

Open call city challenges

June 2017

Use these challenges as inspiration to ensure your experiment is aligned with the innovation Aarhus, London and Santander need. These are not mandatory but are there to guide you in creating ideas which are relevant to the local context. You can also find a brief description of the city.

If you want to experiment in a different city, ensure you are tackling the issues that the city has highlighted in their priorities.

Aarhus



Aarhus city challenges

Promoting active citizenship

Explore innovative ways to promote active citizenship, as per the [Aarhus Active Citizenship Policy](#).

Aarhus has a strong focus on co-creation and a long tradition of involving citizens, companies, and relevant stakeholders when developing the city. The City even has a policy on active citizenship - a policy that was co-created together with 700 citizens and stakeholders. The active citizenship policy is a recognition of the active citizenship already being exercised and a recipe for how everyone living and working in the city can work together for Aarhus. [Read the policy here.](#)

Experiments can explore smarter ways to promote active citizenship in Aarhus e.g. by looking into how volunteering can be made smarter ([Aarhus is European Volunteering Capital in 2018](#)), or making it easier to communicate about urban challenges or possibilities across local communities with different stakeholders of different age, ethnicity, and gender.

Smart culture

Create new urban cultural experiences or synergies between different events in the city.

Culture is highly valued by the citizens in Aarhus; 38% of the citizens say that culture is what makes Aarhus a great city for them. Aarhus is also the [European Capital of Culture in 2017](#) (ECOC), which represents one of the most prestigious and prominent cultural events in Europe. The city is buzzing with life and culture in every corner of the city. Many Smart City solutions and technologies are focused on optimizing the infrastructure of the city, and therefore little attention is given to culture. The aim of this challenge is to give room for experimenting with how culture can become “smart”.

Experiments can explore ways of using smart city technologies and data sources to create new urban cultural experiences or for creating synergies between different cultural events in the city e.g. by making use of existing event data or generating new sources of cultural data.

Going green

Explore new green solutions, engaging ways of creating awareness about CO2-reduction and the green transition (particularly amongst children and young people).

Aarhus has a goal of becoming CO2-neutral by 2030. Most of the CO2-emission comes from activities of citizens and private companies. The green transition requires that local ownership of making a change is increased amongst the citizens and companies in the city. Research shows that increased knowledge also increases the motivation to participate in the green transition. Therefore green transition needs to be made relevant and tangible for as many as possible.

[For more information on climate plans in Aarhus follow this link.](#)

Experiments could explore engaging ways of creating awareness about CO2-reduction and green transition - especially amongst children and young people since their choices and behaviour will influence the development until 2030. Experiments could also explore new green solutions.

Sharing economy

Change the habits of citizens or organisations, and explore potential uses or sustainable business models for the national testbed for the sharing economy, based on the [principles outlined by the testing phase in Aarhus](#).

Aarhus has been appointed to be the national testbed for the sharing economy in 2017 by the Danish Ministry of Business. There is a huge potential in the sharing economy both as a driver for growth and as a sustainable business model. Being a testbed, Aarhus can help create the right conditions that ensures a fair competitive business environment for new and established companies and clear guidance in relation to tax and labor conditions. Aarhus has formulated [6 principles for working the sharing economy](#) during this phase.

Being a smart city is also about sharing resources or data. Experiments could challenge existing practices and habits of citizens or organisations and explore sharing solutions that make use of smart city technologies and urban data.

Attend the Sharing Economy festival on 21st August to explore experiments and partners within the city.

Aarhus context

335,000 people live in Aarhus and 1.2 million people live in the greater Aarhus Area. In Aarhus, you will find knowledge in clusters of highly specialised businesses, research and educational facilities driven by a desire to collaborate and innovate. Renewable energy, food, health, and productivity are all areas in which Aarhus excels and with a global top 100 university centrally placed in the city, highly qualified employees and the most up-to-date research is literally just around the corner. Aarhus is also one of the European frontrunners in a Smart City context. Aarhus is European Capital of Culture in 2017, which gives the city a great deal of national and international attention and a vast range of big events throughout the year. Being a city of engaged creative citizens, innovative businesses and students from all over the world, Aarhus is characterised by a strong spirit of cooperation, social cohesion and civic participation.

As one of the first European cities, Aarhus will have LoRaWan coverage across the entire city – this gives the city new ways to create the smart city of the future. A new outdoor city lab to demonstrate and experiment with Smart City solutions will launch this summer – just in time for your experiments. During the first open call in OrganiCity we introduced [three challenges](#), which are still very relevant to work with, however for this second open call we are highlighting some of the important themes and strategies of the city to encourage experimentation within these areas to create even more synergy between the experiments in OrganiCity and the local context.

London



London city challenges

Urban mobility

Encourage active modes of transportation, accessibility and ease of connectivity across the city.

By 2040, an extra six million trips will be taken per day in London. Given the finite amount of road space we have and the high costs and long lead times of providing new infrastructure, it will not be possible to keep pace with these increases in demand. We need to change the way we travel.

More than 40% of Londoners do not achieve the recommended 150 minutes of activity a week, and 28% do less than 30 minutes a week. Lack of physical activity increases the risk of developing a range of chronic diseases including diabetes, dementia, depression and the two biggest killers in London – heart disease and cancer. [Transport for London's plan for Healthy streets](#) provides further details and information about this challenge.

In addition, our 150 year-old public transport can pose difficult to a variety of travellers: from people with impaired mobility or visibility, parents carrying babies on prams, or tourists adapting to a complex variety of modes of transport. How might we work around our current network of public transport to make it more accessible to the diversity of travellers?

Improving air quality

Create and support measurable improvements on pollution levels in our streets.

London's air quality is dangerously poor. The equivalent of nearly 9,500 Londoners are dying each year because of it. Londoners which are already suffering from lung or heart issues are particularly vulnerable. 25% of schools are in areas with unhealthy high levels of air pollution. Furthermore, deprived parts of the city are more likely to be affected than wealthier areas. We have measured it and we know it is bad: how might we act upon it and create measurable improvements?

Read more about this issue at the [Mayor of London's website](#).

Connecting communities

Enable people to connect to one another and to the community assets at their disposal.

You can encourage the creation of communities or work with an existing community to help them generate the impact they strive to see.

In a global city like London it is important to build successful communities where Londoners of every background feel connected with each other. The precarious housing situation in the city encourages residents to consider their home as 'temporary': this decreases the degree of integration with their local area.

Developing new ways of helping Londoners to feel part of their city, and to be able to play active roles as citizens and neighbours. Enable active participation in community and civic life. That might mean supporting Londoners of all ages to volunteer and take action to improve the city. It also means ensuring that Londoners can play an active part in the democratic governance of our city.

Urban green spaces

Making London more accessible through walking and cycling, shape our places to become better to play and socialise, and enhance biodiversity to attract wildlife.

Public health benefits of greens spaces include having a positive impact on both physical and mental health. Recent studies suggest that people experiencing mental distress frequently use physical activities such as walking, gardening and exercise to help: lift their mood, reduce stress, provide purpose and meaning, and reduce their vulnerability to depression. Green spaces also provide outdoor areas for exercise and fitness classes. For example, in Hampstead Heath almost 150 people gather each Saturday to take part in a 5km run. Many use green spaces as a meeting place to socialise. Playgrounds make a prominent feature of many green spaces in London. As part of their impact, over 80% of local authorities felt that their [green spaces promoted community cohesion](#). [Read more about the green spaces in London](#).

London context

London has a diverse range of people and cultures, more than 300 languages are spoken in the city. With a population of over 8.6m people it is the largest city in Europe.

The administration of London is formed of two tiers: a citywide, strategic administration is coordinated by the Greater London Authority (GLA), while local administration is carried out by 33 boroughs. The Mayor of London and the boroughs wish to see innovative technology solutions which enable Londoners to access and use public services more easily and effectively. They are keen to bring data from across London's boroughs and public agencies together, and opening it up to enable quicker decision making, better public services, more efficient and transparent government, and economic growth. Check the [London datastore](#) to identify data sets which can support your experiment – and request their integration in the OrganiCity technical environment or include it as part of your planned activities.

For reference you can read about the challenges presented for the open calls in 2016 [in this link](#).

Santander



Santander city challenges

Managing the impact of events

Explore ways of measuring the positive and negative impacts of large-scale events or medium events with a high frequency. Propose ways of maximising the benefits of these events for the local context.

It is well-known the importance of big impact events in cities, not only owing to the economical benefits coming from the activity itself but also from the previous and post-event impact that provides an important yield in the form of visibility, international projection, touristic and professional attraction, etc. In Santander, there are some examples as the Davis Cup semifinals and round in 2000 and 2006 respectively, the 2014 ISAF Sailing World Championships or the forthcoming ISAF Sailing World Cup in June 2017. Although the advantages are very clear, there is an important concern in the citizens about the final net income taking into account all the investments to be made by the cities for hosting this kind of events and the nuisance to the neighbours caused by the event.

Sustainable, active and social mobility

Facilitate or encourage more sustainable, active or social means to move to the downtown. Reduce the perception of wasted time in public transportation, the difficulties with parking or congestion during the school run. You can also utilise the new infrastructure (escalators, cycling routes, metrotus) in innovative ways.

This topic was already exposed in the first open call. The aim of this topic was to facilitate or encourage more sustainable, active or social means to move to the downtown; reduce the perception of wasted time in public transportation or their difficulties with parking.

Additionally to these interests there are other particular needs that can be addressed by experiments. There are some temporary, short time but repetitive congestion situations in the municipality located in specific places and with well-known causes but difficult to solve. One of the examples is the problems occurring in the nearby of schools when dropping-off and picking-up schoolchildren. The accumulation of vehicles causes a lot of disturbance in the surroundings being more severe where is located in axial roads or in the

downtown. Another example is the corresponding to goods delivery in the downtown during specific hours in the morning.

Apart from that, there are several important actions related to mobility that has been carried out or are currently in progress. These initiatives are aimed to improve significantly the quality of life of the citizens and visitors. examples of that are the increasing amount of surface escalators (the city is settle down in several hills), the extension of the cycling infrastructure or the forthcoming metrotus. These new or improved facilities introduce changes to be addressed not only from the obvious mobility point of view but also from the perspective of taking advantage of the new infrastructures for any other purpose.

Waste management and street cleaning

Suggest solutions to measure the level of service, increase early detection of punctual issues or increment the efficiency of the service to save staffing resources.

These pair of municipality services are paramount in the city life. They not only have an important share of the resources applied but also they are key issues when considering how is the perception of a city by citizens and visitors. Although the global quality of the service is considered good there are still several drawbacks to be improved. In fact, with respect to the street cleansing, one of the main ones is that current status is achieved with lot of resources i.e. by going over more than once a day that could be tailored to increment the efficiency. Another one is the important and costly impact of dropped chewing gum even with moderate occurrence. Concerning waste management can be named the annoyance of dropping out of the waste container or incidental burn down.

Taking advantage of current advanced degree of IT (including IoT) integration in these services there is a high potential of use for developing experiments for enhancing this information with an objective measurement the level of service, early detection of punctual problems, etc.

Elderly care and assistance

Alleviate the pressure on municipality services by proposing segmented services to deliver health, assistance or tackle solitude.

Population at the cities of the world is increasingly ageing and Santander is not an exception. A 25% of population over 65 years old is expected by 2025 and the pressure over municipality services in charge of home assistance service and tele-assistance is producing a big concern. The currently main target is to increase the quality and level of service devoted to these activities taking into account the budget limitation. One of the currently under assessment topics is to develop a segmented service to the elderly as the needs to be addressed are very specific and evolves as each person is ageing. These needs are not only related to health and assistance but also, and very importantly, to solitude.

Traditional shops

Develop ways to engage citizens in utilising the local traditional shops. Foster the collaboration of shop owners or proposing innovative ways to renew traditional shopping.

The local retail sector in the cities has been suffering a decreasing in their activity leading to an important economic recession with a great risk of disappearance. Changes in the shopping styles and new business models are getting an important share of the shopping sector. However, the small traditional shopping at the streets of the city may maintain its strength by taking advantage of those feelings they transmit to the city and the citizens and visitors like personal and careful assistance, neighbouring life knowledge and city distinctive aesthetics and feeling. These topics, although well-known are not used in its full scope.

Santander context

Santander, a port city located on the north coast of Spain, has an approximate population of 180,000. Santander's metropolitan area concentrates half of the population of its region and also the majority of administrative activities as it also holds the region government. It has been pioneer in the Smart City dimension since the [SmartSantander](#) EU funded project and, as a result, it has become an urban lab for developing new ideas and experiments. In this sense, engagement and participation for citizen and visitors like [Santander City Brain](#) and [Pulse of the City](#) are a very mature channels and periodical meet-ups and events are taking place. Also, its open data portal are continuously increasing the available data. But the best is coming through two new exciting projects that will change the face of the city by powering and enriching the city data and municipality services: the setup of a Smart City platform as a repository with business intelligence and the implementation of a physical and virtual city card that will improve the interaction and user experience of people with the city.

During the first open call we provided a set of [three city challenges](#) to the experimenters with the aim of giving some detailed examples about the topics they could use for their design of their proposals. Those topics were based on recent interactions with citizens in the scope of the project as workshops with neighbour associations, the Instagram contest and the assessment of the municipality strategic plan. These actions have been particular activities within a seamless effort of collecting municipality needs from different sources and channels. At the current stage of the project a wider set of relevant topics has been identified and are proposed to be addressed by experimenters' proposals.

Visit organicity.eu for details on the OrganiCity open call.