekend of 22 to 24 September 2017 where the future city of Ghent will be created. The goal is to experiment and test the developed products and services which have been prototyped at the Smart Cities Challenge on the 3rd of May 2016.</p>
<b>Location</b>	Gent
<b>Website</b>	<a href="http://www.smartcitiesplatform2017.be/">http://www.smartcitiesplatform2017.be/</a>

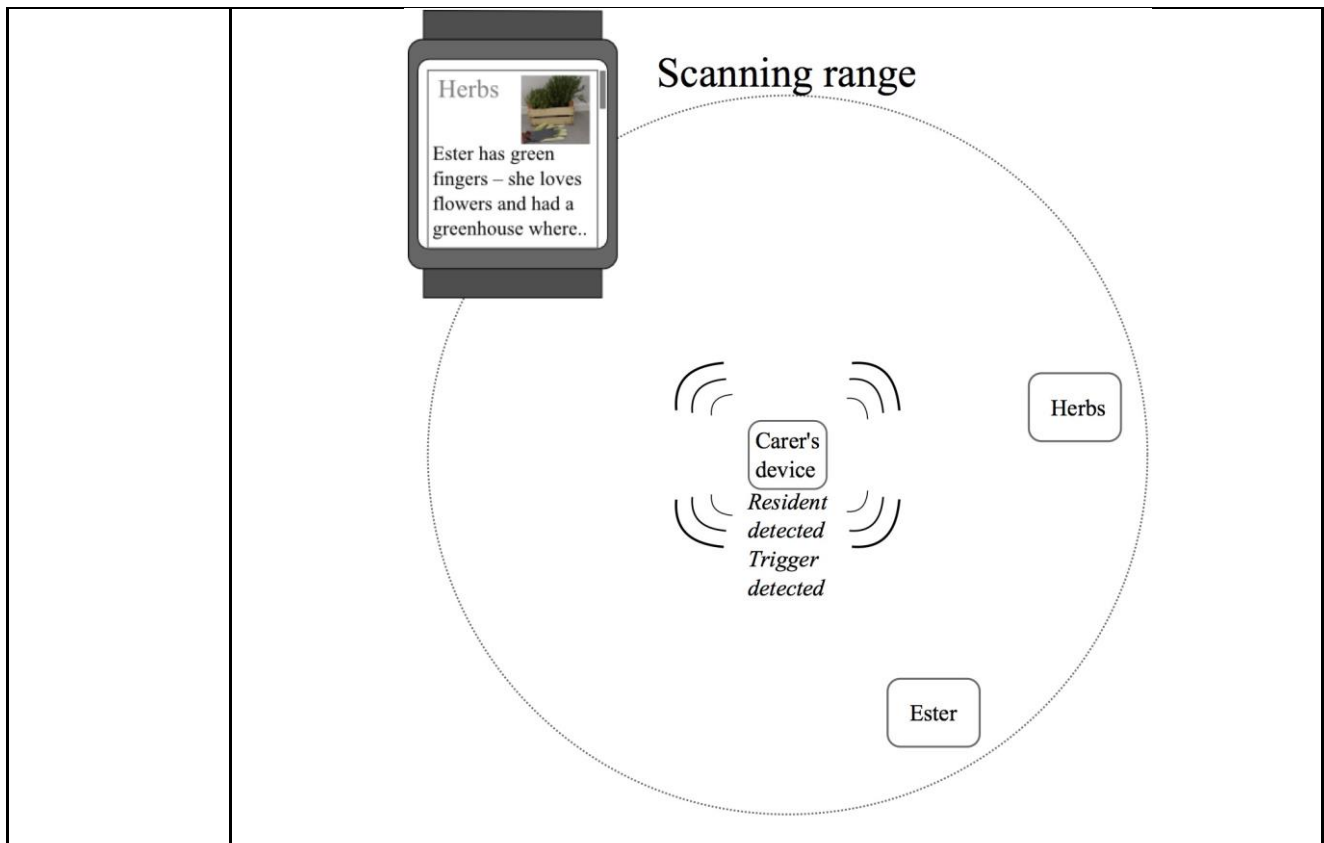
### 2.2.8 City of Things - BE

<b>Name</b>	City of Things
<b>Topic</b>	Smart Living, Smart Mobility, Smart Energy
<b>Specialization /Activity Description</b>	<p>City of Things: discover today the possibilities of tomorrow’s smart cities</p> <p>Bringing the Internet of Things – which uses the Internet to connect physical objects with each other and with us – to the City of Antwerp. This is what iMinds’ City of Things project is about.</p> <p>Hundreds of smart sensors and wireless gateways positioned at carefully selected locations across streets and buildings will transform the city into a true living lab for the Internet of Things (IoT). The long-term objective is to connect thousands of Antwerp citizens with numerous innovative solutions that will considerably improve their quality of life – by positively impacting mobility and public safety in the city, among other things.</p> <p>City of things is a large scale testground to support the development of smart city applications.</p>
<b>Location</b>	Antwerp
<b>Website</b>	<a href="https://www.iminds.be/en/succeed-with-digital-research/go-to-market-testing/city-of-things">https://www.iminds.be/en/succeed-with-digital-research/go-to-market-testing/city-of-things</a>



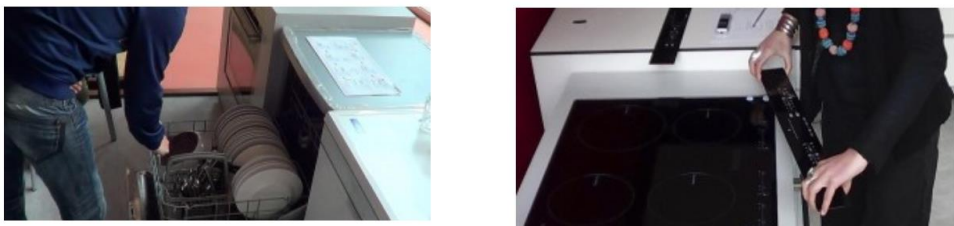
## 2.2.9 Memento – Enriching Conversations with People having Dementia - DK

<b>Name</b>	<i>Memento</i> – Enriching Conversations with People having Dementia
<b>Topic</b>	Smart Living: Smart Carehome
<b>Specialization /Activity Description</b>	<i>Memento</i> is an app for carers practicing spontaneous reminiscence therapy with people suffering from dementia. Reminiscence therapy can enhance the sense of identity of a person with dementia by activating competences from the past through conversations. We all have “triggers” – objects, people, events – resurrecting memories and reminding us who we are and what we know well. Carers with multiple people in their care may have difficulty remembering specific memory triggers for each individual on the spot, while engaging in casual conversation. <i>Memento</i> seeks to overcome this problem by connecting relevant triggers with nearby residents with dementia and subtly displaying relevant information from their life story on the carer’s smartwatch.
<b>Location</b>	Djursland, Denmark
<b>Photo</b>	<p>The diagram shows a smartwatch on the left displaying a card for 'Ester' with a photo and 'Appartment 3U'. A large dotted circle labeled 'Scanning range' is centered on a 'Carer's device'. Inside this range, a 'Resident detected' icon is shown, with a smaller box labeled 'Ester' nearby, indicating the app's ability to identify and display information for nearby residents.</p>



**2.2.10 H-NEA - ES**

Name	H-NEA
Topic	Smart Living
Specialization /Activity Description	<p>H-Enea belongs to ACEDE, the Basque Cluster Association of the Home Appliance Industry, and conceives people as the engine of the innovation needed by companies and organizations in order to be able to reach a complex and changing market.</p> <p>Under this premise, H-Enea helps businesses and organizations through its services so that they can get faster to the market with products and services that truly meet the needs of their current demanding and well-informed customers.</p> <p>H-Enea team <b>specializes in the household setting</b>, in its broadest sense, understanding it as a system that provides quality of life for people who live in it and, at the same time, contributes to the environmental sustainability of the society through a better management of the energy efficiency, and to the development of <i>smart cities</i>.</p> <p>Within the scope of the household, H-Enea has worked in depth on five specific areas or sectors, allowing to understand more accurately what is happening in these fields and give their customers the keys they need. These sectors are the following ones: household, energy, food, health, security.</p>

<b>Location</b>	Mondragón - Basque Country - Spain
<b>Website</b>	<a href="http://h-enea.org">http://h-enea.org</a>
<b>Photo</b>	

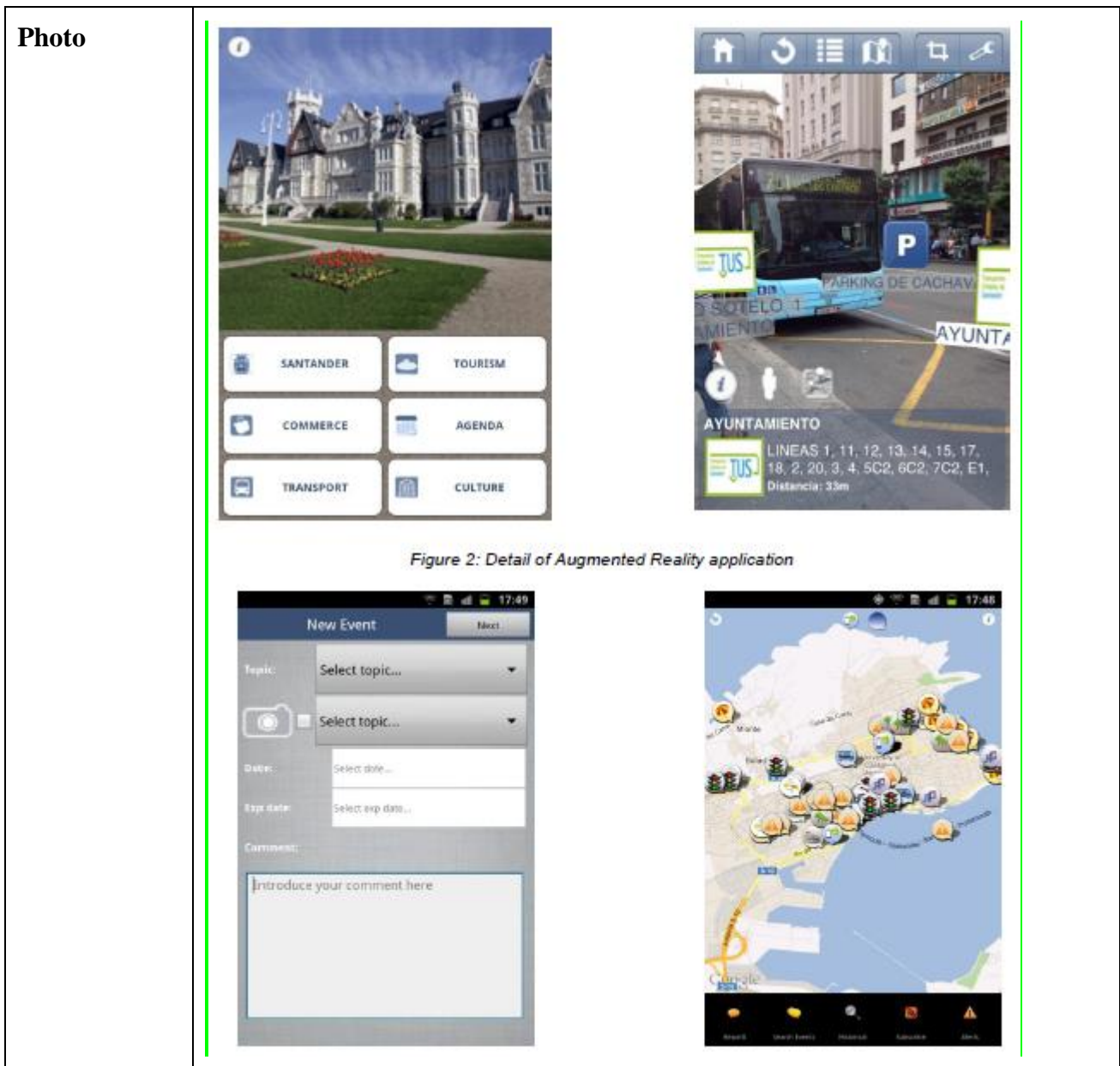
### 2.2.11 SSI - ES

<b>Name</b>	SSI
<b>Topic</b>	Smart Living
<b>Specialization /Activity Description</b>	<p>It is a pioneering infrastructure in Euskadi that attempts to simulate the different rooms of a home with advanced technology. It has 100 square metres and adapted beds and baths, hydraulic motor cranes, a modular kitchen, etc., resources that are equipped with technological advances that make it easier to care for elderly dependent people. It also has user friendly touch screen computers that avoid having to use a mouse and keyboard for people with reduced mobility, by using software which allows carrying out videoconferences. Its most innovating technological characteristic is an hydraulic motor crane system that hangs from the ceiling and can move the dependent users from their wheelchair to any room in the simulated home.</p> <p>Furthermore, the infraestructure goes beyond the physical infraestructure S.S.I. Group has been equipped with, as it is also made up of the 2200 homes in which it provides services for the care of dependant adults in Biscay. The characteristic that makes it unique is the degree of participation and involvement of the users, mainly care workers, in the different innovating projects the Group has managed during its 28 years history.</p>
<b>Location</b>	Bilbao Basque Country - Spain
<b>Website</b>	<a href="http://www.grupossi.es">http://www.grupossi.es</a>

## 2.2.12 Smart Santander - ES

<b>Name</b>	Smart Santander
<b>Topic</b>	Smart Living, Smart Mobility, Smart Environmet, ...
<b>Specialization /Activity Description</b>	<p>The <b>Santander testbed</b> is composed of around 3000 IEEE 802.15.4 devices, 200 GPRS modules and 2000 joint RFID tag/QR code labels deployed both at static locations (streetlights, facades, bus stops) as well as on-board of mobile vehicles (buses, taxis). Over the deployed testbed, several use cases have been implemented:</p> <ul style="list-style-type: none"> <li>- <b>Environmental Monitoring.</b> Around 2000 IoT devices installed (mainly at the city centre), at streetlights, facades provide measurements on different environmental parameters, such as temperature, CO, noise, light and car presence).</li> <li>- <b>Outdoor parking area management.</b> Almost 400 parking sensors (based on ferromagnetic technology), buried under the asphalt have been installed at the main parking areas of the city centre, in order to detect parking sites availability in these zones. Deployment for environmental monitoring and outdoor parking area management is shown in the next figure:</li> <li>- <b>Mobile Environmental Monitoring:</b> In order to extend the aforementioned environmental monitoring use case, apart from measuring parameters at static points, devices located at vehicles retrieve environmental parameters associated to determined parts of the city. Sensors are installed in 150 public vehicles, including buses, taxis and police cars.</li> <li>- <b>Traffic Intensity Monitoring:</b> Around 60 devices located at the main entrances of the city of Santander have been deployed to measure main traffic parameters, such as traffic volumes, road occupancy, vehicle speed or queue length.</li> <li>- <b>Guidance to free parking lots:</b> Taking information retrieved by the deployed parking sensors, 10 panels located at the main streets' intersections have been installed in order to guide drivers towards the available free parking lots.</li> <li>- <b>Parks and gardens irrigation:</b> Around 50 devices have been deployed in two green zones of the city, to monitor irrigation - related parameters, such as moisture temperature and humidity, pluviometer, anemometer, in order to make irrigation as efficient as possible.</li> <li>- <b>Augmented Reality:</b> Around 2000 RFID tag/QR code labels have been deployed, offering the possibility of "tagging" points of interest in the city, for instance a touristic point of interest, shops and public places such as parks, squares, etc. In a small scale, the service provides the opportunity to distribute information in the urban environment as location based information.</li> <li>- <b>Participatory Sensing:</b> In this scenario users utilize their mobile phones to send physical sensing information, e.g. GPS coordinates, compass, environmental data such as noise, temperature, etc. This information feeds the SmartSantander platform. Users can also subscribe to services such as "the pace of the city", where they can get alerts for specific types of events</li> </ul>

	<p>currently occurring in the city. Users can themselves also report the occurrence of such events, which will subsequently be propagated to other users that are subscribed to the respective type of events, etc.</p> <ul style="list-style-type: none"> <li>- <b>Native experimentation:</b> Most of the deployed IoT Nodes (those with fewer constraints in terms of battery) can be flashed, as many times as required with different experiments, through OTAP (over-the-air programming) or MOTAP (Multihop OTAP), for nodes more than one hop away from the gateway. In this sense, researchers can test their own experiments, such as routing protocols, data mining techniques or network coding schemes. This experimentation is made available by using an additional IEEE 802.15.4 transceiver, thus isolating data traffic associated to experimentation from the generated by the service provision. Figure 4 shows a screenshot about the experimentation skills offered by the platform.</li> </ul>
<b>Location</b>	Santander – Cantabria - Spain
<b>Website</b>	<a href="http://www.smartsantander.eu/">http://www.smartsantander.eu/</a>



## 2.3 Smart Mobility Showrooms

### 2.3.1 MVG Multimobil – DE

<b>Name</b>	MVG Multimobil
<b>Topic</b>	Smart Mobility: Smart Transport
<b>Specialization /Activity Description</b>	An integrated service by the Munich transport utility that not only gathers public transport journey services in one app/website, but also integrates data (and car locations) of 4 private car companies, and Taxis. Bike rental integration is to follow.

<b>Location</b>	Munich – Bavaria- Germany
<b>Website</b>	<a href="http://www.mvg-mobil.de/multimobil/">http://www.mvg-mobil.de/multimobil/</a>

### 2.3.2 Smart Mobile Labs – DE

<b>Name</b>	Smart Mobile Labs
<b>Topic</b>	Smart Mobility: Mobile Communication
<b>Specialization /Activity Description</b>	Stationary and mobile demonstrators of mobile communication technology that will be supported by carriers in 1-2 years from now.
<b>Location</b>	Munich – Bavaria- Germany
<b>Website</b>	<a href="http://smartmobilelabs.de/">http://smartmobilelabs.de/</a>

### 2.3.3 Mobility Lab - ES

<b>Name</b>	Mobility Lab
<b>Topic</b>	Smart Mobility
<b>Specialization /Activity Description</b>	<p>Mobility Lab responds to the need to create a platform, a living laboratory, to improve transport and convert it into a smart, clean, safe and efficient mobility.</p> <p>Mobility Lab is an initiative wherein the following may participate:</p> <ul style="list-style-type: none"> <li>• Companies that innovate and develop new products, testing them in real life conditions prior to market launch.</li> <li>• Governments, who lend their infrastructure for testing for the subsequent incorporation for the improvement of mobility.</li> <li>• Citizens, who will experience improvement of infrastructure they use and may actively participate in the testing to guide research towards its real needs.</li> </ul> <p>The main services, the Mobility Lab platform provides focus on:</p> <ul style="list-style-type: none"> <li>• Research, development and innovation promotion programmes for the creation of new solutions (products or services) for the management of Smart Transport.</li> <li>• European FOT Model for the validation and approval of products and services for application in the field of Smart Transport.</li> <li>• Platform for interoperability of multiple agents associated with the transit of goods and people.</li> </ul>



	<ul style="list-style-type: none"> <li>• Social Network with citizen participation to guide and lead new developments in the territory.</li> </ul>
<b>Location</b>	Gipuzkoa – Baque Country- Spain
<b>Video</b>	<a href="https://www.youtube.com/watch?v=wNQHLF9gW3Q">https://www.youtube.com/watch?v=wNQHLF9gW3Q</a>
<b>Photo</b>	

### 2.3.4 ETIC - ES

<b>Name</b>	ETIC
<b>Topic</b>	Smart Living , Smart Mobility
<b>Specialization /Activity Description</b>	<p>ETIC (Smart Cities Innovation Center) is a non-profit business service cooperative specialised in the development of products, services and applications within the context of Smart Cities.</p> <p>Among their objectives we can talk about the development of R+D+i solutions for companies with products and services in all application areas: Home, Health, Transport, Smart Cities, Power, User Interfaces (Natural User Interfaces NUI) and Kinect, Automobiles, and Mobility (Tablets and Smartphones).</p> <p>Many solutions are demonstrated in their showroom.</p>
<b>Location</b>	Mondragon – Basque Country - Spain
<b>Website</b>	<a href="http://www.embedded-technologies.org">http://www.embedded-technologies.org</a>
<b>Video</b>	<a href="http://www.embedded-technologies.org/en-us - Demos">http://www.embedded-technologies.org/en-us - Demos</a>

### 2.3.5 City Depot - BE

<b>Name</b>	City Depot
<b>Topic</b>	Smart Mobility
<b>Specialization /Activity Description</b>	<p>CityDepot, the expert in smart urban distribution, is the first company to offer a total solution for sustainable distribution of goods to and from the city centre, by road or water.</p> <p>CityDepot transports large pallets, small parcels, fresh goods, raw materials, waste and residual fractions, to mention a few.</p> <p>CityDepot is a neutral logistic platform that works together with big and small businesses active in urban distribution to enable the expansion of its operations.</p> <p>CityDepot plays a unifying role in the rapidly growing market of e-commerce.</p>
<b>Location</b>	Hasselt
<b>Website</b>	<a href="http://www.citydepot.be/en/">http://www.citydepot.be/en/</a>

## 2.4 Smart Governance Showrooms

### 2.4.1 Fix my Street - BE

<b>Name</b>	Fix my street
<b>Topic</b>	Smart Governance
<b>Specialization /Activity Description</b>	<p>Fix My Street is an initiative of 'Mobiël Brussel' in collaboration with the municipalities and partner institutions in Brussels.</p> <p>Fix my street is an application through which citizens can report problems in public spaces in Brussels.</p> <p>Fix My street Brussels is adapted from the original idea MySociety's FixMyStreet by CIBG (Centrum voor Informatica van het Brusselse Gewest - <a href="http://www.cibg.irisnet.be">www.cibg.irisnet.be</a>).</p> <p>Fix My Street Brussels is using the open source project <a href="http://fixmystreet.ca">fixmystreet.ca</a> van <a href="http://visiblegovernment.ca">visiblegovernment.ca</a>.</p>
<b>Location</b>	Brussels
<b>Website</b>	<a href="https://fixmystreet.irisnet.be/nl/">https://fixmystreet.irisnet.be/nl/</a>

## 2.4.2 Metaposta - ES

<b>Name</b>	Metaposta
<b>Topic</b>	Smart Governance
<b>Specialization /Activity Description</b>	<p>Metaposta is an internet based letterbox and strongbox in which documents of personal interest, received via and internet based electronic letterbox, are stored.</p> <p>Metaposta offers the safest way to receive, send and save your interesting documents.</p> <p>Metaposta is hosted in the computer systems of the Basque Government as a neutral place in which members of the public can keep their documents with absolute confidence. These infrastructures are managed by EJJIE, a Computer Company of the Basque Country.</p>
<b>Location</b>	Virtual
<b>Website</b>	<a href="https://www.metaposta.com/en/index.html">https://www.metaposta.com/en/index.html</a>
<b>Vídeo</b>	<a href="https://www.youtube.com/watch?v=gX-fhyG_u7A">https://www.youtube.com/watch?v=gX-fhyG_u7A</a>

## 2.4.3 Hiriposta - ES

<b>Name</b>	Hiriposta
<b>Topic</b>	Smart Governance
<b>Specialization /Activity Description</b>	<p>HiriPosta is a platform that allows administrations to foster citizen participation by offering citizens modern communication tools in accordance with their current social habits (social networks, open website, mobile applications, etc.).</p> <p>The service, which is both bidirectional and georeferenced, simplifies the whole process by channeling communication through hiriPosta and making it a single point of entry for the administrator, facilitating thus control, analysis and participation management</p> <p>hiriPosta directs and encourages different types of communication giving voice to all the problems and uncertainties of citizens, and getting all the benefits that citizens can bring to the administrations.</p>
<b>Location</b>	Virtual
<b>Website</b>	<a href="http://www.hiriposta.com/">http://www.hiriposta.com/</a>

<p><b>Photo</b></p>	
<p><b>Vídeo</b></p>	<p><a href="https://www.youtube.com/watch?v=T-_yi5gGcDs">https://www.youtube.com/watch?v=T-_yi5gGcDs</a></p>

### 2.4.4 X-Inno Approach - BE

<p><b>Name</b></p>	<p>X-Inno approach</p>
<p><b>Topic</b></p>	<p>Smart Governance</p>
<p><b>Specialization /Activity Description</b></p>	<p>The development of the X-Inno approach in Flanders started from the vision that huge business opportunities exists on the interface between different domains but that X-ecosystems, X-discipline, X-sector collaboration is needed to create value from those opportunities.</p> <p>Furthermore, this type of collaboration can be catalysed through intermediaries. The X-Inno has been developed to support those intermediaries in developing X-Inno activities aiming at exploring and exploiting innovative solutions on the interface of different domains. The development of the X-Inno approach was initiated during another EU funded project Nano4Health.</p> <p>This project was focusing on facilitating the development of new healthcare products and services enabled by a combination of Smart Systems and life sciences technology. The Clines project allowed for evaluating if this X-Inno approach was also applicable in a Smart Cities context. The results of this exercise are described in Clines deliverable D3.3 on Open Innovation."</p>
<p><b>Location</b></p>	<p>Flanders</p>

## 2.5 Smart Economy Showrooms

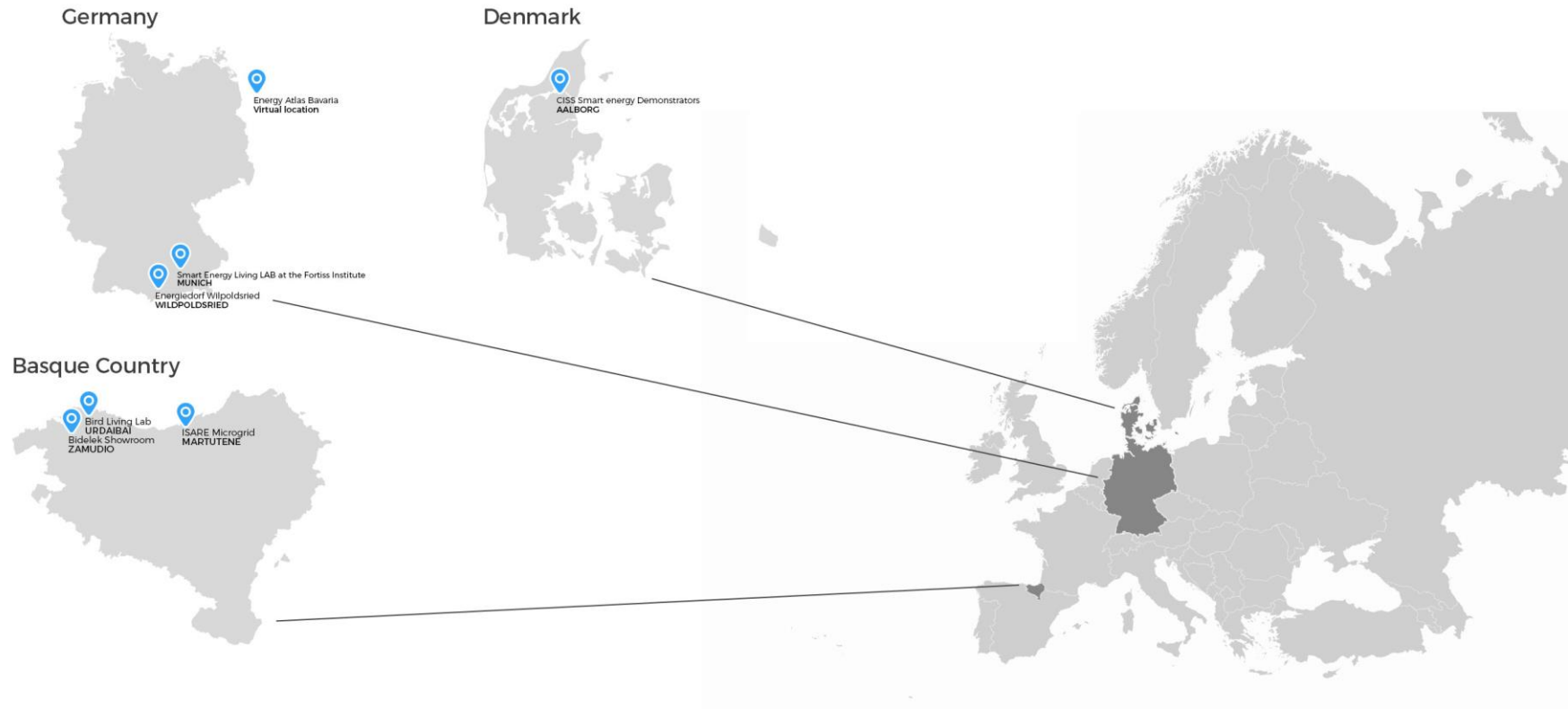
### 2.5.1 OCEAN LL – IRUN-HENDAYA ES-FR

<p><b>Name</b></p>	<p>OCEAN Living Lab</p>
<p><b>Topic</b></p>	<p>Smart Economy</p>
<p><b>Specialization</b></p>	<p>OCEAN Living Lab aims at making the ‘Basque California’ a land of excellence</p>

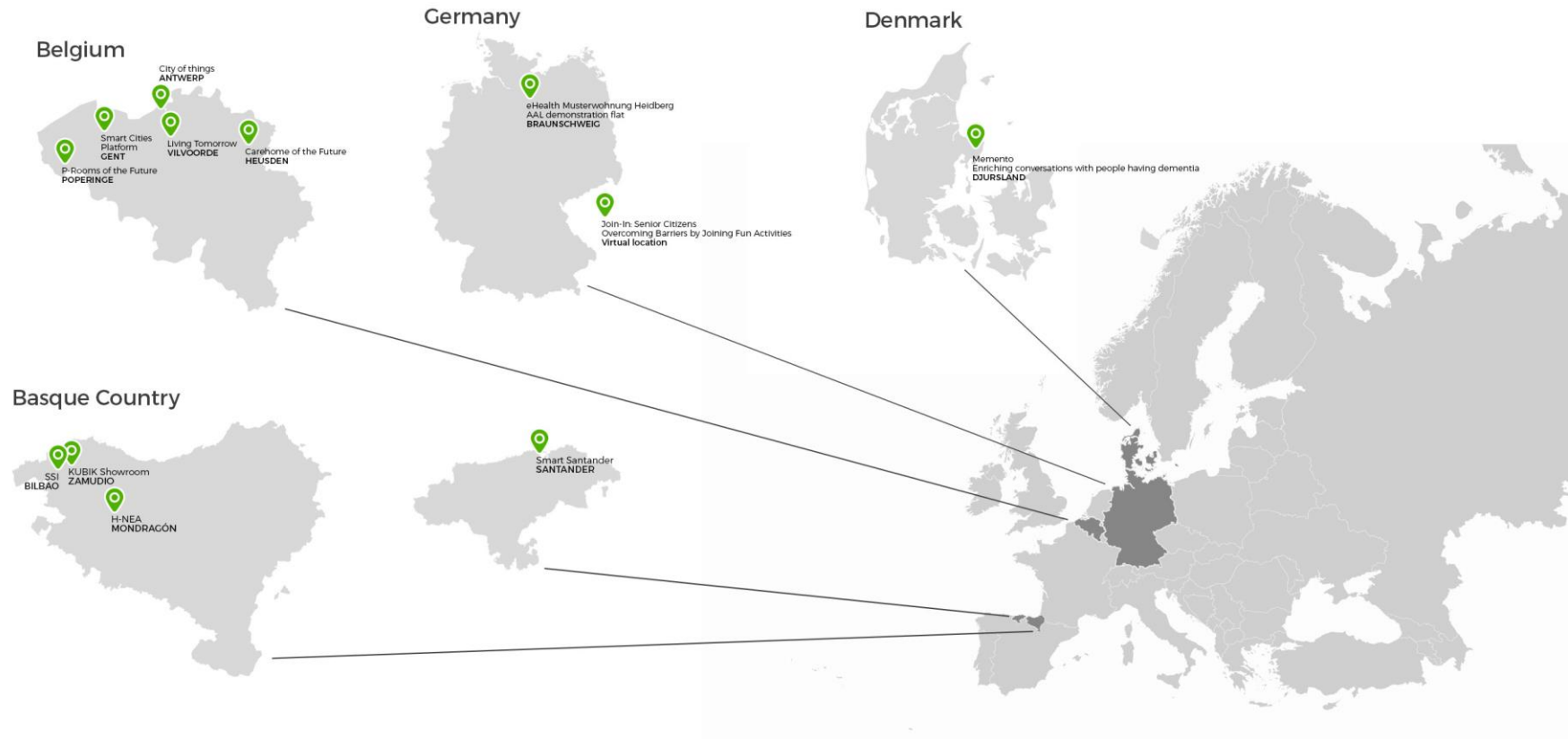
<b>/Activity Description</b>	<p>for co-conception and experimentation. They do so by developing optimal conditions for water sports new products and services destined to all kinds of users</p> <p>OCEANLL is a cross-border association with 10 founding members (public authorities, private companies, universities, and user communities.</p> <p>They all have developed the expertise and infrastructures that make the Basque coast a top destination for water sports. It now encompasses a complete ecosystem that includes co-development structures situated within a radius of 50 km on either side of the border.</p>
<b>Location</b>	Irun-Hendaya - Basque Country – Spain-France
<b>Website</b>	<a href="http://www.ocean-livinglab.eu/">http://www.ocean-livinglab.eu/</a>

### 3 Showrooms Distributed on a Map

#### Smart Environment Showrooms



# Smart Living Showrooms





# Smart Mobility Showrooms

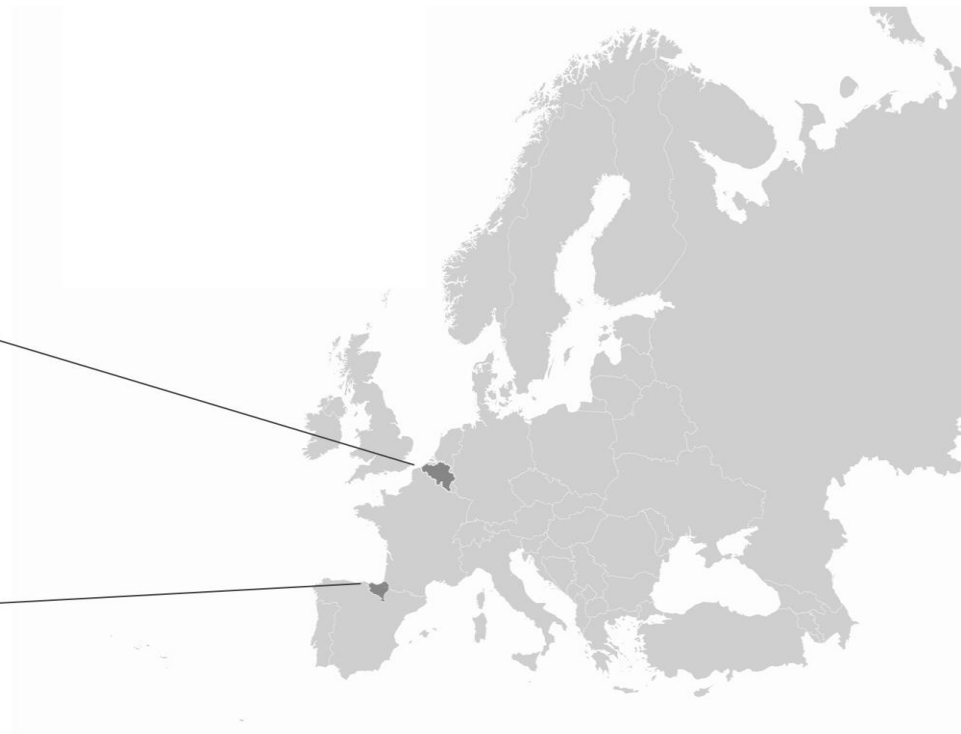


# **Smart Governance** Showrooms

Belgium



Basque Country



 **Smart Economy** Showrooms



## 4 CLINES video

Based on the restructuring of the project budget and on the opportunity identified to make more understandable what Smart Systems for Smart Cities are, the project partners have elaborated a video that incorporates their general vision about Smart Cities: which opportunities exist, the domains included in a smart city, ... but also a video that included some real experiences of smart city projects in a sort of summarized way

The general objective of WP7 is to carry out dissemination activities to raise the awareness of the community with regards to project objectives, achievements and final results. In that sense, these objectives can perfectly be translated into the form of a video which promotes, disseminates and raises the awareness of the community of the existence of Smart Systems for Smart Cities, its main goal being to increase its visibility to the general public. It also serves as a basic tool for the partners to assist their dissemination and exploitation activities and the successful engagement of the regional stakeholders in promoting smart cities via the solutions provided by their members.

Therefore, the project partners have worked in close collaboration to obtain a good result in line with their expectations. For this purpose they have decided to outsource an external marketing agency named DONOSTIFRAME with a wide experience in developing project videos. GAIA, as communication coordinator, took the role of selecting the subcontracted company as well as collect the ideas and visions from the different partners to produce a common message.

The script, which has evolved in different stages, was a document raised by GAIA but completed and validated by all the project partners. A first meeting between GAIA and the producing company decided on the mix of real images, videos and 3D graphics and the general outlook of the video. Several attempts resulted in the final script, universally agreed by all. The script has a simple but accurate nature to allow non-research actors to understand the messages launched. There were more than 16 changes to the script and animation.

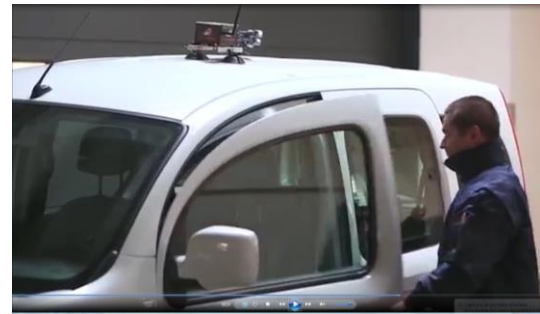
The end result has been a 9 minute video; the language selected has been English, even though each partner has the possibility to re-use the material and record a new track in their mother tongue.

The three real cases included are: Bike Cruiser from Denmark, Aircontrol from Belgium and Smart Street from Spain. The fourth initially foreseen case from Germany has been not developed following the partner's decision.



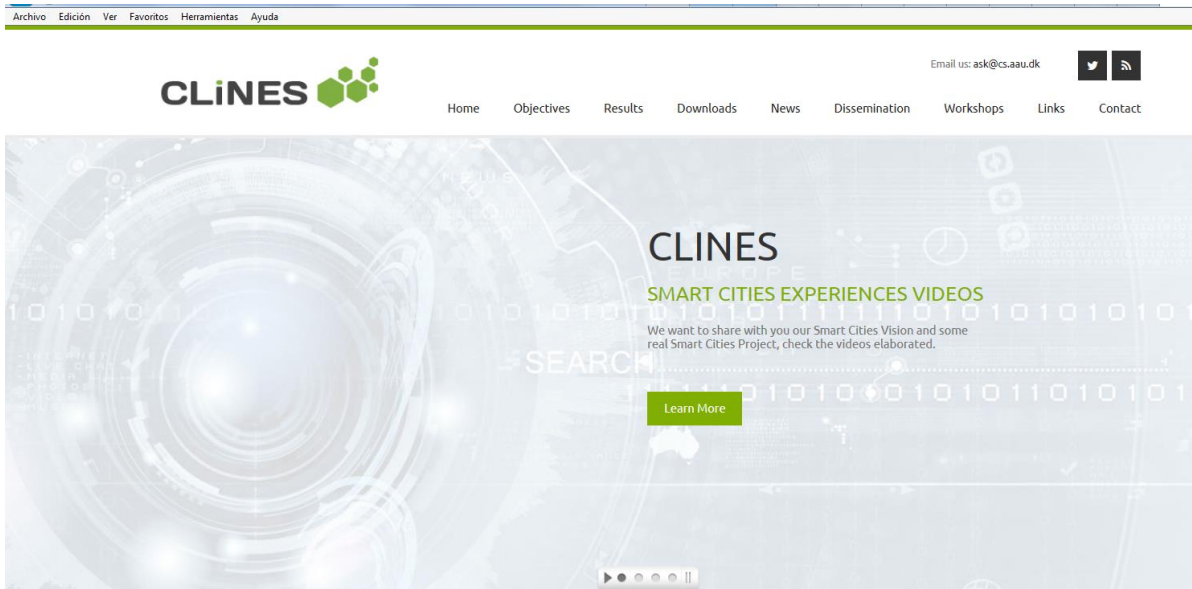
The Bike Cruiser presents an APP that obtains data from the riders of the cycle lanes used by the tourists and city visitors, Following this, the same path can be used by others visitors and the data therefore managed by the municipality or other entities to that way offer services, improve the road marking, ...

The Air Control systems uses different kinds of sensors to measure the city air quality, building up the air pollution health map reachable via an specific developed APP, allowing also the policy makers to make recommendations on improvements with regards to mobility and pollution.



The Smart Street presents the implementation deployed in a city street so as to improve, control and inform the residents of the area regarding aspects like: light savings, water consumption, people in the street and how many of them visit the retail stores in the studied street,... providing data via a specific platform.

The final version in High Definition is available in the project web. A new update of the webpage, including an option to download section contents has been developed since it was not foreseen to have a video at the beginning of the project. The video can be visualized in two forms: the complete version or case by case.



*Changes in the Home Sliders*

Downloads

- Download Poster
- Download Leaflet
- Download Logo with slogan
- Download Logo with out-slogan
- Download Intermediate Joint Action Plan



The video will be broadly cascaded to the target audience and stakeholders. The channels to disseminate the video will be the CLINES website, project partners specific promotional channels and on twitter.

Videos

WHAT IS A SMART CITY?



CLINES Project presents their Smart City vision.

SMART KALEA THE BASQUE SMART SYSTEMS USE CASE



Knows the reality of an Smart Street.

AIR CONTROL THE FLEMISH SMART SYSTEMS USE CASE



Discover healthy ways to your destination in the city.

BIKE CRUZER THE DANISH SMART SYSTEMS USE CASE



Know how to make more tourist oriented your city.

*Changes in the Download Section*

## 5 Conclusion

This document collects a number of showrooms and demonstrators using embedded technologies for Smart Cities (Living, Environment, Mobility, Governance, Economy etc.) identified by CLINES Project partners. For each demonstrator we have described briefly the specialization scope.

All the above is resulting in an opportunity for CLINES members to establish partnerships and networking with other third-party European organisations, and allow the companies from the four clusters to interact among themselves and to present their products-services in the specialty areas that are being addressed from CLINES, and associated with embedded technologies.