# BSC and the City Council join forces to develop projects aligned with the strategic plan "Barcelona Digital City"

➢ The alliance will enable collaboration in those work areas related to the new municipal strategy, such as city digitalization, air quality in urban environments or the contribution of technology in urban mobility

➢ BSC will provide support to the City Council in order to standardize and structure the city data catalogue available within the city Big Data platform (CityOS) to facilitate its systematic analysis

➢ The subscribed agreement between the Institut Municipal d'Informàtica (IMI) and the Barcelona Supercomputing Center – Centro Nacional de Supercomputación takes place within the development of the plan "Barcelona Digital City 2017-2020"

(Barcelona, July 19th 2017). – The Barcelona City Council, through Institut Municipal d'Informàtica (IMI) and the Barcelona Supercomputing Center – Centro Nacional de Supercomputación (BSC), located in the North Campus of the Universitat Politècnica de Catalunya (UPC), have signed an agreement to collaborate in the development of highly technological projects of common interest aligned with the strategic plan "Barcelona Digital City 2017-2020", which aims to facilitate a more diverse digital economy and a new model of urban innovation.

The alliance between BSC and the City Council will evolve around those work areas related to the municipal strategy, such as city digitalization, air quality in urban environments or the contribution of technology in urban mobility. The use of simulation models, both in city traffic and pollution, has to enable a better definition of public environmental and mobility policies.

The agreement will allow any institution, institute or area within the Barcelona City Council to establish specific agreements with the BSC to develop projects that encourage innovation, technology and citizen creativity, and to participate in the processes of innovative public procurement.

The framework agreement, signed by the president of IMI, the deputy mayor, Gerardo Pisarello, and the associate director of the BSC, Josep Maria Martorell, aims to share information and software so as to move forward in technological projects and share its results, as well as in data exchange (not protected by the Data Protection Law) to allow the elaboration of scientific research studies that entail technological advancement. It also fosters the promotion of dissemination and research, collaborating in the organization of joint events, the promotion of actions of an academic, scientific and cultural nature, and it encourages the debate and interchange of knowledge and information dealing with research and innovation subjects.

**A first agreement to collaborate in the definition of the city data structure based on standards (ontology) for the CityOS platform**

IMI and BSC have agreed on a first collaboration project to add more features to the CityOS platform, the City Operative System, thanks to the work developed by BSC scientists in the field of ontologies applied to the standardization of the city data.

The technological platform CityOS, under development, will allow for a better management of the city services and will encourage decision taking in real time, as it will enable massive information processing via Big Data techniques.

The objective of the city data ontology of CityOS is to have access to a system that standardizes the different catalogues of available data, which come from systems or mixed sources, with sensors, energy indicators, mobility or pollution, so as to, within this platform framework, being cross-referenced and analysed in a systematic way.

BSC will provide the result developed within the European project GrowSmarter, in which the City Council, via IMI, also takes part. Thanks to this agreement, BSC gives the ontology to IMI, under Apache licence, so as to be added to the CityOS project.

**Simulations for a better definition of public environmental and mobility policies**

This framework agreement, signed today, will be followed by other agreements in specific fields:

• Work is being done to use simulation models both for city traffic and pollution for a better definition of public environmental and mobility policies.

• This knowledge will also be applied to better understand the impact that the urban transformation that is being carried out (for example, the "superilles" the peacemaking or the "green policies") may have in the city.

• Finally, BSC will have a growing and prominent role in Big Data and Data Analytics projects, given its experience in the analysis of great data volume, and in the interest of the city in encouraging citizen empowerment and data sovereignty.