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# PORTO INTEGRATED ACTION PLAN

PORTO, PORTUGAL



Porto.



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**Porto.**

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## TABLE OF CONTENTS

<b>1. INTRODUCTION</b>	7
<b>2. CONTEXT</b>	
2.1. Medium sized cities	9
2.2. Porto	11
<b>3. STRATEGIC FOUNDATIONS OF PORTO SMART CITY</b>	
3.1. Electoral Manifesto	15
3.2. Urban Development Strategic Plan (PEDU)	17
3.3. Action Plan for Innovation (PAPI)	17
3.4. Organizational model	18
3.5. RIS 3 Strategy	20
<b>4. URBACT LOCAL GROUP (ULG)</b>	
4.1. Structure	23
4.2. Strategy	26
4.3. Outputs	27
<b>5. INTEGRATED ACTION PLAN GOALS AND METHODOLOGY</b>	
5.1. Action Plan objectives	29
5.2. Target Audience	29
5.3. Methodology and Approach	30
<b>6. INTEGRATED ACTION PLAN DEFINITION</b>	
6.1. ACTION 1: Assessing internal and external needs	33
A. CITIZENS	36
B. PORTO MUNICIPALITY	39
C. COMPANIES & ENTREPRENEURS	41
6.2. ACTION 2: Plan for Organisational Capacity building	47
6.3. ACTION 3: Plan for Reinforcement of the Local Innovation Ecosystem	53
6.4. ACTION 4: Plan for a Smarter Governance	59
<b>ANEX I LIST OF ACTIVITIES</b>	69



## ACRONYMS' LIST

### **AMP**

Porto Metropolitan Area  
(*Área Metropolitana do Porto*)

### **APOR**

Agency for Porto' Modernization  
(*Agência para a Modernização do Porto*)

### **Ccdrn**

Commission for Regional Coordination and Development of the North  
(*Comissão de Coordenação e Desenvolvimento Regional do Norte*)

### **CEIIA**

Centre for Engineering and Product Development

### **CGI**

Integrated Management Centre  
(*Centro de Gestão Integrada*)

### **CMP**

Porto Municipality  
(*Câmara Municipal do Porto*)

### **IAP**

Integrated Action Plan

### **PDF**

Porto Design Factory

### **PIH**

Porto Innovation Hub

### **ULG**

URBACT Local Group

### **UPTEC**

Science and Technology Park of the Porto University  
(*Parque de Ciência e Tecnologia da Universidade do Porto*)

# INTRODUCTION

Sketching  
the city



# 1. INTRODUCTION

Cities are complex ecosystems of services, data, processes, entities, technology, urban development and people. To empower cities and promote their sustainable growth it is essential to stimulate the development of this ecosystem into an innovative and dynamic structure which will address the ever more demanding challenges faced in daily basis.

Porto is part of the Smart Impact (URBACT III) consortium, with a total of 10 partner cities, led by the city of Manchester (United Kingdom). The consortium also includes Dublin (Ireland), Guadalajara (Spain), Zagreb (Croatia), Smolyan (Croatia), Suceava (Romania), Miskolc (Hungary), Stockholm (Sweden) and Eindhoven (Netherlands). Besides the partner cities, the project includes the Fraunhofer Institute as the expert partner with widely acknowledged competences in this field.

The Smart Impact network aims at developing a pragmatic approach that builds on the work being undertaken by cities in identifying mechanisms and approaches that make their cities smarter. Decision making, and policies have a strong impact in the cities shape and transformation being an primordial asset in this context. This network focuses in the development of decision-making processes and organizational structures, innovative investments, legal and policy frameworks and the management and operations of valuable smart city solutions which will reinforce the local innovation ecosystem and help achieving the city's development goals.

This Integrated Action Plan presents the result of two years work developed by the Urbact Local Group (ULG) in coordination with relevant projects and city stakeholders. The goal of this plan is to provide the city of Porto with a roadmap of projects and initiatives that are base in a set of Actions (developed within the project lifetime) that defined the baseline of needs and status of the city and its stakeholders.

# CONTEXT



## 2. CONTEXT

### 2.1. MEDIUM SIZED CITIES

Cities and urban areas play, nowadays, a key role in regional development throughout the European Union (EU). A majority of the EU population – more than two-thirds – lives in these urban areas, which account for about 80% of energy use and generate up to 85% of GDP (Gross Domestic Product).

Cities are the main centres of learning and knowledge and are fundamental for economic competitiveness: they strive to combine competitiveness and sustainable urban development. Citizens and economic actors have a considerable impact on the quality of urban space, economy, culture, society and environmental conditions. However, cities and city authorities also face important challenges related to sustainable environment, water supply, reduction of energy consumption, adequate waste treatment while facing critical challenges on unemployment, social segregation and poverty.

Most urban areas in Europe correspond to medium-sized cities, which offer a particular insight into the state of regional economies, in ways bigger cities – often the main focus of global strategies – fail to provide. Unlike large cities, medium-sized cities cannot be approached as isolated places or entities. Their success in generating new jobs, attraction and retention of companies and workers, is closely related to the interdependencies that exist between the city and the area in which they are inserted. The economies of the cities and areas around them are clearly interdependent and benefit from interaction and the exploitation of synergies. It is, therefore, essential to increasingly consider cities as entities whose influence clearly extends beyond their strict borders.

As major centres of population and major drivers of the economy and social activity, cities have been the focus of significant European programs on themes such as mobility, ICT, infrastructure and energy. In the framework of the various European financial instruments, of which the European Innovation Partnerships (EIP) stands out, the neighbourhood scale has been consistently promoted.

Porto argues on the importance of such interaction between cities and the surrounding regions. Furthermore, it looks at the city as a multifaceted entity and perceives

its strategies from a holistic perspective, combining actions that think and aim at the development of the city as a whole. The Municipality of Porto acts locally but also with a global perspective and expects that some of the implemented strategies have a wider applicability. Porto's strategy aims always at implementing projects at a city scale to test solutions in a wider and "at scale" realistic environment; doing so, the city expects to increase the potential for scalability and replication of the solutions designed and tested locally.

With more than 220,000 inhabitants, Porto exploits the fact that it is the centre of a large metropolitan area with more than 1.7 million inhabitants. These characteristics make Porto a perfect example of a typical midsize European city being an ideal place to experiment with city-wide solutions capable of becoming replicable solutions, namely in European environments with common characteristics that can be found in other medium-sized cities.

As central economic drivers, places of connectivity, creativity, knowledge and innovation and, above all, due an adequate population density that tends to generate significant entrepreneurship, cities are not just a perfect setting for experimentation, but they may also exploit the local ecosystems for the development of novel solutions. Entrepreneurial ecosystems are not, necessarily, innovative ecosystems, this is why cities, and certainly Porto, pay significant attention to the framework conditions that favour innovation. In times of slow economic development, cities face for example strong unemployment-related challenges that they have to deal with; this and other challenges have to be considered as opportunities, what calls upon the identification of creative and innovative solutions. Owing to its history, centrality and connection to the traditional industry, Porto has been able to successfully regenerate itself and overcome several crises, adopting always unconventional solutions and approaches that resulted successfully in the creation of a new generation of economic actors that exploited opportunities given by technological advances and new business models.

Today Porto is embracing the concept of smart city; by promoting a smart city strategy at the city level, based upon open and citizen centric strategies and integrating its efforts in European networks (such the Smart Impact, Synchronicity<sup>1</sup>

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<sup>1</sup> <https://synchronicity-iot.eu/>

or GrowSmarter<sup>2</sup>, but also by adopting open platforms like FIWARE<sup>3</sup> and integrating networks such as OASC<sup>4</sup> Open and Agile Smart Cities). Porto expects to contribute to the European efforts to turn cities into central hubs for innovation and main actors of a new generation of economic development strategies.

## 2.2. PORTO

The city of Porto is a major city in Portugal and the centre of one of the main urban areas in Southern Europe, with significant importance at a European scale, particularly on what concerns competitiveness and territorial cohesion. The city is undoubtedly an economic, educational and cultural centre of vital importance for the development of the region and the country.

The historic centre of Porto was classified by UNESCO as a World Heritage site in 1996 and the city of Porto was awarded “European Best Destination” in 2012, 2014 and 2017. Porto is a major centre of research and innovation, with a rapid growing sector of creative industries, and the centre of the nation’s main exporting region.

Porto City had around 220,242 inhabitants (census of 2014), down from over 300,000 in 1991. In the northern region of Portugal, Porto stands out as the most significant city exploiting heavily its manufacturing industry, broad economic dynamics, activities, businesses and services.

In 2013 the constitution of the Área Metropolitana do Porto AMP (Porto Metropolitan Area) was approved, establishing an area comprising of seventeen municipalities<sup>5</sup>. The AMP embodies cooperation between the municipalities and seeks to be an important catalyst of broader institutional networks with the objective of reinforcing the regional dimension of the economic, cultural, social and environmental development. It does not have any formal powers, but the studies promoted, the strategies shared, and the cooperation put in place exploit in an efficient way e.g. national

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<sup>2</sup> <http://www.grow-smarter.eu/home/>

<sup>3</sup> <http://www.fiware.org/>

<sup>4</sup> <http://www.oascities.org/>

<sup>5</sup> Arouca, Espinho, Gondomar, Maia, Matosinhos, Oliveira de Azeméis, Paredes, Porto, Póvoa de Varzim, Santa Maria da Feira, Santo Tirso, São João da Madeira, Trofa, Vale de Cambra, Valongo, Vila do Conde and Vila Nova de Gaia.

structural fund programmes. Its dimension also makes it a relevant interlocutor at national level, e.g. with the country government.

This region was responsible for 38% of Portuguese exports in 2014. The unemployment rate in Portugal has been growing rapidly in the last years, and in 2014, 15.6% of Porto inhabitants were registered as unemployed, what is a significantly high rate. One encouraging factor was that, equally in 2014, 8.2% of Portuguese adults were involved in experimenting or developing start-ups or managing new businesses<sup>6</sup>; nowadays, Porto stands out as having 28% of Portugal's "scale up" businesses.

In fact, in the last years the city has been transforming itself with the aim of becoming a true city of knowledge, exploiting its highly qualified workforce. Porto has a very qualified young talent pool consisting of 21.2% of the total population with less than 24 years; these youngsters excel for their flexibility and creative skills, being highly technologically skilled. There are more than 60000 students with higher education (27.2% of the total population) and more than 16000 are new graduates each year, with 3000 being STEM graduates (Science, Technology, Engineering and Mathematics).

61% of the Portuguese population speaks at least 1 foreign language, usually English, French or Spanish. In Porto, yearly, there are 113 English graduates, 76 French graduates, 68 German graduates. There are more than 1,405 foreign residents in Porto district from English speaking countries, 736 from French speaking countries and 647 from German speaking countries. While in the past Porto had already significant international influence (e.g. Port wine production), Porto is now rapidly becoming increasingly international in terms of its specialised workforce, in great part due to the prestige of the academic and R&D institutions.

The University of Porto is one of the oldest and most prestigious higher education institutions in Portugal, teaching more than 32,000 students and 3,300 foreign students. There are 14 different faculties and 1 business school, with 50 R&D units. It is the largest science producer in Portugal, with 1/5 of the scientific articles being published from this University. The Porto Business School is present in Financial Times rankings for the top business schools in the world. Also, the Polytechnic Institute of Porto, the largest and most prestigious polytechnic institute in Portugal,

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<sup>6</sup> SEP Monitor – Portugal Rising: Mapping ICT scale ups

offers education to more than 6,000 students, with a particularly active informatics engineering department with 1,200 students and 78 teachers, offering 4 R&D units and counting with 23 PhD's, based in scientific areas such as Knowledge engineering and Decision Support, Architectures for computing Systems, Test Systems and many other areas in the IT. Portuguese engineers are considered premium workforce due to their extraordinary capabilities of problem solving and creativity in the resolution of such issues.

Tourism has met an important and significant development in recent years, becoming one of the major economy boosters of the city of Porto. Porto is now a trendy city in terms of tourism, recognized worldwide as one of the best medium-size cities to travel. In a little more than ten years, the number of overnight stays in the region increased from 3.3 million in 2004 to in 2015, reaching 5.4 million between January and September of 2016, and it's expected to have passed the 6 million mark in 2016<sup>7</sup>, the highest growth rate in the country, reflecting the popularity of Porto as a travel destination.

The Portuguese State has also created the Comissão de Coordenação e Desenvolvimento Regional do Norte (CCDR-N), the North Regional Coordination and Development Commission, a public institution that works towards the integrated and sustainable development of the Norte Region of Portugal, contributing to the country's competitiveness and cohesion.

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<sup>7</sup> National Institute of Statistics; Reports of Touristic Activity, 2015

# STRATEGIC FOUNDATIONS OF PORTO SMART CITY





## 3. STRATEGIC FOUNDATIONS OF PORTO SMART CITY

In this chapter we make reference to some important milestones in the journey to make Porto a smarter city, with particular emphasis in the last 4 years. Apart from manifestos and action plans described in this chapter by the most relevant characteristics, one of the keys for success was the creation and the further refinement of Porto Digital, a non-profit association with three main promoters – Porto City Council, University of Porto and the Metro do Porto (Porto Light Rail Company), supported by multiple partners that include higher education institutions, vocational training companies, business associations, museums and other cultural institutions, information technology and multimedia companies, state agencies, research organisations, financial institutions, organisations supporting social inclusion and the regional development agency.

### 3.1. ELECTORAL MANIFESTO

The electoral manifesto proposed by the current Mayor and his City of Porto Council Councillors, released during the presentation of their candidature in 2013, presented already a strong ambition to bet on innovation to leverage economic growth, social cohesion and the quality of life of the city of Porto. The three main pillars of the mandate are (i) Social Cohesion, (ii) Economy and Employment and (iii) Culture and Development. The electoral manifesto is clearly aligned with (and a trigger of) the strategy for Porto as a Smart City, focusing on the improvement of urban spaces, social cohesion, sustainable development and local economy, promoting the consolidation of a strong local innovation ecosystem.

Innovation plays clearly a very important role in pursuing these objectives. It became an imperative to cultivate entrepreneurship, creativity and innovation as a way of overcoming the challenges arising from the normal functioning of a city.

With several institutions, organizations, companies and equipment that, given their innovative characteristics justify the ambition to grow at a higher rate, it was considered crucial to develop processes, as a result of consistent policies, that foster their operation in network.

The electoral manifesto strongly emphasized the development of policies that would make Porto a Smart City of reference at European level, such as the promotion of:

- digitization of processes within the municipal structure;
- investments on infrastructure deployment (Wi-fi, optics fiber, sensors, advanced networks, etc);
- open data availability, promoting the development of the app economy;
- a true business ecosystem of startups and scaleups;
- effective relationship between entrepreneurs and universities, interactions aimed to help them to find novel solutions to some of the city's problems.

Aiming at establishing more concrete activities, the implementation plan that followed the Electoral Manifesto pointed out a few specific initiatives in the field of innovation and Smart Cities.

For the purpose of this document, we highlight three of them:

- **Porto Innovation Hub:** This centre aims at creating a space of reference in the city where it is possible to create a link between population and companies, being a showcase for everything that could be developed in terms of innovative solutions for problems of the city and, at the same time, raising the awareness of the various agents that build the city's innovation. This creates a strong bridge between economic clusters, providing opportunities, visibility and cohesion to an entire economic structure of innovation. Specific actions not only with companies, but with Universities, Research Centres and other actors in R&D activities are foreseen in this project and currently being implemented (e.g. exhibitions, brainstorming sessions, participative mechanisms to listen to citizens, explanation sessions, etc).
- **ScaleUp Porto:** The ScaleUp Porto project was idealized as an initiative that aims at stimulating entrepreneurial ecosystem by boosting the high potential companies that already exist in the city, giving them access to opportunities in the fields of financing, training and access to clients. The implementation of this project is influencing the city in all its dimensions, namely cultural, economic and related to the quality of life. This new strategy for the city and the region of Porto aims to focus on a more competitive paradigm for the regional economy and to support local technological startups with the potential to scale internationally.
- **Desafios Porto (Challenge Porto):** Desafios Porto emerges in the context of the Smart Cities as a participative project, promoter of innovation at city scale,

involving all the actors of the local ecosystem – a practical implementation of the Living lab concept. The goal of the initiative is to promote the innovation capacity of the city, its entrepreneurs and businesses, making the local innovation ecosystem better known and further exploitable while fostering the emergence of solutions for real problems identified by citizens.

### **3.2. URBAN DEVELOPMENT STRATEGIC PLAN (PEDU)**

The Plano Estratégico de Desenvolvimento Urbano (PEDU) is the Urban Development Strategic Plan for the city of Porto created in September of 2015. It includes an exhaustive analysis of the city in terms of urban planning, mobility and social communities, highlighting its strengths and weaknesses. The PEDU also includes a set of recommendations and targets to promote a sustainable development of the city. The second part of the report includes three main Sectorial Action Plans:

- Action Plan for the Urban Sustainable Mobility;
- Action Plan for Urban Regeneration;
- Integrated Action Plan for Disadvantaged Communities.

The third part of the Strategic Plan details the governance model adopted.

### **3.3. ACTION PLAN FOR INNOVATION (PAPI)**

Porto's Action Plan for Innovation was created with the objective of establishing a clear strategy for the city of Porto in the context of innovation, deriving from but also contributing to the renovation and development of the city of Porto.

It derives from the political will to make Porto a Smart City, with a citizen-centred vision for sustainability, energy efficiency, R&D and all-encompassing economic expansion.

The strategic objectives of Porto as smart city included in the PAPI resulted from a reflection that became particularly useful in the context of the work done in the Smart Impact project. The underlying concepts influenced significantly the work done in the Urban Local Group described later. It should also be mentioned that the

transformation of the Porto Digital Association was instrumental and a catalyser for this local reflection that at the same time benefited strongly from the initiatives described before – Porto Innovation Hub, Porto Scale up and Challenge Porto.

### 3.4. ORGANIZATIONAL MODEL

New policies require new organisations to interpret and deploy in practice the required actions. The Smart Impact project provides significant attention to this perspective and has as one of its focus to propose models of how organisations can adapt their structures to deliver smart cities. It makes therefore full sense to include in this chapter a reference to Porto Digital, a non-profit association created by four founders, led by the City Council of Porto, in 2004. Through multiple concrete projects with a long-term perspective, Porto Digital become a seed inspiring for new organisational structures (e.g. Centro de Gestão Integrada – Integrated Management Centre) that exploit new models and technological approaches and that are transforming the city,

Porto Digital consolidated progressively its role and in February 2010, launched a new strategic plan, which aimed at fostering the emergence of Porto as a knowledge-based city and in which the innovation area plays paramount importance. Such strategy leverages the investments done by the Municipality since 2005 on a large-scale fibre optic backbone and in an advance ICT platform.

Citizen's centred sustainability, energy efficiency, R&D and economic growth are the main areas of interest in which different programmes and projects were launched. An interdisciplinary approach was adopted aligning the city well-known strengths with the excellence of the R&D work developed by the Academia. With the support of reference industry partners, it was possible to contribute to the creation of hundreds of qualified jobs and to transform the city centre into a place where people, especially young entrepreneurs, are inspired by a new risk culture and integrated in a new multicultural and international ecosystem.

As a clear result of this strategy the city is now attracting more people for the city centre, creating new jobs, developing solutions required by citizens, reducing social exclusion, and increasing the city security.

Based on the strategic approaches described above, the City of Porto started an organizational transformation in order to implement a smart city model. This process includes the integration of processes and the promotion of multidisciplinary work amongst the different stakeholders and inside the municipality. A very successful solution identified and implemented is the Centro de Gestão Integrada (Integrated Management Centre).

The Integrated Management Centre is a fundamental step towards the creation of a first integrated city operator where the use of advanced data collection and analysis tools will foster an effective “smart” management of the services of the municipality. Cities like Porto generate an increasingly larger amount of information, from traffic signalling systems to environmental sensors, from video cameras to data made available by public or private entities – that are able to generate information in real time and on a scale never before possible. Such information requires agile and multi-service management, since only this way can all this information be translated into efficiency gains at municipal level.

The Integrated Management Centre brings together in a single space the services responsible for Mobility, Municipal Police, Fire Protection, Civil Protection and Environment, and its main objective is to contribute to increasing efficiency and effectiveness in areas such as urban cleaning and waste collection, security and civil protection, traffic management, tourism, health, etc.

The aim of Porto Digital is to contribute decisively to a structural change in the operating mode of the city, to make it ready to improve and address the challenges.

To make a long lasting structural change, Porto Digital considers four important axes:

- **Education** – make a qualitative leap in terms of infrastructure to support the use of ICTs in education covering all the way from primary school to university and R & D laboratories.
- **Employment** – to increase the competitiveness of the business fabric of the city of Oporto and make it more attractive for investment.
- **Bureaucracy** – reduce inefficiency and bring citizens closer to the public administration.
- **Quality of life** – improving urban quality of life for residents, workers and visitors to the city of Porto.

Porto Digital will act at several levels, to ensure that citizens, academia, industry and Public Authorities can cooperate, benefit and be active partners in the process of creating a Smarter City. Porto Digital acts, therefore at the level of:

- Infrastructure – to allow a generic access to the digital world (looking at digital as a basic service, equivalent to energy, communications, water or sanitation)
- Promotion – enticing real communities to the digital world, looking to its articulation with the real world by producing contents in areas such as scientific, informative, tourist, recreational and cultural
- Accessibility – spreading access points to the Internet and services throughout the city
- e-Government – redesigning administrative processes, exploring the notion of e-citizens and adding transparency to local government
- **Sub-sectorial projects** – representing an intervention at the level of a sector area (such as employment, economy or culture) aiming at modernizing the economic fabric and increasing competitiveness through business cooperation activities, research and development, investment attraction, increased productivity and increased qualified employment.

### 3.5. RIS 3 STRATEGY

In a context of increasing international competitive pressure and in order to stimulate the active promotion of the European Union economy, a strategy has been outlined in the Europe 2020 agenda and in its 3 initiatives, namely Innovation Union, Sustainable Growth and Growth Inclusive. The reference to smart specialization, which is transversal to the 3 flagship initiatives, aims at underlining the importance of dynamics of competitive advantages based on territorial potential and provided by new competitive positions region. The promotion and adoption of the regions strategy, underlining the uniqueness of some solutions in respect to the vectors of competitiveness and that the regions, territories, geographical units of reference, must be at the basis of both the formulation of a own focused strategy of smart specialization, whether on the basis of its application and management.

An brief analysis of the Norte-RIS3, the City of Porto, has defined the following priority clusters for investment as relevant for the Smart Impact Project:

- **Human Capital and specialized services:** development of multimedia and programming applications, development of e-government applications, dematerialisation of processes and Association with the conversion of human capital, harnessing tendencies for the operations of engineering centres, shared and contact services.
- **Advanced Engineering, Technologies and Materials:** Porto has been developing, in accordance with the regional development, an attractive innovation ecosystem for production, development, testing, validation and demonstration.
- **Creative Industries:** Porto has a strong history in arts and a solid reputation in architecture, fashion, jewellery... In the past years, the evolution of this sector has promoted the creation of several companies, start-ups, events and new dynamics that make the city of Porto an active and diverse city.
- **Health and Life Sciences:** The Health and Lifesciences sector is a prominent, fast-evolving sector, which has experienced a remarkable evolution recently, with entities and scientists in areas such as neurosciences, cancer, immunology, regenerative medicine and nanomedicine.
- **Mobility Industries:** Portugal is a pioneer in the development and adoption of new energy models for sustainable mobility and Porto's institutions and firms were at the core of this achievement, supplying leading aeronautics and automotive companies.

The development of a local political, social and economic strategy needs to take into consideration the following aspects in alignment with the Northern 2020 strategy: Research, Technological Development and Innovation; Competitiveness of Small and Medium Enterprises; Urban System development; Social Inclusion and Poverty; and Institutional Capacity Building and ICT.



**URBACT  
LOCAL  
GROUP  
(ULG)**



## 4. URBACT LOCAL GROUP (ULG)

### 4.1. STRUCTURE

Within the framework of the **Smart Impact** project, the **URBACT Local Group**, created in each partner city, aims at including the relevant actors in the development of an **Integrated Action Plan**, in the areas identified by the project. As shown in figure 2, the **Porto URBACT Local Group (ULG)** consists mainly of 10 entities/ departments which work together with the objective of discussing and analysing what can be enhanced for the cooperation in the Smart Cities field.



Figure 2 – The URBACT Local Group composition (by department/organization)

Since there is a high degree of political agreement on the main objectives to be pursued and an effective leadership at city level, it was decided that the most useful

for the URBACT Local Group was to ensure that the majority of the representatives should come with a technical and very implementation-oriented background. The members of the group are still at the adequate level in the organisational structures to ensure effectiveness and the right impact of the decisions taken. They are also fully committed to the improvement of the city governance and ecosystem's relations, based on the 5 pillars of Smart Impact (as described in the Introduction Chapter).

ENTITY	NAME OF REPRESENTATIVE	ROLE
Agência de Energia do Porto	Rui Pimenta	Executive Director
	Alexandre Varela	Technical Director at AdEPorto
CMP – Information System's Department	Fernando Pinto	Head of Unit
CMP – Purchasing Department	Fernando Martins	Head of Unit
	Vera Sampaio	Senior Technician
CMP – Urban Planning Department	Célia Ferreira	Senior Technician
CMP – Environment Department	Pedro Pombeiro	Head of Environmental Management Office
	Marta Silva	Senior technician
CMP – Innovation Department	Cristina Taveira	Senior technician
CMP – Mobility Department	Sandra Sequeira	Senior Technician
	Teresa Stanislau	Technical Advisor for Mobility
	Ricardo Fernandes	Senior Technician
	Filipe Costa	Senior Technician
CMP – Social Development Department	Sílvia Cunha	Head of the Municipal Health Promotion Division
Porto Design Factory	Diogo Pinto	Head of Innovation Activities
Porto Digital Association	Paulo Calçada	CEO
	Gil Coutinho	Urban Platform
	Margarida Campolargo	Head of Smart Cities Department
	Gustavo Silva	Intern

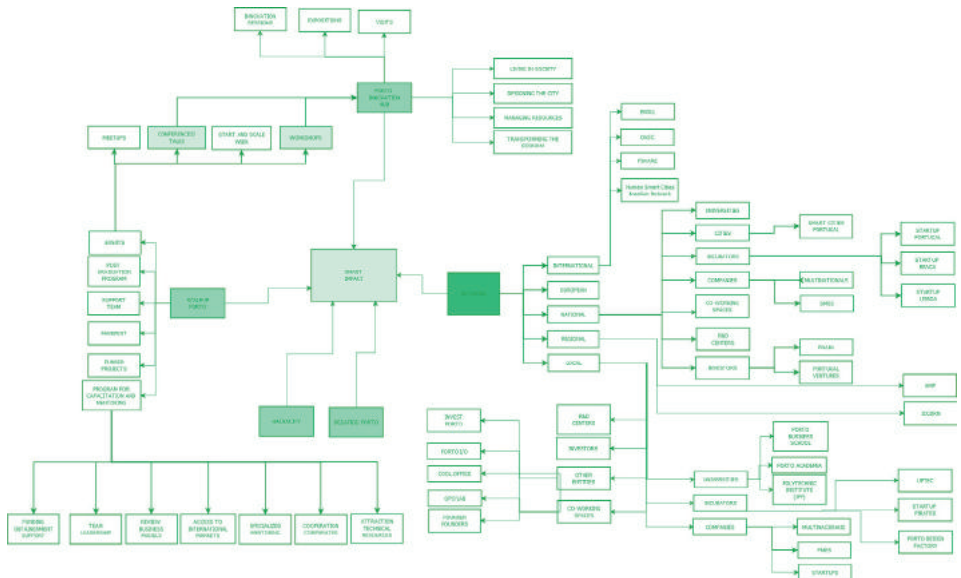


Figure 3 – ULG relation to City projects

In Order to improve the potential of the work developed by the Smart Impact ULG, the city of Porto decided to involve 4 other ongoing projects/programmes to contribute to the development and testing of new solutions: CGI, Desafio Porto, ScaleUp Porto and Porto Innovation Hub (as described below).

PROJECT	TEAM MEMBERS
CGI (Integrated Mangement Centre)	Gil Coutinho
	Mário Serrão
	Marlene Rocha
Desafios Porto	Daniela Monteiro
Porto Innovation Hub	Andreia Faria
	Carlos Vieira
	Catarina Pires
	Joana Silva
ScaleUp Porto	José Salcedo
	Joana Leite
	Joana Zeferino
	Rafael Pires

PROJECT	TEAM MEMBERS
Smart Impact	Paulo Calçada
	Margarida Campolargo
	Cristina Taveira
	Gustavo Silva

## 4.2. STRATEGY


The Porto ULG aimed at developing a strategy for the city of Porto based on the principles established by the city for the development of the smart city strategy:

- Providing it with a wide range of sensors and communication equipment, thus creating the conditions for future research and development using advanced technologies for data collection and processing;
- Implementing solutions for smart governance and monitoring. Several initiatives are already in place and more are being programmed for administrative simplification and participatory governance;
- Increasing visibility and public awareness for different fields such as sustainability, mobility, urban planning and information and communication technology;
- Promoting energy efficiency through refurbishment, innovative technological solutions and community participation;
- Increasing the usage of alternative energies (solar, biomass, geothermal) in order to reduce the dependency for the classic energy sources (coal, petrol);
- Supporting companies at different stages, from start-ups to scale-ups and stimulating public and private investments;
- Implementing integrated solutions for mobility, through the creation of integrated infrastructure and mobility and urban planning. Implementing the electro mobility and sustainable urban transportation and traffic;
- Separating waste collection and recycling implementing measures for citizen behaviour transformation;
- Adopting innovative PPP financing schemes for smart city projects.

### 4.3. OUTPUTS

The main focus of the ULG was defined to be the construction of a sustainable Smart City Urban Platform. As shown in the next chapters this was found to be one of the major concerns of the city not only at a **technological** level but essentially at an **organizational** level. The main goal is to insure the exchange of information and knowledge transfer and to manage the city in an integrated and multidisciplinary way, ensuring the “de-siloing” of the present organizational structure.

With this in mind, the objective is also to create the necessary infrastructure to support this implementation based on the real needs of the different users.



# **INTEGRATED ACTION PLAN GOALS AND METHODOLOGY**

## 5. INTEGRATED ACTION PLAN GOALS AND METHODOLOGY

### 5.1. ACTION PLAN OBJECTIVES

The purpose of this document is to elaborate the basis of an **Integrated Action Plan** based on the work developed during the Smart Impact project, reflecting the needs of the city for the implementation of a sustainable smart city strategy. The goal is to create a cohesive and coherent document that, in a later stage, can be plainly implemented and worked on if need be. The document provides a solid and explicit content of the actions foreseen for this purpose, based on specific activities and projects described in the next chapters.

The expected results of the implementation of the Integrated Action Plan are essentially related to the main goals identified below:

- Cooperate, share and learn from examples of good practice that may be identified in the project;
- Learn to identify accurately the role and importance of each stakeholder in the “Lighthouse” and models of commercial development of “smart city districts.”;
- Learn to identify, analyse and develop pragmatic solutions to the set of risks associated with the development of “smart cities”;
- Find, develop and adapt alternative forms of public funding, promoting the participation of public-private financing;
- Implement the resulting actions created under the Smart Impact program, as a result of the URBACT Local Group strategy.

### 5.2. TARGET AUDIENCE

This document acts as a guideline to all the city stakeholders (identified below), aiming for coherent implementation of activities. It also allows for a transparent source of information to all external partners of the Smart Impact project and to the public in general.

### 5.3. METHODOLOGY AND APPROACH

For this purpose, a specific process as developed based on URBACT methodologies and including co-design and co-creation methodologies has been adopted. Five main phases of the process, previous to the Integrated Action Plan implementation were identified in order to lead the work:

- Vision;
- Diagnosis (Needs identification, City projects collection);
- Definition of goals and strategy;
- Stakeholders involvement and co-design of solutions;
- Assessment.



Figure 4 – Integrated Action Plan Conception process

A set of activities was defined to implement each of these phases as described in the next chapters.



## 6. INTEGRATED ACTION PLAN DEFINITION

The Action plan was designed to involve and integrate a large number of stakeholders and projects already on going or foreseen in the city. Each Action is divided into Activities, and Activities into main tasks, as identified below. For the purpose of delivering an integrated and consistent action plan, this document includes actions that took place during the project lifecycle as well as the ones foreseen up to the next 2 years after the closure of the project. The Actions developed will have a direct connection to the 5 Smart Impact topics: Organizational development; Smart Financing and Procurement; Local Innovation Ecosystem; Data Integration; Support regulation and incentives.

### **ACTION 1: ASSESSING INTERNAL AND EXTERNAL NEEDS**

- ACTIVITY 1.1: Needs assessment
- ACTIVITY 1.2: Porto Innovation Hub Report

### **ACTION 2: ORGANISATIONAL CAPACITY BUILDING**

- ACTIVITY 2.1: Innovation handbook
- ACTIVITY 2.2: Capacity building workshops

### **ACTION 3: REINFORCING THE LOCAL INNOVATION ECOSYSTEM**

- ACTIVITY 3.1: Desafios Porto 2018
- ACTIVITY 3.2: Scaleup Porto 2018
- ACTIVITY 3.3: Porto Innovation Hub 2018/2019

### **ACTION 4: SMARTER GOVERNANCE**

- ACTIVITY 4.1: Manifesto for Porto smart city
- ACTIVITY 4.2: Governance model for the integrated management centre
- ACTIVITY 4.3: Pilot for new policies
- ACTIVITY 4.4: Open data strategy
- ACTIVITY 4.5: Hackacity
- ACTIVITY 4.6: Urban Platform

The image features a large, abstract graphic on the left side, composed of several overlapping, semi-transparent shapes in shades of green and yellow. The shapes are geometric, including rectangles and trapezoids, and they overlap in a way that creates a sense of depth and movement. The colors are vibrant and modern. The text is positioned to the right of this graphic, partially overlapping it.

# ASSESSING INTERNAL AND EXTERNAL NEEDS

## 6.1. ACTION 1: ASSESSING INTERNAL AND EXTERNAL NEEDS

### ACTION OWNER

Porto City Council (CMP)/Porto Digital

### DATE

November 2016 to December 2017

### SUMMARY

In order to better address the Smart Cities' strategy, a programme was developed to assess the stakeholders wishes, needs and expectations to gather a consistent amount of knowledge enabling the revision and/or reinforcement of the previous strategies defined.

### STRATEGIC GOALS

- Collect wishes, needs and expectations from all the relevant stakeholders acting in the city;
- Foster multidisciplinary and cross-entity approach to develop an innovation culture of exchange;
- Gather relevant stakeholders and inputs for the definition of a common vision;
- Promote the creation of a sustainable support network.

### METHODOLOGY AND INITIATIVES

- Internal approach:
  - Collective meetings: Context, overview and project presentation;
  - One to One meetings with departments: collection of inputs, State of the art;
  - ULG Workshops: Design Thinking methodologies;
- External approach:
  - Research;
  - Collaboration with Porto Innovation Hub:
    - Talks
    - Workshops.

**MAIN STAKEHOLDERS**

- Porto Municipality;
- Porto Digital;
- Municipal Companies;
- Porto Innovation Hub;
- Centro de Gestão Integrada;
- Academia:
  - Universidade do Porto;
  - Instituto Politécnico do Porto.

**TARGET USERS**

- Citizens
- Municipal Companies;
- Academia;
- Porto Municipality
- Research centres;
- Companies.

**OUTPUTS AND INDICATORS**

OUTPUT (O) OR INDICATOR (I)	DESCRIPTION	UNIT	QUANTITY	CURRENT STATUS
I	Stakeholders and individuals involved in the activities	Number	500	More than 2500
I	Number of workshops held	Number	8	15 workshops
O	“Porto Innovation Hub: Innovation in the city transformation” report			published

**PROBLEMS AND CONCERNS**

- Involvement of all the relevant stakeholders;
- Keep the interest throughout the process.

## ACTIVITY 1.1

### needs assessment

Porto, aims at including all the major city’s stakeholders in the definition of the innovation strategy with the goal of building a smart and sustainable hub. To assess the needs of the various stakeholders of the local community, the URBACT Local Group took under consideration the previous projects developed and designed several new activities to be undertaken during the first phase of this process. The needs identification was, therefore divided into the following groups of stakeholders:

- Citizens
- Porto Municipality
- Public Entities
- Companies and Entrepreneurs

The table below summarizes the main tasks required for the development of Activity 1.1.

TASK DESCRIPTION	LEAD STAKEHOLDER	KEY PARTNERS	INTENDED OUTPUTS	TIMESCALE
Internal meeting for the definition of the workshop strategy.	•Innovation Department	•Porto Digital	Workshop delivery plan	November 2016
Produce briefing documents to circulate to stakeholders prior to the workshop, and debriefing to validate after each session.	•Innovation Department	•Porto Digital •Smart Value	Briefing and debriefing documents to prepare and validate the results of the workshop	January 2017
Organize 4 workshops for: •Identification of challenges and opportunities; •Stakeholders map definition; •Global vision for the Action Plan	•Innovation Department •Porto Digital	•Agência de Energia do Porto •Information Systems Department •Purchasing Department •Urban Planning Department •Environment Department •Innovation Department •Mobility Department •Social Development Department •Porto Design Factory •Smart Value	Map the issues to overcome, the stakeholders to involve and their needs. Co-design the basis for the IAP vision.	July 2017

TASK DESCRIPTION	LEAD STAKEHOLDER	KEY PARTNERS	INTENDED OUTPUTS	TIMESCALE
Organize 2 workshops for:	<ul style="list-style-type: none"> <li>•Innovation Department</li> <li>•Porto Digital</li> </ul>	<ul style="list-style-type: none"> <li>•Agência de Energia do Porto</li> <li>•Information Systems Department</li> <li>•Purchasing Department</li> <li>•Urban Planning Department</li> <li>•Environment Department</li> <li>•Innovation Department</li> <li>•Mobility Department</li> <li>•Social Development Department</li> <li>•Porto Design Factory</li> <li>•Smart Value</li> </ul>		January 2018
Identify long-list of potential pilot projects amongst the stakeholders involved	<ul style="list-style-type: none"> <li>•Innovation Department</li> <li>•Porto Digital</li> </ul>	Same as above	List of possible pilot projects to implement in the Smart Impact strategy.	February 2018

## A. CITIZENS

The city promotes a strong involvement, participation and collaboration of the citizens, resulting in several projects from where the ULG can extract knowledge. There is a strong connection between the municipality and the communities residing in Porto. The Municipal Cabinet (Gabinete do Município) was created in order to address the citizen’s needs and expectations and to solve issues in a simple and fast manner. It is an important tool to provide voice to the city inhabitants, through a multichannel system which allows to get in touch with the Municipality via an online platform, phone or face to face. This service works in articulation with other departments to ensure maximum quality and celerity in the processes e.g. asking for new building permits, license for ramp constructions near a house or even to perform maintenance in the houses. As a result, this structure is essential to maintain the contact with the citizen’s and collect their needs adapting its response in an agile way. The Gabinete do Município, together with other projects such as the social innovation projects, enables us to establish a few urgent needs of the global population in Porto. From these projects some general needs were highlighted:

- Fight digital illiteracy and promote a deeper training for citizens with little knowledge;
- Promote Job creation;
- Foster social inclusion, amongst social classes, integrating people with disabilities...
- Improve intermodality, a more efficient mobility and accessibility;
- Improve end-to-end connected mobility experience;
- Integrate urban environment and mobility needs to deliver seamless experiences;
- Promote multichannel city services experiences;
- Promote one single point of contact to report, comment and identify local problems, occurrences and situations;
- Extend digital access to all the city services (besides the ones already provided by the Gabinete do Município).

Before enrolling in Smart Impact, Porto started a couple of projects, namely Desafios Porto. Desafios Porto (translated as “Challenge Porto”) inquiries, directly, in a first phase, the citizens about the biggest issues that they face daily in the city. In the second phase, the project challenges the local entrepreneurial ecosystem to address the needs of the citizens, promoting the creation of smart solutions. The best ideas are chosen, for each category, and implemented in the city, gaining access to mentorship and to financing processes.

As a result of the 313 challenges submitted by the citizens, the URBACT Local Group was able to identify the following areas of need related to the smart city concept:

- Digitalization of documents and books to be available for public consultation;
- Creation of games, social challenges and use of gamification for people’s engagement and to promote citizen’s empowerment;
- Promotion of a sustainable and more informative tourism;
- Development of apps to support tourism and culture;
- Develop interfaces for an easier access to political decisions and votes at a local scale;
- Access to more open data;
- Expansion of the internet access to all the city;
- Use alternative energy for a more sustainable city;
- Creation and usage of alternative vehicles;
- Improve the mobility systems such as garbage collection;
- Improve accessibility for people with disabilities;

- Control and more efficient management of the parking;
- Improve the intermodality amongst the traditional public transportation (already well connected) and the new transportation modes;
- Support active ageing;
- Social inclusion of people with disabilities;
- Promote healthier and more active ways of life.

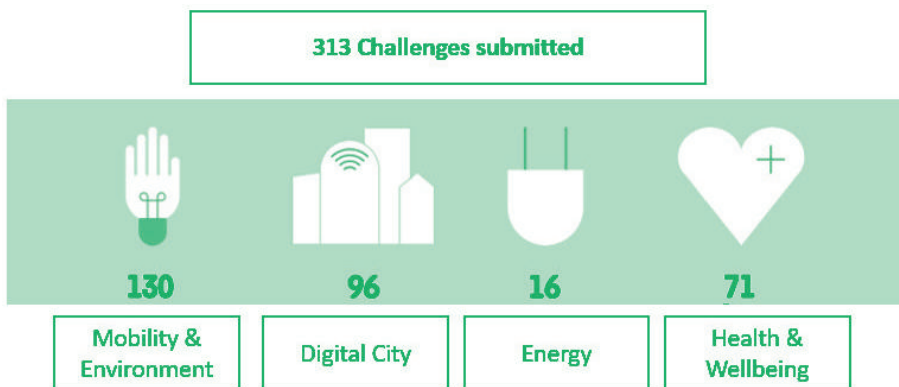


Figure 5 – Desafios Porto main themes and number of challenges submitted by citizens

With the theme “Innovation in the Transformation of the City”, Porto Innovation Hub is an important centre to meet the expectations of the citizens. The second edition of Porto Innovation Hub was inaugurated in December of 2016, with the objective of promoting innovation initiatives taking place in the city, creating a bigger proximity bound between the communities/the citizen and the entrepreneurial ecosystem. For 3 months, the Porto Innovation Hub initiative allows for the collection of a vast number of opinions and necessities from citizens and companies, promoting the participation of the civil society in the development of the city by identifying crucial needs. This assessment was mainly done by promoting a series of talks with important players in the respective fields, subsequently followed by public debates. The main themes of action were:

- Living in Society: Culture, education & formation, social cohesion, wellbeing;
- Designing the City: Accessibility, Architecture and Urbanism, Networks;
- Reaching Sustainability: Energy, Waste;
- Transforming the Economy: Employment, Entrepreneurship, Support Structures.



Complementing the talks, innovation sessions and public laboratories/workshops, as well as public exhibitions, took place, all of them open to the public. As a result of this debates a Collection of needs is being undertaken for every theme, and will be available in a Smart Impact Publication at the end of the project together with the guidelines for the design of a Smart City implementation.

In addition to the areas identified above, the ULG also concluded, from a global analysis of all the projects that it is essential to:

- Maximise the collaboration and information sharing within municipal organizations;
- Deliver quick wins while considering the emerging needs of citizens;
- Promote citizen's involvement in the strategy definition to optimize and design new internal and external processes as well as services;
- Combine citizen's feedback with open data to uncover city pain points.

## **B. PORTO MUNICIPALITY**

To assess the needs of the Municipality, the URBACT Local Group established a set of fields of interest and specific stakeholders, mapped (in the stakeholder's map, figure below), including the municipal structure. The main conclusions (related to the needs) of this internal assessment are as follow:

- Training and qualification of the Municipality's staff for new solutions;
- Improvement of the communication and multi-disciplinary approach, integrating the different departments in a transversal approach;
- Implementation of innovative governance models;
- Increase the number of innovative PPP;
- Focus on the provision of Open data and the creation of an interoperable technical infrastructure;
- Increase specialized Human resources.

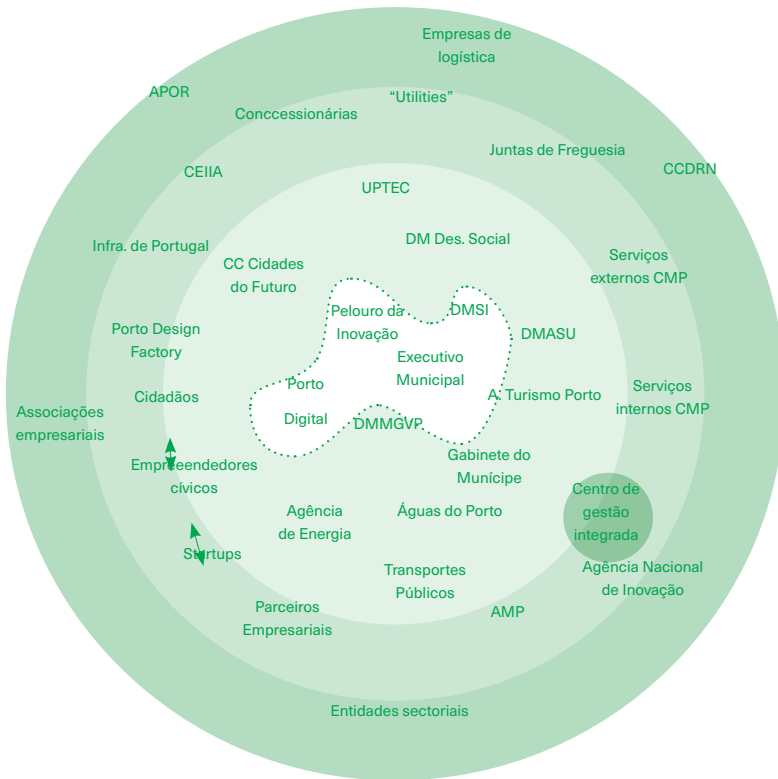


Figure 6 – Local Stakeholders map as defined by the URBACT Local Group

In addition to these results, a list of challenges related to the implementation of the Smart City Concept was built by the ULG, presented below.

DIMENSIONS	GROUP 1	GROUP 2
Technology	<ul style="list-style-type: none"> <li>•Investments' sustainability;</li> <li>•“Legacy” (integration of new and older technology): Avoid having obsolete technological park</li> <li>•Necessity of having more flexible, evolutionary, simpler technology</li> <li>•Scalability;</li> </ul>	<ul style="list-style-type: none"> <li>•Operationalization</li> <li>•Costs</li> <li>•Inclusion</li> <li>•<i>Evolution</i></li> <li>•Accessibility</li> <li>•Education and Capacity building</li> <li>•Easy Innovation</li> </ul>

DIMENSIONS	GROUP 1	GROUP 2
Data / Information	<ul style="list-style-type: none"> <li>•Privacy;</li> <li>•Municipality's role (aggregator? Producer? Consumer? Disseminator?)</li> </ul>	<ul style="list-style-type: none"> <li>•Open Data</li> <li>•Rigor</li> <li>•Organization</li> <li>•Privacy</li> <li>•Integration</li> <li>•Relevance</li> <li>•Actualization</li> <li>•Real Time</li> </ul>
Internal Connections	<ul style="list-style-type: none"> <li>•Break Silos;</li> <li>•Break information;</li> <li>•Necessity of having centralized management of all the information</li> </ul>	<ul style="list-style-type: none"> <li>•Fluidity</li> <li>•Interoperability</li> <li>•Coordination</li> <li>•Debate</li> <li>•Channels</li> <li>•Responsibility</li> </ul>
External Connections	<ul style="list-style-type: none"> <li>•Necessity to diversify the channels of communication</li> <li>•More inclusive and broad solutions for everyone (e.g. allow reclamations and services by the phone and not only online)</li> </ul>	<ul style="list-style-type: none"> <li>•Awareness</li> <li>•Financing</li> <li>•Ecosystem</li> </ul>

Porto Municipality has implemented, in June 2015, the new Integrated Management Centre (Centro de Gestão Integrada) in the Town Hall. This centre brings under one roof the services responsible for Mobility, Municipal Police, Fire department, Civil and Environmental Protection, and its main objective is to contribute to increased efficiency and effectiveness in areas such as street cleaning and waste collection, security and civil protection and traffic control, among others. The management centre helped identifying and collecting the needs. All the municipal processes under the responsibility of the departments included in this centre were analysed and mapped. During this process a first round of interviews took place. As a complement to this first information, a new set of more focused interviews was designed to create a new management model for the Management Centre within the Smart Impact project.

## C. COMPANIES & ENTREPRENEURS

As one of the major urban areas in Southern Europe, Porto has designed and embraced policy strategies focused on citizen's centred sustainability, energy efficiency, R&D and economic growth.

With an interdisciplinary approach, the city's well-known strengths are aligned with the excellence of the work developed by the academia. With the support of reference industry partners, hundreds of qualified jobs were created, and the city is becoming a place where people, especially young entrepreneurs, are inspired by a new risk culture and integrated into a new multicultural and international ecosystem. Porto is attracting talent to the city, developing solutions required by citizens, reducing social exclusion, and increasing security. Synergies have been making the city a tech, innovative and creative entrepreneurial hub. Porto is a facilitator of innovation. The city becomes a living lab, citizens challenge companies, entrepreneurs and researchers, and all of them work together to solve real problems, with differentiated solutions able to be replicated.

In the last years, the city has lived an intense atmosphere of entrepreneurship, with a fantastic business environment and the creation of hundreds of new businesses.

After successfully achieving a problem/solution fit and validating a business model the companies ready to grow face challenges related to scaling in a sustainable way. These challenges are connected to access to funding, qualified talent, knowledge and connection to the market.

The city has been developing an integrated vision of the scaleup process by supporting and promoting activities, programs and strategies that attract investment to the city, foster knowledge sharing and technology training, bring talent to the ecosystem and provide access to market. With these initiatives, Porto is developing the sustainability of the ecosystem, enhancing the economic competitiveness of the region, creating employment and improving citizens' quality of life. In order to better define the strategy for the IAP, a SWOT analysis was developed to support the decision making.

## **ACTIVITY 1.2**

### **SWOT ANALISYS**

As a result of all the work carried out in the analysis of the status of the city, definition of the needs, strengths and identification of the local ecosystem, a swot analysis was developed. This Analysis supports the definition of a clear and objective strategy and its sustainability in a log term vision.

**STRENGTHS**

- Strong European / national consensus on the relevance of urban regeneration for sustainable urban development, coupled with support regulation and various financing instruments;
- Increased international mobility of students and researchers, and business tourism;
- Diversification of tourist demand segments, in search of authenticity, cultural and natural heritage, and non-mass experiences;
- Internationalization of other destinations regarding which Porto exhibits a recognised centrality (e.g. Douro, Braga / Guimarães);
- Trend of changing pattern of demand for housing by the young population (housing rehabilitated and / or leased);
- Awareness of the advantages of a welcoming environment in terms of society and quality of life.

**OPPORTUNITIES**

- Attractiveness of students, scientists, research projects and generation of startups and spinoffs associated with higher education;
- Dynamics of attraction of economic activities intensive in knowledge and investment in incubation infrastructures and transfer of technology;
- Strengthening the international image of the city as a tourist destination;
- Dynamics of urban rehabilitation in different zones, with investment attraction;
- Improvements to public spaces and green areas;
- Patrimonial quality, authenticity and concentration of amenities;
- Transports network connecting several parts of the city and good international accessibility (air and sea);
- Resilience of associative movements and networks of solidarity;
- Dynamic ecosystem activities.

**WEAKNESSES**

- Access to credit to households and businesses, resulting in a hostile and uncertain context for private investment;
- Strong fiscal restrictions on public investment;
- Instability of the global economy and uncertainties (e.g. tourism demand, foreign direct investment, etc.);
- Restrictions on physical and infrastructural investment (e.g. in the fields of mobility);
- Competition of other Iberian and European cities in attracting tourism and foreign investment flows;
- Improvement of the quality of urban life in cities in or near the metropolitan area, contributing to internal migratory flows;
- Difficulties of institutionalization of urban and metropolitan governance models;
- Revitalization of the real estate market with implications in the rise of prices, mainly in the centre, retracting young people.

**THREATS**

- Structural decline of the resident population, evidence of urban “shrinkage”;
- Recent decrease of the skill pool due to qualified (e)migration;
- Strong sociodemographic and territorial disparities;
- Evidence of “touristification” of the historic centre and appropriation of space for associated mono-functions;
- Heavy inheritance of depletion of advanced urban functions and trade / quality services;
- Stigmatization of areas with pockets of social vulnerability and signs of development at various rates / fragmented,
- High rates of aging and poverty concentrated in space, associating physical, social and economic declines;
- Countless industrial spaces abandoned outside the historic city of difficult attractiveness;
- Fragmentation of private property and weak investment capacity of many owners;
- Mobility constraints and high level of emission of greenhouse gases.

## ACTIVITY 1.3

### PORTO INNOVATION HUB REPORT

As a result of the co-creation and participatory activities developed during the first phase of the project, in collaboration with the Porto Innovation Hub, a Report was elaborated and published in June 2017.



Figure 8 – Porto Innovation Hub: Innovation in the city transformation book cover

This report is a result of the partnership of the 2 projects and can be found at [http://www.porto.pt/assets/misc/img/noticias/AMBIENT/Porto\\_Inovation\\_Hub/Livro%20Expo\\_transforma%C3%A7ao%20da%20cidade/PIH%20%E2%80%93%20Livro%20sintese%20%E2%80%93%202017%20%E2%80%93%20Baixa.pdf](http://www.porto.pt/assets/misc/img/noticias/AMBIENT/Porto_Inovation_Hub/Livro%20Expo_transforma%C3%A7ao%20da%20cidade/PIH%20%E2%80%93%20Livro%20sintese%20%E2%80%93%202017%20%E2%80%93%20Baixa.pdf).

A list of the tasks required for the elaboration of this activity can be found below

TASK DESCRIPTION	LEAD STAKEHOLDER	KEY PARTNERS	INTENDED OUTPUTS	TIMESCALE
Definition of the aim of the Report	•Porto Digital	•Innovation Department •Porto Innovation Hub •PIH Consulting Group •José Salcedo	Clear vision of the expected output of the Activity	November 2016
Definition of a programme of conferences and talks in collaboration with Porto Innovation Hub.	•Porto Digital	•Innovation Department •Porto Innovation Hub •Smart Impact team	Creation of a programme covering the main topics of Smart Impact	November 2016
Conferences and Talks.	•Porto Digital	•Innovation Department •Porto Innovation Hub •ULG	General awareness and inputs collection	February 2017 to May 2017
Collection and systematisation of all the outputs of the talks.	•Porto Digital	•Innovation Department •José Salcedo	Report of the main topics discussed and suggestions of the stakeholders	June 2017
Public release of the Report	•Porto Digital	•Innovation Department •Porto Innovation Hub •PIH Consulting Group •José Salcedo	Report	June 2017

**PLAN FOR  
ORGANISATIONAL  
CAPACITY  
BUILDING**





## 6.2. ACTION 2: PLAN FOR ORGANISATIONAL CAPACITY BUILDING

### ACTION OWNER

Porto City Council (CMP)/Porto Digital

### DATE

November 2016 to December 2018

### SUMMARY

This action aims at developing and implementing a structured capacity building and training plan for the Municipality and Municipal companies with the goal of preparing the implementation of future Smart strategies. It is essential to involve the technical and political level of the organizations to promote knowledge exchange, identification of training needs and existing know-how and the development of a common vision for the municipality. The goal is to kick-start a capacity building programme which, ideally will be adopted by the municipality as a permanent initiative.

### STRATEGIC GOALS

- Awareness on smart city and innovation topics;
- Capacity building and training;
- Promotion of new collaboration models;
- Support an integrated vision for the Municipality.

### METHODOLOGY AND INITIATIVES

- Innovation Handbook:
  - Research;
  - Input collection;
  - Prioritization;
  - Systematization;
  - Design;
  - Publication;
- Capacity building Workshops:
  - Discussion & debate
  - Visual Thinking

- Personas
- Value Proposition Canvas
- Stakeholders map
- Awareness Activities.

**MAIN STAKEHOLDERS**

- Porto Municipality;
- Porto Digital.

**TARGET USERS**

- Municipal Companies;
- Porto Municipality.

**OUTPUTS AND INDICATORS**

OUTPUT (O) OR INDICATOR (I)	DESCRIPTION	UNIT	QUANTITY	CURRENT STATUS
I	Departments actively involved in the process	number	6	7
I	Capacity building workshops	number	4	1
O	Innovation Handbook published			ongoing
I	Distributed innovation handbook	number	200	tbd

**PROBLEMS AND CONCERNS**

- Involvement of all the relevant stakeholders;
- Keep the interest throughout the process.

## ACTIVITY 2.1

### INNOVATION HANDBOOK

One of the main conclusions of the assessment of needs, was the lack of knowledge of the actors from the local ecosystem on themes such as Innovation and Smart Cities. To address this issue, the Municipality created, at the end of 2013 the Innovation Department. This department has been implementing a set of initiatives to promote awareness on this theme, both at an internal and external level. To complement this work and improve the impact of the ongoing work, the ULG defined a set of Actions. The tables below summarize the tasks required for the development of the Actions related to Organisational Capacity building.

TASK DESCRIPTION	LEAD STAKEHOLDER	KEY PARTNERS	INTENDED OUTPUTS	TIMESCALE
Internal meetings for the definition of the handbook vision based on the workshops and needs assessments.	Innovation Department	Porto Digital	Vision and structure of the Handbook	November 2016
Collection of definitions and use cases.	Innovation Department	Porto Digital	Accessible and structured content about Smart Cities and Innovation.	November 2017
Internal presentations for validation.	Innovation Department	Porto Digital	Final list of themes to be integrated	May 2018
Public release and distribution amongst the Municipality's staff.	Innovation Department	Service and Operational managers, Politicians	Innovation Handbook	July 2018

The innovation handbook is a project developed by Porto Digital and the Innovation Department of the Municipality aiming at developing a simple and accessible document to be distributed amongst the Municipality staff (in a first phase) to promote awareness. The goal is to have a short repository of most common terms used in the field of Innovation and Smart Cities for a better understanding of the topic.

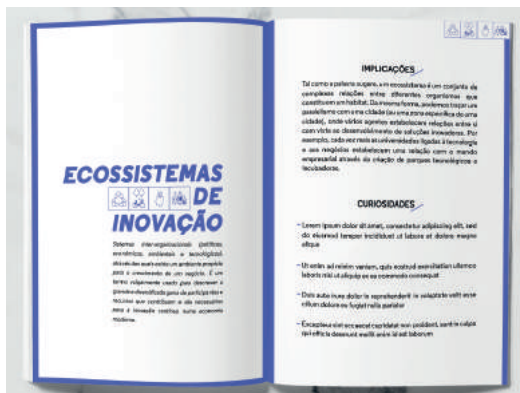


Figure 7 – Innovation Handbook

## ACTIVITY 2.2 CAPACITY BUILDING WORKSHOPS

TASK DESCRIPTION	LEAD STAKEHOLDER	KEY PARTNERS	INTENDED OUTPUTS	TIMESCALE
Internal meeting for the definition of the workshop strategy.	•Innovation Department	•Porto Digital	Workshop delivery plan	February 2018
Produce briefing documents to circulate to stakeholders prior to the workshop and debriefing to validate after each session.	•Innovation Department	•Porto Digital •Smart Value	Briefing and debriefing documents to prepare and validate the results of the workshop	May 2018
Organize 4 workshops	•Innovation Department •Porto Digital	•Águas do Porto •Agência de Energia do Porto •Information Systems Department •Purchasing Department •Urban Planning Department •Environment Department •Innovation Department •Mobility Department •Social Development Department •Porto Design Factory	Capacity building of the local actors in the field of Smart Cities and Innovation.	From June to December 2018

A couple of first level Capacity building workshops have already taken place and are foreseen for the members of the ULG and for the Municipality's staff. Their goal is to give a general perspective on the topic of Smart Cities and to kick start a more specific set of capacity building activities to address particular issues of the different departments. The main goals of these workshops are:

- Alignment and in-depth understanding of the Smart Cities issue;
- Identification of the relevant structuring dimensions of the Smart Impact and Porto project as Smart City;
- Establishment of the Strategic Stakeholders Map;
- Involvement of departments;
- Training of technical bodies.

This activity intends to develop a set of thematic workshops of 3 types:

- Definition of the strategy based in the Porto Innovation Hub;
- Identification of interests and needs;
- Assimilation and Development of concepts.



**PLAN FOR  
REINFORCEMENT  
OF THE LOCAL  
INNOVATION  
ECOSYSTEM**

## 6.3. ACTION 3: PLAN FOR REINFORCEMENT OF THE LOCAL INNOVATION ECOSYSTEM

### ACTION OWNER

Porto City Council (CMP)/Porto Digital

### DATE

September 2017 to December 2019

### SUMMARY

In order to promote a stronger impact of the Smart Cities strategies it is essential, not only to involve all the relevant stakeholders of the city, but also to reinforce the innovation ecosystem through the implementation of projects, programmes and policies. As a result of the first actions developed in the project Porto clearly identified needs and solutions to improve the local innovation Ecosystem. Job creation, Talent attraction, branding and territorial marketing, economic growth amongst others, are topics that need to be addressed in a common long-time vision. To support this action 3 projects came together for a new re-designed structure for the years of 2018 and 2019.

### STRATEGIC GOALS

- General awareness on the topics and projects;
- Capacity building and training;
- Talent attraction and retention;
- Development of participatory and innovative solutions;
- Promote access to Funding.

### METHODOLOGY AND INITIATIVES

- Desafios Porto:
  - Stakeholders Awareness and engagement;
  - Needs collection;
  - Discovering workshops.
  - Support solutions development;
- ScaleUp Porto:
  - Masterclasses and learning exchange experiences;

- Networking events;
- Stakeholders engagement programmes.
- Porto Innovation Hub:
  - Workshops and innovation events;
  - “Stepping out” – activity to discover innovation related entities or projects;
  - Service Design activities.

**MAIN STAKEHOLDERS**

- Porto Digital;
- Porto City council;
- Academia: University of Porto, Polytechnic school, schools;
- Parishes councils;
- Local associations.

**TARGET USERS**

- Citizens;
- Companies;
- Startups;
- Students.

**OUTPUTS AND INDICATORS**

OUTPUT (O) OR INDICATOR (I)	DESCRIPTION	UNIT	QUANTITY	Current Status
I	Masterclasses	number	6	4
I	Participants involved in the projects	number	3000	More than 1000
I	Partners involved in the process	number	20	10

**PROBLEMS AND CONCERNS**

- Lack of engagement of the stakeholders;
- Keeping an active and dynamic structure;
- Human resources.



## ACTIVITY 3.1

### DESAFIOS PORTO 2018

The Desafios Porto programme was created by the municipality of Porto with the support of private entities in a public-private partnership (PPP) with the objectives of including people in the public decision-making process and implementing new innovative solutions in the city to overcome some of the local issues highlighted. In a first phase, citizens are called to point out the main problems of the city using a public web platform. In a second phase, companies are called to suggest innovative solutions to overcome the pointed-out issues. To the selected projects financing, mentorship and other forms of institutional support was granted.

This program allowed further development of the Porto's ecosystem, successfully promoting cooperation between citizens, the local government and companies, while fostering the participation of all the quadrants of the local agents in the implementation of new solutions driven by innovation.

The initiative is now expanding its ambition and adapted itself to the needs identified, by working closely to local institutions identifying challenges and then with citizens to co-design tech and non-tech solutions for these challenges. The city is not only a living lab for tech companies; with Desafios Porto it is also becoming a platform to connect challenges to solutions and organizations to citizens with a focus on products and services that will benefit all the stakeholders.

TASK DESCRIPTION	LEAD STAKEHOLDER	KEY PARTNERS	INTENDED OUTPUTS	TIMESCALE
Identification of stakeholders	•Porto Digital	•Porto Municipality •Municipal companies	2018 Programme	May 2018
Citizens awareness Campaign and needs collection	•Porto Digital	•Parish Council •Porto Municipality •Local associations	List of Needs	June 2018
Engagement of the Municipal Departments	•Porto Digital	•Porto Municipality •Municipal companies	Set o engaged stakeholders	July 2018

TASK DESCRIPTION	LEAD STAKEHOLDER	KEY PARTNERS	INTENDED OUTPUTS	TIMESCALE
Workshops and Challenge definition	•Porto Digital	•Porto Municipality •Local Associations •Academia •Parish Council	List of ideas and proposals	September 2018
Engagement of the startups and companies and associations	•Porto Digital	•Startups •Companies •Porto Municipality •Incubators •Accelerators	Launch of the open call	From November 2018 on permanently
Selection of the final solutions	•Porto Digital	•Porto Municipality •Industry •Municipal companies	Solutions Implementation	From January 2019 on permanently

## ACTIVITY 3.2

### SCALEUP PORTO 2018

Scaleup Porto will keep its activity of supporting and promoting activities, programs and strategies that attract investment to the city, foster knowledge sharing and technology training, bring talent to the ecosystem and provide access to market.

To name a few, a minimum of 6 Masterclasses will take place, bringing experts to share knowledge with entrepreneurs and ecosystem builders in the city. A new edition of the scaleup training program “The Growth Champions” will take place, supporting scaleups optimizing operations, HR and sales strategy. The ecosystem and specific communities will be supported by “Call For Activities” that funds initiatives developed by the ecosystem to promote innovation, entrepreneurship and technology.

The connection to other scaleup ecosystems will keep being developed by being part of the SCALE (Startup City Alliance) network, and by developing Scaleup for Europe, a project that is promoting the role of the city as a market for scaleups.

## ACTIVITY 3.5

### PORTO INNOVATION HUB 2018/2019

Cities are living laboratories! It is fundamental to contaminate citizens with the will to be engaged in innovation-led projects of his city; it is vital to foster a fertile ecosystem for innovation in the city. Contemporary cities are growingly based on innovation, creativity and entrepreneurship – true forces of urban development streamlining economic and social fabrics, labour markets, culture, and the prominence of cities. Porto Innovation Hub aims at demonstrating the potential of innovation in the city's evolution and highlighting the direct impact that this relationship has on the improvement of the quality of life of the citizens.

In 2018 Porto Innovation Hub will inaugurate a new space in the city to develop activities gathering the innovation ecosystem around a common goal, to boost and make aware Innovation in Porto.

TASK DESCRIPTION	LEAD STAKEHOLDER	KEY PARTNERS	INTENDED OUTPUTS	TIMESCALE
Definition of the programme of conferences and workshops.	•Porto Digital	•Innovation Department •Porto Innovation Hub •Desafios Porto •ScaleUp Porto	Creation of a programme covering the main topics of Smart Impact	May 2018
Opening of a new space Porto Innovation Hub	•Porto Digital	•Porto Municipality	New space	October 2018
Activities, Conferences and Workshops.	•Porto Digital	•Innovation Department •Porto Innovation Hub •Desafios Porto •ScaleUp Porto	General awareness and outputs collection	November 2018

**PLAN FOR A  
SMARTER  
GOVERNANCE**

**4**

## 6.4. ACTION 4: PLAN FOR A SMARTER GOVERNANCE

### ACTION OWNER

Porto City Council (CMP)/Porto Digital

### DATE

September 2017 to December 2019

### SUMMARY

The goal of this action is to create a new “intelligent” layer to city governance augmenting the impact of the infrastructure and resources available in the city. Porto aims at building an interconnected knowledge-based city. Trends and patterns, stakeholders needs and city events should be integrated in the decision-making process and result in an improvement of the quality of life of the citizens. A set of activities were designed to build a Smarter Governance model in the city of Porto including processes re-definition, policies implementations and digital support addressing issues related to data availability, city management and innovative solutions testing.

### STRATEGIC GOALS

- Innovative governance model;
- Data based decision making processes;
- Digital Urban management;
- Open data strategy;
- Development of innovative services.

### METHODOLOGY AND INITIATIVES

- Manifesto for Porto Smart City:
  - Data gathering and analysis from all the projects involved in the smart cities field;
  - Workshops and co-creation activities;
  - Awareness and dissemination events;

- Governance Model for CGI:
  - Workshops;
  - Interviews and questionnaires;
  - Research;
  - Model prototype;
- Pilot for new policies:
  - Research and persona's definition;
  - Process analysis;
  - Solution prototype and testing.
- Open Data Strategy:
  - Data identification, collection and analysis;
  - Research;
  - Data testing and improvement: Hackacity;
- Urban Platform:
  - Process mapping;
  - Requirements definition;
  - Procurement process;
  - Implementation.

### **MAIN STAKEHOLDERS**

- Porto Digital;
- Porto City Council;
- Academia;
- Municipal Companies.

### **TARGET USERS**

- Citizens;
- Public sector;
- Companies;
- Academia;
- Industry

## OUTPUTS AND INDICATORS

OUTPUT (O) OR INDICATOR (I)	DESCRIPTION	UNIT	QUANTITY	Current Status
O	Manifesto			started
O	Open data portal			Started
O	CGI Governance model			Presented
O	Hackacity			Planned

## PROBLEMS AND CONCERNS

- Stakeholders engagement;
- Business model;
- Quality of the data.

### ACTIVITY 4.1

## MANIFESTO FOR PORTO SMART CITY

Based on the work developed during the lifecycle of the Smart Impact project, the ULG, together with Porto Municipality identified the need to co-create a common vision and public strategy for the Smart Cities field. The Manifesto/Roadmap will be developed to address this need and point out a set of new projects to be implemented.

Several activities are foreseen for the implementation of this action such as workshops, meetings, awareness campaigns, etc. One of the most relevant is the Global GovJam. This is an international non-profit event that was initiated by WorkPlayExperience in 2013 and is aimed at anyone who works or deals with government and the public sector. The city of Porto will organise, in 2018 the Global GovJam aiming at developing innovative approaches by applying design thinking and service design techniques and exchanging ideas with colleagues, while working on concrete projects addressing key issues inspired by the common theme.

TASK DESCRIPTION	LEAD STAKEHOLDER	KEY PARTNERS	INTENDED OUTPUTS	TIMESCALE
Internal meeting for the definition of the structure of the Manifesto.	•Porto Digital	•Innovation Department •Porto Innovation Hub •José Salcedo	Vision and structure of the Manifesto.	December 2016
Collection of contents in all the activities promoted by Porto Innovation Hub and previous projects.	•Porto Digital	•Innovation Department •José Salcedo	Repository and information for the Manifesto.	March 2017
Public release of the first report of Porto Innovation Hub.	•Porto Digital	•Innovation Department •Porto Innovation Hub •José Salcedo	Report release	June 2017
Awareness and capacity building campaign around the report	•Porto Digital	•Porto Municipality •Porto Innovation Hub	Stakeholders engagement	September 2017
Workshops for prioritization of challenges to address	•Porto Digital	•Porto Municipality •Porto Innovation Hub	List of priorities	May 2018
Global GovJam	•Porto Digital	•Porto Municipality •Municipal Companies	Global GovJam	June 2018
Public release of the final version of the Manifesto/ Roadmap.	•Porto Digital	•Innovation Department •Porto Innovation Hub •José Salcedo	Final version of the Manifesto.	October 2018



## ACTIVITY 4.2

### GOVERNANCE MODEL FOR THE INTEGRATED MANAGEMENT CENTRE

The Integrated Management Centre (CGI) is one of the exponents of the innovation of the city of Porto, interconnecting several entities that intervene in the operation of the city and that must be in perfect harmony, with special emphasis on situations that escape normal and crisis situations.

CGI provides real time information and promotes an integrated action amongst different public stakeholders and services, such as, security (National and Municipal Police), emergency (civil protection, medical emergency and fire department), public transportation, and services of the Municipality of Porto (e.g. environment and waste, mobility and traffic, public space management and fleet management). CGI was launched in 2015 and was significantly upgraded in 2016. It comprises an operations room with 81 m<sup>2</sup>, a meeting room with 48 m<sup>2</sup> and a backup office with 50 m<sup>2</sup>. It monitors the city on a videowall through the lens of 118 cameras and other sensors (such as, vehicle counters); monitors and controls 154 centralized traffic lights (out of 294) and 40 retractable bollards for restricted areas; monitors the municipality's fleet and is connected to the city's fibre network with a 10 Gbit/s connection (owned and operated by Porto Digital). The CGI is fully working since 2016 but will be improved when the Urban Platform is operational, as it will be integrated in the CGI. In order to follow up with this evolution among the various entities, reinforcing the operational and technological integration, a model of Governance and operational rules have been developed that allow it to be effective in a timely manner. This process was developed in a participatory manner, ensuring the comfort of all involved. The main objective is to contribute to placing the Porto in an integrated management of services, following its own strategy of innovation.

TASK DESCRIPTION	LEAD STAKEHOLDER	KEY PARTNERS	INTENDED OUTPUTS	TIMESCALE
Internal meeting for the definition of the strategy.	•Porto Digital	•Innovation Department •Spark2D •Centro de Gestão Integrada (CGI)	Work plan delivery with and alignment and establishment of goals.	January 2017

TASK DESCRIPTION	LEAD STAKEHOLDER	KEY PARTNERS	INTENDED OUTPUTS	TIMESCALE
Presentation of the project to the CGI	<ul style="list-style-type: none"> <li>•Porto Digital</li> <li>•Innovation Department</li> <li>•Spark2D</li> </ul>	<ul style="list-style-type: none"> <li>•Centro de Gestão Integrada (CGI)</li> </ul>	Awareness and engagement	February 2017
Interviews with the Stakeholders	<ul style="list-style-type: none"> <li>•Porto Digital</li> <li>•Innovation Department</li> <li>•Spark2D</li> </ul>	<ul style="list-style-type: none"> <li>•Centro de Gestão Integrada (CGI)</li> <li>•Environment Department</li> <li>•Municipal Police</li> <li>•Firefighters department</li> <li>•Civil protection Department</li> <li>•Mobility Department</li> <li>•Information Systems Department</li> </ul>	Engagement of the main stakeholders and definition of their priorities, concerns and suggestions.	February 2017
Analysis of existent models of Governance. Research, information gathering, analysis of reference centres and similar bodies in other cities. Conduct a workshop to identify possible scenarios and select the most appropriate one.	<ul style="list-style-type: none"> <li>•Porto Digital</li> </ul>	<ul style="list-style-type: none"> <li>•Innovation Department</li> <li>•Spark2D</li> </ul>	Collection of references and lessons learnt.	February 2017
Production of a preliminary version of the Governance Manual according to the most appropriate scenario, determined in the previous phase.	<ul style="list-style-type: none"> <li>•Porto Digital</li> </ul>	<ul style="list-style-type: none"> <li>•Centro de Gestão Integrada (CGI)</li> <li>•Innovation Department</li> <li>•Spark2D</li> </ul>	First version of the Governance Manual.	February 2017
Incorporation of comments and refinement of the most relevant details to produce and publish a final version of the Government Manual.	<ul style="list-style-type: none"> <li>•Porto Digital</li> </ul>	<ul style="list-style-type: none"> <li>•Centro de Gestão Integrada (CGI)</li> <li>•Innovation Department</li> <li>•Spark2D</li> </ul>	Validation of the work developed and Final Version of the CGI Governance Manual	March 2017

## ACTIVITY 4.3

### PILOT FOR NEW POLICIES

Decision making and city governance is very often dependent on historical data, and strategies take a long time to be. The adoption and implementation of new policies depends, many times on external factors (regulation, funding, political priorities) and are the result of a reactive approach. The aim is to create a pilot aiming at supporting the development and testing of new policies. This pilot will be based in an application that will gather, process and analyse city data, providing valuable information to the City Council, local business owners and citizens (both inhabitants and visitors).

This tool will ease and increase the transparency, interaction and communication between the stakeholders. The flow of information available will not only support the digitalization process but also improve the “de-siloing” trend of the traditional structures, thus promoting an integrated and more effective management system.

TASK DESCRIPTION	LEAD STAKEHOLDER	KEY PARTNERS	INTENDED OUTPUTS	TIMESCALE
Selection of the Pilot field	•Porto Digital	•Innovation Department •Municipality service managers and politicians	Pilot definition	April 2017
Solution Definition	•Porto Digital	•Innovation Department •Municipality service managers and politicians	Implementation plan	December 2017
Development of a working pilot	•Porto Digital	•Innovation Department •Municipality service managers and politicians	Pilot	July 2018
Assessment of impacts of the pilot	•Porto Digital	•Innovation Department •Municipality service managers and politicians	Analysis and delivery report	November 2018

## ACTIVITY 4.4 OPEN DATA STRATEGY

This activity aims at setting the principles for the implementation of an Open data strategy for the City’s data. A first analysis of the current status and identification of the datasets allowed Porto Digital to set the basis for the implementation of the open data portal. A group of relevant Municipal stakeholders were selected and have been responsible for the definition of the city strategy: Municipal Department of Mobility and Transport Planning; Municipal Department of Urban Management; Municipal Department of Civil Protection; Municipal Department of Environment and Urban Services; Municipal Police; Municipal Directorate of Culture and Science; Municipal Directorate of Human Resources; Municipal Trade and Tourism Division.

TASK DESCRIPTION	LEAD STAKEHOLDER	KEY PARTNERS	INTENDED OUTPUTS	TIMESCALE
Identification of the stakeholders to engage	•Porto Digital	•Porto Municipality •Municipal companies	Set of partners	November 2017
City status analysis	•Porto Digital	•Porto Municipality	“As is situation”	December 2017
Identification and collection of datasets	•Porto Digital	•Porto Municipality •Municipal companies	Datasets	May 2018
Workflows identification	•Porto Digital	•Porto Municipality •Municipal companies	Organizational data structure	September 2018
Re-definition of open Data principals	•Porto Digital	•Innovation Department •Municipality service managers and politicians	Analysis and delivery report	November 2018
Open data portal improvement	•Porto Digital	•Porto Municipality •Municipal companies	Open Data Portal	December 2018

## ACTIVITY4.5

### HACKACITY

Hackacity is a hackathon that aims at testing big data and promoting its use to develop ideas that can have an impact in the city, but also fostering collaboration amongst stakeholders. For 24 hours, participants get together to develop solutions based in open source platforms, as FIWARE, to address challenges faced by the citizens, using data provided by the city. It started in 2015 in Porto. In 2016, the city challenged the cities of Amersfoort/Utrecht in Netherlands, Olinda/Recife in Brazil and Santander in Spain – with the support of the Open and Agile Smart Cities (OASC) initiative – to work together, as a first attempt to implement an integrated approach of the use of data for the creation of innovative city solutions. In 2017 Hackacity had several editions taking place between June and December, bringing together the cities of Porto in Portugal, Garanhuns, Cuiabá, Campo Grande and Belo Horizonte, in Brazil and Utrecht in the Netherlands. The cities of Zagreb in Croatia, Santander in Spain and Paterborn in Germany also contributed to the Hackacity events by providing data to the participants. In total, Hackacity has engaged 11 cities in 6 countries.

TASK DESCRIPTION	LEAD STAKEHOLDER	KEY PARTNERS	INTENDED OUTPUTS	TIMESCALE
Partners identification	•Porto Digital	•Municipalities	Set of partners	February 2018
Definition of the thematic to address	•Porto Digital	•Porto Municipality	Programme 2018	April 2018
Hackacity event	•Porto Digital	•Municipalities	Hackathon	October 2018

## ACTIVITY 4.6 URBAN PLATFORM

The Urban Platform is the implemented realization of a logical architecture / design that brings together (integrates) data flows within and across city systems, by exploiting modern technologies (IoT/sensors, cloud, mobile, analytics, social media, etc.).

Being pivotal to a Smart City, it faces a wide range of challenges, from security and privacy (for data) to performance and scalability (of the technological infrastructure), whilst maintaining agility to adapt and find solutions to new problems.

It aims to provide the building blocks that enable cities to rapidly shift from fragmented operations to include predictive effective operations, as well as novel ways of engaging and serving city stakeholders in order to transform, tangibly and measurably, outcomes at local level (e.g. increase energy efficiency, reduce traffic congestion and emissions, create (digital) innovation ecosystems)

TASK DESCRIPTION	LEAD STAKEHOLDER	KEY PARTNERS	INTENDED OUTPUTS	TIMESCALE
Stakeholders Map	•Porto Digital	•Porto Municipality •Municipal companies •CGI	Set of partners	January 2018
General plan for the development occurrences integrated manager	•Porto Digital	•Porto Municipality •Municipal companies •CGI	Report	August 2018
Ideation and co-creation phase – plan for the development occurrences integrated manager	•Porto Digital	•Porto Municipality •Municipal companies	Structure	November 2018
Prototype and Implementation phase – development occurrences integrated manager	•Porto Digital	•Porto Municipality •Municipal companies	Prototype	February 2019
Test and validation of the Pilot Phase	•Porto Digital	•Innovation Department •Municipality service managers and politicians	1 <sup>st</sup> product	February 2019

## ANEX I LIST OF ACTIVITIES

The Project Stakeholders organized several meetings and activities within the context of the development of the Smart Impact Project as shown in the table below.

DATE	EVENT	TYPE	HOUR	VENUE	PARTICIPANTS FROM PORTO
21-set-16	Preparation meeting	Internal SI meeting	12:00 – 13:00	CMP	3
4-out-16	Workshop	ULG meeting	10:00 – 12:00	CMP	7
11-out-16	Preparation meeting	Internal SI meeting	12:00 – 13:00	APD	4
20-out-16	Preparation meeting	Internal SI meeting	14:00 – 15:00	APD	3
24-nov-16	Preparation meeting	Internal SI meeting	12:00 – 13:00	APD	4
16-nov-29	Urbact Network National meeting	National meeting	13:00 – 18:00	Amarante	40
7-dez-17	Workshop	ULG meeting	09:30 – 13:00	CMP	14
13-dez-16	Preparation meeting	Internal SI meeting	11:00 – 13:00	PIH	3
16-dez-17	Workshop	ULG meeting	09:30 – 13:00	PIH	8
20-dez-17	Future Cities 4th annual meeting	International conference	09:30 – 18:00	FEUP	50
6-jan-17	Workshop	ULG meeting	09:30 – 13:00	PIH	8
16-jan-17	Workshop	ULG meeting	14:30 – 18:00	PIH	10
24-jan-17	CONVERSA 10.2 / URBANISMO	Open Talk	18:00	PIH	38
25-jan-17	CONVERSA 11 / QUE CIDADE QUEREMOS	Open Talk	18:00	PIH	21
26-jan-17	CONVERSA 12 / PORTO REABILITADO	Open Talk	18:00	PIH	37
27-jan-17	Parallel meeting for definition of the Integrated Management center governance model: Batalhão de Sapadores Bombeiros do Porto	Parallel meeting	11:00	Rua da Constituição, 1418, 4250-161 Porto	3

DATE	EVENT	TYPE	HOUR	VENUE	PARTICIPANTS FROM PORTO
27-jan-17	Parallel meeting for definition of the Integrated Management center governance model: Proteção Civil	Parallel meeting	14:30	Largo Duque da Ribeira, 47, 4050-006 Porto	4
30-jan-17	Parallel meeting for definition of the Integrated Management center governance model: Direção Municipal da Mobilidade e Gestão da Via Pública	Parallel meeting	09:15	Paços do Concelho	4
30-jan-17	Parallel meeting for definition of the Integrated Management center governance model: Departamento Municipal Sistemas de Informação (DMSI)	Parallel meeting	14:15	R. Guilherme Costa Carvalho 4000-114 Porto	4
31-jan-17	Parallel meeting for definition of the Integrated Management center governance model: Polícia Municipal	Parallel meeting	09:15	Rua 13 do Bairro da Rainha D. Leonor, 13, 4150-734 Porto	5
31-jan-2017 and 1-fev-2017	transnational exchange activity -Organisational development	consortium meeting	09:00 – 18:00	Miskolc	2
6-fev-17	CONVERSA 15 / REDES E PLATAFORMAS TECNOLÓGICAS	Open Talk	18:00	PIH	15
15-fev-17	CONVERSA 20 / O PORTO E NOVOS PARADIGMAS EMPREGO	Open Talk	18:00	PIH	30
10-fev-17	Workshop GCI	workshop	14h30	PIH	21
16-fev-17	CONVERSA 21 / EMPREENDEDORISMO – NOVOS ATORES E ESTRUTURAS APOIO	Open Talk	18:00	PIH	71
20-fev-17	Preparation of the conclusions for the integrated management center governance model	Internal meeting	10:30	APD	7
24-fev-17	Presentation fo the Final Governance model solution	Workshop	09:30	CGI	36



DATE	EVENT	TYPE	HOUR	VENUE	PARTICIPANTS FROM PORTO
4-abr-17	Meeting with the PIH consultant group for the preparation closing the book "Porto Innovation Hub – a Inovação na transformação da cidade"	ULG meeting	08:30/10:30	PIH	11
04-abr-2017 and 5-abr-2017	transnational exchange activity – Finance and procurement	consortium meeting	09:00 – 18:00	Zagreb	3
25-mai-17	Launching of the "Porto Innovation Hub – a Inovação na transformação da cidade" portuguese version	Launching event	17:30	PIH	63
26-mai-17	workshop Porto Design Factory	Workshop	09:00 – 13:00	PDF	20
1-jun-17	Hackacity	Open Workshop	18:00	PIH	30
27-jun-17	Smart Impact	Conference	8:45-23:00	PIH	40
28-jun-17	Smart Impact e Morgesntadt	Conference	08:45 – 23:00	Ordem dos contabilistas	80
29-jun-17	Morgenstadt	Conference	08:45 – 15:00	PIH	30
10-jul-17	ULG – parallel meeting with DMSI	ULG meeting	9:30 – 11:00	DMSI	3
11-jul-17	ULG – parallel meeting with Urbanism	ULG meeting	10:30 – 11:30	Urbanism	3
11-jul-17	ULG – parallel meeting Procurement	ULG meeting	11:30 – 13:00	Procurement	4
13-jul-17	ULG – parallel meeting with	ULG meeting	14:30 – 15:30	Public streets	4
2017-oct-03 and 04-oct-2017	Transnational meeting – data integration	consortium meeting	09:00 – 18:00	Guadalajara	4
25-out-17	Workshop ULG	ULG meeting	09:30 – 13:00	APD	11
12-dec-17	Workshop ULG	ULG meeting	09:30 – 13:00	APD	10
12-jan-2018	work group data and procurement for Eindhoven	ULG meeting	09:30 – 11:00	APD	5
	Transnational meeting	consortium meeting	09:00 – 18:00	Eindhoven	5





# Sketch

# the

# Porto

Cities are complex ecosystems of services, data, processes, entities, technology, urban development and people. To empower cities and promote their sustainable growth it is essential to stimulate the development of this ecosystem into an innovative and dynamic structure which will address the ever more demanding challenges faced in daily basis.

[...]

This Integrated Action Plan presents the result of two years work developed by the Urbact Local Group (ULG) in coordination with relevant projects and city stakeholders. The goal of this plan is to provide the city of Porto with a roadmap of projects and initiatives that are base in a set of Actions [...].