
SYNCHRONICITY

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Executive Summary

SynchroniCity opens up a global Internet of Things market where cities and businesses develop shared digital services to improve the lives of citizens and grow local economies. SynchroniCity takes an inclusive and transparent approach to grow the emerging market place by inviting businesses and cities to join through an open call. This guarantees the Digital Single Market appeal and ensures scalability whilst supporting the best citizen-centred services.

In this report, we present the foundations of the SynchroniCity open call and the considerations that we have taken during its co-design and developing phase to achieve our end objectives, including the feedback received from a pre-market consultation exercise. The outcome of this work is reflected in the open call guidelines and supporting documents that are necessary for interested participants to apply for the open call. The report ends by reflecting on some aspects of future work and presents some lessons learnt during this design and development period.

Abbreviations

DPO	Data Protection Officer
DSM	Digital Single Market
EU	European Union
FCC	Future Cities Catapult
GDPR	General Data Protection Regulation
H2020	Horizon 2020
IoT	Internet of Things
LSP	Large-Scale Pilot
MaaS	Mobility-as-a-Service
OASC	Open and Agile Smart Cities
RZC	Reference Zone Coordinator
SME	Small or Medium-sized Enterprises
TRL	Technology Readiness Level
WP	Work Package

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1 Introduction

SynchroniCity aims at creating a simplified, open and agile digital single market across borders that help cities and their citizens get better services. This emerging market will also help businesses of all sizes to transparently compete and easily scale their products and solutions. By implementing a common technical foundation, SynchroniCity will enable the identification and development of smart city standards that will allow an effective marketplace to be established.

In order to further these objectives, SynchroniCity takes an inclusive approach to grow the emerging marketplace by inviting other European businesses and cities to join through an open call.

Open calls are a tool that organisations can use to achieve different purposes. The way in which these are designed, developed and executed determines their success. The SynchroniCity consortium believes that successful open calls are an extraordinarily powerful tool to foster open innovation. They allow organisations to test and develop new concepts that would otherwise be difficult to develop under the established systems and help to lower the barrier to participation in different initiatives.

Based on the principles of Open and Agile Smart Cities (OASC), the focus of the SynchroniCity open call is to prove interoperability, replicability, scalability and sustainability of Internet of Things (IoT) enabled solutions in multiple cities. We are looking for Small or Medium-sized Enterprises (SMEs), cities and corporations which would like to be part of this new emerging community and become pioneers in making this digital single market a long-lasting reality. The open call will allow the strengthening of the ecosystem by creating a positive ripple effect throughout Europe and globally, to establish sufficient momentum and critical mass.

In particular, the specific aims of the SynchroniCity open call are to:

- Validate the SynchroniCity vision and technical framework as a model for large-scale standards-based innovation and procurement of IoT-enabled services for cities and communities.
- Attract innovative SMEs with an existing product to demonstrate the potential and viability of the harmonised Synchronicity framework by proving the replicability and scalability of human-centred IoT enabled solutions from one city to another. These SMEs should address identified urban challenges benefiting cities and its citizens.
- Attract new cities and other players in this ecosystem to become part of the SynchroniCity digital single market ensuring its expansion and sustainability.
- Test and prove the basic principles of the digital single market to inform European and international standard bodies to shape and adopt new smart city standards. The later will ensure an open and agile marketplace for the different players of the global ecosystem; i.e. cities, SMEs and large businesses.

Finally, it is important to mention that the SynchroniCity open call has been realised with the ambition of creating and establishing a:

“standard based innovation procurement
across domains
and market realistic.”

To the best of our knowledge, these three elements together have not been yet realised through open call processes at a city scale in Europe.

In SynchroniCity, we acknowledge the complexity of the smart city market and we embrace it in the open call. Making an impact in the development of the Digital Single Market (DSM), not just in theory but also in practice, needs of this holistic approach. SynchroniCity and its open call could represent the first at-city scale trial of this type of all-inclusive standard based innovation processes.

2 Open Call at a Glance

We present below an overview of the main characteristics of the SynchroniCity Open Call.

What is SynchroniCity?	SynchroniCity is an EU-funded initiative under the Horizon 2020 Framework Programme for Research and Innovation (2014-2020). It is one of the IoT European Large-Scale Pilot Projects¹ currently operating. SynchroniCity opens up a global IoT market where cities and businesses develop shared digital services to improve the lives of citizens and grow local economies.
Aim of the Open Call	Validating the SynchroniCity vision and technical framework as a model for large-scale standards-based innovation and procurement of IoT-enabled services for cities and communities by demonstrating the replicability, scalability and sustainability of citizen-centric IoT-enabled solutions across cities.
Who is it for?	• IoT enabled SMEs that have already demonstrated their solution in a relevant environment (TRL ≥ 6)². SMEs can apply alone or in a Pilot Group. The SME Lead Applicant should provide an IoT data-enabled application or a full stack solution. • Cities. Cities can only apply in a Pilot Group. • Large businesses. Large businesses can only apply in a Pilot Group.
Scope (Themes & Challenges)	• <i>Sustainable Mobility</i> - Enabling and improving Mobility-as-a-Service (MaaS); Encouraging more non-motorised transport • <i>Citizen Engagement</i>- Increasing citizen engagement in decision making; Increasing a greater level of diversity in political engagement • <i>Environment & Wellbeing</i> - Climate change mitigation; Reducing air and noise pollution • <i>Open Theme</i> - Open challenge
Funding	Total budget of €3M in funding. Each application can be funded with: up to €100.000 if an SME applies alone; up to €200.000 for Pilot Groups of 2 organisations; up to €300.000 for Pilot Groups of 3 organisations or more. Synchronicity open call will co-fund 80% of the total individual budget of each project. The remaining 20% will need to be provided by applicants either as in-kind support or by bringing in funding to the project. Funding to cities and large businesses is limited to €60.000.

¹ <https://european-iot-pilots.eu/>

² https://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/annexes/h2020-wp1415-annex-g-trl_en.pdf

	Note that SMEs, cities and large businesses that are not from the EU or H2020 associated countries are welcome to apply but they will not be eligible for funding.
Open Call Pilot Cities	Cities that could pilot your solution include Core Pilot Cities (Antwerp, Carouge, Eindhoven, Helsinki, Manchester, Milano, Porto and Santander) and it also may include New Applicant Cities that you could introduce in your Pilot Group. You will need to pilot your solution in at least 2 Open Call Pilot Cities. Updates on the SynchroniCity readiness level of the Core Pilot Cities and on the available data can be consulted on the website³.
Eligibility Criteria	• Excellence (e.g. What is the vision, ambition and value proposition of your solution?) • Impact (e.g. Who will benefit from the implementation of your solution or service and how? How will your solution impact the lives of citizens and communities?) • Feasibility (e.g. Is the proposal feasible given the technology features and maturity? Is the budget clearly described?) • Sustainability (e.g. What's your exploitation/commercialisation plan for this solution? In how many cities your solution will be piloted in? How can you demonstrate the interoperability, replicability and reusability of your solution? Will your solution support the goal of creating more jobs across Europe?) Each proposal will be evaluated by a technical, city and commercial-minded evaluator. Feasibility (technical and non-technical) and Sustainability will be prioritised.
Intellectual Property Rights and Data	As a guideline, the IPR of the data collected before the SynchroniCity open call pilot will remain the property of the data provider or its licensors. The data produced during the pilot phase will be shared according to the contractual Sharing Agreements between the Pilot Group and the relevant open call pilot cities. Importantly, the Pilot Agreement between the Pilot Group and the SynchroniCity Consortium will also set some obligations for the signing parties.
Duration of pilot	Maximum 6 months (between Feb and Sep 2019)

³ <https://synchronicity-iot.eu/data-tools-services-in-core-pilot-cities/>.

3 Considerations for the Open Call Preparation

The SynchroniCity open call is an essential part of the SynchroniCity project and represents the gateway to the city market. It is also the junction where all the different Work Packages (WPs) of the project converge and have a pivotal role to play in it. Consequently, this open call has been co-designed in close collaboration with all WPs. Each element of the open call process represented a train of well-founded discussions, meetings and encounters between cities and key partners to disentangle the complexity of the smart city market reality. These helped agree on a common vision that informed the outputs.

In particular, WP1 (“Tools, guidelines and support”) has established the foundations of the project and provides the link to the eight Core Pilot Cities through the Reference Zone Coordinator (RZC). Through this work stream, WP5 embarked upon a city tour to learn, first-hand, about the status, needs and views of each Core Pilot City. This work was deemed to be essential for: (i) on-boarding the cities on the open call process and get their buy-in, and (ii) re-directing subsequent discussions which culminated in the final content of the open call specifications.

WP2 (“IoT Enabled Framework for Smart Cities”) defines the SynchroniCity reference architecture, including the marketplace, that needs to be integrated and deployed in the SynchroniCity cities. This also includes work around data and licence access. Without the integration of the interoperable components of the reference architecture into the core pilot cities, the SynchroniCity open call, which aims at proving the feasibility of a digital single market, could never be realised.

WP3 (“Base Applications and Services”) creates the first set of common pilot projects to several core pilot cities. WP3 is the first workstream that puts into practice the SynchroniCity digital single market. This helps de-risk the open call through ensuring that the integration of the reference architecture is completed. It, therefore, prepares the core pilot cities to be ready for the open call. The validation of such integration is determined in WP4 (“Pilot Validation”). This validation (Milestone13 (MS13), basic components technically validated) and the on-the-ground deployment of the SynchroniCity framework (MS14, basic framework deployed and operational in all cities) are the decisive steps for cities to participate as pilot cities in the open call and determine their readiness.

WP6 contains several elements also essential for WP5 (“Open Call”) that need to be considered during the co-design process. These are:

- contribution to standardisation processes through testing of relevant standards by winning applicants during the piloting phase;
- KPIs, which need to be considered in advance and indirectly introduced in the open call process; and
- communications, which is a fundamental piece for the smooth progress of the open call.

In order to better understand how we arrived at the current content of the SynchroniCity open call specifications, it is important to walk through some of the considerations we took during this design and development journey.

Build on best practices. Based on the principle that to make progress one should not “re-invent the wheel”, we have actively pursued inspiration from other similar EU open innovation processes that have been successful. This knowledge was transferred into the context of the SynchroniCity open call and adopted when applicable.

We inherited the learnings and practices from OrganiCity open calls because three of our current partners (Aarhus University, Future Cities Catapult (FCC) and University of Cantabria) participated in it. Like SynchroniCity, OrganiCity is also a smart city project. OrganiCity set an experimentation and co-creation platform to create digital solutions to urban challenges, and it can be understood as

complementary to SynchroniCity, which opens up a global IoT market where cities and businesses develop shared digital services to improve the lives of citizens and grow local economies.

As such, the processes and learnings from OrganiCity open calls have proven essential to building the basis of the SynchroniCity one. SynchroniCity has adopted the main structure of the preparation, execution, reporting and monitoring processes of OrganiCity, while shaping and developing other aspects which are specific to SynchroniCity (the open call target audience, tight timeline, the need for convergence in scope between cities, introduction of General Data Protection Regulation (GDPR) law, among others).

Importantly, setting the vision and ambition, objectives, scope and audience of the open call in this particular order has simplified the open call preparation process and clarified the development of further material; for example, by setting the right tone for the right audience, or dedicating effort to gathering information of city data and assets associated to the scope.

We have also obtained inspiration from the Data Pitch open call. Data Pitch is an H2020 EU-funded open innovation programme bringing together corporate and public-sector organisations that have data with start-ups and SMEs that work with data. The strength of this project and its partners lies in their knowledge, use and sharing of data. In particular, they have published a comprehensive report on how start-ups and SMEs should confidently use and share data to innovate in legally-compliant and ethical ways within the GDPR framework. Consequently, we have incorporated several applicable elements of this project into our documentation, especially within our Pilot Agreement and Sharing Agreement legal framework.

Finally, we have taken some basic guidance from the SME Instrument Phase II, especially with respect to ensuring that processes are adapted to mature SMEs rather than to start-ups.

Let the market be the market. One of our main drives for this project and for this open call is that we do not want to prescribe what the market should do but rather allow the market to develop by itself, as would occur in real life. It is only in this way that our learnings about the market will be meaningful and our results will be able to have an impact on future advances.

For this reason, we took an inclusive approach. Even though originally the open call was targeted to SMEs only, we asked the market, we listened to the market and we realised that there was a will to collaborate with other stakeholders. As a result, we have decided to open up the call, from just SMEs to cities and large corporations and allowing consortiums to be formed, which we call Pilot Groups. This is the only LSP project that allows consortiums to apply for the open call.

Despite the fact that this approach adds complexity to the open call process we believe that the benefits that this will bring to the value of the results will supersede the downsides.

Cities at the spotlight. SynchroniCity starts and ends with cities. They are at the focal point of the project because it is through them and with their citizens and communities that city services are improved, and not just through technology. Empowering the voice of the cities has been essential in the development of the open call process, although doing so has been challenging due to the diversity of contexts and opinions. Having a RZC as a link between the cities and the different WPs have proven to be critical for reducing the dispersion of requests and information exchange management.

Transparency. We have always taken transparency as a core value for this open innovation process. Transparency inspires trust and trust is essential for the well-functioning of the entire open call process, from the pre-engagement phase to the closure of the pilot projects, and possibly

beyond. This value has informed the way how we have written the open call specifications. For example, in the specification text, we clearly describe how the proposals are going to be evaluated and by who, how the conflict of interest is going to be addressed, and who is responsible for what.

Simplify complexity. SynchroniCity open call tries to emulate the reality of the city market. This makes the management of the open call particularly difficult. Despite the intricacy, we have tried to simplify this complexity by identifying the minimum interoperability points, which are necessary for the IoT city market to operate, whilst retaining the flexibility needed to account for its stakeholder complexity. Allowing for a high degree of flexibility, in an attempt to emulate the real market, has not been straight-forward. All the legalities need to be well-defined and properly addressed, especially when there are different stakeholders involved. Therefore, a balance has had to be reached between “simple and short” and “comprehensive and legally conformant”. We finally decided to provide the specifications in an “all-contained” document (the Guide for Applicants, one for businesses and an analogous one for cities); even though this had to be at the detriment of the length of the document. Learnings from OrganiCity implied that this was a better option than dispersing the core information into different documents. In any case, the SynchroniCity open call has been written with the purpose of making it useful, appealing and understandable to the target reader.

The legal boundaries. The open call needs to be firmly held by a legal back bond that ensures compliance with EU values. Therefore, it is very important to get professional legal support from an early stage in the process and in close collaboration with the Project Coordinator.

Ethics & Privacy. Take it seriously. With the GDPR becoming enforceable in May 2018, it was very important that personal data privacy was taken seriously from a very early stage of the open call process. For this reason, we initiated recurring conversations with the project Data Protection Officer (DPO) and the Coordinator to ensure that this aspect is well-covered in both the open call application and the pilot phase. In particular, a dedicated Ethics and Privacy Board (EPB) will carefully evaluate these facets during the evaluation process. Applications can be rejected based on ethics and privacy aspects only.

Expectation Management. Based on our past experience from OrganiCity and other open calls, we learnt that expectation management is a key element for the successful progression of any open call process. We feel it is central to re-iterate its importance. We have based the open call specifications on a realistic case to ensure expectations of the participants are proportionate and managed appropriately.

Flexibility. Given that this open call is complex (large number of distinct cities, large number of partners, different stakeholders, cutting across domains), the timeline is tight, and the ambition is high; it is important that we allow for certain flexibility in some of the elements presented in the open call, many of which are still evolving. For example, in the open call, we are presenting a summary of the SynchroniCity technical framework so that the applicants understand what is available to use in each core pilot city. However, the core pilot cities are inevitably adopting the SynchroniCity environment at a different pace and unlocking relevant data and assets at different moments in time. For this reason, the “SynchroniCity Framework” document of the open call often refers to the SynchroniCity website. We will make use of our website as a flexible tool that can inform on the most updated information about the readiness of the Core Pilot Cities.

Note that the SynchroniCity website is currently being updated.

Application Platform. Choosing the appropriate application platform for the SynchroniCity open call was also another element of consideration. The requirements we were looking for were as follows:

- the platform had to provide a good user experience for all users (the ones setting-up the system, the applicants and the evaluators);
- it had to be a professional and robust system;
- it had to be aligned with the conducts of the open call applicants (i.e. we are aiming at mature organisations rather than start-ups);
- it had to be compliant with the GDPR regulations; and
- it had to have systems in place to ensure the objectivity of the evaluation confidentiality when needed.

We originally considered the [F6S](https://www.f6s.com/)⁴ platform which we had used in OrganiCity and other open calls. However, we realised that while F6S is quite suitable for start-ups and freelancers, it may fall short for more mature organisations like SMEs that are scaling their solution, as well as for corporations and cities. We did an extensive search of the available platforms and we found that [Submittable](https://www.submittable.com/)⁵ was the most suitable for our purpose.

The advantages and disadvantages of both Submittable and F6S platforms can be found in the table below.

SUBMITTABLE	F6S
Advantages	
Allows greater levels of privacy and confidentiality for applicants	UK based company
Assign permission and access to different levels of the proposals	Experience in using it previously (Organicity and other open calls)
Evaluators are not able to see evaluations from others	Free of charge
Evaluators can download applications in a user-friendly format	
Excellent user experience for both applicants and users	
Localisation – translation of submission page and internal dashboard to any language	
Accepts any image, audio, video, or specialised file	
Currently a member of <i>Privacy Shield</i> . It will be compliant with the GDPR in April 2018.	
Disadvantages	
US-based company	Evaluators can see others' comments and marks
Data stored in the US	Evaluators can only download applications in excel file (very inconvenient to read)
Paying Software: €3000-€4000 per yearly licence	There is no possibility of assigning permission to different levels of the proposal
	The data on SMEs and start-ups is used by F6S to offer other services
	Lower levels of privacy and confidentiality for applicants

Table 1: Advantages and disadvantages of Submittable and F6S application platforms for the open call.

⁴ <https://www.f6s.com/>

⁵ <https://www.submittable.com/>

Discussions based on the points presented in the table allowed the SynchroniCity consortium to take the decision of investing in Submittable as a platform. Nonetheless, we seriously considered the weaknesses of Submittable and we tried to find an alternative solution to overcome the drawbacks, in particular with regards to data. As such, these are the steps we took and the options we considered in order to cover from a legal point of view this specific issue:

- Submittable agreed to sign a statement of their compliance with the GDPR.
- We will sign a data transfer agreement with Submittable standardised by the European Commission which enables EU based controllers to send data to processors based outside Europe.
- If some of the applicants still have doubts on how their personal data is processed, they will be able to opt not to use the platform and will be able to send the application to us via email. Based on past experience, we envisage this number not to be higher than 10% of the applicants.

4 Reflection of the market

In order to guarantee that the SynchroniCity open call receives quality and targeted applications and that the open call text reflects the needs of the market, SynchroniCity organised a pre-market consultation between July and November 2017. The exercise had the specific goals of:

- Start mobilising and engaging with SMEs and other stakeholders that could either apply or support the dissemination activities of the open call.
- Test and fine-tune the overall architecture and objectives of the open call and assess the market appetite.
- Minimise the risk of unsatisfactory applications to the open call.

The consultation was promoted throughout Europe and 56 responses were received. The full questionnaire can be found in Annex 1.

The key insights of the pre-market consultation that reflects the market include:

- Over 56% of the respondents were from the UK and Spain.
- Over 50% of the respondents were micro companies.
- Over 80% of the companies reported that they would benefit from partnering with complementary businesses.
- Most of the respondents' solutions were TRL6 and TRL7.
- Nearly 40% of respondents reported that the biggest factors impeding the deployment and commercialisation of their solutions are difficulties in navigating local authority's structures and regulations.
- 43% of respondents believe that the lack of appetite to trial smart/new solutions is the biggest barrier to the commercialisation/deployment of their solution.
- Almost 50% of respondents indicate that one of their main privacy concern is keeping control over personal data provided to them/collected by them.
- Compliance with the upcoming GDPR is a concern of 43% of respondents.

The results demonstrated that there is an appetite from companies with solutions TRL6 and TRL7 in participating in an open call. In addition, the open call will be able to act as an effective tool to address some of SME's biggest challenges of navigating local authorities' regulations and lack of appetite to trial new solutions. Similarly, we identified the desire from SMEs to apply to consortia with complementary businesses and other stakeholders that can support them to scale their businesses in Europe and beyond. The formation of consortia was not considered originally but the voice from the market influenced our subsequent approach of the open call. As a result, the SynchroniCity open call will now allow for both single SMEs and consortiums of SMEs, large businesses and/or cities to participate in the open call.

We have also identified shortcomings that will be addressed during the open call preparation. In response to the limited geographical representation of business across Europe in the survey, we will prepare a stronger communications campaign to promote the open call. Launch events and clinics will be organised in the eight Core Pilot Cities. Webinars will also be organised to guarantee that businesses across Europe and H2020 associated countries can participate and be equally informed about the open call requirements. We are also working closely with ENoLL, our communication partner, to improve the open call webpage on the SynchroniCity website.

In terms of concerns around the GDPR and processing and collecting personal data, we have developed SynchroniCity's Ethics & Privacy guidelines that will inform the applicants in an accessible manner. We have also prepared a GDPR readiness questionnaire that will enable applicants to understand their levels of compliance with the upcoming regulation. In addition, there will be a person dedicated to answering any queries coming from applicants around ethics and privacy issues.

5 Open Call Documentation

The entire open call process (design and preparation, application, dissemination, evaluation and piloting phase) requires of many activities and documents being produced.

There are four main groups of documentation, each with a different purpose.

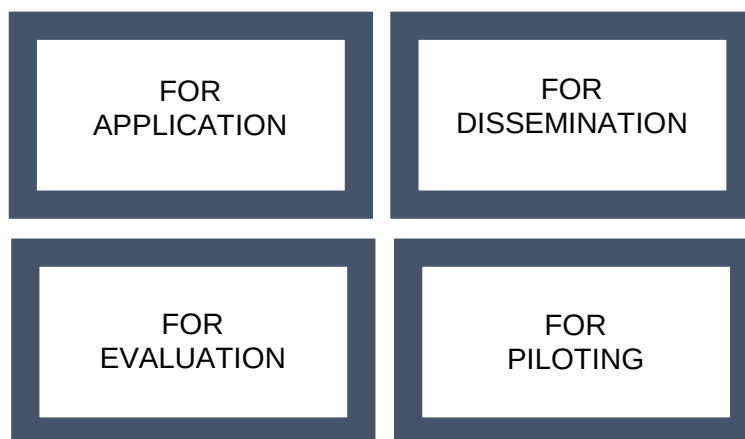


Figure 1: Scheme of the four main groups of documentation necessary for the SynchroniCity open call process.

In the following sub-sections, we list the different documentation that we are and will be producing for the smooth progress of the open call.

5.1 Open Call Documentation – For Application

These are the set of documents that are needed for the interested participants to apply for the open call. The documents are listed below:

1. **Open Call at a Glance** – this is a summary version of the more complex and legally supported “Open Call Specifications”. This document should enable potential applicants to understand what the SynchroniCity open call is about and what are the main specifications. In this way, potential applicants will quickly choose if to proceed with the open call application and therefore read the complete documentation.

The “Open Call at a Glance for SMEs and Large Business Applicants” can be found in Annex 2 as a reference and [here](#).⁶ The “Open Call at a Glance for Cities”⁷ can be found [here](#).⁸

⁶ https://synchronicity-iot.eu/wp-content/uploads/2018/08/Synchronicity_Open-Call-at-Glance-for-SMEs-LBA-2.pdf.

⁷ Please note that the content of the Open Call at a Glance for SMEs and Large Business Applicants and the content of the Open Call at a Glance for Cities is very similar. Therefore, we have only added as an annex the Open Call at a Glance for SMEs and Large Business.

⁸ https://synchronicity-iot.eu/wp-content/uploads/2018/08/Synchronicity_Open-Call-at-Glance-for-Cities-1.pdf.

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- 2. Open Call Guide for Applicants** – The open call guide for applicants are designed to inform interested applicants, in a user-friendly manner, about the open call application process.

There are two separate, but analogous guides for the two main types of audiences of the open call: businesses (SMEs and corporates) and cities. We believe it is important to communicate the guidelines from the different type of audience's point of view.

- **Guide for SMEs and Large Businesses Applicants**
- **Guide for New City Applicants**

The guides for applicants include a terminology section and visuals of the application process to help applicants navigate through the document. The guides also contain the legal terms and conditions associated with the open call process.

Both “Guide for Applicants” can be found in Annex 3 for reference and [here](#)⁹ under the respective Open Call Toolkit for Applicants¹⁰.

- 3. Open Call SynchroniCity Framework** – this document describes the SynchroniCity technical framework and presents the Core Pilot Cities where solutions from applicants will be demonstrated.

The “Open Call SynchroniCity Framework” can be found either under the Open Call Toolkit for Applicants that can be downloaded from the [website](#)⁹ or [here](#)¹¹. It can also be found for reference in Annex 4.

- 4. Open Call Application Templates** – this section provides those templates needed to apply for the open call, which are:
- Application form with instructions (to complement the Submittable platform)
 - Eligibility check grid
 - Ethical statement
 - GDPR readiness questionnaire
 - Work and resource plan
 - Budget template

The “Open Call Application Templates” can be found in the respective Open Call Toolkit for Applicants downloadable from the website⁹. It can also be found in Annex 5 for reference.

- 5. Open Call Templates for Winning Applicants** – these documents will be included in the “Pilot Handbook” that we will provide to the winning applicants once selected. However, we also provide the subset of documents listed below at this application stage because they contain important information for applicants.

⁹ <https://synchronicity-iot.eu/open-call/>

¹⁰ Please note that the content of the Open Call Guide for SMEs and Large Business Applicants and the content of the Open Call Guide for New Applicant Cities is very similar. Therefore, we have only added as an annex the Open Call Guide for SMEs and Large Business Applicants.

¹¹ https://synchronicity-iot.eu/wp-content/uploads/2018/08/SynchroniCity-Framework_v1.6.pdf.

Given that we are still developing and embedding aspects of the SynchroniCity framework and given that these documents will be handed once the winning applicants will be chosen; these documents may undergo changes to adapt to the varying circumstances. Nonetheless, we will always ensure full transparency on any of the minor updates.

- Pilot Agreement
- Declaration of Honour

The “Open Call Templates for Winning Applicants” can be found under the respective Open Call Toolkit for Applicants downloadable from the website⁹. It can also be found in Annex 6 for reference.

The provision of all this information (section 5.1) during the application phase is important to ensure applicants' expectations are managed and there are no surprises for applicants at the end of the process.

5.2 Open Call Documentation – For Dissemination

To disseminate the open call, we will be running eight launch events, one in each of the eight Core Pilot Cities, and two webinars for those applicants that cannot attend the physical events. Additionally, each of the SynchroniCity partners may organise or get involved in their local events to disseminate SynchroniCity and its open call.

The main documentation that we are providing to the eight Core Pilot Cities, as well as to the rest of the SynchroniCity partners, is:

- Document for cities on “How to run an Open Call Launch Event”
- Standardised presentation for the “Open Call Launch Event”
- Marketing collaterals and other materials (business cards, flyers, etc.)

5.3 Open Call Documentation – For Evaluation

It is also important to provide evaluators with some guidelines to ensure consistency amongst all evaluators and transparency of the evaluation process.

The documentation we are generating is the following:

- Invitation letter to become an evaluator
- Evaluators Guidebook
- Evaluation templates:
 - Eligibility check grid
 - Evaluation grid for experts
 - Non-Discloser Agreement
 - Conflict of Interest statement

5.4 Open Call Documentation – For Piloting

Once the winning projects will be selected we will provide a “Pilot Handbook” to all successful applicants. This handbook will describe in detail the process the piloters will go through during the 6-month piloting period. It includes the following material:

- **Pilot Handbook**
 - Pilot Agreement (between FCC on behalf of SynchroniCity consortium and the different Pilot Groups)
 - Declaration of Honours
 - Pilot Monitoring Structure
 - Reporting instructions
 - Bi-monthly report templates

Before the pilot period starts, the winning applicants will need to sign several legally binding documents. These are mainly the “Pilot Agreement”, signed by FCC on behalf of the SynchroniCity consortium and the selected SME/Pilot Group, and the “Sharing Agreement”, signed by the selected SME/Pilot Group and the different open call pilot cities where their solution will be demonstrated. Given that this latter exercise could become overwhelming and time consuming for selected SMEs/Pilot Groups and open call pilot cities, FCC will facilitate by providing a template of the “Sharing Agreement” to the DPOs of the different open call pilot cities. This will be only a starting working document that they can make use of and adapt to their context. Under no circumstances, FCC will take the responsibility and will be liable for the contents of the agreement that will lie in the relevant signing parties.

6 Future Considerations

During the past year, we have carried out the design and development of the SynchroniCity open call which has culminated in the description of the entire journey of the open call process and the delivery of the open call specifications and text reflecting the market. These documents are listed in Section 5.1 and can be read in the Annex section of this deliverable.

For the journey ahead, we will need to:

1. Embed all open call documents into our SynchroniCity visual identity design template in the same way that the “Open Call at a Glance” documents are presented in Annex 2. This work will be finalised in mid-May 2018.
2. Finalise the remaining supporting documentation (Section 5.2, 5.3 and 5.4) and take certain aspects into consideration like:
 - Allowing for **flexibility** and **transparency** of the material and processes we are developing. The SynchroniCity project is still evolving, cities are adopting different features of the SynchroniCity Architecture at different times and in different ways, depending on their context.
 - Ensuring that the SynchroniCity website and Newsletter are well-aligned with the open call and allow for the flexibility needed. This is done in close collaboration and

coordination with the external communication partner and the Coordinator.

- Strengthening the work that has already started by the Large-Scale Pilot Activity Group 4 'IoT Accelerators, Ecosystems and Market Place', to coordinate a more supporting action.

7 Lessons Learnt during the open call preparation

- **Guaranteeing early buy-in from cities involved in the project is key.** One of the biggest challenges of organising a city-led open call has been to guarantee the buy-in from the cities involved in the project. This involved guaranteeing them to agree to the terms of the open call, for example, making data available for applicants. Also, ensuring that the city representatives were providing us with the necessary information to allow us to write the call requirements. It is also worth noting that it is important to ensure the buy-in from key departments or people within the city.
- **Having a “Reference Zone Coordinator” has proven to be an effective way to communicate with cities and centralise requests for information.** Tools such as the “Cities Forum” (fortnightly calls with all the cities) and “Cities Tour” (visits to the eight reference zones to collect information about their assets and data, priorities, needs and challenges) have allowed us to engage with the cities in a consistent way and to access the necessary information for the open call.
- **An effective communication and marketing strategy is essential to reach out to the target audience.** During the pre-market consultation phase, the UK and Spain were successful in securing responses from SMEs. This success is due to efforts in reaching out to the ecosystem that has access to the target SMEs. All partners involved in the open call, and the responsible for the project communications, must work together to enable a balanced geographical representation of SMEs from all over Europe in the open call.

ANNEX 1: Pre-market consultation questionnaire

SynchroniCity is an EU funded initiative to deliver a single digital city market for IoT-enabled urban services in the EU and beyond. SynchroniCity is a project for and about cities, their citizens and their startups and SMEs. Find out more [here](#).

In June, SynchroniCity will launch an Open Call for funding start-ups and SMEs currently working in the IoT domain who meet the EU Horizon 2020 Technology Readiness Level 6 description noted on page 29 of the [Horizon 2020 Work Programme 2016-2017](#).

The open call includes:

- 3,000,000€ (total) available for pilots
- Pilot deployment potential in up to 8 European cities
- Funding up to 80% of the total project budget (100,000€/Single SME; 300,000€/SME Consortiums)
- Pilot duration of 6 months or less

Please fill out this survey so that we can have a more focused open call process ready for you in June. (The survey should take 15 minutes or less to complete.)

Top of Form

*1. Name of the company:

*2. Contact name and surname:

*3. Position:

*4. Email:

*5. City (company's main location):

6. Country:

*7. Registration number:

*8. Company category:

- Micro
- Small
- Medium
- Large

*9. What is the technology readiness level (TRL) of your product and/or service?

*10. Please choose one or more of the options below that best describes your company? (choose one or multiple options)

- IoT infrastructure
- IoT data
- IoT integration (reusing existing either infrastructure or data to unlock hidden added values)
- IoT service delivery (new and innovative ways to better deliver IoT services or products to their target audiences)
- Security and/or privacy
- Other (please specify)

*11. In a brief sentence, please describe your product or service:

*12. Which one of the following “themes” provides the most suitable description of your product/solution?

- Context-adaptive traffic management (e.g. human-centric traffic management; emergency management; solutions that stimulate environmentally friendly modes of transport; traffic light system, bike sensors, e-bike, electric car recharge; air quality; noise, and others).
- Multimodal transport and mobility services (e.g. multi-modal transport navigator; context-aware logistics planning; smart parking; bus management; pedestrian solutions; bikes and bike traffic; autonomous cars/buses; and others).
- Adaptive (community-based) policy-making tools (e.g. neighbourhood policy as a service; using a dynamic data-driven platform to inform future IoT investment and respond quickly to citizen needs; smart lighting in city areas, neighbourhood improvement, the creation of communities with shared interests, and others).
- Other (please specify)

13. In a brief sentence, please explain how your solution fits into the “theme” you chose in #12?

*14. Does your organisation collaborate with partners (e.g large corporations, research organisations, others)?

- Yes
- No
- In a brief statement, please provide more details:

*15. Is your organisation currently working with a city (or cities)?

- Yes
- No

Please name the cities your organisation is working with:

Please note: Open & Agile Smart Cities (OASC) will be supporting SynchroniCity. The initiative has over 100 cities in 23 countries. Learn more [here](#).

16. What are the minimum communication fabric requirements necessary for your solution(s) to deploy in pilot cities?

- LoraWan
- Sigfox
- Wifi
- Cellular (EC-GSM, LTE-M, NB-IoT)
- Wire
- Other (please specify)

17. What are the minimum standard interfaces for integration necessary for your solution(s) to deploy in pilot cities?

- IoT Agents for specific technologies provided - MQTT
- IoT Agents for specific technologies provided - OneM2M
- Support for new IoT Agents development
- Other (please specify)

18. What are the minimum requirements for data access APIs necessary for your solution(s) to deploy in pilot cities?

- NGSI v2 APIs

-
- NGSI 9/10 APIs
 - Open Data CKAN APIs
 - Other (please specify)

19. What are the minimum privacy and security functionality requirements necessary for your solution(s) to deploy in pilot cities?

- Authentication & Authorisation mechanisms/protocols (OAuth/OAuth 2.0)
- Accounting functionalities
- Other (please specify)

20. What are the minimum standard and versatile data model requirements necessary for your solution(s) to deploy in pilot cities?

- Standard data formats (JSON, XML, CSV, GIS...)
- Provide specific data models for common domains (Smart Parking, Public transportation, Smart lighting, Environmental solutions...)
- Capability of defining new data models
- Other (please specify)

21. What are the minimum support requirements necessary for your solution(s) to deploy in pilot cities?

- Local helpdesk - support for IoT integration
- Local helpdesk - data management
- Local helpdesk - IoT platform usage
- Local helpdesk- data access
- City sanctioned IT representatives
- Open Data responsible
- Other (please specify)

*22. What factors are impeding the deployment/commercialisation of your solution(s)? (choose one or multiple options)

- Complexity of procurement rules/process
- Requirements of procurement (e.g. min turnover/financial buffer)
- Lack of interoperability
- Navigating local authority's structures and regulations
- Lack of demand
- Lack of legal support for privacy issues
- Lack of transparency on management of privacy issues
- Lack of appetite to trial smart/new solutions (too risk averse)
- Other (please specify)

*23. Would partnering with other complementary businesses to deploy and/or test your solutions enable further development or progress to market?

- Yes (we would like to understand how we can support in case you wish to form a consortium)
- No (chances of being successful on the open call application does not depend on you forming a consortium)

If your answer was yes, please provide more details of the kind of skills and complementary services you would need.

Please note: Applicants can enter the SynchroniCity Open Call as single entities or in consortiums of up to three SMEs. Chances of a successful open call application do not depend on forming a consortium.

*24. Are you willing to participate in co-creating services together with the citizens of pilot cities?

- Yes
- No

Please enter a comment:

*25. Does your solution provide the local community with open data?

- Yes
- No

Please enter a comment

*26. **What are your privacy concerns?** (choose one or multiple options)

- Keeping control over personal data provided to you/collected by you
- Enforcement of users' rights, particularly the rights to be forgotten and to data portability
- Obliging the upcoming GDPR
- Transfers of personal data outside the EU
- Implementation of organizational and technical security measures
- Obtaining privacy certifications
- Defining the privacy roles within your company
- Defining the privacy roles with your outsourcers/business partners
- Understanding the privacy implications of your marketing initiatives
- Obtaining the relevant users' consent(s)
- General difficulty in understanding the legislative landscape on data protection
- Other (please specify)

27. What privacy and security advice should be required as part of the pilot process? (choose one or multiple options)

- General guidelines and data protection policies
- Tailored legal advice
- Tailored technical advice
- Financial Support to obtain legal/technical advice
- Other (please specify)

Please note: All suggestions will be taken under consideration in the formation of the pilot process.

28. Is there anything else you would like to add?

ANNEX 2:

Open Call at a Glance for SMEs and Large Business Applicants

SYNCHRONICITY

OPEN CALL AT A GLANCE FOR SME &
LARGE BUSINESS APPLICANTS



This project has received funding from
the European Union's Horizon 2020
research and innovation programme
under grant agreement No732240

OPEN CALL OPENS

1st June 2018 - 17:00 CEST*

OPEN CALL CLOSES

30th September 2018 - 17:00 CEST*

*Brussels Time



INTRODUCTION

The SynchroniCity IoT Large-Scale Pilot for smart cities is built on the belief that creating a simplified, open and agile market across borders will help deliver better services to cities and communities, in a way that supports local economic development, while still leveraging global digital and economic dynamics. It will also help businesses of all sizes to transparently compete and easily scale their products and solutions through standards-based innovation and procurement.

A common, minimal technical foundation will enable the establishment of an effective market for IoT-enabled services in Europe and beyond. This will help to build trust and confidence from the demand-side that the solutions are beneficial for the local community, and for providers and investors that large-scale solutions are bankable. We are looking for SMEs, cities and large businesses that would like to be part of this emerging community and become one of the pioneers in making a global market for IoT-enabled services for smart cities and communities a long-lasting reality.

SYNCHRONICITY OPEN CALL AT A GLANCE FOR SME AND LARGE BUSINESS APPLICANTS

WHAT IS SYNCHRONICITY?

SynchroniCity is an EU-funded initiative under the Horizon 2020 Framework Programme for Research and Innovation (2014-2020)¹. It is one of the IoT European Large-Scale Pilot Projects currently operating.

SynchroniCity opens up a global IoT market where cities and businesses develop shared digital services to improve the lives of citizens and grow local economies.

AIM OF THE OPEN CALL

Validate the SynchroniCity vision and technical framework as a model for large-scale standards-based innovation and procurement of IoT-enabled services for cities and communities by demonstrating the replicability, scalability and sustainability of citizen-centric IoT-enabled solutions across cities.

WHO IS IT FOR?

- IoT SMEs that have already demonstrated their solution in a relevant environment (TRL ≥ 6)². SMEs can apply alone or in a Pilot Group. The SME Lead Applicant must provide an IoT data enabled application or a full-stack solution
- Cities. Cities can only apply in a Pilot Group
- Large businesses. Large businesses can only apply in a Pilot Group

WHY SHOULD I APPLY?

For SMEs:

- I will demonstrate my solution on different geographies
- I will be able to test in parallel different business models according to the contextual reality of the pilot cities

1 <https://european-iot-pilots.eu/>

2 https://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2018-2020/annexes/h2020-wp1820-annex-g-trL_en.pdf

- I will be connected to multiple cities and their local business ecosystems across Europe and beyond
- Global visibility and outreach
- I will make a positive impact on the local communities
- I will help create and sustain a global open and agile digital single market for IoT-enabled solutions that will help others like my business scale their solutions

For Large Businesses:

- I will be seen as a pioneer in helping to create and to sustain a global open and agile digital single market for IoT-enabled solutions. This will help identifying and developing new standards which will have a tremendous impact in Europe and beyond
- I will acquire a better understanding of the IoT-enabled solutions available in the market
- Global visibility. I will amplify my active innovation role in this space

SCOPE (THEMES & CHALLENGES)

- **Sustainable Mobility** - Enabling and improving Mobility-as-a-Service (MaaS); Encouraging more non-motorised transport
- **Citizen Engagement** - Increasing citizen engagement in decision making; Increasing a greater level of diversity in political engagement
- **Environment & Wellbeing** - Climate change mitigation; Reducing air and noise pollution
- **Open Theme** - Open challenge

FUNDING

Total budget of €3M in funding.

Each application can be funded with: up to €100,000 if an SME applies alone; up to €200,000 for Pilot Groups of 2 organisations; up to €300,000 for Pilot Groups of 3 organisations or more.

Synchronicity open call will co-fund 80% of the total individual budget of each project. The remaining 20% will need to be provided by applicants either as in-kind support or by bringing in funding to the project. Funding to cities and large businesses is limited to €60,000.

Note that SMEs, cities and large businesses that are not from the EU or H2020 associated countries are welcome to apply but they will not be eligible for funding.

ELIGIBILITY CRITERIA (FOR BUSINESSES)

- Application submitted on time (Deadline: 30 Sept. 2018, 17:00 CEST)
- Application led by an SME
- The status of SME applicants must be conformant with the EU definition³ of Small and Medium Enterprises.
- The SME's proposal is providing an IoT-enabled application or a full-stack solution
- Completeness of the proposals (i.e. fields as well as page limit)
- The language of the applications (i.e. English)
- Letter of support of new cities to the respective Pilot Group (if applicable)

- The solution proposed must be piloted in at least 2 cities (preferably more)
- Non-affiliation with SynchroniCity consortium partners that may lead to a conflict of interest
- Compliance with SynchroniCity Ethics & Privacy guidelines.
- Within the scope of the call
- The inclusion of eligible activities for funding

EVALUATION CRITERIA

- **Excellence** (e.g. What is the vision, ambition and value proposition of your solution?)
- **Impact** (e.g. Who will benefit from the implementation of your solution or service and how? How will your solution impact the life of citizens and communities?)
- **Feasibility** (e.g. Is the proposal feasible given the technology features and maturity? Is the budget clearly described?)
- **Sustainability** (e.g. What's your exploitation/commercialisation plan for this solution? In how many cities your solution will be piloted in? How can you demonstrate the interoperability, replicability and reusability of your solution? Will your solution support the goal of creating more jobs across Europe?)

Each proposal will be evaluated by a technical, city and commercial minded evaluator. Feasibility (technical and non-technical) and Sustainability will be prioritised.

OPEN CALL PILOT CITIES

Cities that could pilot your solution include Core Pilot Cities (Antwerp, Carouge, Eindhoven, Helsinki, Manchester, Milano, Porto and Santander) and it also may include New Applicant Cities that you could introduce in your Pilot Group.

You will need to pilot your solution in at least 2 Open Call Pilot Cities. At least one of the cities needs to be a Core Pilot City.

Updates on the SynchroniCity readiness level of the Core Pilot Cities and on the available data can be consulted on the website⁴.

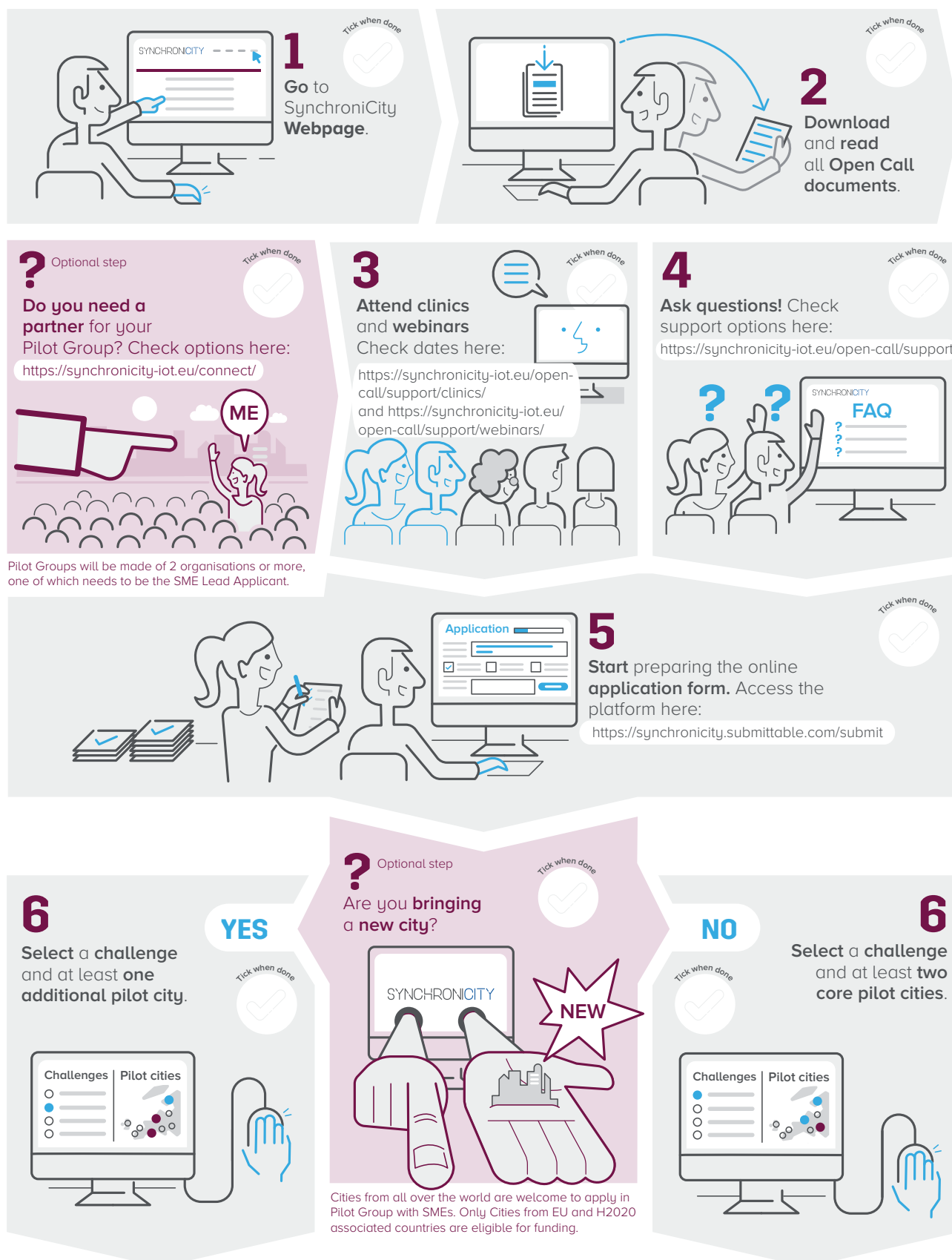
INTELLECTUAL PROPERTY RIGHTS (IPR) AND DATA

As a guideline, the IPR of the data collected before the SynchroniCity open call pilot will remain the property of the data provider or its licensors. The data produced during the pilot phase will be shared according to the contractual Sharing Agreements between the Pilot Group and the relevant open call pilot cities. Importantly, the Pilot Agreement between the Pilot Group and the SynchroniCity Consortium will also set some obligations for the signing parties.

DURATION OF PILOT

Maximum 6 months (between February and September 2019)

APPLICATION PROCESS FOR SMES AND PILOT GROUPS

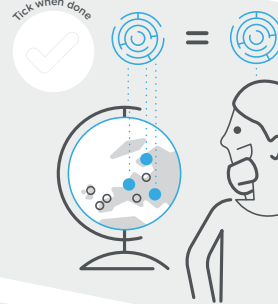


7

Make sure that the **city will adopt** the necessary requirements to become a pilot city.



Tick when done

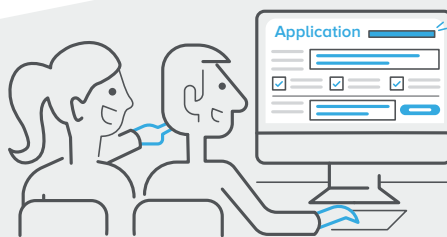
**7**

Make sure that the **challenge** you are trying to tackle is common to the cities that you selected.

Tick when done

8

Complete the online application form.

**9**

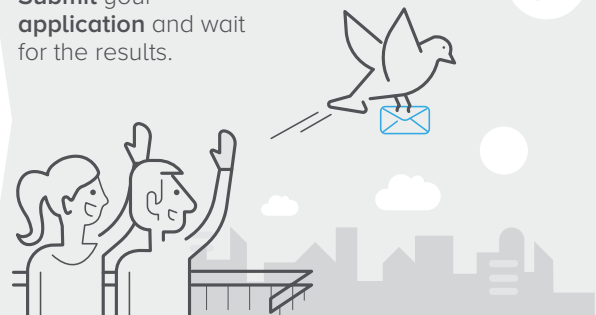
Provide budget, workplan, resource plan, Ethical statement and GDPR readiness questionnaire. Templates are available here: <https://synchronicity-iot.eu/open-call>



Tick when done

10

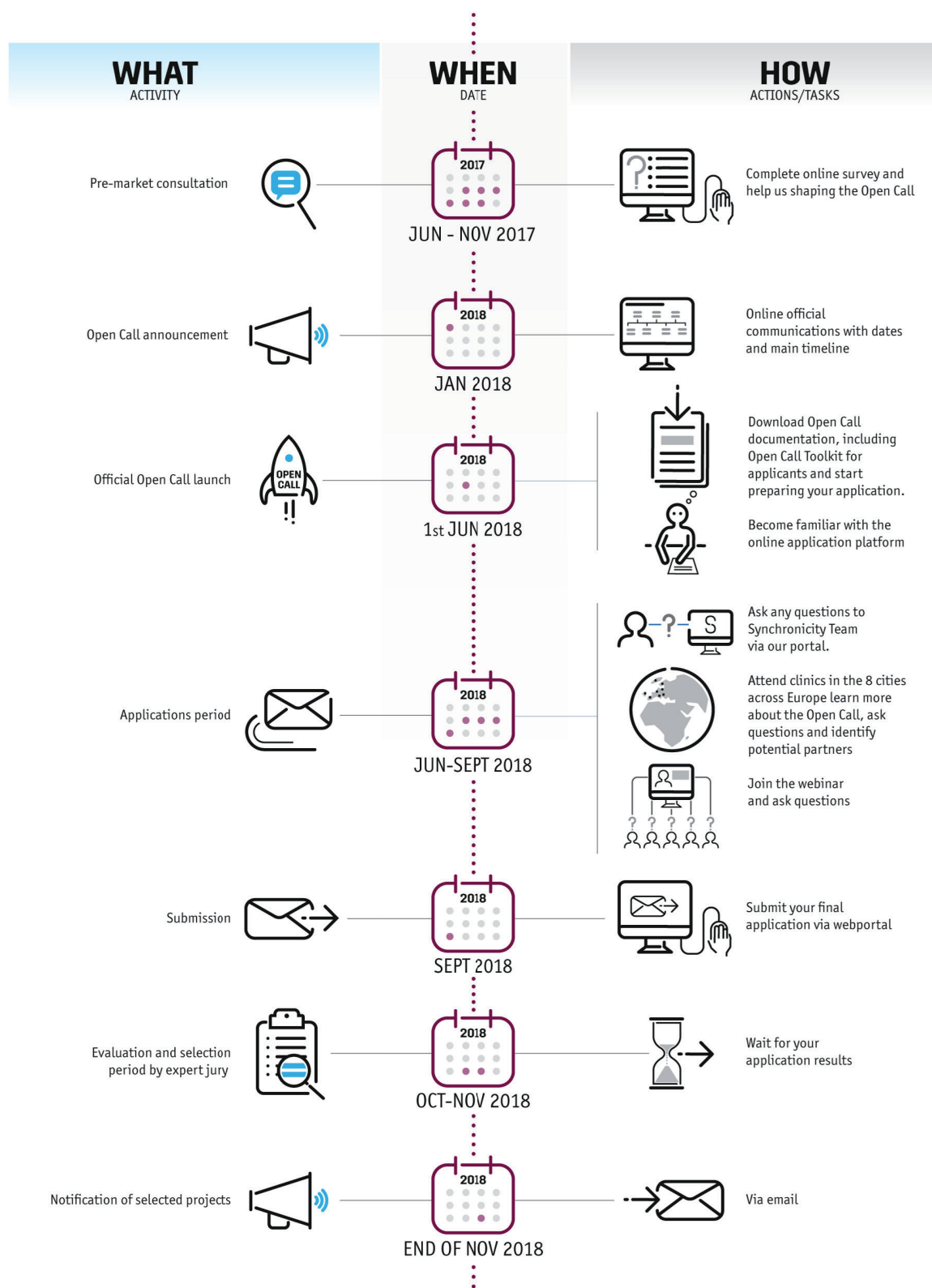
Submit your application and wait for the results.

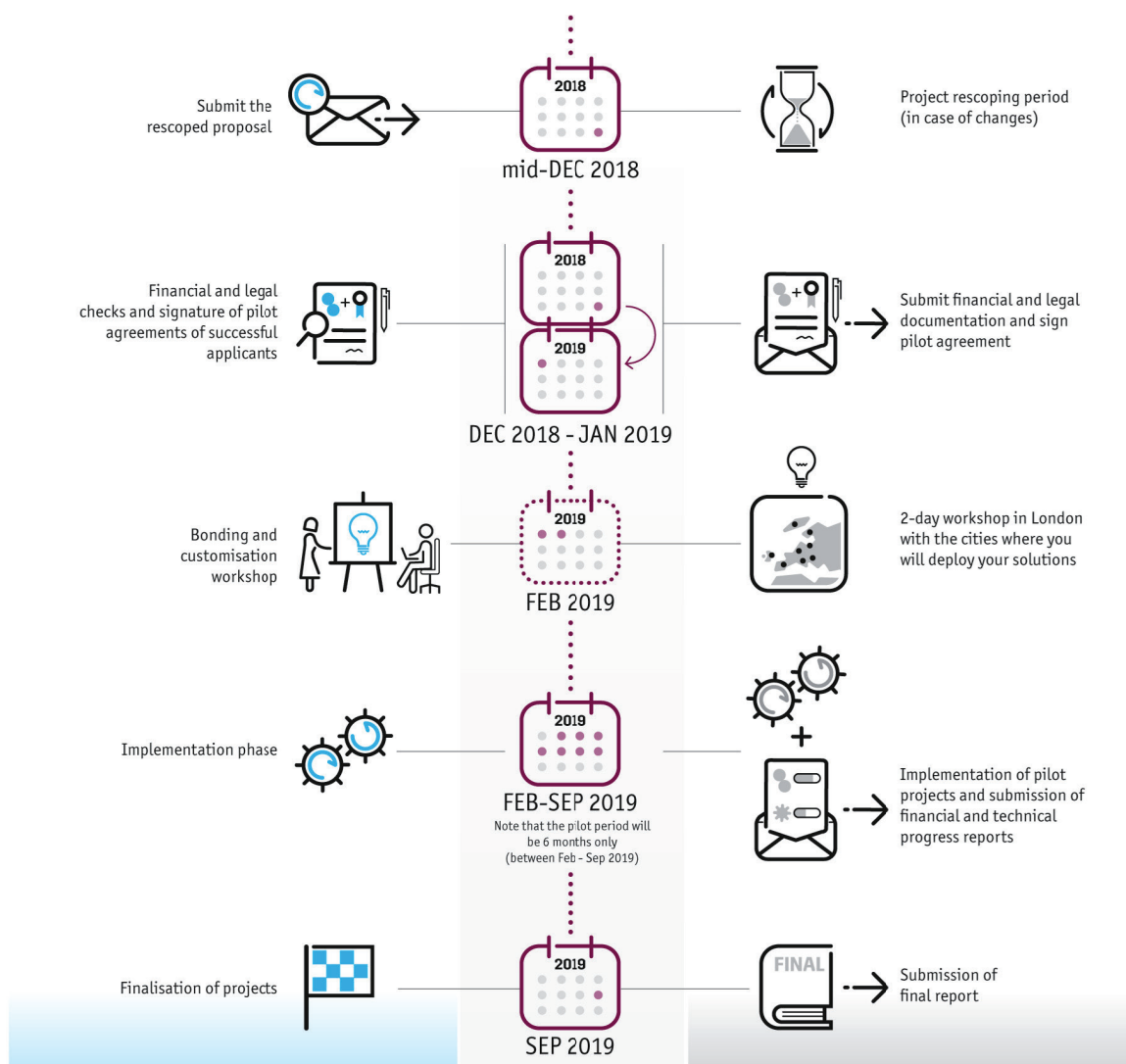


Tick when done

TIMELINE

SYNCHRONICITY





SYNCHRONICITY

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synchronicity-iot.eu

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Or send us an email

info@synchronicity-iot.eu



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No732240

This document reflects only the author's view and that the Commission is not responsible for any use that may be made of the information it contains

Contributing partners

Switzerland



South Korea



Mexico

ANNEX 3:

Open Call Guide for SMEs and Large Business Applicants

SYNCHRONICITY

GUIDE FOR SME AND LARGE BUSINESS APPLICANTS



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No732240

OPEN CALL OPENS

1st June 2018 - 17:00 CEST*

OPEN CALL CLOSES

30th September 2018 - 17:00 CEST*

*Brussels Time



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CHANGELOG

Version number	Date	Comment
1.10	17.08.2018	10 th version

1. Introduction

SynchroniCity is an EU-funded initiative under the [Horizon 2020 Framework Programme for Research and Innovation \(2014-2020\)](#). It is one of the [IoT European Large-Scale Pilot Projects](#) currently operating. This project is being implemented by 38 partners from 13 countries around the world between 2017 and 2019¹.

The SynchroniCity project is conducting an open call to competition. This guide is designed to inform interested applicants about the open call application process and includes a terminology section in Annex 1 to help you navigate through the document. The guide also contains the legal terms and conditions associated with the open call process in Annex 7.

This guide should be consulted together with:

- ***Open Call SynchroniCity Framework***, which describes the technical environment based on the Open and Agile Smart Cities Network (OASC) Minimal Interoperability Mechanisms (MIMs), linked to emerging standards, and presents the core pilot cities where the framework will be piloted.
- ***SynchroniCity Open Call Application Templates that*** provide those templates needed to apply for the open call.
 - Application form with instructions
 - Eligibility check grid
 - Ethical statement
 - GDPR readiness questionnaire
 - Work and resource plan
 - Budget template

¹ Conditions of participation and funding are those of Horizon 2020 – the Framework Programme for Research and Innovation (2014-2020), as defined principally in Regulation (EC) No 1290/2013 of the European Parliament and the Council of 11th December 2013 laying down the rules for the participation of undertakings, research centres and universities in actions under the Horizon 2020 Programme and exploitation and dissemination results (2014–2020). More information can be found at the rules for the participation and dissemination in Horizon 2020.

This Guide for Applicants does not supersede the rules and conditions laid out, in particular, in Council and Parliament Decisions relevant to the Horizon 2020 Research and Innovation Programme of the European Commission: Multi-beneficiary General Model Grant Agreement.

- ***SynchroniCity Templates for Winning Applicants***

- **Pilot Agreement** - agreement document that will need to be signed only by the winning applicants. It includes the legal terms and conditions related to the pilot period.
- **Declaration of Honour**

All this documentation is comprised within the [Open Call Toolkit for SME and Large Business Applicants](#) and includes all visuals that can be downloaded independently.²

Should you have any outstanding queries regarding the application process after reading this document, please refer to the Applicant Forum and the FAQ document on our [website](#)³. You can address private questions only to helpdesk@synchronicity-iot.eu.

2. What is SynchroniCity?

SynchroniCity opens up a global IoT market where cities and businesses develop shared digital services to improve the lives of citizens and grow local economies.

The opportunities presented by Internet of Things (IoT) enabled solutions and technologies are endless. But societies are still struggling to get social, environmental and economic value out of it.

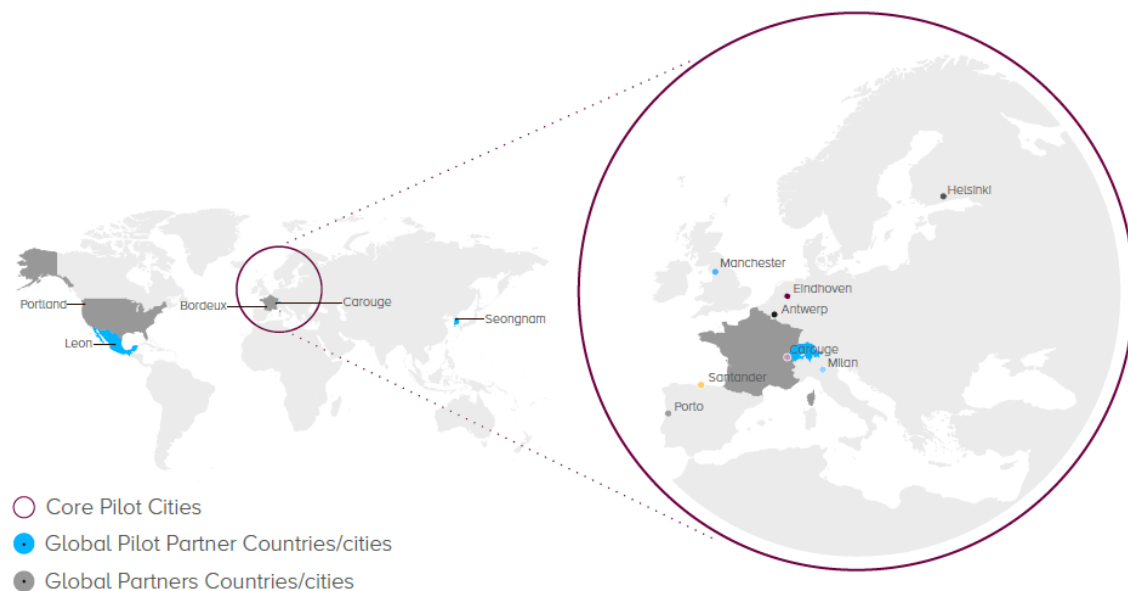
When adopting new technologies, cities face barriers such as lack of standardised solutions and interoperability between systems. These barriers make it difficult for service developers to deploy smart city services across multiple cities. This deters large investments and is a major barrier to growth, in particular for smaller organisations.

SynchroniCity is an initiative that has been created to address these barriers. It will help cities simplify the creation of new services using IoT technologies and data and it will help smart city providers to openly compete and scale their solutions in the global smart city market.

²<https://synchronicity-iot.eu/open-call>.

³ <https://synchronicity-iot.eu/open-call/support/faq/>.

The project has developed a harmonised IoT-enabled reference framework that will be implemented and demonstrated through pilot projects in 8 cities across Europe: Antwerp, Carouge, Eindhoven, Helsinki, Manchester, Milan, Porto and Santander.



Taking an inclusive approach to enrich and grow the ecosystem, SynchroniCity actively encourages SMEs, cities, and large businesses to join the marketplace through an open call.

From a citizen-centric perspective, these stakeholders will be welcome to demonstrate solutions that tackle identified urban challenges in our 8 core pilot cities using IoT technologies and demonstrating the SynchroniCity digital single market across Europe and beyond.

2.1. What will be the Outcomes of SynchroniCity Project?

The key outcomes of SynchroniCity will be:

- A technical framework for IoT-enabled services for smart cities and communities. This will include neutral branding based on standards, minimal interoperability mechanisms, a reference architecture model implementation and a cloud hosting option.
- Validation of the technical framework through internal and external large-scale pilots.
- A set of methodologies, processes and guidelines established around the SynchroniCity pilots that help IoT technology and smart city service providers to better design solutions to address citizen needs.

- A framework for the quantification and monitoring of the value of IoT-enabled smart city interventions that considers economic, environmental and social benefits, based on emerging key performance indicators (KPIs).
- New business models that are viable at a scale through the generation of secondary revenue streams enabled by minimal interoperability mechanisms.
- Strong European presence in a global digital single market of IoT-enabled solutions, with a thriving community of SMEs, cities and industry participating.

3. What are the Objectives and Scope of Synchronicity Open Call?

3.1. Objectives

The open call of the SynchroniCity project is realised as one of five Large-Scale Pilot (LSP) projects that are receiving a total of €104 M in funding from the European Union's Horizon 2020 research and innovation programme. An underlying objective is to foster and validate the underpinnings of a mainstream market for IoT-enabled services responding to the increasing demand for cross-domain interoperability. Therefore, proposers are encouraged to consider the realisation of IoT-based solutions that are validating cross-domain interoperability.

Solution scenarios shall serve as environments to use standards and other emerging mechanisms for interoperability, replicability and reuse that are or can be applicable to more than one domain, to address the current turning point where commercially viable and/or economically sustainable cross-domain and cross-application use cases are emerging and entering the mainstream.

In particular, the main objectives of the SynchroniCity open call are:

- Validate the SynchroniCity vision and technical framework as a model for large-scale standards-based innovation and procurement of IoT-enabled services for cities and communities.
- Demonstrate that the SynchroniCity framework enables the interoperability, replicability, reusability and scalability of human-centred IoT-enabled solutions across

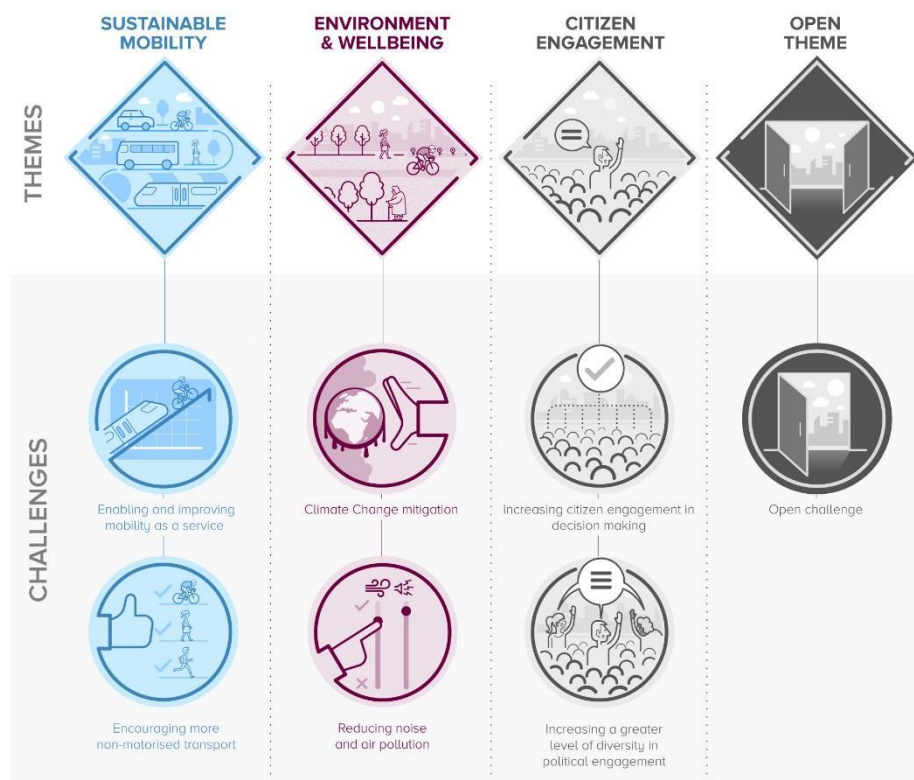
cities, showcasing sustainable business models and thus reducing the risk of investment in large-scale IoT solutions.

- Attract new cities and other players in this ecosystem to become part of the SynchroniCity digital single market ensuring its expansion and sustainability.
- Inform and influence European and global standards developing organisations to shape and adopt new smart city standards that foster an open and agile digital marketplace for all the different stakeholders of the global ecosystem.

3.2. Scope

To be considered, proposals must address one of the challenges listed below and demonstrate how they will respond to these challenges in at least two open call pilot cities.

The open call consists of seven challenges organised in four different themes:



1. Theme: Sustainable Mobility

Cities are complex networks of people and goods moving to multiple destinations to maintain a prosperous economy and create a harmonious liveable place. While many transport modes exist, both private and public, motorised carbon fuelled vehicles are still the most popular. This poses one of the greatest environmental challenges we face today.

Challenge 1.1: Enabling Mobility-as-a-Service (MaaS)

Many cities are seeking to encourage a shift from ownership models to a service model because of more stringent environmental regulations, congested streets, inefficiencies in the transport industry and to enhance travel experiences. Some of the opportunities around MaaS include: enabling a multimodal transportation system, accessibility of real time data on transport modes, improvement in efficiency of existing transport modes and redistribution of stakeholder roles in the ecosystem.

Can your IoT-enabled solution or product address these or other opportunities in MaaS?

Challenge 1.2: Encouraging non-motorised (active) Transport

Many cities in Europe are shifting their policies towards cleaner urban transport. Encouraging active transport is essential, especially for relatively short distances, which make up the largest share of trips in cities.

Can your IoT-enabled solution encourage citizens to use active transport more often? Can your solution address safety issues around active travel, especially when confronted with motorised vehicles?

2. Theme: Citizen Engagement

In the Smart City, citizen engagement is increasingly gaining importance after the consistent failure of technology driven city solutions in the past years. It has become apparent that the view of the citizens is a key element for the adoption of new IoT solutions that address real city and citizen needs. Cities around the globe want to improve engagement to make their cities a better place to live in.

Can your solution improve citizen engagement?

Challenge 2.1: Increasing Citizen Engagement in Decision Making

Data promises benefits for society as well as business. But policy makers often do not know how best to use this scale of data for driving decisions for citizens in an effective way. Also, most decision-making processes are driven by stakeholders other than citizens.

Can your solution make an intelligent use of the available data that citizens use to shape important issues like planning a district?

Challenge 2.2: Increasing a greater Level of Diversity in Political Engagement

Many methodologies, campaigns and tools used to obtain the views of citizens are biased towards a certain type of citizen. For example, if a tool requires long term citizen interaction, working citizens or those with family responsibilities may not have the time to engage. If the tools are digital, it will only magnify the digital divide between those economically and educationally more disadvantaged and older generations.

Can your solution help bridge the digital divide? Can your solution help address low participation of certain citizens? Is your solution able to address engagement with citizens new to the city?

3. Environment & Wellbeing

Cities are centres of consumption, greenhouse gas production, waste and emissions of pollutants in water and air. We need innovative and sustainable solutions that help address some of the main environmental challenges in cities.

Can your solution decrease greenhouse gas production? Can it improve air quality?

Can it improve waste management and collection?

Challenge 3.1: Climate Change Adaptation

The resilience of cities as well as mitigation and adaptation to climate change is increasingly a high priority for cities. Impacts to climate range from an increase in extreme weather events and flooding to hotter temperatures and public health concerns.

Could your solution help cities combat flooding impacts? Can available datasets provide an integrated management solution to help cities become more resilient?

Challenge 3.2: Reducing Air and Noise Pollution

There is increasing pressure on cities to reduce pollution which has a direct influence on citizens health and behaviour. Better air quality and less noise could be achieved through a combination of initiatives that encourage a shift to less polluting transport modes, effective implementation of low-emission zones and, fundamentally, better integrated land use and transport policies.

Can your IoT-enabled solution reduce air pollution in cities from vehicles or natural-gas heating? Can your solution reduce noise levels in urban spaces?

4. Theme: Open

Challenge 4.1: Open Challenge

The Open Challenge presents an opportunity for ground-breaking proposals which do not fall within the defined challenges of the open call. This option is dedicated to SMEs and new cities that are working on something truly innovative that can tackle a real challenge in at least one other city or that covers an area from a different theme to the ones presented. It can also include any solution that does not fit within the themes and challenges proposed but could be of interest to the open call pilot cities.

The solution needs to have been demonstrated in a relevant environment.

Applicants will need to provide evidence that the challenge they are trying to solve is representative for the needs and concerns of large numbers of citizens.

Note that the open call challenge can only account for a maximum of 20% of the total number of winning projects.

3.3. Themes & Challenges by Cities

Themes and challenges common to all core pilot cities have been identified. The individual eight core pilot cities indicated their most relevant challenges, and these are displayed in the table below.

Note that applicants will need to select a challenge that is common to at least two open call pilot cities, but preferably more, where they would like to pilot their solutions.

		Antwerp	Carouge	Eindhoven	Helsinki	Manchester	Milan	Porto	Santander
Theme	Challenge								
SUSTAINABLE MOBILITY	Enabling and improving MaaS	◆		◆	◆	◆	◆	◆	◆
	Encouraging more non-motorised transport	◆	◆	◆	◆	◆	◆		◆
CITIZEN ENGAGEMENT	Increasing citizen engagement in decision making		◆	◆	◆	◆	◆	◆	◆
	Increasing a greater level of diversity in political engagement		◆	◆	◆	◆		◆	◆
ENVIRONMENT & WELLBEING	Climate change mitigation	◆	◆	◆	◆	◆	◆	◆	
	Reducing noise and air pollution	◆	◆	◆	◆	◆	◆	◆	◆
OPEN THEME	Open Challenge	◆	◆	◆	◆	◆	◆	◆	◆

Be aware that implementation of the SynchroniCity framework in the core pilot cities is ongoing through the duration of the open call. Applicants are strongly advised to consult the [online updates](#)⁴ on the technical level of the SynchroniCity framework in each of the core pilot cities.

4. Who is this Open Call aimed at?

SynchroniCity open call is aimed at **SMEs, cities** and **large businesses** that believe in an open and agile digital single market across borders for IoT solutions to allow better human-centred services for cities and its citizens.

Applicant SMEs must adhere to the definition of the European Commission⁵ or consult the “Terminology” section of this guide in Annex 1.

It is not necessary that your organisation is located in one of the eight core pilot cities. In fact, we actively encourage demonstration of projects in new cities.

⁴ <https://synchronicity-iot.eu/data-tools-services-in-core-pilot-cities/>.

⁵ <http://ec.europa.eu/DocsRoom/documents/15582/attachments/1/translations>.

The SynchroniCity open call will not fund early stage or untested solutions. The call is open to **SMEs which can implement an IoT-enabled solution that has been already demonstrated in a relevant environment (TRL ≥ 6)**⁶ and which have the ambition to access the European market and expand globally.

For each application there will be always a **Lead Applicant**. The Lead Applicant must be always a for-profit or not-for-profit **SME** that can provide an **IoT data enabled application or a full stack solution** (infrastructure + middleware + application).

SME Lead Applicants can either **apply alone** or **as part of a Pilot Group**.

A **Pilot Group** consists of 2 organisations or more, one of which needs to be the SME Lead Applicant. The remaining members of the Pilot Group can be any combination of other for-profit or not-for-profit **SMEs** and/or **new cities** and/or **larger businesses** wanting to join the SynchroniCity ecosystem.

The SME Lead Applicant will coordinate the Pilot Group and is responsible for providing the SynchroniCity project management with reports and feedback for the relevant European Commission auditing.

There are no restrictions on the number of organisations that can become part of a Pilot Group. However, applicants will need to demonstrate that the partners have complementary skills and that they are able to deliver the project within time and budget.

The specific characteristics of possible **Pilot Group partners** are described below:

Partner SME

- IoT SMEs:
 - Being mature enough to deploy its technology at scale.
 - Be complementary to the SME Lead Applicant; i.e. provide IoT infrastructure, provide IoT middleware, enhance IoT security and privacy, etc.
- Non-technical SMEs:
 - Be complementary to the SME Lead Applicant by bringing expert knowledge related to the application of the solution (citizen engagement, design, etc.) that can be demonstrated through their experience.

⁶ https://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2018-2020/annexes/h2020-wp1820-annex-g-trl_en.pdf.

Partner City (New City Applicant)

Cities from all over the world are welcome to apply in a Pilot Group with SMEs. Cities need to provide a Letter of Support to the Pilot Group they are applying with. Cities are not eligible to apply as lead applicants.

In order for cities to apply, they need to share the same principles of the [OASC](#)⁷, they must be compliant with the [General Data Protection Regulation](#) (GDPR)⁸ and they need to adopt elements of the [SynchroniCity Technical Framework](#)⁹ at the beginning of the piloting phase. Be aware that this may require having accessible data around the challenge of the open call that the SME Lead Applicant has selected, unless the Pilot Group is able to provide the necessary data. Keep also in mind that SynchroniCity partners will not be able to provide on-the-ground support in new cities.

If as an SME Lead Applicant, you include a new city into the Pilot Group you should provide evidence in your application that your project and challenge selected is relevant in the context of the city and has the potential to make a positive impact on local issues.

Large Businesses

Large businesses will be able to participate in the open call in those cases where the Pilot Group partners see a clear benefit for the proposal.

SynchroniCity partners are not eligible for funding and cannot be part of a consortium for the open call. Businesses and organisations funded by or otherwise affiliated with a SynchroniCity partner are not eligible for funding and cannot be included as a partner in your proposal. As part of our agreement with the European Commission, we are obliged to avoid conflicts of interest, and therefore we reserve the right, at our full discretion, to reject your proposal on that basis. The full list of SynchroniCity partners can be found in Annex 2.

If you would like to apply as a Pilot Group, it is your responsibility to find the appropriate partner for this open call. However, we will aim at facilitating the encounter of potential partners through the Connect section on our [website](#)¹⁰. You can also attend some of our open

⁷ <http://oascities.org/about-oasc/>.

⁸ More information the GDPR can be accessed in this link: <https://www.eugdpr.org/>

⁹ <http://synchronicity-iot.eu/open-call/framework>

¹⁰ <https://synchronicity-iot.eu/connect/>.

call clinics and webinars to find appropriate partners to form a Pilot Group. You can find the information about these events [here](#)¹¹.

Each applicant, either applying alone or in a Pilot Group, can submit several applications, but only a maximum of one can be funded.

5. What is the Eligibility Criteria?

The applications will be assessed by evaluators to identify whether all the eligibility criteria are met. The criteria are listed in below.

- 1) Application submitted on time (Deadline: 30 Sep 2018, 17:00 CEST)
- 2) Application led by an SME (according to the description of SME Lead Applicant)
- 3) The status of SME applicants must conform with the [EU definition](#) of Small and Medium Enterprises.
- 4) The SME proposal is providing an IoT-enabled application, infrastructure or a full stack solution (infrastructure + middleware + application)
- 5) Completeness of the proposals (i.e. fields as well as page limit)
- 6) The language of the applications (i.e. English)
- 7) *Letter of Support* of new cities to the respective Pilot Group
- 8) The solution proposed must be piloted in at least 2 cities (preferably more)
- 9) Non-affiliation with SynchroniCity consortium partners that may lead to a conflict of interest (i.e. *Declaration of Honour* to be signed only if selected)
- 10) Compliance with SynchroniCity *Ethics & Privacy Guidelines* (more information can be found in Annex 3).
- 11) Within the scope of the call
- 12) The inclusion of eligible activities for funding. Further information is available in Section 8 and Annex 4.

¹¹ <https://synchronicity-iot.eu/open-call/support/clinics/>.

6. Why should I apply?

For SMEs

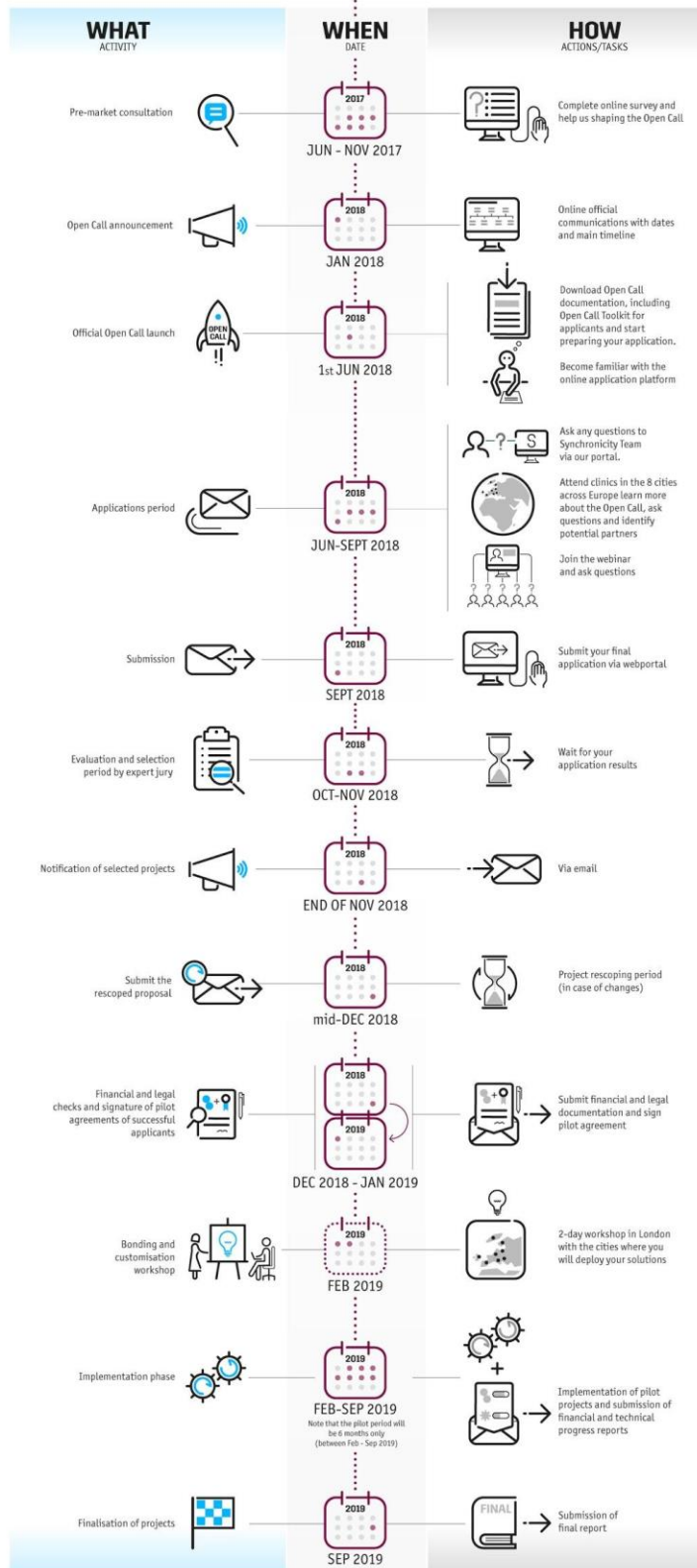
- I will be able to demonstrate the scalability and replicability of my solution on different geographies
- I will be able to test in parallel different business models according to the contextual reality of cities where I will pilot my solution
- My solution will be showcased by SynchroniCity partners and cities globally being able to amplify my outreach
- I will be connected to multiple cities and their local business ecosystems across Europe and beyond
- I will make a positive impact on the local communities where I will pilot my solution
- I will help create and sustain a global open and agile digital single market for IoT-enabled solutions that will help others like my business scale their solutions.

For large businesses

- I will be seen as a pioneer in helping create and sustain a global open and agile digital single market for IoT-enabled solutions. This will help identify and develop new standards which will have a tremendous impact in Europe and beyond
- I will acquire a better understanding of the IoT-enabled solutions available in the market
- The pilots I will be involved in will be disseminated by all SynchroniCity partners across Europe and beyond, amplifying my active innovation role in this space.

7. Timeline

SYNCHRONICITY



This timetable may be amended as required at the discretion of the Synchronicity team. The most updated version will be available on [SynchroniCity's website](#)¹².

8. Funding Conditions

8.1. Budget available

This open call will provide a total of €3.000.000 in funding.

Each application can be funded with:

- up to €100.000 if an SME applies alone
- up to €200.000 for a Pilot Group of 2 organisations
- up to €300.000 for a Pilot Group of 3 organisations or more.

Note that SMEs, cities and large businesses that are not from EU or H2020 associated countries are welcome to participate in the open call but are not eligible for funding. A list of the EU and H2020 associated countries is available in Annex 5.

Also, be aware that the candidates' work plan to carry out as part of the SynchroniCity open call cannot receive double funding. Synergies with other sources of funding, including other H2020 projects, are allowed as long as the grants are used for complementary, not overlapping purposes.

Other important information that you need to know:

- SynchroniCity open call will co-fund 80% of the total budget asked by each participant in each project. The remaining 20% must be provided by the applicants either as in-kind support or by bringing in funding to the project.
- In a Pilot Group, the SME Lead Applicant will be the one receiving the funding. They will then distribute the funding to the Pilot Group partners according to the budget presented in the budget application template and agreed with the Open Call Evaluation Committee (OCEC).

¹² <http://synchronicity-iot.eu/open-call>.

- Cities and large businesses eligible for funding (i.e. from EU or H2020 associated countries) can claim a maximum of €60.000 of the total allocated budget for fundable activities.
- We recommend that the winning applicants have a bank account in Euros (€) to avoid paying exchange rates that are not covered by the SynchroniCity open call.
- For the winning applications, the distribution of funding will be split into milestones and each milestone is subject to the approval of the interim reports in stages 1 (pre-financing of 50% at the start) and 2 (35%) and final report in stage 3 (15%). Funding will only be received upon signature of the Pilot Agreement, which includes the project plan, and in accordance with the distribution of funding proportions. Each payment is released 30 days after the approval of each report.
- The reports during the piloting phase require Pilot Group members to provide SynchroniCity with honest information on their pilots and their experience of the technical framework.
- Indirect costs (e.g. overheads) will be covered if they are declared as flat-rate of 25% of the eligible costs.

8.2. For which Activities can I receive Funding?

SMEs from EU or H2020 associated countries are eligible for funding for all activities mentioned below, under the condition that these activities take place after the approval of the Pilot Agreement and contribute to maturing, sustaining, and further developing SynchroniCity digital single market.

- 1) Planning, preparation and customisation of the piloting phase. For example, exploring SynchroniCity features and organising initial SynchroniCity stakeholder meetings. Note that we will be organising a specific Customisation Workshop for all winning participants and open call pilot cities to know each other, understand who is the contact person for each organisation during the pilot phase, understand the journey ahead during the pilot phase and ensure stakeholder alignment of needs and requirements. The costs of this activity should be included in the budget plan. You can find more information in the application form with instructions which is available in the *Open Call Toolkit for SME and Large Business Applicants*¹³.

¹³ <https://synchronicity-iot.eu/open-call/>.

- 2) Technical integration and adaptation
- 3) Deployment of the solution and adaptation to the Synchronicity technical framework
- 4) Data licenses and data management activities
- 5) Testing and piloting activities
- 6) Activities related to bringing maturity for market take-up. For example, development of features in your solution that have been identified together with the partners, open call pilot cities and local ecosystems as important for being prominently considered in their procurement pipeline.
- 7) Generation of reports and publications related to the pilot
- 8) Supporting the rest of technical activities in the project, by providing feedback about the use of the technical framework and identifying gaps for the development of appropriate standards that can help mature SynchroniCity in the future. You will be required to do this as a condition of funding.
- 9) Report the necessary effort and costs according to H2020 rules and management practices requested by the SynchroniCity open call lead partner (Future Cities Catapult). You will be required to do this as a condition of funding.
- 10) Translation activities which are essential for your solution to be integrated in the piloting geographies.

SMEs, either applying alone or in a Pilot Group, can sub-contract work and knowledge that is essential for their innovation project. Note that sub-contracting must cover only a limited part of the project, and applicants must guarantee the best value for money and avoid conflicts of interest.

The specific costs for which SMEs may or may not receive funding are presented in Annex 4.

Large Businesses that are registered in EU or H2020 associated countries are eligible for funding for all activities mentioned below, under the condition that these activities take place after the approval of the Pilot Agreement and contribute to maturing, sustaining, and further developing SynchroniCity digital single market.

- 1) Planning, preparation and customisation of the piloting phase. For example, exploring SynchroniCity features and organising initial SynchroniCity stakeholder meetings. Note that we will be organising a specific Customisation Workshop for all winning participants and open call pilot cities to know each other, understand who is the contact person for each organisation during the pilot phase, understand the journey ahead during the pilot

phase and ensure stakeholder alignment of needs and requirements. The costs of this activity should be included in the budget plan. You can find more information in the application form with instructions which is available in the *Open Call Toolkit for SME and Large Business Applicants*¹⁴.

- 2) Travel and accommodation for the purpose of enabling and coordinating the pilot project (i.e. Pilot Group meetings).

For large businesses, the grant will only cover staff time involved in the project (excluding project management activities) and travels costs for meetings and workshops. Refer to Annex 4 to see all eligible funds.

9. Intellectual Property Rights (IPR) and Data

9.1. Who keeps the IPR?

You or your Pilot Group will be the sole owner of the IoT-enabled solution of your project and all associated IP.

SynchroniCity itself will not retain an equity stake in your company, nor will it retain any IPR.

However, SynchroniCity consortium will be licensed the right to use (internally) any IPR you produce as part of the project, for three years after the project finishes.

Additionally, SynchroniCity or the European Commission may ask you to present your work as part of our public relations and networking events, in order to showcase the benefits of the SynchroniCity project.

9.2. Who owns the Data produced?

SynchroniCity adheres to the principles of OASC and expects participants of this open call to follow such principles. These could be reflected in the business models and the shared data models that the participants will propose.

The type of data available for SynchroniCity open call pilot projects is manifold, representing the contextual diversity of cities which mirrors the complex reality of the smart city market.

¹⁴ <https://synchronicity-iot.eu/open-call/>.

The type of data that you may make use of could be open data and closed data, with either open access or restricted access. Each city has its own data policy and preferences on how data should be treated in their region. You can find this information in the *Cities Cards* of the *SynchroniCity Framework* document which is available in the [Open Call Toolkit for SME and Large Business Applicants](#)¹⁵. However, even if Open Source licenses and open and license-free access to the developed software components is not a must, it will be considered positive in the proposal evaluation, as an enabler of an open market supporting innovation.

It will be the responsibility of the applicants to ensure they understand the conditions on data in each city where they plan to pilot, as well as associated licences and costs, in order to provide a sound proposal that takes this diversity into account. It will also be the responsibility of applicants to propose data processing solutions compliant with the current GDPR.

If you or your Pilot Group is selected as one of the winning applicants, you will be required to sign a *Sharing Agreement* with each of the cities where you plan to pilot your solution, as part of the *Pilot Agreement* that you must sign with the SynchroniCity Consortium. A preliminary template of the *Pilot Agreement* can be found at the [Open Call Toolkit for SME and Large Business Applicants](#)¹⁶.

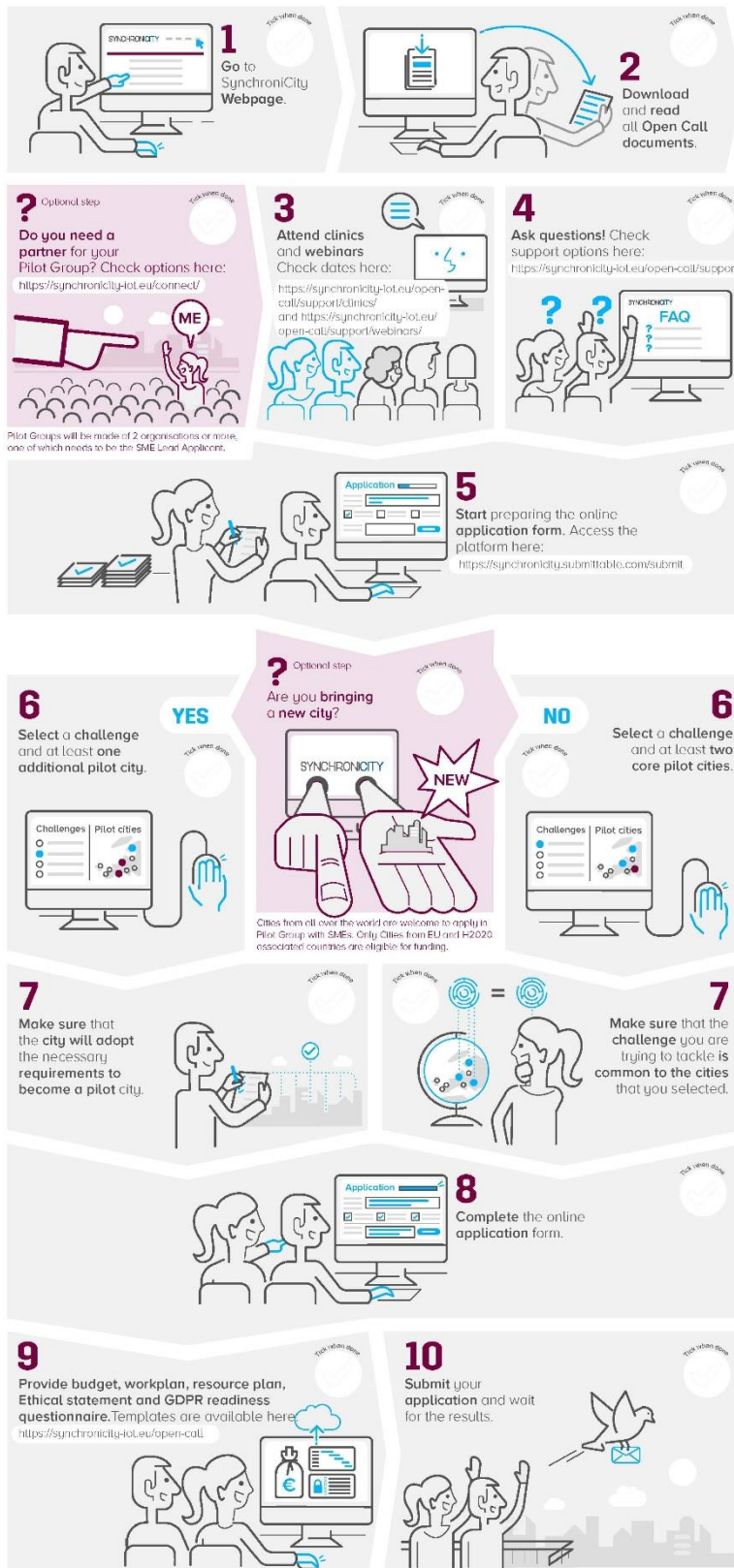
As a guide, the IPR of the data collected prior to the SynchroniCity open call pilot will remain the property of the data provider or its licensors. The data produced during the pilot phase will be shared according to the contractual *Sharing Agreements* between the SME or Pilot Group and the relevant open call pilot cities. Importantly, the *Pilot Agreement* between the SME or Pilot Group and the SynchroniCity Consortium will also set some obligations for the signing parties.

¹⁵ <https://synchronicity-iot.eu/open-call/>.

¹⁶ <https://synchronicity-iot.eu/open-call/>.

10. How to apply?

SYNCHRONICITY Application process for SMEs and Pilot Groups



To apply for the SynchroniCity open call applicants are required to follow the process outlined below:

Step 1: Download and read all the relevant documentation.

Read the *Open Call at a Glance for SME and Business Applicants*. This should provide you with an overview of the main parameters of the open call and should be sufficient to decide if you would like to proceed further with the open call application.

If you decide to proceed with the application, you should read the full instructions under *SynchroniCity Open Call - Guide for SME and Large Business Applicants*. We recommend you familiarise yourself with the *Legal Terms & Conditions* in Annex 7, which states the legally binding specifications for the open call.

You should also consult:

- *The SynchroniCity Framework* document, which describes the technical framework and presents the core pilot cities where solutions will be demonstrated;
- The *SynchroniCity Open Call Application Templates* that provides those templates needed to apply for the open call (i.e. application form with instructions; eligibility check grid; Ethical statement, GDPR readiness questionnaire; work and resource plan, budget template);
- The *SynchroniCity Templates for Winning Applicants* (i.e. Pilot Agreement and the Declaration of Honour).

Applicants are requested familiarise themselves with the *Pilot Agreement*. This agreement will need to be signed in case an SME/Pilot Group is selected. Note that if Pilot Groups, as opposed to individual SMEs, are selected it is their responsibility to establish a formal agreement between the parties before signing the *Pilot Agreement*. It will also be responsibility of the Pilot Group to enter in a *Sharing Agreement* with the cities where they will be piloting their solutions. The sharing agreement will describe the terms in which the data is going to be shared among the different parties in each of the open call pilot cities.

You can download the [Open Call Toolkit for SME and Large Business Applicants](https://synchronicity-iot.eu/open-call/)¹⁷ that contains all the documentation mentioned above, including all visuals that can be downloaded independently.

¹⁷ <https://synchronicity-iot.eu/open-call/>.

Step 2: Identify challenge and pilot cities

Consult the table in Section 4 to know what challenges are relevant to each of the core pilot cities and identify the one relevant to you. Note that pilots will need to be deployed in at least 2 open call pilot cities, but preferably more. At least one of the cities needs to be a core pilot city (Antwerp, Carouge, Eindhoven, Helsinki, Manchester, Milan, Porto and Santander). You will be able to specify your preferred core pilot city during application.

Step 3: Complete and submit your application

Register on the submission platform "[Submittable](https://synchronicity.submittable.com/submit)"¹⁸ and start preparing the application. The application form is comprised by an administrative and a technical section. The application questions can be found in the SynchroniCity [Open call Application Templates](https://synchronicity-iot.eu/open-call/support/)¹⁹.

During this time, and before you press the final "Submit" button, you will be able to save drafts of your application and come back later. **Note that applicants will not be able to retrieve or reopen applications once they press the "Submit" button.**

In case of an emergency, if you need to amend your proposal after its submission but before the open call submission deadline, please send a change request to the Lead Organisation via email at helpdesk@synchronicity-iot.eu, writing in the subject "Proposal amendment request". For further information, please refer to the *Legal Terms & Conditions* in Annex 7.

Applicants using other channels will not be accepted unless it is agreed with the Open Call Evaluation Committee on the basis of specific regulations in their respective country.

Applicants must complete all fields required and upload all attachments. Only in this case applicants will be considered for review. All information must be provided in English. Proposals and attachments submitted in any other language will not be eligible.

After the call deadline, changes or additions are no longer possible, unless the Open Call Evaluation Committee asks the applicant to clarify any obvious clerical errors on their part.

During application, applicants will be asked to:

¹⁸ <https://synchronicity.submittable.com/submit>.

¹⁹ <https://synchronicity-iot.eu/open-call/support/>.

- 1) Provide general information about the company, partner companies and other Pilot Group applicants²⁰.
- 2) Complete all fields in the online application form within field limits.
- 3) Agree to the terms of *Ethical statement*. See the *Ethics & Privacy Guidelines* in Annex 3.
- 4) Complete the *GDPR readiness questionnaire*. See guidelines on *Ethics & Privacy* in Annex 3.
- 5) All SMEs, including those in Pilot Groups, must declare their legal status according to the European definition of an SME.
- 6) Upload all other mandatory documents:
 - a) Budget
 - b) Resource and work plan

All templates mentioned above (application form with instructions, *Ethical statement*, and *GDPR readiness questionnaire*, budget, resource and work plan), are available in the [Open Call Toolkit for SME and Large Business Applicants](#)²¹.

Note that each Pilot Group will only submit one budget, one resource and work plan, as well as one Ethical statement and one GDPR readiness questionnaire. However, all members of each Pilot Group must submit information regarding their financial and operational capacity if they are selected.

- 7) Applicants may also submit (optionally) a short video (1 minute). In it you should present the vision of the project and explain why your solution and team should receive the funding.
- 8) Applicants are allowed to provide one appendix as additional supporting information to their projects. The appendix can have up to 6 sides of an A4 document, should be submitted in Portable Document Format (.pdf), and should be legible at 100% zoom/magnification. The appendix is optional.

Step 4: Receive notification

²⁰ Note that we will capture the type of the organisations applying for the open call and the type of clients they supply to in order to anonymously and statistically evaluate the profile of the interested participants.

²¹ <https://synchronicity-iot.eu/open-call/>.

All Lead Applicants will be notified of the results of their application by email by the end of November 2018. It is responsibility of the Lead Applicant to communicate the results to other members of the Pilot Group.

You can find the latest timeline on the SynchroniCity [website](#)²².

11. Evaluation Process

11.1. How will my Proposal be evaluated?

Applications will be thoroughly reviewed according to the process below:

Step 1 - Eligibility checks

The Open Call Evaluation Committee (OCEC) will carry out an eligibility check to identify whether all the eligibility criteria are met. You can find the eligibility criteria in Section 11.

Note that in the last step of the evaluation process the Ethics & Privacy Board (EPB) will review any ethical and privacy implications of your proposal. Please ensure you understand the Ethics & Privacy guidelines provided in Annex 3.

Step 2 - Individual Reviews

After all eligible proposals have been anonymised, they will be evaluated and scored by **three reviewers** with complementary backgrounds (technical knowledge, local authority knowledge and commercial knowledge) against the criteria of "Excellence, Impact, Feasibility and Sustainability" (see Section 8). The reviewers consist of a mixture of internal team members and external experts.

Be aware that technical feasibility will be of critical importance in this open call, which aims to show the replicability and scalability of urban IoT-enabled solutions. **Therefore, your proposal can be rejected only on the basis of poor technical feasibility.**

Note that the reviewers will look positively at projects that:

- bring new cities in their Pilot Group
- have a balance of genders represented in their teams

²² <http://synchronicity-iot.eu/open-call>

- are looking to pilot in multiple cities, subject to evidence of the feasibility of implementation.

Step 3 - Panel Review

The Open Call Evaluation Committee and the core pilot cities will collect the scores and feedback from each of the individual reviewers. A ranking list will be assembled with all proposals that score above the threshold of 14 out of 20.

The OCEC will meet and make a final funding decision based on the ranking list whilst prioritising the following aspects:

- geographical distribution of pilots (each core pilot city should demonstrate at least 1 solution); and
- at least 1 solution for the following themes - Sustainable Mobility, Environment & Wellbeing, and Citizen Engagement - must be funded provided that the proposal is scored 14 or more. The open call challenge can only account for a maximum of 20% of the total number of winning projects.
- expression of support by the core pilot cities.

In the case of applications receiving an equal score, priority will be given to projects with higher scores in the "sustainability" and "feasibility" criteria.

Step 4 - Ethics & Privacy Check

If your project is in the finalist list, the SME Lead Applicant will receive an email immediately after the evaluation of proposals with a score above the threshold and it may include additional clarification questions from the SynchroniCity consortium regarding Ethics & Privacy issues. These applicants shall return their responses before the fixed deadline, thereafter the Ethics & Privacy Board will make their assessment.

Notwithstanding other merits, your proposal may be rejected solely on the grounds of ethical and privacy reasons, so please make sure that any issues are properly addressed.

Step 5 - Final Communication and Re-scoping

Notifications on funding or rejections together with any feedback will be sent out by end of November 2018.

It may occur that the OCEC needs to alter the pilot cities that you have chosen in your application because of one of the following reasons:

- the core pilot city in question is not technically ready at the start of the piloting phase;
- there is a geographical imbalance of projects in the core pilot cities;
- the new city you may bring in your Pilot Group does not comply with the Ethics & Privacy Guidelines.

If any of those occur, we will notify you and we will agree on a new combination of cities that fits the purpose of this open call. We reserve the right of having a final decision in case an agreement cannot be reached between us (the SynchroniCity team) and the applicant, which may lead in the inability of the selected project. However, we will always try to ensure that your preferred city is included in the piloting phase of your project.

Note that during this evaluation phase, if you bring a new city in your Pilot Group, this new pilot city could be disregarded based on Ethics & Privacy reasons, but your Pilot Group can still be eligible.

After the agreement, there will be a period for re-scoping the project and budget plan according to the new city arrangement.

The re-scoping period will take place in December 2018.

If you would like to file a complaint after the feedback is received, you will need to follow the guidelines in Annex 6.

11.2. What are the Evaluation Criteria?

Evaluators will score your proposal based on 4 different criteria (Excellence, Impact, Feasibility and Sustainability). For each criterion, your proposal will be given scores of 0 to 5 (half marks are possible), as follows:

0 – Very poor: the proposal fails to address the criterion or cannot be assessed due to missing or incomplete information (unless the result of an "obvious clerical error").

1 – Poor: the criterion is inadequately addressed or there are serious inherent weaknesses.

2 – Fair: the proposal broadly addresses the criterion but there are significant weaknesses.

3 – Good: the proposal addresses the criterion well but with a number of shortcomings.

4 – Very good: the proposal addresses the criterion very well but with a small number of shortcomings.

5 – Excellent: the proposal successfully addresses all relevant aspects of the criterion; any shortcomings are minor.

These are the aspects that evaluators will consider under each of these criteria:

Excellence (0-5 points)

- What is the vision, ambition and value proposition of your solution?
- Is your project proposition clear in meeting the objectives of the call?
- Has your solution been demonstrated in a relevant environment?

Impact (0-5 points)

- Does your project address a challenge recognised or prioritised by the cities; or can you argue for another challenge that is as important for the city and its communities? Do you have evidence?

- How will you measure the quality of your outputs (methodology and key performance indicators)?

You can get inspiration from CITYKeys²³ EU project, that sets some key indicators for smart city projects and smart cities, and also from the UN-initiative coordinated by ITU, U4SCC²⁴; when deciding on the key performance indicators (KPIs) that you will use to assess the quality of your pilot project

- Who will benefit from the implementation of your solution or service and how? How will your solution impact the life of citizens and communities?
- What is the long term social, environmental and economic impact if your solution is implemented at a larger scale?

Feasibility (0-5 points)

- Can you demonstrate that the project is feasible within the budget? If it is not, can you demonstrate that you have the additional necessary resources to make it feasible? Is the budget clearly described?

²³

<http://nws.eurocities.eu/MediaShell/media/CITYkeysD14Indicatorsforsmartcityprojectsandsmartcities.pdf>

²⁴ <https://www.itu.int/en/ITU-T/ssc/united/Pages/default.aspx>

- Is the proposal feasible in the time given? Is there an achievable deployment plan?
- Is the proposal feasible through the skills and expertise of the team? Does the team have the capacity to run the project?
- Is the proposal feasible given the technology features and maturity?
- Are there any additional infrastructure and resource requirements? Do you have a plan to unlock these assets?

Sustainability (0-5 points)

- In how many cities will your solution be piloted in?
- How can you demonstrate the interoperability, replicability and reusability of your solution?
- How credible is your methodology in proving the scalability of your solution/service?
- What's your exploitation/commercialisation plan for this solution? How clear is your revenue model and monetisation strategy?
- How big is the market you are addressing?
- Can your pilot contribute to the further development of the SynchroniCity marketplace?
- Will your solution support the goal of creating more jobs across Europe?

Note that IoT-based solutions in the IoT Large-Scale Pilot Programme (LSP) aim at standards-based interoperability, replicability and reuse of the envisaged results. These three elements are considered fundamental to achieving large scale deployment and mainstream adoption on open market terms which contributes to the **sustainability** of the solutions. To achieve this, specifically the following aspects shall be considered when elaborating the proposals:

- ***Interoperability***

Envisaged IoT-based solutions shall make use of established open standards as far as possible. Proposals shall explain how the solutions will avoid vendor lock-in by pointing out key interoperability points in the framework and which standards-based interoperability mechanisms will be used at those points, or where the teams are actively contributing to the current work of related standards developing organisations. Even as the mandatory architectural framework of a Large-Scale Pilot already has incorporated standards as part of interoperability points and mechanisms, the proposal should explain how the mandatory or recommended framework is used to achieve interoperability.

- ***Replicability***

The LSP projects and related innovation activities, including open call pilots, will require active exposure of solution capabilities through recognised and interoperable catalogues of data, applications, services, microservices and hardware that will present the solutions deployed and validated in the scope of the innovation activity. Also, the proposals selected in the scope of the open call need to confirm that they will provide access to their lessons learnt, best practices, tutorials, guidelines and an overview of deployed technical components when signing a Pilot Agreement. Open Source licenses and open and license-free access to the developed software components is not a must, but considered positive in the proposal evaluation, as an enabler of an open market supporting innovation. However, a tangible business model is considered a prerequisite that shall finally correspond to the selected licensing scheme and envisaged commercialisation strategy.

- ***Reusability***

Proposed project ideas shall explain how they reuse existing, relevant and validated technological components to avoid reinventing the wheel. Reuse of results developed and/or validated in the initial use cases from open and standards-based initiatives will be evaluated positive.

Further information on the way these elements are going to be evaluated during the pilot phase will be presented in the *Pilot Handbook* that will be distributed to the winning applicants.

12. Support Options during the Open Call Application Period

Online Forum

You can access a public forum where applicants can ask questions or review answers to previous questions. This repository will be the quickest way to find answers. Access to the online forum will be available [here](#)²⁵.

Private Questions

Applicants can ask confidential questions via email helpdesk@synchronicity-iot.eu. Only confidential questions will be answered through this channel. We therefore highly encourage the use of the online forum for all other non-confidential matters.

Note that the SynchroniCity team is not able to provide feedback on the proposals.

Open Call Clinics

Antwerp, Carouge, Eindhoven, Helsinki, Manchester, Milan, Porto, and Santander will host a Launch Event and Clinic where applicants will receive support in person during the open call application period. The events will assist applicants with any detailed questions about the open call process and offer an opportunity to meet other potential applicants. Details about the launch events including dates and venues will be available on SynchroniCity's [website](#)²⁶.

Open Call Webinars

For those applicants who cannot physically attend the Launch Events or Clinics there will be two webinar calls to inform about the open call process and assist applicants with any questions. Details on the open call webinars can be found [here](#)²⁷.

Connect

To support applicants in the identification of partners to form Pilot Groups, the SynchroniCity team has created a section on the website to facilitate the encounter of other SMEs and partners who want to participate in the open call. You can access the platform [here](#)²⁸. It is, however, the responsibility of each applicant to find the right partner if they wish to form a Pilot Group.

²⁵ <http://forum.synchronicity-iot.eu/>.

²⁶ <https://synchronicity-iot.eu/open-call/support/clinics/>.

²⁷ <https://synchronicity-iot.eu/open-call/support/webinars/>.

²⁸ <https://synchronicity-iot.eu/connect/>.

13. What should I expect if I am Successful?

After the rescoping period, if you are successful, you will:

- Receive an email communicating your success and feedback from the application.
- Be requested to **submit a series of documents** listed below.
- Receive the ***Pilot Handbook***, which describes the journey for the winning applicants during the pilot phase as well as support available and expectations, and will include the *Pilot Agreement*, the *Declaration of Honours* and the *Report templates*. Note that the Lead Applicant will be responsible for the reporting.
- Be requested to commit **availability to answer questionnaires or be interviewed** in order to support the understanding of the SynchroniCity potential environment (up to 2 hours).
- Be requested to provide and update information on your users and market. You will be provided with a toolkit to support and ease the process.
- Have **the willingness to collaborate** with the SynchroniCity team.
- Be requested to formally sign the ***Pilot Agreement*** once the single SME applicant or the Pilot Group is validated. **The terms of the Pilot Agreement are the same for every single applicant or Pilot Group and the terms cannot be negotiated.** Be aware that Pilot Groups will need to provide evidence that the Pilot Group has been formally established (e.g. Collaboration Agreement or other) before signing the Pilot Agreement.
- Be requested to sign ***Sharing Agreements*** with each of the cities your solution will be piloted in. This is the responsibility of the SME Lead Applicant or the Pilot Group and the open call pilot cities you will pilot in to agree upon. The *Sharing Agreements* will be included as an Annex in the *Pilot Agreement*.
- Be requested to attend a kick-off customisation workshop in London at the beginning of February. More information will be available on our [website](http://synchronicity-iot.eu/events)²⁹. Among other topics, in this workshop we will explore in more detail the Data & Privacy implications of your solution.

²⁹ <http://synchronicity-iot.eu/events>

- You may be requested to perform a complete Data Protection Impact Assessment (DPIA) if the Data & Privacy implications of your solution are complex to assess in order to ensure compliance with the GDPR.

Documents to be submitted by SMEs:

In order to confirm the status of the successful SME applicants, you will be requested to submit the following documents. Note that all SME members of the Pilot Groups will be required to submit the documents below to understand if they are eligible for the open call and if they are eligible for funding:

- Completed [Legal Entity Identification form](#)³⁰.
- Company registration number and registration documents.
- Official VAT (or equivalent) document or - if you are not registered for VAT - proof of VAT exemption not older than 6 months.
- Balance sheet.
- Profit and loss accounts.
- Staff headcounts expressed as full-time equivalents.
- For **newly established enterprises** that do not have closed accounts yet, we will require a self-declaration, including a bona fide estimate (in the form of a business plan) for the ongoing financial year.
- For **enterprises without a turnover**, whose activities imply a long time in the market, we will require a declaration of the investment made and the expected return (to demonstrate economic activity).
- If the applicant has previously been validated by European Commission as an SME (e.g. as past or current recipient of European funding), they should contact us at helpdesk@synchronicity-iot.eu. This will facilitate the validation process.
- Bank account information.

All documents must be in **English**. Documents in other languages will not be accepted. If originals are not available in English, the SMEs will need to use a translation service and send us an official translation.

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http://ec.europa.eu/budget/library/contracts_grants/info_contracts/legal_entities/legEnt_privComp_en.pdf

All documents must be submitted to helpdesk@synchronicity-iot.eu by mid December 2018. The SME status will be confirmed only if all documents listed are submitted to SynchroniCity in the form specified and within the given deadlines.

SynchroniCity reserves the right to solicit any other document that allows SynchroniCity to assess the financial health of the SME and its sustainability during the implementation phase.

Documents to be submitted by Large Businesses:

Corporates will be requested to provide the company registration number and registration documents. These are the following:

- Completed [Legal Entity Identification form](#)³¹
- Company registration number and registration documents.

It is important to note that the time from notification of successful applications to the start of the piloting phase may be administratively tedious and long. Applicants should also be aware that due to the complexity of the stakeholder environment, and the technical ambition of large-scale pilots, we cannot foresee all barriers and obstacles to developing and deploying the IoT solutions. We therefore recommend you include reasonable contingency to manage any unexpected issues.

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http://ec.europa.eu/budget/library/contracts_grants/info_contracts/legal_entities/legEnt_privComp_en.pdf

Annex 1: Terminology

Cities

Core Pilot Cities: these are the cities in the SynchroniCity consortium that are committed to implementing the technical SynchroniCity framework, to pilot some initial IoT services and become Open Call Pilot Cities. These cities are: Antwerp, Carouge, Eindhoven, Helsinki, Manchester, Milano, Porto and Santander.

Global Pilot Partner Cities: these are the cities in the SynchroniCity consortium implementing and piloting some initial IoT services but are not participating in the open call. These are: Seongnam (South Korea) and León (Mexico).

Global Partner Cities: these are the cities in the SynchroniCity consortium that are actively following any development in the project as well as getting involved in sharing best smart city practices. They are neither involved in piloting the initial IoT services nor are they participating in the open call. These cities are: Portland (US) and Bordeaux (France).

New City Applicants: cities which will apply for the open call in a Pilot Group with at least an SME Lead Applicant. If their application is successful they will need to implement the SynchroniCity framework and become Open Call Pilot Cities during the piloting phase.

Open Call Pilot Cities: cities that will provide the environment for the open call winning projects to demonstrate their solutions. Pilot cities include the Core Pilot Cities and any New City Applicant.

Affiliation: According to the 'Horizon 2020 Rules for Participation (Regulation (EU) 1290/2013)'

- art. 2.1(2)

'affiliated entity' means any legal entity that is under the direct or indirect control of a participant, or under the same direct or indirect control as the participant, or that is directly or indirectly controlling a participant. Control may take any of the forms set out in Article 8(2)

- art. 8(2)

For the purposes of paragraph 1, control may, in particular, take either of the following forms:

(a) the direct or indirect holding of more than 50 % of the nominal value of the issued share capital in the legal entity concerned, or of a majority of the voting rights of the shareholders or associates of that entity;

(b) the direct or indirect holding, in fact or in law, of decision-making powers in the legal entity concerned.

Conflict of interest: is any situation where the impartial and objective implementation of the action is compromised for reasons involving economic interest, political or national affinity, family or emotional ties or any other shared interest.

Sharing Agreement: This is a legal contractual document between the winning SMEs or winning Pilot Groups and the cities where they will pilot their solution. This agreement needs to be signed before the SynchroniCity pilot phase commences and sets the basis for the participating parties on what and how data and assets are going to be used, shared and processed.

Ethics & Privacy Board (EPB): this is a group of selected representatives from the SynchroniCity consortium which includes the Data Protection Officer (DPO), the Coordinator of the SynchroniCity project and the DPOs of each individual Core Pilot City. This expert board will evaluate the ethics and privacy implications of the open call proposals.

Full Stack IoT solution: in this document we refer to full stack IoT solutions those that comprise infrastructure (e.g. sensors), middleware and application all in one solution.

General Data Protection Regulation (GDPR): The GDPR is a regulation in EU law on data protection and privacy for all individuals within the European Union. It addresses the export of personal data outside the EU. The GDPR aims primarily to give control back to citizens and residents over their personal data and to simplify the regulatory environment for international business by unifying the regulation within the EU. When the GDPR takes effect, it will replace the 1995 Data Protection Directive (Directive 95/46/EC).

The GDPR became enforceable on 25 May 2018.

Match-funding: funding that the open call winning projects will need to contribute to in addition to the funding that they will receive to deliver the proposed pilot project. In our particular case, this represents 20% of the individual total budget of each participant in each winning project. This amount can be provided by the project partners either as in-kind contributions or as additional cash.

Open Call: a competitive process that is open to all qualified applicants and where the sealed bids are opened in public for scrutiny and are chosen on the basis of a described eligibility and evaluation criteria.

Open Call Evaluation Committee (OCEC): this is a group of selected representatives from SynchroniCity consortium, including technical and legal advisors, that the evaluators can consult during the evaluation of the open call applications.

Pilot Agreement: in SynchroniCity we refer to the Pilot Agreement to the legal contractual document between the SynchroniCity consortium and the open call winning SME applicant or the winning Pilot Groups. This sets the legal basis for the delivery of the open call pilot solutions.

Pilot Group: an association of two or more organisations (for SynchroniCity these are SMEs, large businesses and city governments) with the objective of participating in a common activity or pooling their resources for achieving a common goal. In this case, this refers to the group of organisations that will apply together for the SynchroniCity open call with a unified solution.

Small and Medium Enterprise (SME): small and medium-sized enterprises (SMEs) are defined in the [EU recommendation 2003/361](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32003H0361)³².

The main factors determining whether an enterprise is an SME are:

³² <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32003H0361>

1. staff headcount
2. either turnover or balance sheet total

Company category	Staff headcount	Turnover (or Balance sheet total)
Medium-sized	< 250	≤ € 50 (≤ € 43 m)
Small	< 50	≤ € 10 m (≤ € 10 m)
Micro	< 10	≤ € 2 m (≤ € 2 m)

These ceilings apply to the figures for individual firms only. A firm that is part of a larger group may need to include staff headcount/turnover/balance sheet data from that group too.

Additional information and resources can be found here:

- [The revised User Guide to the SME definition](#)³³ (770 kB, available in all EU languages)
- Use the [SME self-assessment questionnaire](#)³⁴ and determine whether your
- organisation qualifies as a small and medium-sized enterprise

SME Lead Applicant: it is the leading SME partner of a Pilot Group applying for the SynchroniCity open call. The SME Lead Applicant is responsible to coordinate the partners in its Pilot Group and will be the contact point for the communication with the SynchroniCity team. To be able to lead an application the SME needs to be able to provide a mature IoT-enabled application or a full stack IoT solution that has been tested in a relevant environment. SME Lead Applicants can apply alone for this open call.

SynchroniCity consortium partners: these are the 38 organisations that have signed a legally binding consortium agreement to deliver the SynchroniCity project funded by the European Commission under the H2020 programme. A complete list of the SynchroniCity partners can be found in Annex 2.

³³ <http://ec.europa.eu/DocsRoom/documents/15582/attachments/1/translations>

³⁴ http://ec.europa.eu/growth/tools-databases/SME-Wizard/smeq.do;SME_SESSION_ID=3-Cv106JfKnqieLIv9PNM3NiEWaOFYn8VwTYOp6fHXH9aJz79jjS!1028861268?execution=e1s1

Annex 2: List of SynchroniCity Partners

1. Aarhus University (DK)
2. Aalto University (FI)
3. Alexandra Institute (DK)
4. Forum Virium Helsinki (FI)
5. Engineering Ingegneria Informatica SpA (IT)
6. Atos (ES)
7. Associação Porto Digital (PT)
8. University of Cantabria (ES)
9. Santander City Council (ES)
10. TST Sistemas (ES)
11. Future Cities Catapult (UK)
12. Manchester City Council (UK)
13. Digital Catapult (UK)
14. Manchester Metropolitan University (UK)
15. Comune di Milano (IT)
16. Imec (BE)
17. Stad Antwerpen (BE)
18. Rombit (BE)
19. Hejmans Wegen BV (NL)
20. Ubiwhere (PT)
21. European Network of Living Labs (BE)
22. Bronze Software Labs (UK)
23. City of Eindhoven (NL)
24. Mandat International (CH)
25. City of Carouge (CH)
26. UDG Alliance (CH)
27. Korea Electronics Technology Institute (KR)
28. Fondo de Información y Documentación para la Industria (MX)
29. Instituto Tecnológico de Estudios Superiores de Monterrey (MX)
30. Amio Ingenieros (MX)

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31. León Municipality (MX)
 32. HOP Ubiquitous (ES)
 33. NEC Laboratories Europe (DE)
 34. Ulike (KR)
 35. Seongnam Industry Promotion Agency (KR)
 36. FIWARE Foundation (DE)
 37. City of Bordeaux (FR)
 38. Open & Agile Smart Cities (BE)

Annex 3: SynchroniCity Ethics & Privacy Guidelines

Ethics and privacy issues will be assessed by the Ethics and Privacy Board.

1. Ethical Guidelines

Compliance with ethical requirements is valued highly in the SynchroniCity project. Applicants will be required to sign an [*Ethical statement*](#)³⁵ during application and a [*Declaration of Honour*](#)³⁶ requiring self-disclosure of matters such as past professional misconduct - as well as a guarantee of future compliance with ethical and legal principles under the SynchroniCity project.

All participants in the project are expected to consider ethics issues throughout its lifecycle - before, during, but also after the pilot period in relation to knowledge exchange and impact activities (such as reporting and publication).

Below are a set of core ethical principles providing general guidance that the winning applicants will need to follow:

1. Respect for general personal data protection principles according to the GDPR European law, by design and by default.
2. Pilots should be conducted with integrity and transparency.
3. Lines of responsibility and accountability should be clearly defined.
4. Independence of pilots should be maintained and where conflicts of interest cannot be avoided they should be made explicit.
5. The rights and dignity of individuals and groups should be respected.
6. Data subjects should be informed and their consent to data collection and processing obtained.
7. Data subjects' rights exercise to be informed, to object, to be forgotten, and to withdraw consent should be ensured.
8. Personal data processing should be conducted in a lawful way.
9. Decisions based solely on automated processing of data should be avoided.
10. Processing of data that may profile data subjects should be excluded.

³⁵ <http://synchronicity-iot.eu/open-call>

³⁶ <http://synchronicity-iot.eu/open-call>

11. Processing of genetic data, biometric data, data concerning health or data concerning a natural person's sex life should be excluded.
12. Profiling of children (under 16) should be prevented and avoided.

2. Privacy Policy

All data collected and/or processed within the SynchroniCity project will need to be compliant with the GDPR regulation.

In this respect, the SynchroniCity open call will involve:

- 2.1 Collection of personal and non-personal data from the open call applicant
- 2.2 Collection and processing of city related data by the winning SMEs or Pilot Groups

2.1 Collection of personal and non-personal data from the open call applicant

By inviting participants to submit a pilot project proposal the SynchroniCity Consortium will collect the participant's personal data submitted by them and processed in accordance with applicable law and data protection with particular regard to the General Data Protection Regulation 2016/679 of the European Parliament and of the Council of 27 April 2016 (*infra* "GDPR"). The processing of your personal data, your privacy and your rights will be based on the principles of fairness, lawfulness, transparency, integrity.

The SynchroniCity consortium has designated Future Cities Catapult (FCC) as Data Controller pursuant to article 4 (7) of the GDPR. In this capacity, FCC kindly asks that you carefully read the contents of the information below prior to giving your consent, as defined in article 4(11) of the GDPR, to the processing of your personal data.

1. Nature of data collected

FCC, in their capacity as Data Controller, collects and processes the personal data that you submit as part of your application to the open call.

You can participate in the open call by submitting your details through the "Submittable" online platform. Through this submission FCC collects personal data: family name, first name, country of residence/registration, personal email address, phone number and the relevant registration number allocated to your application.

Submittable is a US online platform adhered to the European GDPR regulation. You can check the [Privacy Policy of Submittable](https://www.submittable.com/gdpr) here³⁷ for more information on how the relevant data is collected and used. Only in the case of successful applicants, FCC directly collects the bank account details directly from those applicants, for the purpose of allocating the relevant grant funds.

2. The purpose and modalities of the processing for which the data are intended

Your personal information, referring to you as a natural person, or related to the company that you represent, is collected for the purpose of checking the eligibility for funding of the applicants and for the purpose of the obligatory reporting by SynchroniCity to the European Commission.

Your personal data may be processed both by digital and non-digital means, with full respect of the security measures provided by the GDPR.

Additionally, during the pilot period the winning applicants can be asked to participate in interviews or to contribute to communication material on their pilots. Such material, including personal data, will be published in SynchroniCity social media channels, the SynchroniCity website or communicated through relevant press releases.

Finally, we may use the personal data you provide to contact you after the end date of the project, to inform you of similar initiatives and invite you to participate in new activities. For these purposes, we may contact you by email.

We take the security of your personal data seriously and we have followed a privacy-by-design framework in order to ensure that your data is secure at all times.

3. The obligatory or voluntary nature of providing the requested data and the consequences of a potential refusal of providing such data

Providing your personal data for the purpose of registration and submission of your project proposal is not compulsory, yet the refusal to provide such data will preclude you from participating, as it will render you ineligible to receive the grant.

Providing your data for the promotional and marketing purposes described above is optional and requires the relevant prior consent, that you may give by clicking the

³⁷ <https://www.submittable.com/gdpr>

checkbox in the application form on [Submittable](https://synchronicity.submittable.com/submit)³⁸. In the absence of such consent you can still participate in the project, however, the Data Controller and its affiliates and partners cannot send you any further information about similar activities after the conclusion of the project. Your consent, once provided, can be revoked at any time for all the contact modalities (whether traditional, such as paper-based mail, or automated, such as SMS or e-mail), as well as only for one or some of them, by submitting a communication to the Data Controller, without any formality, at the following email address: helpdesk@synchronicity-iot.eu.

4. Entities or categories of entity to whom or which the data may be communicated, or who/which may get to know the data in their capacity as data processors or persons in charge of the processing, and the scope of dissemination of said data

After your personal and identifying data is anonymised by the Data Controller, your remaining data from the open call application will be shared with the open call reviewers, both internal and external members to the SynchroniCity projects that will sign a Declaration of Honour and a declaration of absence of Conflict of Interest prior to the revision. Your proposal will be also shared with the Open Call Evaluation Committee and the Ethics & Privacy Board made of selected members of the SynchroniCity project. All the organisations involved in the revision of the open call application will be considered as Data Processors.

For the purposes of the competition, if you are selected for the grant, your company name will be published on the Synchronicity website together with the name of the project and funding amount (in compliance with EC guidelines for Cascading funding).

5. Your rights of access to, and rectification, of your data

We remind that, in your capacity of natural person, you can exercise your rights against the Data Controller at any time, in accordance with the relevant provisions of the GDPR, by sending an email without formality to helpdesk@synchronicity-iot.eu.

³⁸ <https://synchronicity.submittable.com/submit>.

2.2 Collection and processing of city related data by the winning SMEs or Pilot Groups

The SMEs or Pilot Group participants to the open call will be required to answer a GDPR readiness questionnaire during application.

Immediately after the evaluation of proposals has been concluded and if your project is in the list of finalists, your questionnaire will be sent by email to applicants with a score above the threshold and it may include additional clarification questions from the SynchroniCity consortium. These applicants shall return their responses before the fixed deadline, whenafter the Ethics and Privacy Board (EPB) will make their assessment. In addition, the EPB will assess the following generic aspects of the proposal:

1. If the pilot project is likely to result in a high risk to the rights and freedoms of natural persons (or data subject), even in case of anonymous/anonymized data processing.
2. Whether the proposal takes into account any further likely effect/impact/risk – bot positive or negative – implied by the experiment, in terms of ethics and privacy

The EPB may require carrying out a complete Data Protection Impact Assessment (DPIA) if the project is complex to evaluate with the provided information.

It is important to notice that the open call participants will be the ultimate responsible for the compliance with the GDPR rules.

For this reason, we recommend the following:

- SMEs looking to comply with the GDPR should first carry out a data audit in order to establish factual context such as: what data the company holds, where it is held, third parties who have access, retention issues, security etc.
- Applicants should make sure that decision makers and key people in their organisation are aware that the law is changing to the GDPR in May 2018 and they need to understand the impact this is likely to have.
- Applicants should review the current privacy notices and put a plan in place for making any necessary changes in time for GDPR implementation.

- 
- Applicants should check the procedures to ensure they cover all the rights individuals have, including how you would delete personal data or provide data electronically and in a commonly used format.
 - Applicants should make sure you have the right procedures in place to detect, report and investigate a personal data breach.

Annex 4: Eligible and Ineligible Costs for SMEs and Large Businesses

SMEs

Eligible costs

To be eligible³⁹ for funding the costs must:

- be incurred and paid between your project start and end dates.
- be directly related to the activities listed in section 8.
- be best value for money.
- be indicated in the estimated budget.
- be incurred in connection with the project as described in the application and necessary for its implementation.
- be identifiable and verifiable, in particular recorded in your accounts and in accordance with the accounting standards applicable in your country and according to your organisation's usual cost accounting practices.
- comply with the applicable national law on taxes, labour and social security.

You are allowed to include:

- Staff costs;
- Subcontracting costs;
- Material costs (this does not include large infrastructure costs)⁴⁰;
- Software and data licence costs;
- Travel costs;
- Translation, among others; and
- Indirect costs on the basis of a flat-rate of 25% of the eligible direct costs.

'Direct costs' are costs that are directly linked to the action implementation and can therefore be attributed to it directly. They must not include any indirect costs.

³⁹ Eligible costs are in accordance with the Financial Regulation No 966/2012 and the Horizon 2020 Eligible costs for all types of action are in accordance with the Financial Regulation No 966/2012 and the Horizon 2020 Rules for Participation Regulation No 1290/2013.

⁴⁰ Note that in general large infrastructure costs are not eligible except when well justified due to the specific novelty of the infrastructure or the singular aim of the pilot.

'Indirect costs' are costs that are not directly linked to the action implementation and therefore cannot be attributed directly to it.

Regarding 'staff costs', refer to the Guidance Notes in the Budget template which is available in the *Open Call Toolkit for Applicants*.

Regarding subcontracting costs: if necessary to execute the project, you may subcontract part of the activities in the project. Subcontracting may cover only a limited part of the pilot. If you need a substantial part of the project to be carried out by a third party, they should be invited as partners⁴¹. Note that that subcontracting may not be rewarded to any SynchroniCity partner or part thereof due to conflict of interest the SynchroniCity cannot fund projects where funds are awarded to SynchroniCity partners. For more details about subcontracting costs, see *Pilot Agreement*.

The total amount of time and cost will be reviewed before approval for funding. More information about funding found in the *Pilot Agreement*⁴².

Ineligible costs

Ineligible costs are mainly costs that do not comply with the conditions set out above, in particular:

- costs related to return on capital;
- debt and debt service charges;
- provisions for future losses or debts;
- interest owed;
- doubtful debts;
- currency exchange losses;
- bank costs charged by the beneficiary's bank for transfers from the Agency;
- excessive or reckless expenditure;
- deductible VAT;
- costs incurred during suspension of the implementation of the action;
- Large Infrastructure for open call pilot cities.

⁴¹ Note that the partners need to be eligible to apply.

⁴² <https://synchronicity-iot.eu/open-call/support/>.

Large Businesses

Eligible costs

To be eligible⁴³ for funding the costs must:

- be incurred and paid between your project start and end dates;
- be directly related to the activities listed in the in the previous section 8b;
- be best value for money;
- be indicated in the estimated budget;
- be incurred in connection with the project as described in the application and necessary for its implementation;
- be identifiable and verifiable, in particular recorded in your accounts and in accordance with the accounting standards applicable in your country and according to your organisation's usual cost accounting practices; and
- comply with the applicable national law on taxes, labour and social security.

You are allowed to include:

- Staff costs;
- Travel costs;
- Indirect costs on the basis of a flat-rate of 25% of the eligible direct costs.

'Direct costs' are costs that are directly linked to the action implementation and can therefore be attributed to it directly. They must not include any indirect costs.

'Indirect costs' are costs that are not directly linked to the action implementation and therefore cannot be attributed directly to it.

Regarding 'staff costs', refer to the Guidance Notes in the Budget template which is available in the *Open Call Toolkit for Applicants*.

⁴³ Eligible costs are in accordance with the Financial Regulation No 966/2012 and the Horizon 2020 Eligible costs for all types of action are in accordance with the Financial Regulation No 966/2012 and the Horizon 2020 Rules for Participation Regulation No 1290/2013.

Ineligible costs

Ineligible costs are mainly costs that do not comply with the conditions set out above, in particular:

- costs related to return on capital;
- debt and debt service charges;
- provisions for future losses or debts;
- interest owed;
- doubtful debts;
- currency exchange losses;
- bank costs charged by the beneficiary's bank for transfers from the Agency;
- excessive or reckless expenditure;
- deductible VAT;
- costs incurred during suspension of the implementation of the action;
- Subcontracting costs;
- Material costs;
- Software and data licence costs;
- Translation, among others; and
- Infrastructure for the open call pilot cities.

Annex 5: List of Countries eligible for Funding

The list of countries from which SMEs and other businesses legally registered may apply.

EU Member States

Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom.

Horizon 2020 Associated Countries⁴⁴

Iceland, Norway, Albania, Bosnia and Herzegovina, the Former Yugoslav Republic of Macedonia, Montenegro, Serbia, Turkey, Israel, Moldova, Switzerland, Faroe Islands, Ukraine, Tunisia, Georgia, Armenia.

⁴⁴ Source: http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/3cpart/h2020-hi-list-ac_en.pdf

Annex 6: What do I need to do to file a Complaint?

If you think that the submission of your proposal was not entirely successful due to a technical error on the side of the SynchroniCity team, the applicant/coordinator may make a complaint by e-mail to helpdesk@synchronicity-iot.eu entitled "Complaint Open Call Process - *"name of SME Lead Applicant"*". For the complaint to be admissible it must be filed **within 5 calendar days** following that of the call closure on 30 September 2018 at 17:00 CEST (GMT+2, Brussels Time). The applicant will receive an acknowledgement of receipt the same or next working day.

The Open Call Evaluation Committee will gather to discuss and assess the complaint. This will be also assessed by the internal lawyer. The applicant will be notified about the outcome of their complaint as soon as possible and at latest within the time indicated in the acknowledgment of receipt. If the feedback is in agreement with the complaint, the OCEC will let the applicant know about the next steps to fix the issue. If the feedback is in disagreement with the complaint, there will be no further action.

Annex 7: SynchroniCity Open Call Legal Terms and Conditions

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1. Introduction and Background to the Project

1.1 The SynchroniCity Project is an EU-funded initiative under the Horizon 2020 Framework Programme for Research and Innovation (2014-2020) (**SynchroniCity**). It is one of the IoT European Large-Scale Pilot Projects currently operating. This project is being implemented by 38 partners from 13 countries around the world between 2017 and 2019. SynchroniCity opens up a global IoT market where cities and businesses develop shared digital services to improve the lives of citizens and grow local economies.

1.2 The purpose and scope of this Annex ("**Legal Terms & Conditions**"), the SynchroniCity open call guides for New City Applicants cities and for SMEs and corporate applicants together with the application templates ("**Open Call Documentation**"), the SynchroniCity Framework guide for applicants ("**Framework Guide**") and any other supporting documents is to explain in further detail the requirements of Future Cities Catapult on behalf of the SynchroniCity consortium partners (the "**Lead Organisation**") and the open call process for submitting an open call proposal.

1.3 Unless the context otherwise requires, words, expressions and abbreviations that have been capitalised, shall have the meanings prescribed in the Pilot Agreement as applicable. If there is a conflict between the terms in this document and the Pilot Agreement, the Pilot Agreement shall take precedence.

2. Open Call Conditions and Contractual Requirements

This section of the Legal Terms and Conditions sets out the Lead Organisation's contracting requirements, general policy requirements, and the general open call conditions relating to this open call process ("**Open Call Process**").

2.1 Contracting requirements

- 2.1.1 The appointed applicant(s) will be expected to participate in the pilot in at least three pilot cities. These cities could be the eight core pilot cities (Antwerp, Carouge, Helsinki, Eindhoven, Milan, Manchester, Santander, Porto) or any New City Applicant that may participate in SynchroniCity. Please refer to the Open Call Guide for Applicants for more details.
- 2.1.2 The Lead Organisation's contracting and commercial approach in respect of the required products and/or services is set out in the pilot agreement ("**Pilot Agreement**"). By submitting an open call proposal, you are agreeing to be bound by the terms of the Legal Terms and Conditions, the relevant Open Call Documentation, and the Pilot Agreement without further negotiation or amendment. We would draw applicants attention to Annex 6 of the guide within the Open Call Documentation on how to file a complaint if applicants wish to raise technical issues following the outcome of the Open Call Process.
- 2.1.3 The Pilot Agreement awarded will be for a duration of 6 months without an option for an extension. In the exceptional event of unexpected delays, due to external causes out of control of the applicant(s) and/or the Lead Organisation, the Lead Organisation could agree to an extension of the pilot duration. The Lead Organisation reserves the right to have the final decision on whether the Pilot Agreement will be extended.
- 2.1.4 In the event that an applicant considers there is an error or inconsistency in the Pilot Agreement, the Lead Organisation may in its discretion amend the Pilot Agreement to correct the error or inconsistency. In such circumstances, applicant(s) are required to submit a clarification request via email to helpdesk@synchronicity-iot.eu Requests should have the object 'Inconsistency in the PA' and they will need to be supported by robust evidence⁴⁵. Requests can be sent before the deadline for open call proposals to be submitted, 30 September 2018 at 17:00 CEST (GMT+2, Brussels

⁴⁵ Robust evidence must include as a minimum: (a) The reference to the document, i.e. section and article with details of the potential error/inconsistency, (b) The rationale of the error/inconsistency, based possibly on legal reference, and (c) The proposed amendment.

Time) (**Open Call Deadline**). Following such requests, the Lead Organisation may issue a clarification change to the Pilot Agreement that will apply to all applicants submitting an open call proposal.

2.1.5 The Lead Organisation is under no obligation to consider any clarifications / amendments to the Pilot Agreement proposed following the Open Call Deadline. Any proposed amendments that received from an applicant as part of its open call proposal shall entitle the Lead Organisation to reject that open call proposal and to disqualify that applicant from this Open Call Process.

2.2 General Policy Requirements

2.2.1 By submitting an open call proposal in connection with this Open Call Process, applicants confirm that they will, and that they shall ensure that any consortium members and/or subcontractors will, comply with all applicable laws, codes of practice, statutory guidance and applicable Lead Organisation policies relevant to the products and/or services being supplied.

2.3 General conditions ("Open Call Conditions")

2.3.1 Application of these Open Call Conditions – In participating in this Open Call Process and/or by submitting an open call proposal it will be implied that you accept and will be bound by all the provisions of the Legal Terms and Conditions, the Open Call Documentation, the Framework Guide and the Pilot Agreement (together the Documentation) without further negotiation or amendment. Accordingly, open call responses should be on the basis of and strictly in accordance with the requirements of the Documentation.

2.3.2 Third party verifications – Your open call proposal is submitted on the basis that you consent to the Lead Organisation carrying out all necessary actions to verify the information that you have provided, and the analysis of your open call proposal being undertaken by one or more third parties commissioned by the Lead Organisation for such purposes.

2.3.3 Information provided to applicants – Information that is supplied to applicants as part of this Open Call Process is supplied in good faith. The information contained in the Documentation and in any related written or oral communication is believed to be correct at the time of issue, but the Lead Organisation will not accept any liability for its accuracy, adequacy or completeness and no warranty is given as such. This

exclusion does not extend to any fraudulent misrepresentation made by or on behalf of the Lead Organisation.

2.3.4 Applicants to make their own enquiries – You are responsible for analysing and reviewing all information provided to you as part of this Open Call Process and for forming your own opinions and seeking advice as you consider appropriate. You should notify the Lead Organisation promptly of any perceived ambiguity, inconsistency or omission in the Documentation and/or in any information provided to you as part of this Open Call Process.

2.3.5 Amendments to the Documentation – At any time prior to the Open Call Deadline, the Lead Organisation may amend the Documentation. Any such amendment shall be issued to all applicants, and if appropriate to ensure applicants have reasonable time in which to take such amendment into account, the Open Call Deadline shall, at the discretion of the Lead Organisation, be extended. Your open call proposal must comply with any amendment made by the Lead Organisation in accordance with this paragraph 2.3.5 or it may be rejected.

2.3.6 Compliance of open call proposal submission – Any products and/or services offered should be on the basis of and strictly in accordance with the Documentation and all other documents and any clarifications or updates issued by the Lead Organisation as part of this Open Call Process.

2.3.7 Format of open call proposal submission – Open call proposals must comprise the relevant documents specified by the Lead Organisation completed in all areas and in the format as detailed in the relevant Open Call Documentation. Any documents requested by the Lead Organisation must be completed in full and submitted by the Open Call Deadline via [the portal]. It is, therefore, important that you read the Documentation carefully before completing and submitting your open call proposal.

2.3.8 Modifications to open call proposals documents once submitted. Please note that this is an exceptional procedure. In the unlikely event that the applicant(s) will need to modify an open call proposal after it has been submitted, this is still possible before the Open Call Deadline. Applicant(s) will need to send a change request to the Lead Organisation via email at helpdesk@synchronicity.com, writing in the object '*Proposal amendment request*'. The amendment request must include in the email the details of the main contact and the proposal reference. The Lead Organisation will proceed to re-open the proposal and the applicant(s) will be able to amend it. In order

to be accepted, the applicant(s) must re-submit the amended proposal by clicking on the Submission button.

2.3.9 Rejection of open call proposals or other documents – An open call proposal or any other document requested by the Lead Organisation may be rejected which:

1. contains gaps, omissions, misrepresentations, errors, uncompleted sections, or changes to the format of the Documentation provided;
2. contains hand written amendments which have not been initialled by the authorised signatory;
3. does not reflect and confirm full and unconditional compliance with all of the instructions in the Documentation issued by the Lead Organisation;
4. contains any caveats or any other statements or assumptions qualifying the open call proposal that are not capable of evaluation in accordance with the evaluation model or requiring changes to any documents issued by the Lead Organisation in any way;
5. is not submitted in a manner consistent with the provisions set out in the Documentation;
6. is received after the Open Call Deadline; or
7. is not submitted in English.

2.3.10 Disqualification – If you breach these Legal Terms and Conditions, if there are any errors, omissions or material adverse changes relating to any information supplied by you at any stage in this Open Call Process, if any other circumstances set out in the Documentation and/or in any supporting documents, entitling the Lead Organisation to reject an open call proposal apply and/or if you or your appointed advisers attempt:

1. to inappropriately influence this Open Call Process;
2. to fix or set the price for products or services;
3. to enter into any agreement or arrangement with any other party that such party shall refrain from submitting an open call proposal;
4. to enter into any agreement or arrangement with any other party (other than another party that forms part of your consortium bid or is your proposed sub-contractor) as to form or content of any open call proposal, the prices submitted, or offer to pay any sum of money or valuable consideration to any party to effect changes to the form or content of any other open call proposal;
5. to collude in any other way;

6. to misrepresent in relation to its open call proposal, its expression of interest or the Open Call Process;
7. to engage in direct or indirect bribery or canvassing by you or your appointed advisers in relation to this Open Call Process; or
8. to obtain information from any of the employees, agents or advisors of the Lead Organisation concerning this Open Call Process (other than as set out in the Documentation) or from another applicant or another open call proposal,
9. the Lead Organisation shall be entitled to reject your open call proposal in full and to disqualify you from this Open Call Process. Subject to the "Liability" Open Call Condition below, by participating in this Open Call Process you accept that the Lead Organisation shall have no liability to a disqualified applicant in these circumstances.

2.3.11 Open Call costs – Applicants are responsible for obtaining all information necessary for preparation of your open call proposal and for all costs and expenses incurred in preparation of the open call proposal. Subject to the "Liability" Open Call Condition below, you accept by your participation in this Open Call Process, including without limitation the submission of an open call proposal, that you will not be entitled to claim from the Lead Organisation any costs, expenses or liabilities that you may incur in participating in this Open Call Process irrespective of whether or not your open call proposal is successful.

2.3.12 Rights to cancel or vary this Open Call Process - By issuing the Documentation, entering into clarification communications with applicants or by having any other form of communication with applicants, the Lead Organisation is not bound in any way to enter into any contractual or other arrangement with you or any other applicant. It is intended that the remainder of this Open Call Process will take place in accordance with the provisions of the Documentation, but the Lead Organisation reserves the right to terminate, suspend, amend or vary at any time (to include, without limitation, in relation to any timelines or deadlines, or re-inviting applicants on the same or any alternative basis) this Open Call Process and/or the Documentation by notice to all applicants in writing. Subject to the "Liability" Open Call Condition below, the Lead Organisation will have no liability for any losses, costs or expenses caused to you as a result of such termination, suspension, amendment or variation.

2.3.13 No commitment to any course of action – The Lead Organisation shall not be committed to any course of action as a result of:

- issuing the Legal Terms and Conditions and/or other Documentation;
- communicating with an applicant or an applicant's representative or agent in respect of the Documentation; or
- any other communication between the applicant and any other party.

2.3.14 Consortium Members and sub-contractors – It is your responsibility to ensure that any staff, consortium members, sub-contractors and advisers abide by these Open Call Conditions and the requirements of the Documentation.

2.3.15 Liability – Nothing in the Legal Terms and Conditions is intended to exclude or limit the liability of the Lead Organisation in relation to fraud or in other circumstances where the Lead Organisation's liability may not be limited under any applicable law.

3. Representations, Assumptions and Provision of Information

3.1. The information in the Documentation is provided to assist applicants in participating in the Open Call Process. It is not intended to form the basis of any investment decision for applicants and should not be considered as an investment recommendation by the Lead Organisation or any of its advisers. The Documentation supersedes any other information provided by the Lead Organisation.

3.2. Applicants are responsible for undertaking any investigations they consider necessary in order to verify any information provided to them during the Open Call Process. Applicants must form their own opinions, making such investigations and taking such advice as is appropriate regarding the Documentation, their open call proposal, any associated information provided by the Lead Organisation, and any response to clarification questions by the Lead Organisation.

3.3. Applicants should form their own conclusions about the methods and resources needed to meet the requirements in the Open Call Process. In particular, the Lead Organisation does not accept liability for statements, representations, writings, dialogue, understandings or information provided by the Lead Organisation in connection with the Open Call Process.

3.4. The Lead Organisation does not accept any responsibility for any assumptions and calculations made by the applicant of the resources required in meeting the Lead Organisation's requirements.

4. Confidentiality and Disclosure Obligations

4.1. All information supplied to you by the Lead Organisation, including the Documentation and all other documents relating to this Open Call Process, either in writing or orally, must

be treated in confidence and not disclosed to any third party (save to your professional advisers, consortium members and/or sub-contractors strictly for the purposes only of helping you to participate in this Open Call Process and/or prepare your open call proposal) unless the information is already in the public domain or is required to be disclosed under any applicable laws.

- 4.2. You shall not disclose, distribute, copy or reproduce any of the information supplied to you as part of this Open Call Process other than for the purposes of preparing and submitting an open call proposal. There must be no publicity by you regarding the Open Call Process or of the future award of any contract unless the Lead Organisation has given express written consent to the relevant communication.
- 4.3. The Documentation shall remain the property of the Lead Organisation and must be returned to the Lead Organisation on demand.
- 4.4. The Lead Organisation reserves the right to disclose all documents relating to this Open Call Process, including without limitation your open call proposal, to any employee, third party agent, adviser or other third party involved in the open call procurement in support of, and/or in collaboration with, the Lead Organisation. The Lead Organisation further reserves the right to disclose information in connection with performance under the Pilot Agreement in accordance with any public-sector transparency policies (as referred to below). By participating in this Open Call Process, you agree to such disclosure and/or publication by the Lead Organisation in accordance with such rights reserved by it under this paragraph.
- 4.5. The applicants acknowledge that the Freedom of Information Act 2000 ("**FOIA**"), the Environmental Information Regulations 2004 ("**EIR**"), and public sector transparency policies, including the placing of contract award notices on the Contracts Finder database, may apply to the information disclosed/used by the Lead Organisation and members of the SynchroniCity consortium in the course of SynchroniCity (including the existence and terms of any contracts entered into with the applicant(s) (together the "**Disclosure Obligations**") and to the extent that they do, the applicant agrees to be bound by and comply with such requirements.
- 4.6. You should be aware of the Lead Organisation's obligations and responsibilities under the Disclosure Obligations to disclose information held by the Lead Organisation. Information provided by you in connection with this Open Call Process, or with any contract that may be awarded as a result of this exercise, may therefore have to be disclosed by the Lead

Organisation under the Disclosure Obligations, unless the Lead Organisation decides that one of the statutory exemptions under the FOIA or the EIR applies.

4.7. If you wish to designate information supplied as part of your open call proposal or otherwise in connection with this Open Call Process as confidential, you must provide clear and specific detail as to:

1. the precise elements which are considered confidential and/or commercially sensitive;
2. why you consider an exemption under the FOIA or EIR would apply; and
3. the estimated length of time during which the exemption will apply.

4.8 The use of blanket protective markings of whole documents such as “commercial in confidence” will not be sufficient. By participating in this Open Call Process, you agree that the Lead Organisation should not and will not be bound by any such markings.

4.9 In addition, marking any material as “confidential” or “commercially sensitive” or equivalent should not be taken to mean that the Lead Organisation accepts any duty of confidentiality by virtue of such marking. You accept that the decision as to which information will be disclosed is reserved to the Lead Organisation, notwithstanding any consultation with you or any designation of information as confidential or commercially sensitive or equivalent you may have made. You agree, by participating further in this Open Call Process and/or submitting your open call proposal, that all information is provided to the Lead Organisation on the basis that it may be disclosed under the Disclosure Obligations if the Lead Organisation considers that it is required to do so and/or may be used by the Lead Organisation in accordance with the provisions provision of the Legal Terms and Conditions.

4.10 Open Call responses are also submitted on the condition that the successful applicant will only process personal data (as may be defined under any relevant data protection laws) that it gains access to in performance of the Pilot Agreement in accordance with the Lead Organisation’s instructions and will not use such personal data for any other purpose. The successful applicant will undertake to process any personal data on the Lead Organisation’s behalf in accordance with the relevant provisions of any relevant data protection laws including the General Data Protection Regulation (Regulation (EU) 2016/679), and to ensure all consents required under such laws are obtained.

5. Clarification Questions

5.1 Clarification questions about the Open Call Process or the Documentation should be submitted in writing to the Online Forum or to helpdesk@synchronicity.eu for private

question before the Open Call Deadline. The Lead Organisation is under no obligation to respond to clarification requests received after such date.

- 5.2 Any clarification questions sent to helpdesk@synchronicity.eu should clearly reference the appropriate paragraph in the Documentation and, to the extent possible, should be aggregated rather than sent individually.
- 5.3 The Lead Organisation reserves the right to issue any clarification request made by you, and the response, to all applicants in a suitably anonymous form, unless you expressly require it to be kept confidential at the time the request is made and provide the reason. The Lead Organisation will consider the contents of the request, but it reserves the right to issue any clarification request and the response to other applicants if it considers the request not to be confidential.
- 5.4 The Lead Organisation may at any time request further supplemental or clarifying information from applicants to verify or clarify any aspects of their open call proposal or other information they may have provided. Should you not provide supplemental or clarifying information to the Lead Organisation by any deadline notified to you, your open call proposal may be rejected in full and you may be disqualified from this Open Call Process. This does not create an obligation for the Lead Organisation to have to make such requests.

6. Waiver

- 6.1. Applicants are advised that nothing herein or in any other communication made between the Lead Organisation and any other party, or any part thereof, shall be taken as constituting a contract, agreement or representation between the Lead Organisation and any other party (save for a formal award of contract made in writing on behalf of the Lead Organisation), nor shall they be taken as constituting a contract, agreement or representation that a contract shall be offered in accordance herewith or at all.

7. Proposal Validity

- 7.1. Your open call proposal must remain open for acceptance by the Lead Organisation for a period of ninety (90) days after the Open Call Deadline. An open call proposal not valid for this period may be rejected by the Lead Organisation. The Lead Organisation reserves the right to request that the applicant extends this period where the Lead Organisation considers it necessary to do so.

8. Applicant Conduct and Conflicts of Interest

- 8.1 Applicants are responsible for ensuring that no conflicts of interest exist between the applicant and the SynchroniCity partner organisations. A conflict of interest includes any situation where the impartial and objective implementation of the action is compromised for reasons involving economic interest, political or national affinity, family or emotional ties or any other shared interest. Any applicant who fails to comply with this requirement may be disqualified from the Open Call.
- 8.2 The Lead Organisation require that any potential, actual or perceived conflict of interest as a result of submitting an open call proposal are to be identified in writing to the Lead Organisation during the Open Call Process. Applicants are required to outline what safeguards they would be put in place to mitigate the risk of the potential, actual or perceived conflict of interest.
- 8.3 Questions relating to any potential, actual or perceived conflicts of interest can be posed to the Lead Organisation at any time during the Open Call Process. Any changes to the applicant's open call proposal in respect of conflicts of interest during this Open Call Process should be notified to the Lead Organisation immediately.

9. Compliance with the GDPR

- 9.1 The Lead Organisation and the SynchroniCity consortium is committed to complying with Regulation (EU) 2016/679, General Data Protection Regulation (GDPR), in processing of personal data related to the SynchroniCity consortium, including the Open Call.
- 9.2 In submitting a proposal, applicants agree to comply with the GDPR, regarding all personal data that might be included in the proposal or that might be used during the deployment of the project, in case of success of the proposal.
- 9.3 In case of breach of article 9.2, the applicant will be the only liable party. No responsibilities will be on the Lead Organisation and/or the SynchroniCity consortium.

10. Governing Law and Jurisdiction

- 10.1. The Legal Terms and Conditions and any dispute or claim (including non-contractual disputes or claims) arising out of or in connection with it or its subject matter or formation shall be governed by and construed in accordance with the law of Belgium.
- 10.2. Each party irrevocably agrees that the courts of Belgium shall have exclusive jurisdiction to settle any dispute or claim (including non-contractual disputes or claims) arising out of or in connection with the Legal Terms and Conditions or its subject matter or formation.

SYNCHRONICITY

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Follow us on Facebook
[@SynchroniCityiot](https://www.facebook.com/SynchroniCityiot)

Or send us an email
info@synchronicity-iot.eu



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This document reflects only the author's view and that the Commission is not responsible for any use that may be made of the information it contains

Contributing partners



Switzerland



South Korea



Mexico

ANNEX 4:

Open Call SynchroniCity Framework

SYNCHRONICITY

OPEN CALL

SYNCHRONICITY FRAMEWORK



This project has received funding from
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under grant agreement No732240

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CHANGELOG

Version number	Date	Comment
1.6	22.07.2018	6th version

1. Introduction

SynchroniCity aims to foster the development of a global Internet of Things (IoT) market where cities and businesses develop shared digital services to improve the lives of citizens and grow local economies.

Cities in Europe and around the globe develop at a different pace with respect to implementing, distributing and managing IoT-enabled services for their citizens. This spectrum ranges from those cities that have not yet embedded any IoT digital architecture to others that are making use of advanced features of their IoT architectures to deliver enhanced smart city services. Cities have therefore their own and distinct IoT architecture, with their own specific components that are adopted to the needs of the city and the reality of its context.

The SynchroniCity project has designed and created the SynchroniCity architectural framework having in mind the inclusion of this diversity. At the core is the Minimal Interoperability Mechanisms (MIMs) of the Open & Agile Smart Cities ([OASC](http://oascities.org/about-oasc/))¹ network with over 100 cities in 24 countries.

The SynchroniCity framework is not aiming at imposing a new platform or even architecture for cities to enable the realisation of a global market but instead is proposing a more flexible approach where only key interoperability points and mechanisms, based on standard interfaces, are identified for cities to adopt whilst maintaining their local preferences, in terms of architecture and suppliers. Built around OASC MIMs, this engenders the common technical ground required for a global market for IoT-enabled services for cities and communities. We believe that only using this open and adaptable methodology a common market can become a reality.

We think that creating a simplified, open and agile digital market across borders will help cities and its citizens to get better services. It will also help businesses of all sizes to transparently compete and easily scale their products and solutions. This common technical foundation will enable the identification and development of smart city standards that will allow to establish an effective data marketplace for all, where data will be transparently traded in a distributed manner.

¹ <http://oascities.org/about-oasc/>.

2. The SynchroniCity Architecture

Built on the neutral branding of OASC, with the minimal interoperability mechanisms for standards-based innovation and procurement, the high-level reference architecture model for IoT-enabled smart cities that SynchroniCity has defined provides a set of logical components and functionalities that can enable different cities to be actively part of a global market for IoT-enabled urban services.

The SynchroniCity reference architecture is the result of a thorough analysis of different cities and their city platforms as well as current IoT enablers and standards, and can be categorised by the following aspects:

- **Existing infrastructures and use case requirements in cities** drove the definition of the functions and components of the architecture. The SynchroniCity reference architecture recalls a layered approach used to categorise the technical infrastructure of cities stressing the aspects of southbound integration (IoT infrastructure), context management (to interconnect between applications and allow for workflow efficiency), security and privacy and northbound API (IoT-based services and the corresponding applications). These main layers, further extended in the global reference architecture picture, can be considered the central pillars of all the cities IoT architectures and for this reason, are directly reflected in the SynchroniCity one.
- **Reuse of standards and existent approaches:** SynchroniCity logical components try to cover the common functionalities identified in the most relevant smart city architectures, maintaining a very generic approach that will allow cities to implement the architectural blocks in different ways reusing standard approaches.
- **Open & Agile Smart Cities² (OASC) principles:** the architecture has been designed following the OASC principles:
 - a common standard API for **context information management:** the context data manager is a key component of the SynchroniCity architecture

² <http://oascities.org/>

and the implementation of its NGSI API and the emerging NGSI-LD API is considered an “interoperability mechanism” to enable cities to participate to the SynchroniCity framework.

- a common set of information models: semantic interoperability achieved through the adoption of **common data models** is introduced as a basic requirement to enable re-use of the data for building applications in different cities and domains.
- a set of common standards data publication platforms: the role of data is crucial in SynchroniCity and for this reason, the reference architecture includes **specific data management components** that aim to provide, through standard interfaces, all the functionalities related to data lifecycle management.

The following picture depicts a high-level overview of the Synchronicity architecture and highlights the interoperability points and mechanisms (in red) that SMEs and large business applying for the open call will need to link to in order to integrate their solutions into the SynchroniCity framework. These connecting components are also the ones that new city applicants will need to incorporate during the pilot phase if they are successful in the open call.

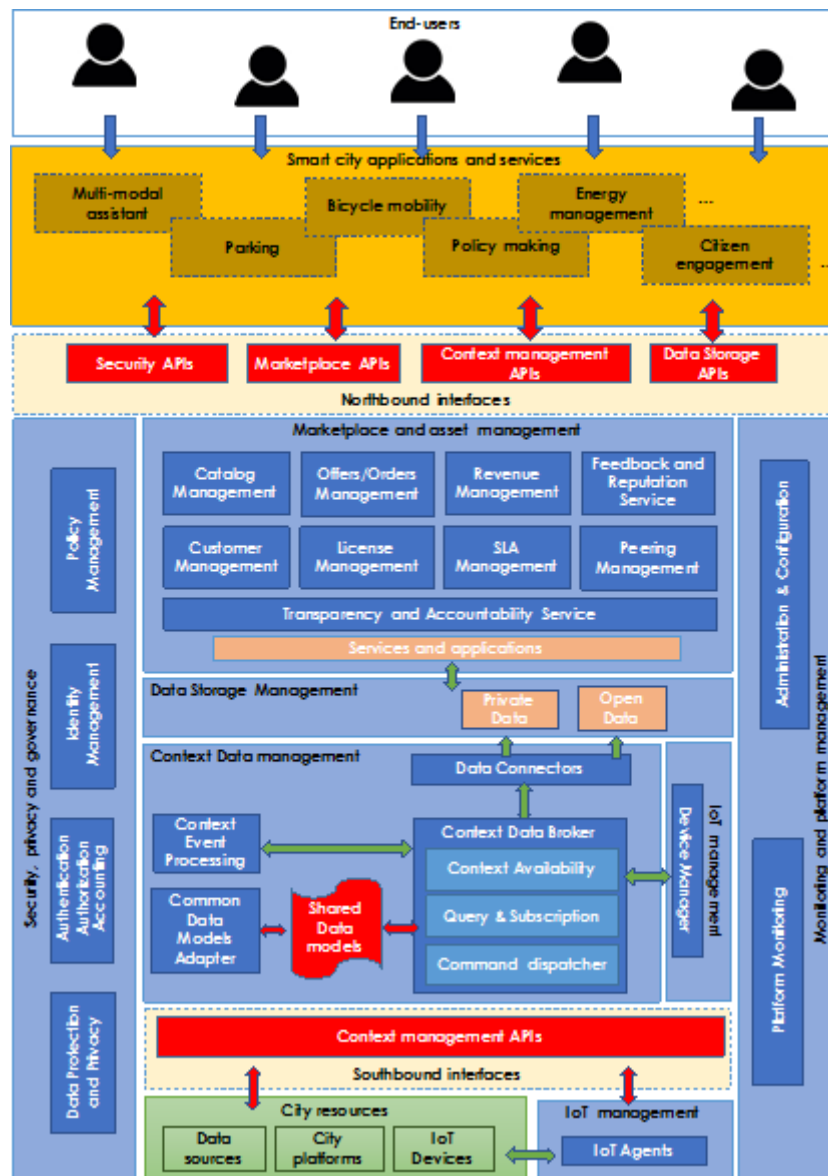


Figure 1: SynchroniCity reference architecture with identified interoperability points and mechanisms.

- City IoT resources and data** represent some of the assets that are provided by the city: these can include IoT devices, historical and open data, existent proprietary platforms and data provided by citizens.
- Southbound interfaces (infrastructure) & connectors:** in order to provide a uniform and standard access to manage city resources, SynchroniCity provides a **Southbound API** that, in conjunction with standard or custom connectors (e.g. protocols adapter) allows to enable interoperability among different technologies and the SynchroniCity framework. This represents one of the relevant “interoperability

points” that should be implemented by cities to be part of the SynchroniCity ecosystem.

- **IoT Management** is the component responsible to interact with the devices that use different standards or protocols making them compatible and available to the SynchroniCity architecture; through its interface this component provides to the Context Management the data coming from Southbound Interfaces layer, handling the creation and the updates of Context Entities and their attributes.
- **Context Data Management:** it is the core of SynchroniCity architecture and it manages the context information coming from IoT devices and other public and private data sources, providing a uniform approach and interface. Context information contains last updates on status information about real world entities defined in a structured way.
- **Data Storage Management** provides functionalities related to the data storage and historical access in the specific context of IoT systems and smart city architecture interacting with heterogeneous sources.
- **IoT Data Marketplace** supports business interactions between data suppliers, that are part of the SynchroniCity ecosystem, and consumers. It will implement a hub to enable digital data exchange for urban data and IoT capabilities providing features in order to manage asset catalogues, orders, revenue management. The IoT data marketplace is further described in Section 3.
- **Security:** this module covers all the security aspects related to three main pillars: data, IoT infrastructure and the framework services, which underpin the applications and services of the cities. Around these pillars, security functionalities provide crucial security properties such as confidentiality, authentication, authorisation, integrity, non-repudiation, access control, etc.
- **Northbound interfaces (applications):** is the set of APIs that provides access to all the platform functionalities (context information, historical data, security features, IoT data marketplace) that will be used by upper services and smart city end-user applications. This layer can be considered an interoperability point because it is the

main way, for SynchroniCity baseline services and external applications, to interact with the architecture and to be part of the digital single market enabled by SynchroniCity. In the upper part of the architecture are shown the end-users smart city applications and services that will rely on the SynchroniCity functionalities and data: in particular, using the same API and data models, the services will be able to work and interact with the different cities, part of SynchroniCity ecosystem, with minimum customisation, simplifying the replications process.

3. The SynchroniCity IoT Data Marketplace and IoT Product Marketplace

Cities have the opportunity to become catalysers for a multitude of data originating from smart devices connected to a gathering infrastructure. Data owners range from businesses that have information that is valuable to local authorities, to citizens or volunteer groups that have information that is valuable to businesses.

IoT data marketplace provides a means of unlocking existing IoT data silos and offer opportunities for generating new revenue streams and new value for all parties. The SynchroniCity vision is to scale these opportunities by envisioning a vibrant IoT data marketplace as a crucial component of the SynchroniCity architecture and a key enabler for the creation of a global market for IoT-enabled urban services with clear licensing agreements, standardised interfaces and common information models. This vision is also shared with the OASC community, which already now encompasses more than 100 cities across the world.

By having an IoT data marketplace, application developers could obtain access to open data from a multitude of sensors and/or actuators made available by assets owners (data providers) to build new applications, thus enabling the creation of new smart city services. It is important noting that application developers will not have access to the sensors and actuators. These will remain in control of the infrastructure owner or IoT service provider. On the other hand, data providers could be incentivised to deploy IoT infrastructures having the opportunity to generate revenue by selling their data on the market, which every user could benefit from. Marketplace providers could benefit from running such a framework by attracting new customers (e.g. data consumers and data providers) and making a profit out of marketplace

transactions. Cities fostering the creation of new smart services could attract useful data providers and increase their return on investment through infrastructure reuse.

The **SynchroniCity IoT Data Marketplace** is the result of a thorough analysis which revealed a set of characteristics that are essential for the successful adoption of an IoT data marketplace. These critical functionalities are being adopted by the 8 core pilot cities (Antwerp, Carouge, Eindhoven, Helsinki, Manchester, Milan, Porto, and Santander) and will be available for the open call applicants. You can find the current status of the adoption of these features by the core pilot cities on our [website](#)³.

These features are the following:

1. **Data catalogue with lookup functions.** Data providers expose their data source offerings in a catalogue, which data consumers can navigate and lookup for specific offerings.
2. **Access control.** Cities are able to decide how to regulate the access to the framework - either by vetting registration requests from both data providers and data consumers or by allowing an open access.
3. **Tools to create license agreements.** Data providers can associate license agreements with their offerings. Agreements include both commercial and open licenses. Furthermore, to better match the expectations of the stakeholders, data providers can fill in license templates with variable content, configurable based on several terms: (i) exclusivity of the data license; (ii) business sectors which the data may be used for; (iii) geographical restrictions for the usage of data (iv) period of validity of the authorisation/right to access data; (v) intended purpose that the data is used for; (vi) authorisation to resell data.
4. **Seamless monetisation of transactions.** The IoT data marketplace currently offers PayPal as a payment method and also supports revenue sharing when transactions involve multiple stakeholders (e.g. data offering owned by multiple parties). Furthermore, the marketplace provider receives a fee for each transaction as an incentive to run the framework.

You can access SynchroniCity IoT data marketplace [here](#)⁴.

³ <https://synchronicity-iot.eu/data-tools-services-in-core-pilot-cities/>.

⁴ <http://iot-data-marketplace.synchronicity-iot.eu>

Beyond the open call, we plan to expand the current version of the marketplace with advanced features that allow to define and monitor Service-Level Agreements (SLAs) related to the IoT data purchased through the marketplace as well as to assess the quality and trustworthiness of IoT data and its providers.

Some of the core pilot cities will be adopting the full version even during the open call piloting phase. For updated information on the implementation of SynchroniCity architecture, you need to visit our website [here](https://synchronicity-iot.eu/data-tools-services-in-core-pilot-cities/)⁵.

We define the basic marketplace modules as a common set of APIs. Specifically, we have built on top of the FIWARE/TMForum Business API Ecosystem and expanded their reference implementation to suit our requirements.

The high-level view of the data marketplace component is shown in Figure 2 and consists of the following modules:

- **Marketplace API.** The core element of the framework and includes several sub-components that expose a set of functions to interact with that. Specifically, the Marketplace API allows data providers to register or import data sources into the framework, and publish offerings containing its description (e.g. version, data model, endpoint URL), and allows data consumers (e.g. service developers) to discover and purchase offerings.
- **Marketplace portal.** An optional module, providing a user interface through which data providers and data consumers can interact with the framework, use the marketplace API, and manage their accounts and information.
- **Security.** It includes three sub-modules: (i) *Identity management* system to store and organise the identities of users; (ii) *Authentication* module to regulate the accesses to the framework; (iii) *Authorisation* module to grant the access to the functionalities and digital assets according to predefined policies.

⁵ <https://synchronicity-iot.eu/data-tools-services-in-core-pilot-cities/>.

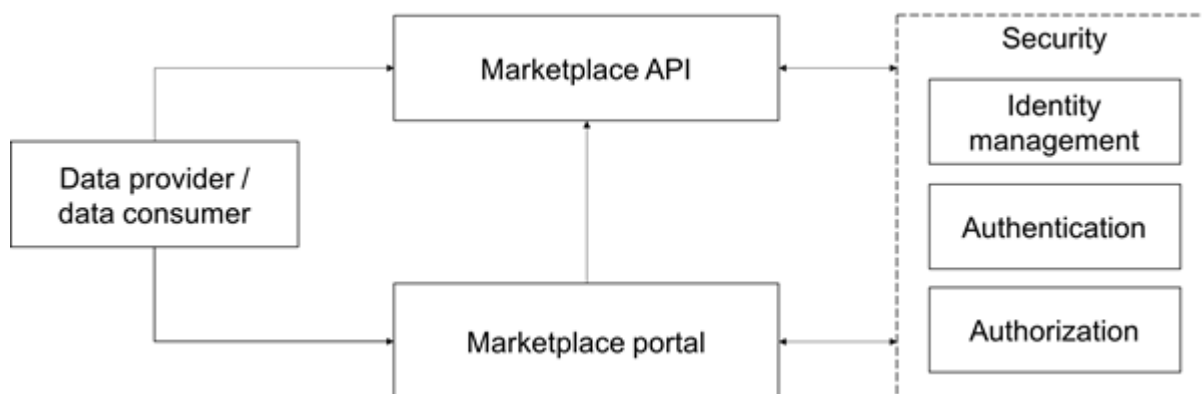


Figure 2: High-level view of the IoT data marketplace framework.

Apart from the IoT data marketplace ("Northbound") which is supported by specific functionality and APIs, SynchroniCity also considers the IoT product market place for IoT devices and solutions ("Southbound") which is highly relevant to fostering a thriving market for IoT-enabled urban services. It is focusing on developing a marketplace for IoT products interoperable with the SynchroniCity framework, providing interested cities for references to find SynchroniCity compliant IoT devices and solutions and help to foster IoT ecosystem.

The Southbound IoT product marketplace can help to find the IoT devices and solutions that are already deployed in SynchroniCity open call core pilot cities in diverse urban services.

4. SynchroniCity and the Smart City Standards

SynchroniCity has a strong focus on standards – existing and emerging – and is aiming at influencing the political and industrial spheres at European and global levels and propose recommendations for cross-domain standards-based innovation and procurement relating to the IoT LSP open calls.

This work will be the result of a joint effort amongst the LSPs (IoF2020, SynchroniCity, ActivAge, MONICA, AutoPilot).

Cross-domain interoperability is recognised as a fundamental barrier to achieving large-scale for IoT-enabled services in Europe as well as globally (e.g. ETSI STF 505). One of the identified paths forward is to separate a full architecture reference model on one hand, and on the other

hand interoperability points and mechanisms, based on emerging specifications and standards.

The standardisation activities linked to SynchroniCity are connected to the OASC Minimal Interoperability Mechanisms. The harmonisation of the heterogeneous smart city market through interoperable common set of IoT related enablers and services will pave the way towards a global adoption of European technologies and standards, in line with the "2016 Rolling Plan on ICT Standardisation" and its follow-up 2017 version established by the Digital Single Market initiative launched by the [EC](#).⁶

Through the open call pilot projects, SynchroniCity will be contributing to relevant standardisation processes and Standards Developing Organisations in connection with ETSI ISG CIM (European Telecommunications Standards Institute Industry Specification Group on Context Information Management) and the ITU-T (International Telecommunication Union-Telecommunication Standardization Sector).

During the pilot phase, the successful open call applicants will be required to provide feedback through bi-monthly reports on the usability of specific elements of the proposed standards, like those referring to data collection, data management, and more specifically to APIs (e.g. ETSI OneM2M r2 and ETSI ISG CIM NGSI-LD API).

Currently, our SynchroniCity teams are working on a preliminary version of the "Context Information Management API Specification" that allows users to provide, consume and subscribe to context information in multiple scenarios and involving multiple stakeholders.

The particularities of the requested information are going to be made available to the successful open call applicants at the time they receive the Pilot Handbook.

⁶ http://ec.europa.eu/newsroom/dae/document.cfm?doc_id=14510.

5. What do I need to know about the SynchroniCity Core Pilot Cities?

5.1 What are the minimum architecture components that the Core Pilot Cities will implement for the Open Call?

The minimum number of components and interoperability mechanisms that the core pilot cities will adopt for the open call are:

- A set of APIs to interact with the SynchroniCity architecture through northbound (IoT applications) and southbound (IoT infrastructure) interfaces. This is based on the [NGSI API standard](#)⁷ and the [preliminary ETSI NGSI-LD API](#) (GS CIM 004)⁸.
- A set of APIs to interact with the SynchroniCity IoT Data Marketplace
- An OAuth2.0 interface to access security features

These components will also need to be adopted by the new city applicants during the piloting phase if their project is selected. More information about new city applicants on how to adopt these components can be found in Section 7.

The basic set of APIs to interact with the SynchroniCity architecture and IoT data marketplace are the following:

⁷ <http://fiware.github.io/context.Orion/api/v2/stable/>

⁸ <http://www.etsi.org/news-events/news/1300-2018-04-news-etsi-isg-cim-group-releases-first-specification-for-context-exchange-in-smart-cities>

Table 1: Interoperability mechanisms of SynchroniCity framework.

Interoperability Point	Description	Specification document (synchronicity-iot.eu/about)	Related Standards [and Baselines]
Context Management API	This API allow to access to real-time context information from the different cities.	Reference Architecture for IoT Enabled Smart Cities (D2.10)	ETSI NGSI-LD prelim API, OMA NGSI, ITU-T SG20*/FG-DPM*
Shared data models	Guidelines and catalogue of common data models in different verticals to enable interoperability for applications and systems among different cities	Guidelines for the definition of OASC Shared Data Models (D2.2) Catalogue of OASC Shared Data Models for Smart City domains (D2.3)	[SynchroniCity RZ + partner data models]
Marketplace API	It exposes functionalities such as catalog management, ordering management, revenue management, SLA, license management etc.	Basic Data Marketplace Enablers (D2.4) Guidelines for the integration of IoT devices in OASC compliant platforms (D2.6)	[TM Forum API]
Security API	API to register and authenticate user and applications in order to access to the SynchroniCity-enabled services.	Reference Architecture for IoT Enabled Smart Cities (D2.10)	OAUTH2
Data Storage API	This API allows to access to historical data and open data of the reference zones.	Reference Architecture for IoT Enabled Smart Cities (D2.10)	ETSI NGSI-LD, DCAT-AP [CKAN]

Note that the core pilot cities are currently adopting the SynchroniCity architecture and its IoT data marketplace. To understand at which stage of their implementation they are during the open call you can visit our [website](https://synchronicity-iot.eu)⁹.

5.2 What datasets are available in each Core Pilot City?

The following [table](#)¹⁰ shows a list of datasets from the different core pilot cities that are available for the open call and can be accessed through the SynchroniCity API. For each dataset is also indicated the specific data model used to describe content, the associated license/s and a price plan if applicable.

The datasets may have open access or restricted access, depending on each city and its context. It will be the responsibility of the open call applicant to ensure these elements are considered in the proposal.

⁹ <https://synchronicity-iot.eu/data-tools-services-in-core-pilot-cities/>.

¹⁰ <https://synchronicity-iot.eu/data-tools-services-in-core-pilot-cities/>.

This information is live as many core pilot cities are currently unlocking the provision of some of the datasets. Please, refer to our [website](#)¹¹ for the latest updates.

5.3 Information about the Core Pilot Cities

For the purpose of the open call and in order to have an overall understanding of the eight core pilot cities, we have developed eight individual city cards for each city that can be found in Annex 1.

With these cards, you will be able to quickly gather information on what are the values of each core pilot city; what are their priorities; the themes and challenges they are interested in; and what data and assets they have available through the SynchroniCity framework. In addition to understanding what is common to the different cities, you will be able to identify other data and assets of the individual cities that could be interesting to consider for the open call application to enhance your project and bring context to the solution you propose. This material could help you decide on the core cities you would like to pilot your IoT-enabled solution in.

Because of the complex reality of the smart city market, SynchroniCity will facilitate a Bonding & Customisation Workshop in London at the beginning of February 2019 for the winning applicants where aspects like contextualisation of the pilot solutions will be discussed between the pilot cities and the winning applicants. More information on the event will be available on our [website](#)¹².

Furthermore, you can find other general information on the core pilot cities on our [website](#)¹³.

6. I am an SME or large business; how do I handle all this information to apply for the open call?

¹¹ <https://synchronicity-iot.eu/data-tools-services-in-core-pilot-cities/>.

¹² <http://synchronicity-iot.eu/events>

¹³ <http://synchronicity-iot.eu/cities>

In this document, we have presented a wealth of information around the SynchroniCity framework that you need to consider when applying for the open call. While getting familiar with the technical and city environment of SynchroniCity is the responsibility of the applicant, we would like to help you in the process. As a result, we have compiled some suggestions that you may want to take into account during the open call process.

1. Have a good understanding of the solution you would like to propose and identify in which open call challenge fits best.
2. Check the table of *Themes & Challenges by Cities* in the *Guide for SME and Large Business Applicants* to see which cities are interested in piloting the challenge you have chosen. You can incorporate new cities through your Pilot Group if you wish but it is your responsibility to build this relationship.
3. Read the pertinent *City Cards* and get an overview of the datasets and assets available in each city. Get also a feeling of what are the values of these cities.
4. Check our [website](https://synchronicity-iot.eu/data-tools-services-in-core-pilot-cities/)¹⁴ for the latest updates on the city data and assets available in the relevant cities through the SynchroniCity architecture. You will need to make use of some of these data and assets for the open call unless you provide your own data. In the latter case, you will need to make your data SynchroniCity compliant.
5. Check on our [website](https://synchronicity-iot.eu/data-tools-services-in-core-pilot-cities/)¹⁵ the readiness level of each relevant city with respect to the SynchroniCity architecture. This will allow you to know which components of the architecture each city has implemented and has them available for the open call. While all cities need to have implemented the minimum requirements of the SynchroniCity architecture, some may have adopted other SynchroniCity advanced features that you may want to make use of. You will need to check this website on a regular basis for updates on the readiness level of the cities.
6. Based on all previous steps, you should be able to have enough information to build your project proposal from a technical point of view. The solution you propose should be tested in at least 3 cities simultaneously.
7. In addition to the previous steps, you may opt to enhance your solution by making it relevant to the context of each city. For this, you can check again the *City Cards* to

¹⁴ <https://synchronicity-iot.eu/data-tools-services-in-core-pilot-cities/>.

¹⁵ <https://synchronicity-iot.eu/data-tools-services-in-core-pilot-cities/>.

understand what other data and assets are available in each relevant city, which you could include in your proposal. If you make use of this additional data, you will be responsible for making it SynchroniCity compliant. This is an activity that can be part of your proposal.

7. I am a city; how should I adopt the interoperability points and mechanisms of the SynchroniCity architecture?

If the proposal of your Pilot Group is successful you will be expected to adopt the minimum required components of the SynchroniCity architecture during the piloting phase of the project. This is because the solution that your Pilot Group will demonstrate in the selected open call pilot cities (including yours) needs to be integrated into the SynchroniCity framework to prove the viability of this digital single market. You can find the list and description of these components in Section 5 of this document.

The precise steps you will need to follow to integrate these components are the following:

1. **Identify your City Assets.** Cities should select which components of the existing city infrastructure, have to be connected with the SynchroniCity framework. It is necessary to identify which datasets should be exposed following the Synchronicity specifications: these datasets can include, for instance, IoT real-time data, historical data and open data.
2. **Implement SynchroniCity API.** It will be necessary to be compliant with the SynchroniCity API. The API can be implemented progressively, in different steps, depending on the technical infrastructure of your city. Security and the Context Management APIs are the basic ones. SynchroniCity project provides existing software components to simplify and speed up this phase.
3. **Harmonise Data Models.** In order to be part of the SynchroniCity ecosystem, all cities need to provide a common semantic level using the same data models. SynchroniCity defines and reuses a set of standard data models for different smart city domains. A new city should adapt its own data models to the SynchroniCity ones: this

phase is also supported by the SynchroniCity project through guidelines and dedicated tools (see [link](#)¹⁶).

4. **Be part of the SynchroniCity Marketplace.** SynchroniCity has the aim of creating an IoT-enabled smart city digital single market. In order to achieve this objective SynchroniCity provides a common marketplace for IoT data and IoT products in which city data can be offered to different stakeholders through specific business models, with or without monetisation models.

The SynchroniCity project partners will be able to provide you with general support guidelines for the adoption of the SynchroniCity architecture, but it is important to notice that these will not provide technical support on-the-ground to the new cities. It is therefore recommendable that, if you do not have technical resources in your city, you have links with a technical organisation that can locally support the integration of the architecture.

¹⁶ <https://synchronicity-iot.eu/data-tools-services-in-core-pilot-cities/>.

SYNCHRONICITY

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Contributing partners



Switzerland



South Korea



Mexico

SYNCHRONICITY

ANNEX 1: CITY CARDS



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No732240

Co-funded by



Switzerland



South Korea



Mexico

ANTWERP

Population: 520,500
Urban area: 204.5 km²

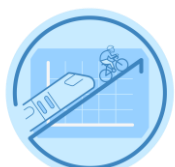
Currently Digipolis and the City of Antwerp have established the Antwerp City Platform as a Service (ACPaaS) that connects and discloses relevant operational city-owned and city-linked systems.

Antwerp demonstrates its ambition as a Smart City and invites the local ecosystem to explore, pilot and validate new innovations in for example the domains of mobility and logistics and environmental wellbeing.

THEMES & CHALLENGES



Encouraging more non-motorised transport



Enabling and improving mobility as a service



Reducing air and noise pollution



Climate Change mitigation



Open challenge

CITIES VALUES & PRIORITIES

- The city of Antwerp is looking for solutions that help to achieve a 50/50 modal split in the Antwerp region by 2030.
 - A modal shift from cars or trucks to more sustainable and less congestion-sensitive modes, both cycling and multimodal trips.
 - A time shift for trips and transports.
 - A mental shift about the need for mobility.
- The city of Antwerp wants to be an exemplary 'ecocity' and aims to be climate-neutral by 2050.
 - Environmental quality (air quality/noise pollution).
 - Circular economy.
 - Waste management

What's available in the City?

* Please, check website for details and latest updates

DATA

Government sites

Datasets on the Antwerp City Platform ACPaaS.

e.g. LEZ Inbound car traffic counters (15 minute aggregated from ANPR),
Bike tracking data, Big Belly usage.

<http://portaal-stadantwerpen.opendata.arcgis.com/datasets>

Datasets on opendata.vlaanderen.be

More than file based 5000 datasets
e.g. Traffic counters updated and aggregated per minute.
309 API based datasets from Antwerp
e.g. Bike sharing and public transport stations.

Datasets on <https://stadincijfers.antwerpen.be/databank/>

Public transport sites

Realtime data API for train (NMBS).

Realtime data API for tram and bus (DeLijn)

Contact Digipolis if you want to integrate the datasets from the government sites in your solution. Digipolis will assess the feasibility to harmonize the dataset to NGSI data models on our local Synchronicity framework. *(Full context information management capabilities through Orion and STH Comet APIs will be implemented by September). The use of data is free of charge. Authentication is based on the OAuth2 standard.*

ASSETS

Lora and Sigfox networks

CAROUGE

Population: 21,000 City of Carouge

Urban area: 2.7 km²

Pilot area: Carouge, Geneva

Carouge sits next to the Lake Lemman and the city of Geneva. Population of the Canton of Geneva: 500,000 habitants. Geneva hosts a lot of international organization such as the United Nation, the ITU, the Red Cross, among others.

Carouge has 21,000 habitants and 25,000 jobs and is oriented toward the well being of its citizens, innovation, transparency and privacy. The city welcomes any IoT projects that bring value to its employees or the population.

THEMES & CHALLENGES



Encouraging more non-motorised transport



Increasing citizen engagement in decision making



Increasing a greater level of diversity in political engagement



Reducing air and noise pollution



Climate Change mitigation



Open challenge

CITIES VALUES & PRIORITIES

- Strong commitment to citizens to enhance of the well being
- To facilitate and help the work of the city employees
- GDPR compliant Safeguarding public interest, ensuring transparency and privacy.
- Development of citizen-centric services
- Increasing the link between the population and the city and creating links cross-generations
- Use of clean energy (solar), efficient use of water, water quality control

What's available through the SynchroniCity technical environment?

* Please, check website for details and latest updates

DATA

- Mobility public transports
- Air quality
- Noise
- Parking (indoor & outdoor)
- Meteorology

ASSETS

- LWAN (LoRaWAN) network
- Fiber
- Wifi
- Noise Monitoring as Smart parking sensors

What's available in the City?

DATA

- Smart parking
- Noise monitoring
- Public transportation
- Weather conditions

ASSETS

- LoRa wan and fiber networks are available along with free wifi for any connected devices
- Smart Parking - parking slot occupancy (300 + 16)
- 3D Street Noise Monitoring (1000)
- Camera's for street security
- Tourist App
- Public Wi-Fi that covers whole City of Carouge

EINDHOVEN

Population: 228,000
Urban area: 88.87 km²
Pilot area:

Elected as “Smartest Region in the world” and one of the 7 best global cities for startups, Eindhoven is internationally recognized as a global hotbed for (social) innovation.

Today the City of Eindhoven is at the heart of the so-called Brainport Eindhoven region: a strong knowledge intensive manufacturing region, specialized in ‘high tech systems’ and ‘design’, and one of Europe’s most innovative and R&D intensive areas (www.brainport.nl).

THEMES & CHALLENGES



Encouraging more non-motorised transport



Enabling and improving mobility as a service



Open challenge



Reducing air and noise pollution



Climate Change mitigation



Increasing a greater level of diversity in political engagement



Increasing citizen engagement in decision making

CITIES VALUES & PRIORITIES

- Privacy by design approach and citizen control of their own data
- Safeguarding public interest, transparency and mutual trust
- Citizen-centric services and collaboration
- Energy, Green & Water, Health, and Education.

What’s available through the SynchroniCity technical environment?

* Please, check website for details and latest updates

What’s available in the City?

DATA

- Road infrastructure and furniture
- Origin-Destination matrices- Only Origin analysis
- Disruptive event notifications
- Traffic counters for all travel modes (including bike, pedestrian counts)
- Pollution / air quality levels - Areas
- Park (and ride) facilities

ASSETS

- V2I communication - Basic Safety Message
- Traffic Light Controllers
- Telephone in Vehicle 2 Infra – Floating Car data, travel time
- ViSense: Intelligent real-time system for object recognition, plus traffic distinguishing and counting
- Areas air boxes - Air quality (6 criteria pollutants), temperature and humidity
- Opticom infrared sender - Fire (and ambulance) vehicles approaching
- Connected street Lighting nodes - Energy consumption, failure messages, status information
- Detection loops, Push buttons, Bus, Radar - Presence traffic at/near traffic lights
- Short distance radio sender (=KAR) -Public Transport busses approaching
- ViNotion people and bicycles counters
- Slippery detection system stations inroads EHV
- Environmental sensor modules collocated with connected lighting infrastructure
- Parking sensors/ barriers - Availability of a number of parking spots on city-owned private parking lots
- PRIS displays - Indication number of available/free parking slots
- City Beacon - information station with POI and available services, local/city announcement screens, help/panic button
- Free WiFi, ready for 5G and mobile payment, possible (=currently disabled)
- Safety camera and lighting, traffic flow camera/journey tracking, air quality sensor

HELSINKI

Population: 640,000

Urban area: 215 m2

Pilot area: City center,
Kalasatama and Jätkäsaari
residential areas

Helsinki's vision is to be the world's most functional city. Helsinki develops digital solutions, which make it easy for residents to follow and engage in matters of interest and concern to themselves, regardless of whether they are the city's or other actors'.

Helsinki's operating model is based on openness and transparency. Helsinki is the world's leading city in opening up and utilizing public data.

THEMES & CHALLENGES



Encouraging more
non-motorised transport



Enabling and improving
mobility as a service



Open challenge



Reducing air
and noise pollution



Climate Change mitigation



Increasing a greater
level of diversity in
political engagement



Increasing citizen
engagement in
decision making

CITIES VALUES & PRIORITIES

- Be the world's most functional city.
- Helsinki develops digital solutions, which make it easy for residents to follow and engage in matters of interest and concern to themselves, regardless of whether they are the city's or other actors'.
- Helsinki's operating model is based on openness and transparency. Helsinki is the world's leading city in opening up and utilising public data..

What's available through the SynchroniCity technical environment?

* Please, check website for details and latest updates

DATA

- Noise Level
- Air Quality

What's available in the City?

DATA (<https://dev.fvh.fi/>)

- [Park & rides](#)
- [Helsinki road signs and parking lots](#)
- [Traffic Accidents in Helsinki](#)
- Real-time location information of all trams, metros, most buses (whole city), [open API](#)
- [Public transit APIs](#)
- [Public transport routing API consisting of all modalities](#)
- [Public transport network & timetables](#) (GTFS)
- [HSL OpenMaaS API](#) (retail interface for single tickets)
- [Pollution/ air quality, description of the sensor stations](#) (in Finnish)
- [Helsinki region greenhouse gas emissions](#) (in Finnish)
- [Traffic emissions in Helsinki metropolitan area](#)
- [Traffic noise zones in Helsinki metropolitan area](#)
- Realtime air quality, 100 measurement points (PM2.5, NO2)
- [Mesoscale weather forecasts](#)
- [Foreca Weather API](#)
- HSY real time air quality
- Helsinki region energy consumption
- [Energy Atlas with e.g. solar power potentials](#)
- [City3D model open data CityGML](#)
- Large set of static data and geospatial (2D, 3D) open data
- [Map API](#) (<https://dev.hel.fi/apis/service-map-backend-api/>)
- [Geocoding API](#)
- [Open Ahjo - open decision-making API](#)
- [Service map API for Helsinki city services](#)
- [CitySDK API Package](#)

ASSETS

- LoRa
- SigFox

IOT INFRASTRUCTURE

- EV charging points
- Sensor (air quality) - 10 devices
- Sensor (telematics) - 2 devices
- Sensor (water meter) - 10 devices
- City NFC Travelcard (0,8M users), access control and identification and loyalty points (identity and services in chip)
- 22 public interactive displays in street scape for pedestrian mobility management
- Platforms
 - Helsinki Region Transport HSL APIs (<https://www.hsl.fi/en/opendata>)
 - Open Helsinki APIs (<http://dev.hel.fi/apis/>)
 - OpenTripPlanner (<http://www.opentripplanner.org/>)
 - Helsinki Region open data platform (www.hri.fi)
 - National and Helsinki Region journey planner (<https://digitransit.fi/en/developers/>)
 - Government open APIs (road use) (<https://www.liikennevirasto.fi/web/en/data>)

MANCHESTER

Population: 540,000

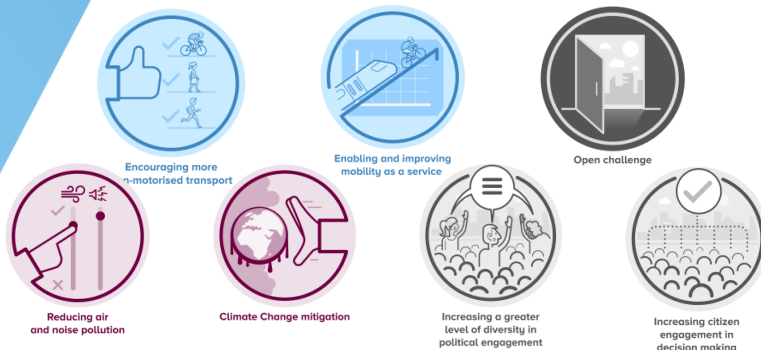
Urban area: 115.7 km²

Pilot area: City of Manchester

Manchester is the second largest economy in the U.K. The City is one of ten local authorities which make up the Greater Manchester conurbation. Historically, Manchester was a flourishing city which played a leading role in world textile manufacture and production in the late 18th century, a position it maintained until the 1960s. Manchester has now transformed: physically, economically, and environmentally.

The City supports innovation and there are a number of organisations, initiatives and funding opportunities designed to help the cities creative and digital businesses grow. The Smart City agenda in Manchester has developed in recent years. Currently the city has a number of activities underway. Manchester is also home to the UK's IoT Smart Cities demonstrator, CityVerve. CityVerve enables IoT testing at scale, providing a replicable model for other cities in the UK and beyond.

THEMES & CHALLENGES



CITIES VALUES & PRIORITIES

- Manchester City's enduring values are: innovation, radicalism, and international outlook.
- The City of Manchester developed the 'Our Manchester' Strategy. Our Manchester Strategy is the notion that new technology and environmental necessity provide a stimulus and opportunity to find local solutions to those challenges and sell these ideas to international markets.
- The strategy identified the following priorities: highly skilled city; a progressive and equitable city; a liveable and low-carbon city; a connected city
- The City of Manchester also puts the citizens in the heart of its services. It values collaboration, connectivity and creativity.

What's available through the SynchroniCity technical environment?

* Please, check website for details and latest updates

DATA

- Air quality
- Pedestrian counting

Soon, other data will become available through the SynchroniCity framework.

What's available in the City?

DATA

Real-time data

- Air quality
- People counting
- Cycle counting
- Car park occupancy
- Cargo bike journeys
- Bike journeys
- Building energy usage data (restricted)

Static Data

- Transport data (e.g. bus stops)
- Location of assets and buildings (e.g. schools)
- Planning data

ASSETS

Platforms

- [CityVerve](#) ""Platform of Platforms"" - Programmable City API [BT Data Hub](#)
- [City Council Open Data](#)
- [Manchester-I](#)

IoT Infrastructure

- People counting cameras and WiFi sensors
- Air quality sensors
- LoRa Network (requires permissions - part of CityVerve)
- Open LoRa Network (ThingsManchester)

MILAN

Population: 1,351,562
Urban area: 1 980 km²
Pilot area: Porta Romana
Vettabia

Second largest city in Italy, Milan is the administrative and business centre in the largest Italian metropolitan area, and the main city of Lombardy, Italian more populated and rich region. As of the 1st of January 2015, Milan turned into a Metropolitan City with 134 Municipalities of the Milanese region and more than 3 million inhabitants, representing 10% of National GDP.

Milan has been ranked as the smartest city in Italy by City Rate in 2014, 2015 e 2016 (Forum PA) on the basis of 72 KPI on economy, living, environment, people, mobility and governance.

THEMES & CHALLENGES



CITIES VALUES & PRIORITIES

One of the high priority objectives for the city of Milan is to improve city services and sustainability implementing an effective Smart City strategy in order to be part of the European and international big cities network. Digital Transformation and specifically "Digitisation of processes and Open Data" is one of the main strategic objectives of the municipality. The latter has a Digital Transformation Policy consisting of infrastructures and services which includes a dense-fibre-optic-networks, wi-fi-hot-spots, digital-areas, portals and open-data, among other things. All these have the aim of creating a more attractive, welcoming, resilient, flexible, changing city, and complement policies already in place such as big-data-analysis, city time structure plans, and so on. The municipality prioritises initiatives in urban mobility but other focus areas include:

- Physical and Digital Accessibility
- Energy management
- Citizen's engagement
- Innovation and industry 4.0 policies
- Social Innovation

What's available through the SynchroniCity technical environment?

* Please, check website for details and latest updates

DATA

- Meteorological data (temperature and humidity) coming from weather sensors (LAMPPOST API)

Municipality **Open Data Platform** contains more than 290 datasets available. Among them:

- 25 datasets concerning mobility and transportation
- 6 datasets concerning environment
- 82 datasets concerning population data

What's available in the City?

DATA

- Upon subscription on the Regional E015 ecosystem API services about Culture, Events, Mobility, Smart Cities, Utility, etc (<http://www.e015.regione.lombardia.it/PE015/>)

ASSETS

Platforms:

Municipality's Interoperability Platform based on WSO2

- Municipality's CKAN Open Data Platform
- Regional E015 platform gathering data from Milan's area service providers

IoT Sensors:

- Traffic Loops
- Gate cameras
- * WIFI free spot
- Weather sensors (humidity, pressure, temperature)
- Parking Lots sensors (installation planned within may 2018)

PORTO

Population: 238,000
Urban area: 41.4 km²
Pilot area:

The city of Porto is one of the major urban areas in Southern Europe. Located along the Douro river estuary in northern Portugal, Porto is one of the oldest European centres. Its settlement dates back to 2.000 years ago, when it was an outpost of the Roman Empire. Its Latin name, Portus Cale, has been referred to as the origin for the name "Portugal". One of its internationally famous exports is the Port Wine, which is produced exclusively in the Douro region and aged in cellars.

But beyond history, Porto has designed and embraced policy strategies focused on citizen's centred sustainability, energy efficiency, R&D and economic growth. By developing synergies and reducing fragmentation, the city becomes a tech, innovative and creative entrepreneurial hub.

THEMES & CHALLENGES



Reducing air and noise pollution



Enabling and improving mobility as a service



Open challenge



Climate Change mitigation



Increasing a greater level of diversity in political engagement



Increasing citizen engagement in decision making

CITIES VALUES & PRIORITIES

- Porto is implementing a digital and smart city strategy, which aims at developing citizen driven services with high impact, attracting talent and entrepreneurs to the city, developing solutions required by citizens, reducing social exclusion, and increasing security.
- To use ICT, sensing, communications and data to improve municipal services and urban processes; use an intelligent and integrated approach to create entrepreneurship and ICT focused companies; combine data on the municipal level across all departments and subsidiary institutions to enhance transparency and efficiency; and invest into organizational development in order to better manage a digital and smart city across the responsible units.
- Other specific priorities and interests comprise: Open and big data, data analytics and visualization; Urban and open data platforms; Fibre, Wi-Fi and LPWAN (in particular, LoRaWAN) communications; Pedestrian counters, parking sensors, trash bin sensors, environmental monitoring, heterogeneous sensor networks; Connected vehicles; Cybersecurity and privacy; Innovation and entrepreneurship support, service design, co-creation and citizen engagement.

What's available through the SynchroniCity technical environment?

* Please, check website for details and latest updates

DATA

- Noise level
- Air quality data
- Meteorological parameters
- Vehicle location and speed
- Vehicle count
- Points of interest
- Events data
- Public transportation data (schedules, routes, lines, stops, etc.)
- Temporary traffic (scheduled events, accidents, etc.)
- Weather forecast service

What's available in the City?

ASSETS

- Environmental monitoring: noise, meteorology and air quality sensing stations* (±30 units)
- Beacons*: active (BLE, ±1.000 units) and passive (NFC+QR code, ±1.000 units)
- Traffic monitoring and access control: vehicle counters and speed meters* (±120 units), video cameras (±120 units) and automatic retractable bollards
- Traffic management: traffic light signals (LED), controllers (±290 units, ±130 units remotely controlled) and RADAR speed detectors
- Water supply telemetry system: wireless water meters (±25.000 units) and data concentrators (±15 units)
- Street lighting (LED)
- Charging stations for electric vehicles
- Multimodal transportation system with wireless (RFID/NFC) card/mobile readers
- Beacons platform
- Commercial use: cellular (2G, 3G, 4G), electric cable (broadband), optical fiber (broadband), Sigfox
- MAN (optical fiber)*: covers all the city with backbone, distribution and access optical fiber, in a total of ±200 km of cables and ±4.000 km of fibers; the backbone has a 10 Gigabit Ethernet connection
- WMAN (Wi-Fi)*: ±180 wireless access-points (WAPs), covers ±120 hotspots and provides free Wi-Fi connectivity
- LPWAN (LoRaWAN)*: pilot covering ±20% of the city area

DATA

- Points of interest (POIs): accommodation, eat and drink, shopping, education, useful information, leisure, business, health, public services, transports, visiting
- Events
- Noise
- Meteorology: air temperature, air relative humidity, wind direction, wind speed, rain, solar radiation, ultraviolet (UV) radiation
- Air quality: particles (PM2.5 and PM10), ozone (O3), nitrogen dioxide (NO2), carbon monoxide (CO)
- Mobility and public transportation network (static and real-time): infrastructure; traffic restrictions; trains, buses, metro, taxis

SANTANDER

Population: 174,000
Urban area: 33 km²
Pilot area: Santander City

In recent years, the city of Santander, ca. 174.000 inhabitants and capital of a small Spanish northern region, has moved into the vanguard of smart cities, improving public services and developing policies oriented towards its citizens and stimulating a new business model of productivity in the city.

Several years ago, the city government had the perception that a new economic model was needed in our city. At the municipal level, innovation is conceived as a transverse area to other areas of governance, coordinating the incorporation of new technologies with municipal services, which leads to their improvement and bringing direct benefits to citizens and visitors.

THEMES & CHALLENGES



Encouraging more non-motorised transport



Reducing air and noise pollution



Open challenge



Enabling and improving mobility as a service



Increasing a greater level of diversity in political engagement



Increasing citizen level of diversity in decision making

CITIES VALUES & PRIORITIES

- Innovation in management and governance in order to provide qualitative improvements to the public services.
- Development of citizen-centric services
- The adoption of ICT technologies to improve the Citizens participation
- Attracting ICT companies and retaining talent in to the city.

What's available through the SynchroniCity technical environment?

* Please, check website for details and latest updates

DATA

- Environmental data (Fixed & Mobile nodes):
 - Temperature (°C)
 - Humidity (%)
 - CO (mg/m³)
 - O₃ (ug/m³)
 - air particles (ug/m³)
 - NO₂ (ug/m³)
 - air Quality aggregated (ug/m³)
 - altitude (m)
- Noise Level
- Traffic Flow
- Street parking status (lots & areas)
- Bike sharing docking stations:
 - Location
 - Total number of slots
 - Available bikes....
- PoI information: Beaches, museums, shops...
- Parks&Gardens:
 - Soil temperatura (°C)
 - Soil moisture (%)
- Buses Info:
 - Buses: location, course, odometer, line
 - Bus stops: location, linked lines
 - Buses estimations: line, bus stop, time

ASSETS

LoRa Network

What's available in the City?

DATA

[Open data platform.](#)

Some example links:

- [Real time information of available surface parking spots. Taxi stops](#)
- [Bike sharing facilities occupancy](#): information about stations existing municipal bicycle rental in the city of Santander is provided.
- [Bike lanes](#). A set of assets, including polylines that represent the lanes for bikes in the city of Santander.
- [Cultural agenda](#)
- [Pace of the city events](#) (reported incidents happening in the city).
- [Shopping information](#).
- [Information of the beaches in the city](#).

ASSETS

- Real time information of available surface parking spots.
- Taxi stops
- Bike Sharing stops and occupation
- Bike lanes.
- Pace of the city events (reported incidents happening in the city).
- Shopping information.
- Information of the beaches in the city.
- Parks and gardens irrigation
- Participatory sensing
- Cultural agenda
- Points of interest

ANNEX 5:

Open Call Templates for Applicants

SynchroniCity Open Call

Application Form Template

1. Admin

Please, complete the questionnaire with administrative information about your SME and/or Pilot Group. Be aware that you will need to answer a different set of questions if you represent a SME, a city or a large business. Don't forget to upload a letter of support if you have a new applicant city in your Pilot Group.

Only click on **"Apply"** when you complete both questionnaires - administrative and technical.

Lead Applicant Partner

Questions	Comments
Name of Pilot Project:	Enter a title for your submission. Make sure that you use the same Project Title for your Administrative and Technical Questionnaires.
Legal Name of the Organisation:	
Registration Number:	
Year founded:	
VAT Number:	
Address:	
City:	
Country:	
Website:	
Size of the company	Dropdown menu • Medium-sized <250, Turnover ≤ € 50 m (or Balance Sheet ≤ € 43 m) • Small < 50, Turnover ≤ € 10 m (or Balance Sheet ≤ € 10 m)

	• Micro < 10, Turnover ≤ € 2 m (or Balance Sheet ≤ € 2 m)
Sector:	
If 'Other', please specify	
Markets trading in (geographies):	If you are exporting your products and services, please tell us where.
Technology Readiness Level	TRL 6 - Technology demonstrated in relevant environment TRL 7 – System prototype demonstration in operational environment TRL 8 – System completed and qualified TRL 9 – Actual system proven in operational environment
Have you received funding before?	Multiple choice: • Yes, EU funding • Yes, another national grant funding • Yes, private investment • No
Staff headcount	Staff headcount covers full-time, part-time and seasonal staff and includes the following: – Employees, persons working for the enterprise being subordinated to it and considered to be employees under national law. – Owner-managers – Partners engaged in regular activities and benefiting from financial advantages from the enterprise
Annual turnover (2017) (Euros)	Annual turnover is determined by calculating the income that the enterprise received during the year. Turnover should not include VAT or other indirect taxes.
Contact Details Lead Partner	
Name:	
Position:	

E-mail:	
Phone Number:	
I declare I am an SME by the EU definition EU recommendation 2003/361.	
I declare I am compliant with General Data Protection Regulation (GDPR)	
I agree to provide data for the promotional and marketing purposes which may be published in SynchroniCity social media channels, the SynchroniCity website or communicated through relevant press releases.	
I declare I am not affiliated to any of the SynchroniCity project partner organisations.	
If you are affiliated, explain why.	According to the 'Horizon 2020 Rules for Participation (Regulation (EU) 1290/2013)', 'affiliated entity' means any legal entity that is under the direct or indirect control of a participant, or under the same direct or indirect control as the participant, or that is directly or indirectly controlling a participant. Control may take any of the forms set out in Article 8(2) For the purposes of paragraph 1, control may, in particular, take either of the following forms:

	(a) the direct or indirect holding of more than 50 % of the nominal value of the issued share capital in the legal entity concerned, or of a majority of the voting rights of the shareholders or associates of that entity; (b) the direct or indirect holding, in fact or in law, of decision-making powers in the legal entity concerned.
Would you like to declare a potential conflict of interest? *	Conflict of interest is any situation where the impartial and objective implementation of the project is compromised for reasons involving economic interest, political or national affinity, family or emotional ties or any other shared interest.
Please explain the potential conflict of interest.	Please include the type of conflict of interest, names of organisation and people involved, the potential financial interests and rewards (if applicable), possible violation of legal requirements (if applicable), and any other information you wish to disclose.
Are you applying as a single entity?	• Yes • No
If No, how many partners are you applying with?	• 1 • 2 • 3 • 4

Partner 1

- Questions in black (for all types of applicants)

- Questions in **blue** (only for private businesses)
- Questions in **orange** (only for public entities and City Governments)

Questions	Comments
Legal Name of the Organisation:	
Legal form:	Private entity Public entity/City Government
Address	
City	
Country	
Website	
Size of the City	
City Department	
Have you received in the last 3 fiscal years?	• Yes, EU funding • Yes, another national grant funding • Yes, private investment • No
If yes, how much public funding have you received?	
Registration number	
Year founded	
VAT Number	
Size of the company	Dropdown menu • Large >250, Turnover > € 50 m (or Balance Sheet > € 43 m) • Medium-sized <250, Turnover ≤ € 50 m (or Balance Sheet ≤ € 43 m) • Small < 50, Turnover ≤ € 10 m (or Balance Sheet ≤ € 10 m) • Micro < 10, Turnover ≤ € 2 m (or Balance Sheet ≤ € 2 m)

Sector	
Technology Readiness Level (for private entities only)	TRL 6 - Technology demonstrated in relevant environment TRL 7 – system prototype demonstration in operational environment TRL 8 – system completed and qualified TRL 9 – actual system proven in operational environment
Staff headcount	Staff headcount covers full-time, part-time and seasonal staff and includes the following: – Employees, persons working for the enterprise being subordinated to it and considered to be employees under national law. – Owner-managers – Partners engaged in regular activities and benefiting from financial advantages from the enterprise
Annual turnover in 2017 (euros)	
Name of the responsible	
Position	
Email	
Phone Number	
I declare I am an SME by the EU definition EU recommendation 2003/361. Only for SMEs.	Tick box
I declare I am not affiliated to any of the SynchroniCity project partner organisations.	According to the 'Horizon 2020 Rules for Participation (Regulation (EU) 1290/2013)', 'affiliated entity' means any legal entity that is under the direct or indirect control of a participant, or under the same direct or indirect control as the participant, or that is directly or

	indirectly controlling a participant. Control may take any of the forms set out in Article 8(2) For the purposes of paragraph 1, control may, in particular, take either of the following forms: (a) the direct or indirect holding of more than 50 % of the nominal value of the issued share capital in the legal entity concerned, or of a majority of the voting rights of the shareholders or associates of that entity; (b) the direct or indirect holding, in fact or in law, of decision-making powers in the legal entity concerned.
If you are affiliated, please explain why.	
Would you like to declare a potential conflict of interest? *	• Yes • No Conflict of interest is any situation where the impartial and objective implementation of the project is compromised for reasons involving economic interest, political or national affinity, family or emotional ties or any other shared interest.
Please explain the potential conflict of interest.	Please include the type of conflict of interest, names of organisation and people involved, the potential financial interests and rewards (if applicable), possible violation of legal requirements (if applicable), and any other information you wish to disclose.
Letter of Support	For New Applicant Cities, please attach a Letter of Support for your Pilot Group

2. Technical Proposal

Complete the open call technical questionnaire. Please take the following steps:

1. Enter the name of your pilot project
2. Select the challenge that you are going to tackle with your pilot project. Note that you can only select one challenge.
3. Select the Core Pilot Cities where you would like to pilot your solution in. Note that you must select at least 2 cities if you are applying as a single entity and one city if you are applying with a new applicant city.
4. Select only one priority Core Pilot City where you would like to pilot your solution in.
5. Answer the 20 technical questions about your pilot project. More guidance on how to answer specific questions can be found [here](#).
6. Upload your:
 - [Workplan/resource plan](#)
 - [Budget](#)
 - [GDPR readiness questionnaire](#)
 - [Ethical statement](#)
 - Appendices (optional)
 - Video (optional)

You can find all the templates you need in the [open call toolkit](#) for applicants.

Only click on "Apply" when you completed the administrative and technical questionnaires.

Questions	Comments
Name of Pilot Project	Enter a title for your submission. This should be the same as in the Administrative Questionnaire.
Do you bring new cities in your Pilot Group?	• Yes • No
Select a challenge	Drop down: • Enabling Mobility as a Service • Encouraging non-motorised (active) transport

	• Increasing a greater level of diversity in political engagement • Increasing citizen engagement in decision making • Climate change adaptation • Reducing Air and Noise Pollution • Open Challenge
Select the Core Pilot cities where you would like to implement your pilot:	• Antwerp • Carouge • Eindhoven • Helsinki • Manchester • Milan • Porto • Santander
What is your priority Core Pilot City where you would like to implement your Pilot? *	• Antwerp • Carouge • Eindhoven • Helsinki • Manchester • Milan • Porto • Santander This should be one of the cities selected in the previous question.

Excellence (0-5 points)

Questions	Comments
Describe your project/solution and objectives and explain how	500 words

your project meets the Open Call aims?	Clearly and concisely describe your project idea. Explain how it meets the open call aims of demonstrating replicability and scalability of your solution from one city to another using the SynchroniCity framework. Include the main motivation for the project. You may wish to include a visual representation as part of an appendix. This is optional.
Demonstrate that your solution has been demonstrated in a relevant environment (TRL $\geq$ 6)	200 words Explain where your solution has been tested, under which conditions, how this happened and what were the outcomes.
How are you better than other solutions in this space?	200 words Clearly articulate how your business/solution is beyond the state of the art. Demonstrate you know what is out there and who your competitors are. Show you understand their limitations. Compare your solution/project with the other solutions in the market and tell us why it will be able to scale and gain market share.
How your solution will benefit cities and citizens?	200 words One of the goals of the open call is to find citizen-centric solutions. Concentrate on describing the potential benefits to the citizens and cities that you selected. Be specific.

Impact (0-5 points)

Questions	Comments
How is your solution addressing the challenge you selected?	200 words Show you understand the challenge and demonstrate how your solution is appropriate to tackle this challenge.
What will the tangible output (s) of your project be?	200 words Show the specific outputs of your six-month pilot project. This is about the product or service that you will be deploying.
How will you measure the quality of your outputs?	200 words For each output describe how you are going to assess quality. Describe your methodology. It is important that you set pertinent key metrics. You can get inspiration from CITYKeys¹ EU project that sets some key indicators for smart city projects and smart cities; and also from the UN-initiative coordinated by ITU, U4SCC². For example. Are you setting KPIs? How are you collecting data to measure it?
What impact will your solution have? Give a concrete example of the economic, societal and/or	200 words

¹

<http://nws.eurocities.eu/MediaShell/media/CITYkeysD14Indicatorsforsmartcityprojectsandsmartcities.pdf>

² <https://www.itu.int/en/ITU-T/ssc/united/Pages/default.aspx>

environmental impact that your solution will have.	What are the wider impacts that your solution will have? Tell us about the economic impacts to customers, supply, broader industry and the EU economy Are there any expected environmental impacts negative or positive? Are you expecting any social impacts (i.e. quality of life, social inclusion or exclusion, jobs, education, public empowerment, health and safety)? Be specific and give concrete examples. They don't need to be 100% accurate, but you must provide enough detail to allow us to evaluate the potential of your proposal.
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Feasibility (0-5 points)

Questions	Comments
Outline your planned activities and your timeline? How will the project be managed? How are you going to implement the solution/project in the cities that you selected in the timeline and budget?	500 words Explain the activities/tasks indicating the division of labour among partners (when relevant). Use the workplan/resource plan template available. Ensure that you allow enough contingency in your plan. Show us your project management approach. Are you going to use a specific tool or mechanism to manage the project?

	Be clear on who will be doing what. Also, be clear how you are going to guarantee what you proposed within time and budget. Attach a workplan/resource plan. This is mandatory. You may wish to upload supporting information in the appendix. This is optional.
What's the total budget requested? How are you going to finance additional costs and resources not covered by the grant?	200 words We would like you to justify your budget requested. We would also like to understand that if your pilot cannot be entirely covered by the open call funding (i.e. if you plan to pilot your solution in a large number of pilot cities) this can still be executed with an alternative proposition. Don't forget to add budget for the customisation workshop in London. We estimate that you will spend on average €120 per day/per person for accommodation, on average €200 in airfares and on average €70 per day/per person in subsistence. Attach your budget template. This is mandatory.
How are planning to use the SynchroniCity framework and datasets available? What else would you need to implement your project? Will you generate any additional data?	500 words Describe your solution from a technical viewpoint. Briefly explain the technical interaction with the SynchroniCity framework and data available. For example, describe in text or upload a simple box diagram in the appendix to illustrate the

	connection of your solution with the relevant SynchroniCity components in a high level. Describe which data sets your project is going to use and/or generate. Let us know if you would require other pieces of infrastructure or data to improve your solution. You may wish to provide a visual representation on how you are going to collect, manage, process the data during your project. This is optional.
Why is your Pilot Group the right one for your proposal?	200 words Either if you apply alone or in a Pilot Group, we would like to understand the reasons why you have decided to apply with the actual combination of partners or absence of those.
List the core members of your team? What are their skills and experience? How many of them will be working full/part-time on the project?	400 words Here you need to describe the team who will work on the project. Keep it simple. Use bullet points with name, role and relevant experience. Try to emphasise skills and experience that are relevant to the project. We are also looking for complementary skills in the team and gender variety. If it is a consortium, describe the current relationship of the project partners. Have you worked together before? Why are you working together? What do you expect the relationship to be like after the pilot implementation?

	You may wish to add more information on your team and members in the appendix. This is optional.
What are the risks to project success and what is the project risk management strategy?	200 words We are looking for awareness of potential risks that can occur during the piloting phase. You should describe a compelling plan to mitigate any potential risk. If you wish, add a project risk matrix in the appendix. This is optional.

Sustainability (0-5 points)

Questions	Comments
How can you demonstrate the interoperability, replicability and reusability of your solution during the pilot and beyond the project?	500 words We want to understand how far the use case will focus on interoperable, replicable and/or reusable components, systems or solutions. You will need to justify interoperability with the SynchroniCity framework and replicability of your solution in other cities with requirements on main legacy and infrastructure support. You will also need to demonstrate the potential reusability of your solution by referring to your catalogue of key components that link to the SynchroniCity framework.

	The usage and validation of emerging standards will be highly appreciated, and usage of open system initiatives will be positively evaluated.
What's your revenue model and monetisation strategy?	200 words We want to understand how you extract (not attract) or intend to extract money from the market for the value you are providing. We want to understand what your strategy is to achieve this.
What is the market segment and size you are addressing? Are you operating in a national or pan-European market?	200 words We want to know the markets where you are operating. Also, we want to see if you've done your homework and you know your market. We also want to know if you the market you are targeting is large enough for you to be sustainable.
Why is now a good time for your solution/project?	200 words Tell us why you think your solution is timely for the market you are addressing. Be as specific as possible.
How many clients/users do you already have?	200 words Tell us what type of customers you have. Let us know how many clients or users of your solution you already have. What is the scale of your sales for this product?
How do you intend to use the results of your project after the	400 words

funding period? What is your growth strategy?	For this open call, in how many cities are you piloting your solution in? Tell us how this project fits with your growth plans. Describe how you are going to grow your business and increase your productivity? How are you going to protect and exploit the outputs of the project, from know-how or changing your business model? Describe your strategy for targeting markets identified during and after the project in Europe and beyond. Tell us if and how this project will enable you to create jobs.
--	---

Eligibility Checklist

This document tracks an application/applicant's eligibility to take part in the evaluation of the SynchroniCity open call and check if it is eligible for funding. Each application must be checked for eligibility by at least two reviewers to guarantee accuracy.

ELIGIBILITY CRITERIA

Criteria	Comments	Yes	No
Has the application been submitted by the specific deadline?	30th September 17:00 CEST (Brussels time)		
Is the status of the SME applicants conformant with the SME definition of the EU recommendation 2003/361 ?	Link: http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en		
Is the proposal being led by an SME providing an IoT enabled application or a full stack solution (infrastructure + middleware +application)?			
Has the applicant completed all the questions on the application form?			
Has the applicant uploaded a budget?			
Has the applicant uploaded a work plan and a resource plan?			
Has the applicant agreed with the Ethical statement?			
Has the applicant completed the GDPR readiness questionnaire?			
Has the applicant completed the questionnaires and submitted all the documents in English?			
If in the project consortium there is a new city, has the project submitted a Letter of Support?			

Does the applicant include 2 cities to pilot the solution in as part of the proposal?	Applicants need to include at least 2 cities in their proposal but preferably more.		
Has the applicant/(s) got any affiliation with a SynchroniCity partner?	SynchroniCity partners are not eligible for funding and cannot be part of the Open Call. Institutions, organisations or other types of legal entities funded by or otherwise affiliated with a SynchroniCity partner are not eligible for funding and cannot be included as partners. SynchroniCity is obliged to avoid this conflict of interest.		
Has the applicant/(s) got any conflict of interest with any members of the SynchroniCity consortium?			
Is the proposal within the scope of the Open Call?			

ELIGIBILITY CRITERIA FOR FUNDING

Criteria	Comments	Yes	No
Are the applicants (SMEs, large business and/or cities) from an EU or an H2020 Associated Country? If in consortium, each one will be considered individually.	Please see Annex 1.		
Does the proposal apply for funding for the eligible activities?	Refer to the Annex 4 of the Open Call Guide for Applicants to see eligible activities.		

ANNEX 1: LIST OF COUNTRIES ELIGIBLE FOR FUNDING

The list of countries from which cities, SMEs and other businesses legally registered may apply.

EU Member States

Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom.

Horizon 2020 Associated Countries¹

Iceland, Norway, Albania, Bosnia and Herzegovina, the Former Yugoslav Republic of Macedonia, Montenegro, Serbia, Turkey, Israel, Moldova, Switzerland, Faroe Islands, Ukraine, Tunisia, Georgia, Armenia.

¹ Source: http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/3cp/h2020-hi-list-ac_en.pdf

SYNCHRONICITY

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No732240

This document reflects only the author's view and that the Commission is not responsible for any use that may be made of the information it contains

Contributing partners



Switzerland



South Korea



Mexico

Ethical Statement

Before signing the statement, you should get familiar with the SynchroniCity *Ethics & Privacy Guidelines* in Annex 3 of the Open Call Guide for Applicants.

This *Ethical Statement* underpins the SynchroniCity project in setting out specific rules and standards of conduct expected from recipients of the open call SynchroniCity funding. Ethical conduct means acting consistently in a way that is ethical and fair and encouraging others to do likewise.

The standard of behaviour expected is additional to compliance with relevant legal rights and obligations arising automatically by virtue of law applying to each participant. It is also not intended to exclude or replace responsibilities agreed under contract with the SynchroniCity consortium through the *Pilot Agreement* (in case your application is successful), as well as the certifications/declarations set out in the *Declaration of Honour*.

As the legal representative of [\[insert legal entity name\]](#), I certify that [\[insert legal entity name\]](#) will adhere to the following principles as far as reasonably possible under the SynchroniCity project:

1. act in good faith;
2. respect human rights;
3. ensure research quality and integrity;
4. be able to show that our findings are independent and non-discriminatory to any groups of individuals;
5. not misrepresent credentials;
6. demonstrate authenticity and validity of authorship;
7. respect confidential information;
8. secure any confidential information provided to prevent its misuse or unauthorised access;
9. only share confidential information where necessary and only where the prior informed consent of anyone potentially affected by the disclosure of such information has been received;
10. respect the privacy of any people identified from the findings of the SynchroniCity project as far as possible;

11. avoid any conduct that may cause anyone harm, and seek relevant individuals' informed consent for any activities that might affect them directly;
12. determine the applicable laws that may apply to our activities under the SynchroniCity project and plan our activities in accordance with such laws as early as possible;
13. not collect or otherwise process any personal or sensitive data not essential for our SynchroniCity activities;
14. be fully transparent to the SynchroniCity consortium about the purpose, methods and intended possible uses of our SynchroniCity activities, and what risks, if any, are involved.
15. seek advice promptly from the SynchroniCity consortium where we believe ethical and/or legal risks may be raised by our activities.

Name:	Signature:
Date:	

SYNCHRONICITY

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Contributing partners



Switzerland



South Korea



Mexico

SYNCHRONICITY

GDPR Readiness Questionnaire

The open call SME Lead Applicant will be required to answer a set of questions related to the privacy aspects of their pilot and organisation. This is required to help the Ethics and Privacy Board (EPB) members assess proposals from an Ethics and Privacy perspective. We recommend that the SME Lead Applicant fills in together with all the members of his/her Pilot Group to align with these basic principles.

Before doing that, the applicants should get familiar with the SynchroniCity *Ethics & Privacy Guidelines* in Annex 3 of the Open Call Guide for Applicants. Note that the SME Lead Applicant will be responsible for ensuring that the other members of their Pilot Group are also in compliance with the SynchroniCity Ethics & Privacy Guidelines.

The questionnaire presented below contains three categories of questions:

1. Data Protection Impact Assessment (DPIA) required at a later stage? (Yes/No answer)
2. Legal grounds and processor agreements (evaluation)
3. [General Data Protection Regulation](#) (GDPR)¹ readiness of the organisation (evaluation)

Questions in categories 1 and 2 pertain to the project presented in response to the call. Questions in category 3 gauge the overall readiness of the company to meet GDPR requirements. Companies with a score lower than 4 for the questions in the third category will be evaluated as 'not quite ready yet'.

It should be noted that this questionnaire does not include any industry-specific issues or considerations and it is not an explanation of the law or the extent of obligations on either controllers or processors under GDPR. The full obligations contained in the GDPR should be consulted to check compliance with each issue.

We, therefore, recommend that any organisation looking to comply with the **GDPR** first carries out a data audit in order to establish factual context such as: what data the company holds, where it is held, third parties who have access, retention issues, security etc.

The following terminology may need explanation:

- 'data subject': the person(s) the data is about;
- 'processing': anything that is done with data: recording data, storing data, organising data, structuring data, using data to create predictions, selling data, publishing data, deleting data.

¹ <https://www.eugdpr.org/>.

- ‘processor’: the entity - company or organisation - that carries out the data processing activities, e.g. the cloud service where data is stored or the accountancy service that processes financial data about customers.

Questionnaire

Preliminary questions: personal data?

Q. 1 Will personal data be processed for the proposed product or service?

Yes ☐ No ☐

If your answer is NO, please do not continue filling the questionnaire.

Q.2 Which of the following types of data are personal data in general (not specifically for your product)?

- ☐ Audio recording
- ☐ Mac address
- ☐ IP address
- ☐ Username
- ☐ HTML cookie
- ☐ Nr of visits
- ☐ Hashed or encrypted data
- ☐ A unique identifier

Part I: DPIA required at a later stage?

Q. 3 Do the processing operations involve evaluation or scoring of people?

Yes ☐ No ☐

Q. 4 Do the processing operations involve systematic monitoring of people?

Yes ☐ No ☐

Q. 5a Do the processing operations support or lead to automated decisions?

Yes ☒ No ☐

If your answer is NO, please continue to Q.6.

Q. 5b Do these automated decisions produce legal effects on people or similar significant effects?

Yes ☐ No ☐

Q. 6 Will the following types of data be processed?

- ☐ data revealing racial or ethnic origin,
- ☐ data revealing political opinions,
- ☐ data revealing religious or philosophical beliefs,

- ☐ data revealing trade union membership,
- ☐ genetic data,
- ☐ biometric data for the purpose of uniquely identifying a natural person,
- ☐ data concerning health, data concerning a natural person's sex life or sexual orientation.

Q. 7 Will you match or combine data sets from multiple data processing operations in a way the data subjects could not have foreseen?

Yes ☐ No ☐

Q. 8 Will the processing operations involve data concerning vulnerable groups, in the sense that the people concerned are at the weaker end of a power imbalance?

Yes ☐ No ☐

Q. 9 Is the same technology already used elsewhere in the city?

Yes ☐ No ☐ I don't know ☐

Part II: Legal grounds and processor agreements

Q. 10 Will you ask permission from the people whose data you will be collecting, prior to the processing operations?

Yes ☐ No ☐

If your answer is YES, please continue to Q.13. If NO, proceed to Q.11.

Q. 11 You won't ask permission prior to the processing operations or it is practically impossible to ask consent from data subjects. What will your legal ground for processing be?

- ☐ performance of a contract,
- ☐ compliance with a legal obligation,
- ☐ protecting the vital interests of people,
- ☐ performance of a task in the public, interest a legitimate interest of your organization

Q. 12 *(Based on Q.11)*

Please explain why you believe you can base your processing operations on this legal ground.

Q. 13 Will you be working with other organisations for the data processing

Yes ☐ No ☐ I don't know ☐

operations ('processors' from here on) who are situated outside the EU?

If your answer is YES or NO, please continue to Q.14. If your answer is I don't know proceed to Q.15.

Q. 14 *(Based on Q.13)*

What are the addresses of the processors you will be working with?

Q. 15 Are you in a position to negotiate the contracts with the processors you will be working with? Yes ☐ No ☐

Q. 16 Will your processors allow audits of the data processing operations Yes ☐ No ☐

Part III: General GDPR readiness of the organisation

Q. 17 Has your company appointed a data protection officer? Yes ☐ No ☐

Q. 18 Does your company have a procedure to detect data breaches? Yes ☐ No ☐

Q. 19 Does your company organize privacy training for staff? Yes ☐ No ☐

Q. 20 Does your company have the ability to draw up processor agreements, or in other words: does your organisation dispose of the required expertise to draw up processor agreements and a position that is independent enough towards the processor to negotiate such agreements? Yes ☐ No ☐

Q. 21 Does your company conduct data protection audits? Yes ☐ No ☐

Q. 22 Is there a data processing register for all your processing processes? Yes ☐ No ☐

If your answer is NO, continue to Q.24.

Q. 23 What does your data processing register look like?

- ☐ We don't have a template for the register.
 - ☐ We have a template for the register.
 - ☐ We have partly mapped our processed.
 - ☐ We have mapped all our processes.
-

Q. 24 Please indicate the procedures you have in place to respond in a timely manner to the following:

- ☐ data subject requests for access to data about them,
 - ☐ data subject requests for correction of about them,
 - ☐ data subject requests for erasure of data about them,
 - ☐ data subject requests to restrict processing of data about them,
 - ☐ data subject requests to transmit data about them to another company or receive the data in a structured, commonly used and machine-readable format.
 - ☐ None of the above.
-

ANNEX 6:

Open Call Templates for Winning Applicants

SYNCHRONICITY

PILOT AGREEMENT



This project has received funding from
the European Union's Horizon 2020
research and innovation programme
under grant agreement No732240

SynchroniCity Pilot Agreement

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**AGREEMENT RELATING TO THE RESEARCH PROJECT ENTITLED
"SYNCHRONICITY" UNDER HORIZON 2020 – THE FRAMEWORK PROGRAMME
FOR RESEARCH AND INNOVATION (2014-2020)**

This PILOT AGREEMENT is entered into by and between:

On the one part:

1. **FUTURE CITIES CATAPULT** with company number 08041915 whose registered office is at One Sekforde Street, London, EC1R 0BE ("**the Catapult**"); and

On the other part:

2. **[Official name in full and registration number]**, a legal entity under the laws of [country], having its registered office at [official address in full] (hereinafter referred to as the "**Pilot Lead**"); and
3. **[Official name in full and registration number]**, a legal entity under the laws of [country], having its registered office at [official address in full]; and
4. **[Official name in full and registration number]**, a legal entity under the laws of [country], having its registered office at [official address in full]; and
5. **[Official name in full and registration number]**, a legal entity under the laws of [country], having its registered office at [official address in full]; and
6. **[Official name in full and registration number]**, a legal entity under the laws of [country], having its registered office at [official address in full]; and
7. **[Official name in full and registration number]**, a legal entity under the laws of [country], having its registered office at [official address in full].

(each individually a "**Piloter**" and collectively referred to as the "**Pilot Group**"),

The parties listed above shall be referred to collectively as "Parties" or individually as a "Party".

RECITALS:

1. The Catapult, together with [*SynchroniCity Partner details to be added here*] (together the **"SynchroniCity Partners"**) has entered into a written agreement dated 1 January 2017 with the European Commission under which the European Commission has awarded a grant for the purposes of delivering actions relating to the SynchroniCity programme as further defined therein (**"the Grant Agreement"** or **"GA"**);
2. The SynchroniCity Partners have among themselves entered into a written agreement detailing their respective rights and obligations towards each other for carrying out the SynchroniCity Action and exploiting the results thereof (**"the Consortium Agreement"** or **"CA"**);
3. The SynchroniCity Partners are establishing a high-level reference architecture for IoT-enabled smart cities within an established market, as further described in Schedule 1 (the **"SynchroniCity Framework"**) in collaboration with eight European cities (each city being a **"Reference Zone"**);
4. Aarhus University is the coordinator of the SynchroniCity Action. Within the SynchroniCity Action it is foreseen that an open call with a fund of €3 million will take place to carry out IoT projects. The Catapult is the organiser of the open call and leading the overall organisation of the Pilots in the Reference Zones to be carried out by the [Piloter / Pilot Group] under the open call, through financial support by the Catapult (under the terms of the Grant Agreement) and/or financed by the [Piloter / Pilot Group] through other sources;
5. Following the open call process, each Piloter/Pilot Group has been selected by the SynchroniCity open call evaluation committee to implement the aspects of the SynchroniCity Action identified in the open call guide for applicants and SynchroniCity Architecture, with the objective to create and make available for use by the public, services that rely upon the SynchroniCity Framework (the **"Pilot"**); and
6. The Catapult together with the Pilot Cities are willing to make the aspects of SynchroniCity Framework available to the [Piloter / Pilot Group] subject to the terms and conditions of this Pilot Agreement and any related guidance set out in open call materials provided to the Pilots .

IT IS NOW AGREED AS FOLLOWS:

1. Definitions

Words beginning with a capital letter shall have the meaning defined in the preamble or in this Section 1 or elsewhere in this Agreement.

"Access Rights" means rights to use the SynchroniCity Framework, the Pilot Cities' IoT Framework, Pilot Results, Feedback or some elements of the SynchroniCity technical environment under the terms and conditions laid down in this Agreement, whether for implementing the Pilot or for Exploitation.

"Affiliated Entity" of a SynchroniCity Partner or a Piloter means:

- a) any legal entity directly or indirectly Controlling, Controlled by, or under common Control with that SynchroniCity Partner or Piloter, for so long as such Control lasts; and
- b) any other legal entity that is listed in Schedule 2 "Pilot Specifics" to this Agreement as being an Affiliated Entity of that SynchroniCity Partner or Piloter, where such legal entity is one in which that SynchroniCity Partner or Piloter (or a legal entity qualifying as an Affiliated Entity of that SynchroniCity Partner or Piloter under (a) directly above) has a 50% equity share or is the single largest equity shareholder.

For the above purposes, "Control" of any legal entity shall exist through the direct or indirect:

ownership of more than 50% of the nominal value of the issued share capital of the legal entity or of more than 50% of the issued share capital entitling the holders to vote for the election of directors or persons performing similar functions, or right by any other means to elect or appoint directors of the legal entity (or persons performing similar functions) who have a majority vote.

Common Control through government does not, in itself, create Affiliated Entity status.

"Agreement" means this Pilot Agreement including the Schedules hereto.

"Confidential Information" has the meaning given in Section 9.1 of this Agreement.

"Data Subject" and **"Personal Data"** shall bear the respective meanings given to them in the Data Protection Act 1998 or General Data Protection Regulation 2016 (as applicable) (in each case as may be amended, updated, replaced or superseded from time to time) (and Process and Processes shall be construed accordingly);

"Data Protection Legislation" means the EU Data Protection Directive 95/46/EC, the Data Protection Act 1998 General Data Protection Regulation 2016 (Regulation (EU) 2016/679) together with the equivalent legislation of any other applicable jurisdiction and all other applicable laws, regulations, guidance and codes of conduct in any relevant jurisdiction relating to the processing of Personal Data and privacy from time to time and any laws, regulations, guidance and codes of conduct that may amend or replace any of these from time to time.

"Disclosing Party" has the meaning given it in Section 9.1 of this Agreement.

"Effective Date" shall mean the date of the last signature to this Agreement.

"Eligible Costs" means those costs in respect of which Piloters shall be entitled to claim reimbursement in accordance with the process, criteria and other requirements set out in this Pilot Agreement, including clause 3 and Schedule 4.

"Exploitation" or **"Exploit"** means the direct or indirect use of Pilot Results or Feedback in (a) further research activities other than those covered by the Pilot, or (b) in developing, creating or marketing a product or process, or (c) in creating and providing a service, or (d) in standardisation activities.

"Fair and Reasonable Conditions" means appropriate conditions, including possible financial terms or royalty-free conditions, taking into account the specific circumstances of the request for Access Rights, for example the actual or potential value of the SynchroniCity Reference Zone or Pilot Results to which Access Rights are requested and/or the scope, duration and other characteristics of the Exploitation envisaged. To fall within Fair and Reasonable Conditions, the conditions must also be non-discriminatory.

"Feedback" means all forms of feedback from the [Piloter / Pilot Group] concerning the SynchroniCity Framework implemented in each Pilot City, including but not limited to suggestions for improvements or modifications thereto, comments, and information about use or performance.

"Financial Support" means reimbursement of some or all of the Eligible Costs (as applicable) in accordance with the terms of this Agreement.

"Force Majeure" means any one or more events beyond the reasonable control of the relevant Party which occur after the date of signing of this Agreement, were not reasonably foreseeable at the time of signing of this Agreement, and the effects of which are not capable of being overcome without unreasonable expense and/or unreasonable loss of time to the Party concerned. Events of Force Majeure shall include (without limitation) war, civil unrest, acts of government, natural disasters, exceptional weather conditions, breakdown or general unavailability of transport facilities, accidents, fire, explosions, and general shortages of energy.

"Intellectual Property Rights" means: patents, patent applications and other statutory rights in inventions; copyrights; registered design rights, applications for registered design rights, unregistered design rights and other statutory rights in designs; and other similar or equivalent forms of statutory protection, wherever in the world arising or available, but excluding rights in Confidential Information and/or trade secrets.

"Needed" means in respect of executing or carrying out the Pilot, and/or in respect of Exploitation of the SynchroniCity Framework or Pilot Results, technically essential and:

a) where Intellectual Property Rights are concerned, that those Intellectual Property Rights would be infringed without Access Rights being granted under this Agreement;

b) in relation to Confidential Information, only Confidential Information which has been disclosed during and for the purpose of the Pilot may be considered as technically essential, except as otherwise agreed in writing between the Parties.

"Object Code" means software in machine-readable compiled and/or executable form including, but not limited to, byte code form and in form of machine-readable libraries used for linking procedures and functions to other software.

"Personal Data" has the meaning given it in Section 8.7 of this Agreement. "Recipient" has the meaning given it in Section 9.1 of this Agreement.

"Pilot" has the meaning given in Recital 5;

"Pilot Cities" means the cities where the Pilot will be deployed. These include Reference Zones or Core Pilot Cities (Antwerp, Carouge, Eindhoven, Helsinki, Manchester, Milano, Porto and Santander) and it also may include New City Applicants that you could introduce in your Pilot Group. Winning applicants need to pilot your solution in at least 3 Open Call Pilot Cities.

"Pilot Handbook" means a set of documents and information made available to the Piloter / Pilot Group after being selected. In the pilot handbook it will be specified the systematic on how the pilots will be supervised by the Synchronicity Monitoring Committee and will also include the templates of the reports and feedback that will need to be provided by the Piloters / Pilot Group to the Synchronicity Partners.

"Pilot Results" means any tangible or intangible outputs of the Pilot including changes or additions to the Pilot Cities' Framework or any other outputs such as (without limitation) data, knowledge and information whatever their form or nature, whether or not they can be protected, which are generated by or on behalf of the Piloters in the Pilot, as well as any rights attached to them, including Intellectual Property Rights.

"Pre-Existing IPR" shall mean any IPR vested in or licensed to the [Piloter / Pilot Group] prior to or independently of the performance by the [Piloter / Pilot Group] of their obligations under this Agreement and includes, guidance, specifications, instructions, toolkits, plans, data, drawings, databases, patents, patterns, models and designs.

"Restricted Data" means all data that (in the Synchronicity Partners' reasonable discretion) is only made available on a restricted basis and is subject to separate terms and conditions in respect of its use.

"Restricted SynchroniCity Architecture Components" means the parts of the SynchroniCity Framework listed in Schedule 1 as, which the Synchronicity Partners have held

before they acceded to the Grant Agreement and have introduced into the Action as "Background" under the terms of the Consortium Agreement.

"Sharing Agreement" means a legal binding document to be signed between the Piloter / Each member of the Pilot Group and the Pilot Cities where the Pilot will be deployed. The Sharing Agreement regulates and sets all the legal conditions in relation to the data, Access Rights, IPRs and hardware to be shared for the deployment of the Pilot and the data, Access Rights and IPR that will be generated during and at the completion of the Pilot. The Sharing Agreement is a compulsory annex to this Pilot Agreement.

"Shared Information" has the meaning given it in Section 8.8 of this Agreement.

"Source Code" means software in human-readable form normally used to make modifications to it, including but not limited to comments and procedural code such as job control language and scripts to control compilation and installation.

"SynchroniCity Action" means the research project entitled 'SynchroniCity: Delivering an IoT enabled Digital Single Market for Europe and Beyond), as further described in Annex 1 to the Grant Agreement;

"SynchroniCity Framework" has the meaning given in Recital 3 above.

"Synchronicity Monitoring Committee" means a selection of SynchroniCity partners in charge or monitoring the Piloters / Pilot Group with regards to the deployment of the Pilots.

2. Overall responsibilities of the [Piloter / Pilot Group]

- 2.1** Each Piloter shall perform those tasks allocated to it in Schedule 2, towards the implementation of the Pilot. Each Piloter shall undertake its tasks:
- 2.1.1 to the best of its ability; and
 - 2.1.2 in accordance with best practices and any guidelines, including ethical and privacy guidelines, issued by the Catapult.
- 2.2** Where the Piloter is working together with other Piloters as part of a Pilot Group, the Pilot Lead shall be responsible for coordinating delivery of the Pilot with the remaining members of the Pilot Group and shall be responsible (without limitation) for:
- 2.2.1 dissemination of information provided by the Catapult to each relevant Piloter;
 - 2.2.2 coordination of tasks between each Piloter in the Pilot Group as required to ensure successful implementation of the Pilot; and
 - 2.2.3 reporting to the Catapult at the times and in the form required under the terms of this Agreement.

- 2.3** The Piloter (or, where the Pilot is to be delivered by a Pilot Group, the Pilot Lead) undertakes throughout the term of this Pilot Agreement to notify the Catapult, in a timely manner, of any significant information, fact, problem or delay likely adversely to affect the implementation of all or any part of the Pilot.
- 2.4** The Piloter (or, where the Pilot is to be delivered by a Pilot Group, the Pilot Lead) shall, in a timely manner, provide all information reasonably required by the Catapult, including (without limitation) any information required for the Catapult to comply with its obligations under this Agreement, the CA and/or the GA.

3. Financial support

- 3.1** The Catapult shall give Financial Support for the Pilot executed by the [Piloter / Pilot Group], in the payment form(s), and subject to the maximum amounts permitted to be granted, as set out in the schedule of payments specified in Schedule 2 "Pilot Specifics", and subject always to any limitations or conditions imposed on the Catapult in respect of such payments under the terms of the Grant Agreement.
- 3.2** The [Piloter / Pilot Group] shall be entitled to claim Eligible Costs from the Catapult for the Pilot as described in Schedule 4 of this Agreement. The Financial Support shall take the form of a reimbursement of a maximum of eighty percent (80%) of the Eligible Costs of the Pilot actually incurred by [the Piloter / Pilot Group].
- 3.3** For the costs to be considered Eligible Costs for reimbursement from the Catapult under this Agreement, such costs must:
- a) be incurred by the [Piloter / Pilot Group] in accordance with those conditions stated in Schedule 6;
 - b) be incurred in the period of the Pilot as set out in Schedule 2, with the exception of costs relating to the submission of the progress report for the last reporting period and the final report;
 - c) be included in the estimated budget set out in Schedule 2;
 - d) be incurred in connection with the Pilot as described in Schedule 2 and necessary for its implementation;
 - e) be identifiable and verifiable, in particular recorded in [the Piloter's / each member of the Pilot Group's] accounts in accordance with the accounting standards applicable in the jurisdiction(s) where [the Piloter / each member of the Pilot Group] is established and with [the Piloter's / each member of the Pilot Group's] usual cost accounting practices (which should comply with good accounting practices in the applicable jurisdiction(s));

- f) comply with the applicable national law on taxes, labour and social security, and
- g) be reasonable, justified and must comply with the principle of sound financial management, in particular regarding economy and efficiency.

3.4 The Catapult, and any other SynchroniCity Partner, shall at any time be entitled to request reasonable information or additional supporting evidence from the [Piloter / Pilot Group] of any Eligible Cost claimed under this Agreement as may be required in order to verify any sums claimed by [the Pilot Group /the Piloter] comply with the requirements of this Agreement, the Grant Agreement or any other restrictions imposed on the Catapult or other SynchroniCity Partners.

3.5 The Financial Support shall be provided to the [Piloter / Pilot Group] in accordance with the following schedule of payments:

[To insert schedule of payments relevant to the Piloter here]

3.6 The amount of any pre-financing payment is specified in Schedule 2. Any pre-financing payment shall remain the property of the Catapult (and the Catapult may on written demand require all or part of such pre-financing payment to be reimbursed) until the payment of the final balance of all payments to be made to the [Piloter / Pilot Group] under this Agreement. The Catapult will, except if clauses 3.9, 3.10 and/or 3.11 applies, make any agreed pre-financing payment to the [Piloter / Pilot Lead] within thirty (30) days of the later of:

3.6.1 the Effective Date; or

3.6.2 the date falling ten (10) days before the anticipated starting date of the Pilot as detailed in Schedule 2.

3.7 Interim payments and payment of the balance is subject to (and may be held back until) the Catapult's approval of any technical and financial reports submitted to it for the relevant reporting period, in particular an approval of the progress of the Pilot. The reports shall be submitted by the [Piloter / Pilot Lead] to the Catapult together with a request for payment of applicable Financial Support and an invoice for the relevant sums at the times specified in Schedule 2. The reports shall be drawn up using the formats provided by the Catapult from time to time and that will be presented in the Pilot Handbook that the [Piloters / Pilot Group] will receive if they are successful in the open call. This will include a "Model for Technical Report" and a "Model for Financial Statements". The financial report shall as a minimum include the following:

a) identification of the Pilot to which the claim for Financial Support relates;

b) a financial statement of costs actually incurred (in accordance with Schedule 4 "Model for Financial Statements") during the period covered by the report;

c) detailed information and documentation documenting the eligibility of the actual costs as Eligible Costs.

- 3.8** The Catapult will pay to the [Piloter / Pilot Lead] the amount due within ninety (90) days from receiving a valid payment request and an accurate invoice together with the technical and financial report, in accordance with the requirements of this Agreement, for the reporting period in question, except if clause 3.9 and/or 3.10 and/ or 3.11 apply.
- 3.9** Irrespective of the above due date of payments set out in this clause 3, the Catapult shall only be under an obligation to pay any part of the due amount of Financial Support provided that such amount at its due date is within the financial scope of the funds made available at such time by the European Commission to the Catapult in accordance with the terms of the Grant Agreement.
- 3.10** The Catapult may at any time suspend a payment of any sums otherwise due under this Agreement if the Catapult finds that the reporting requirements are not met by [the Piloter / relevant member of the Pilot Group], that the Pilot is not implemented properly as described in Schedule 2, or that any changes to the implementation process that are not justified, or that any other obligation of the [Piloter / Pilot Group] under this Agreement is breached. Any failure of [the Piloter / relevant member of the Pilot Group] to remedy a breach within a reasonable period shall entitle the Catapult, in addition to any other right or remedy available under this Agreement or otherwise, to inform the relevant EU authority thereof, to reduce the maximum amount of Financial Support available to the [Piloter / Pilot Group], or to terminate this Agreement by giving written notice of termination to the [Piloter / Pilot Lead].
- 3.11** Any costs which do not fall within the definition of Eligible Costs will be rejected in full by the Catapult, and the Catapult shall have no liability to the [Piloter / Pilot Lead] for such costs upon such rejection.
- 3.12** All sums set out in this Agreement exclude VAT or any other tax that may be due on such sums, and liability for any applicable VAT or other applicable tax payments due on any amount paid by the Catapult under this Agreement shall be borne in full by the [Piloter / Pilot Group].

4. Provisions in the Grant Agreement to apply to the Pilot Group

- 4.1** The Catapult reserves the right to keeping all data and documentation submitted from the Piloters / Pilot Groups in accordance with the obligations set out in the Article 18 of the Grant Agreement (such obligations being the **"Flow-Down Obligations"**). The Flow-Down Obligations are reproduced in Schedule 5 "GA Flow-Down Obligations". The SynchroniCity Partners are referred to therein as "beneficiaries".
- 4.2** [The Piloter / Each member of the Pilot Group] acknowledges that, to the extent that the [Piloter / Pilot Group] is a receiver of Financial Support, the SynchroniCity Partners are obliged to ensure that [the Piloter / each member of the Pilot Group] is subject to the obligations set out in Articles 22, 23, 26, 35, 36, 38, 39 and 46 of the Grant Agreement (such obligations being the **"Flow-Down Obligations"**). The Flow-Down Obligations are reproduced in Schedule 5 "GA Flow-Down Obligations". The SynchroniCity Partners are referred to therein as "beneficiaries".
- 4.3** [The Piloter / Each member of the Pilot Group] hereby agrees to be bound mutatis mutandis by the Flow-Down Obligations set out in Schedule 5 as the SynchroniCity Partners are towards the European Commission, the European Court of Auditors and the European Anti-fraud Office, respectively referred to in Schedule 5 as "Commission", "ECA" and "OLAF". [The Piloter / Each member of the Pilot Group] acknowledges and agrees that it is only bound by the obligations reproduced in Schedule 5 by virtue of the terms of this Agreement and that it is not a party to, nor shall it have any right to enforce, the terms of the GA or the CA.

5. Intellectual property and access rights

5.1 SynchroniCity Framework and the Pilot Cities' IoT Framework

- 5.1.1 [The Piloter / Each member of the Pilot Group] acknowledges that:
- a) the SynchroniCity Framework (excluding changes or additions to the SynchroniCity Framework that fall within the Pilot Results), the Pilot Cities' IoT Framework and all Intellectual Property Rights and other rights in and to the SynchroniCity Framework and the Pilot Cities' IoT Framework, are proprietary to and owned by the SynchroniCity Partner or applicable third parties, and that the SynchroniCity Framework and the Pilot Cities' IoT Framework embody certain valuable confidential know-how and other secrets; and
 - b) the SynchroniCity Partners or such third parties have copyrights of and other Intellectual Property Rights to the SynchroniCity Framework and the Pilot Cities' IoT Framework, including ideas, functions and graphics. Nothing in this Agreement shall transfer to [the Piloter / any member of the Pilot Group] or confer on [the Piloter / any member of the Pilot Group] any license or other rights in or to, any such Intellectual Property Rights, confidential know-how and other secrets, ideas and processes and expressions and articulations thereof,

except for those limited rights of use expressly granted by way of Access Rights in this Agreement.

- 5.1.2 Access Rights to the SynchroniCity Framework, including data, and the Pilot Cities' IoT Framework, including data, in the form from time to time made available by the SynchroniCity Partners for the implementation of the Pilot, is requested by [the Piloter / any member of the Pilot Group] to the owning or controlling SynchroniCity Partner. To the extent that [the Piloter / any member of the Pilot Group] requires Access Rights, such access is subject to a Sharing Agreement, containing separate terms of conditions in relation to its use by [the Piloter / any member of the Pilot Group], such terms to be agreed on a case by case basis between the relevant Synchronicity Partner and [the Piloter / any member of the Pilot Group].
- 5.1.3 Access Rights to data from the SynchroniCity Framework and the Pilot Cities' IoT Framework are ruled by the pertinent Pilot City's marketplace, if there is one.
- 5.1.4 Access Rights to the SynchroniCity Framework and the Pilot Cities' IoT Framework, in the form from time to time made available by the SynchroniCity Partners, for the Exploitation of the Pilot Results, may be requested by [the Piloter / any member of the Pilot Group] to the owning or controlling SynchroniCity Partner(s). At the owning or controlling SynchroniCity Partners' sole choice and discretion, said SynchroniCity Partners may grant Access Rights to SynchroniCity Framework and the Pilot Cities' IoT Framework for Exploitation of Pilot Results to the requesting [Piloter / member of the Pilot Group] on Fair and Reasonable Conditions under a separate agreement to be negotiated in good faith. Such Access Rights, if granted, shall comprise only a right for the [Piloter / applicable member of the Pilot Group] to create and make available, free of charge or paid for, for use by the public, services that rely upon or are based upon the SynchroniCity Framework and the Pilot Cities' IoT Framework. For the avoidance of doubt nothing in this Agreement constitutes a grant of such Access Rights or an obligation of the owning or controlling SynchroniCity Partners to enter into an agreement with the [Piloter / applicable members of the Pilot Group] to this effect. Irrespective of any grant of Access Rights under a separate agreement as provided for in this Section 5.1.3, the SynchroniCity Partners do not provide any express or implied guarantee to keep the SynchroniCity Framework available for any particular period of time, or at all, or to provide any maintenance services or technical support or undertake any other obligation in relation to the SynchroniCity Framework.
- 5.1.5 [The Piloter's / Each of the members of the Pilot Group's] Access Rights to software provided as part of the SynchroniCity Framework and the Pilot Cities' IoT Framework shall only comprise:
 - a) Access Rights to use the Object Code; and
 - b) where normal use of such Object Code requires an API, Access Rights to use the Object Code and such an API; and

- c) if a) and b) (if required as described above) are not available, and if the [Piloter / applicable members of the Pilot Group] can show that the implementation of their tasks under the Pilot or the Exploitation of their Pilot Results is technically impossible without Access Rights to use the Source Code, Access Rights to the Source Code to the extent Needed.

Access Rights to Restricted SynchroniCity Architecture Components and the Pilot cities' IoT Architecture Components shall be subject to the terms (if any) relating to them set out in Schedule 1 ("SynchroniCity Framework"). Access Rights to the Restricted SynchroniCity Architecture Components and the Pilot Cities' IoT Architecture Components shall further be subject to the specific limitations set forth in Schedule 1.

For the avoidance of doubt [the Piloter's / each member of the Pilot Group's] Access Rights to the SynchroniCity Framework and the Pilot Cities' IoT Framework shall not include any right for [the Piloter / any member of the Pilot Group] to receive

- (i) Source Code (except as expressly provided above in Section 5.1.4), or
- (ii) Object Code ported to a particular hardware platform, or (iii) any right to receive Source Code, Object Code or respective APIs in any particular form or detail, but only as made available.

5.1.6 Access Rights do not include the right for [the Piloter / any of the Pilot Group] to:

- a) make any changes or additions to the SynchroniCity Framework and the Pilot Cities' IoT Framework unless required for the purpose of implementing the Pilot;
- b) use the SynchroniCity Framework and the Pilot Cities' IoT Framework for any purpose whatsoever other than creating and making available for use by the public services as referred to in Sections 5.1.2 and 5.1.3 above;
- c) limit the functionality of the SynchroniCity Framework and the Pilot Cities' IoT Framework or limit the possibilities to build upon the SynchroniCity Framework and the Pilot cities' IoT Framework; or
- d) decompile or otherwise reverse engineer any SynchroniCity Framework and the Pilot Cities' IoT Framework or other part or component of the SynchroniCity Framework and the Pilot cities' IoT Framework.

Accordingly, no [Piloter / member of the Pilot Group] shall do, or permit or allow any other person to do, any of these things.

5.1.7 If [the Piloter's / any of the members of the Pilot Group's] actual, proposed or anticipated use of or changes or additions to the SynchroniCity Framework and to the Pilot Cities' IoT Framework, cf. Section 5.1.5 (a) and (b), have or in the Catapult's sole opinion and discretion would or might have an adverse effect on the use by others of, including Access Rights of others to, the SynchroniCity Framework and the Pilot Cities' IoT Framework, then [the Piloter / each member of the Pilot Group] undertakes to fully and timely comply with the Catapult's reasonable instructions and to take all reasonable measures to stop, prevent or limit such adverse effects at their own cost.

- 5.1.8 Notwithstanding the above terms of this Section 5.1, in the event that, prior to the time of grant of Access Rights to the [Piloter / Pilot Group], any SynchroniCity Framework and the Pilot Cities' IoT Framework or other part of the SynchroniCity Framework and the Pilot Cities' IoT Framework is subject to an open source license, then in respect of such part, the terms of the open source license will prevail over this Section 5.1.

5.2 Pre Existing IPR

- 5.2.1 Save as granted elsewhere under the Agreement, neither the Catapult or SynchroniCity Partners shall acquire any right, title or interest in the [Piloter's / Pilot Group's] Pre-Existing IPR.
- 5.2.2 Neither the Catapult nor the [Piloter / Pilot Group] shall, (except when necessary for the performance of the Agreement) without prior approval, use or disclose any Pre-Existing IPR of the other to any third party, save with regards to the Catapult and disclosure to the SynchroniCity Partners for the purposes of the SynchroniCity Action.

5.3 Pilot Results

- 5.3.1 Data and Access Rights from Pilots generated by the [Piloter / Pilot Group] through use of the SynchroniCity Pilot Cities' Infrastructure or otherwise during the Pilot, shall be owned by the concerned [Piloter / Pilot Group] or as the [Piloter/ Pilot Group] may agree within a separate Sharing Agreement; provided that they shall ensure that such Sharing Agreement is consistent with the terms of this Agreement and in particular (without limitation) shall be consistent with the obligations of the [Piloter / Pilot Group] in, and shall not prejudice the SynchroniCity Partners' or the SynchroniCity Partners' Affiliated Entities' rights under, Sections 5.3.2, 5.3.3, 5.3.4, 5.3.5 and 5.4. The [Piloter / Pilot Group] shall be entitled to freely Exploit and otherwise use and to permit use of all Pilot Results generated and owned by the concerned [Piloter / Pilot Group] (without prejudice to Sections 5.3.3, 5.3.4, 5.3.5 and 5.4).
- 5.3.2 Without prejudice to Sections 5.3.3, 5.3.4, 5.3.5 and 5.4, IPRs from Pilots generated by the [Piloter / Pilot Group] through use of the SynchroniCity Pilot Cities' Infrastructure or otherwise during the Pilot, shall be owned by the concerned [Piloter / Pilot Group] or as the [Piloter/ Pilot Group] may agree within a separate Sharing Agreement. However, the SynchroniCity Partners will be licensed the right to use (internally) any IPR produced by the [Piloter / Pilot Group] as part of the project, for three (3) years after the project finishes. SynchroniCity itself will not retain an equity stake in the [Piloter / Pilot Group] company, nor will it retain any IPR. Additionally, SynchroniCity or the European Commission may ask the [Piloter / Pilot Group] to present your work as part of our public relations and networking events, in order to showcase the benefits of the SynchroniCity project.

- 5.3.3 Hardware installed or produced by the [Piloter / Pilot Group] through use of the SynchroniCity Pilot Cities' Infrastructure or otherwise during the Pilot, shall be owned by the concerned [Piloter / Pilot Group] or as the [Piloter/ Pilot Group] may agree in a separate Sharing Agreement.
- 5.3.4 Notwithstanding anything else in this Agreement, the SynchroniCity Partners and their Affiliated Entities shall be deemed to have requested and shall hereby be deemed granted Access Rights
- a) on a royalty free basis to use for implementation of the SynchroniCity Action (including by using and permitting use thereof for other Pilots using the SynchroniCity Framework and the Pilot Cities' IoT Framework pursuant to the SynchroniCity Action) all Pilot Results which are changes or additions to the SynchroniCity Framework and the Pilot Cities' IoT Framework and
 - b) to Exploit and otherwise to disclose, use and permit use of such Pilot Results, on a royalty free basis for all purposes without any restriction, without giving notice, obtaining consent from or otherwise accounting to any person.
- 5.3.5 Notwithstanding anything else in this Agreement, the SynchroniCity Partners and their Affiliated Entities shall be deemed to have requested and shall hereby be deemed granted Access Rights on a royalty free basis as Needed for implementation of the SynchroniCity Action (including by permitting use thereof if and as needed for other Pilots using the SynchroniCity Framework and the Pilot Cities' IoT Framework pursuant to the SynchroniCity Action) all Pilot Results other than those which are changes or additions to the SynchroniCity Framework and the Pilot Cities' IoT Framework. Access Rights to such Pilot Results (which are not changes or additions to the SynchroniCity Framework and the Pilot Cities' IoT Framework) for Exploitation may be requested by the SynchroniCity Partners or their Affiliated Entities (or any of them) to the owning or controlling [Piloter / Pilot Group]. At the owning or controlling [Piloter's / Pilot Group's] sole choice and discretion Access Rights for Exploitation of such Pilot Results may be granted to the requesting SynchroniCity Partner or Affiliated Entity of a SynchroniCity Partner on Fair and Reasonable Conditions under a separate agreement to be negotiated in good faith. For the avoidance of doubt nothing in this Agreement constitutes a grant of such Access Rights for Exploitation or an obligation of the owning or controlling [Piloter / Pilot Group] to enter into an agreement to this effect with the entity requesting such Access Rights.

5.4 Feedback

- 5.4.1 During the Pilot, and for a period of one (1) year after completion of the Pilot or any earlier termination of this Agreement, the Catapult and/or any other SynchroniCity Partner may request the [Piloter / Pilot Group] (or any of them) to provide Feedback, and the [Piloter / applicable member of the Pilot Group] shall do their outmost in a timely manner to provide such Feedback. In addition, if under a separate agreement the [Piloter / Pilot Group] are granted Access Rights to the SynchroniCity Framework for Exploitation of Pilot Results, cf. Section 5.1.3, the obligation on the [Piloter /

applicable member of the Pilot Group] to provide Feedback shall apply during the term of such separate agreement, and for a period of 1 (1) year after expiry or any termination of such separate agreement. All rights in and to Feedback shall be owned by the [Piloter / applicable member of the Pilot Group] who shall be entitled to freely Exploit and otherwise use and to permit use of all Feedback. However, the [Piloter / Pilot Group] shall comply with the confidentiality obligations on the Feedback as set forth in Section 9.1 (unless and until such obligations are waived in accordance with such Section).

- 5.4.2 Notwithstanding Sections 5.3, 5.4.1 or anything else in this Agreement, the SynchroniCity Partners and their Affiliated Entities shall be deemed to have requested and shall hereby be deemed granted Access Rights to Exploit and otherwise to disclose, use and permit use of Feedback, on a royalty free basis for all purposes without any restriction, without giving notice, obtaining consent from or otherwise accounting to any person.

5.5 No additional Access Rights

- 5.5.1 For the avoidance of doubt, any grant of Access Rights not expressly made by this Agreement shall be at the absolute discretion of the owning party and subject to such terms and conditions as may be negotiated and ultimately agreed between the owning and recipient party(ies).

6. Maintenance and support services

- 6.1** The SynchroniCity Framework and the Pilot Cities' IoT Framework are provided (whether for the implementation of the Pilot or for Exploitation) "as is" and with no obligation for the Catapult or the other SynchroniCity Partners to provide maintenance services or technical support services of any kind in respect of the SynchroniCity Framework and the Pilot Cities' IoT Framework. As a consequence, the Catapult and the other SynchroniCity Partners shall have no responsibilities or liabilities for errors to, or interruptions or impaired functionality of the SynchroniCity Framework and the Pilot Cities' IoT Framework and they shall have no obligations to maintain or to generate improvements to the SynchroniCity Framework and the Pilot Cities' IoT Framework. To the extent improvements to the SynchroniCity Framework and the Pilot Cities' IoT Framework are generated by or on behalf of SynchroniCity Partners in the course of implementing the SynchroniCity Action they shall be made available to the [Piloter / Pilot Group] under Access Rights set out under Section 5.1.
- 6.2** Should the SynchroniCity Partners or any of them at their sole discretion deliver maintenance and/ or technical support services to the [Piloter / Pilot Group], any such maintenance and technical support services shall be delivered with no liability or warranties of any kind.

7. Liability

- 7.1** The [Piloter / Pilot Group] shall fully and exclusively bear the risks in connection with the Pilot, including but not limited to any risk arising from use of the SynchroniCity Framework and the Pilot Cities' IoT Framework under the Access Rights provided. The [Piloter / Pilot Group] shall indemnify and hold the SynchroniCity Partners, including the Catapult, harmless from and against all repayments, loss, liability, costs, charges, claims or damages which the SynchroniCity Partners or the Catapult as a result thereof would incur or suffer or have to pay to the European Commission or any third parties. In addition, should the European Commission have a right of recovery against the Catapult or another SynchroniCity Partner regarding any or all of the Financial Support granted under this Agreement, the [Piloter / Pilot Group] shall repay the sums in question in the terms and on the date specified by the Catapult.
- 7.2** To the extent permissible under applicable law, in no event shall the Catapult or any of the other SynchroniCity Partners be liable to the [Piloter / Pilot Group] or any person or entity connected with any of them for loss or damage caused by the Catapult or any other SynchroniCity Partner, their employees, agents and subcontractors in connection with the Pilot for any of the following, however caused or arising, on any theory of liability, and even if the Catapult and/or any other SynchroniCity Partners were informed or aware of the possibility thereof:
- a) loss of profits, revenue, income, interest, savings, shelf-space, production and business opportunities;
 - b) lost contracts, goodwill, and anticipated savings;
 - c) loss of or damage to reputation or to data;
 - d) costs of recall of products; or
 - e) any type of indirect, incidental, punitive, special or consequential loss or damage.
- 7.3** The Catapult's and other SynchroniCity Partners' liability in aggregate, arising out of or in connection with the Pilot and/or this Agreement, however caused or arising, on any theory of liability, and even if the Catapult and/or any other SynchroniCity Partners were informed or aware of the possibility thereof, shall in no event exceed the total amount of the Financial Support provided to be provided to the [Piloter / Pilot Group] under the terms of this Agreement.
- 7.4** In respect of any information or materials (including the SynchroniCity Framework, the Pilot Cities' IoT Framework and Pilot Results) supplied by one Party to another Party or to or by an SynchroniCity Partner, no warranty or representation of any kind is made, given or implied as to the sufficiency, error-free performance, or fitness for purpose, nor as to the absence of any infringement of any proprietary rights of third parties. Therefore, in particular but without limiting the foregoing:

- a) the [Piloter / Pilot Group] shall in all cases be entirely and solely liable for the use to which they put such information and materials, and the consequences of such use, and
- b) neither the Catapult nor the other SynchroniCity Partners shall be liable to the [Piloter / Pilot Group] in respect of such use;
- c) or any of them in case of infringement of proprietary rights of a third party resulting from the [Piloter / Pilot Group] exercising their Access Rights.

7.5 The exclusions and limitations stated in Sections 7.2, 7.3 and 7.4 above, and any other term of this Agreement that has as its object or effect the exclusion or limitation of liability, shall not apply in respect of any: fraud; death, injury to natural persons or damage to real or immovable property caused by the negligence or wilful act of the Party or SynchroniCity Partner whose liability would otherwise be limited or excluded, its directors, employees, agents and subcontractors; wilful misconduct, gross negligence, wilful breach by such Party or any SynchroniCity Partner of any obligation accepted under the GA, the CA or this Agreement; or otherwise in so far as mandatory applicable law overrides such exclusions and limitations.

8. Processing of personal data

8.1 The provisions concerning Personal Data processing set out in this Section 8 cover the collection and processing of Personal Data in completion of or in connection with the Pilot and/or in connection with the exercise of Access Rights by the [Piloter/ Pilot Group].

8.2 Unless otherwise required by law, the [Piloter / Pilot Group jointly - or one or some of them] if determining, on a case by case basis and depending on the specific type of Pilot, the purposes and means of the processing of Personal Data as agreed between [the Piloter / relevant member(s) of the Pilot Group] - shall act as the data controller in respect of Personal Data collected and processed in the completion of or in connection with the Pilot. In this capacity the applicable data controlling Piloters shall be liable for compliance with all the applicable statutory Data Protection Legislation. The applicable data controlling Piloter(s), as pertaining to their using the SynchroniCity Framework, are obliged to protect Personal Data against loss, damage, unauthorised access, alteration and distribution or other unauthorised processing: for this purpose, the applicable data controlling Piloter(s) shall take appropriate technical, organisational and personnel measures adequate to the manner of the processing of Personal Data.

8.3 Acting as data controller the applicable data controlling Piloter(s) shall be responsible for obtaining, if required by applicable law, any statutory written approvals from the applicable competent data protection authority before commencing the Pilot with or in any manner involving any Data Subjects. The Pilot Lead shall provide the Catapult

with a copy of all such written approvals so that they can be provided to the European Commission.

- 8.4** The applicable data controlling Piloter(s) undertake to bind any and all of their data processors, including if necessary the Catapult and/or any other SynchroniCity Partners and their sub-contractors, to a data processing agreement in compliance with Data Protection Legislation. A copy of any such data processing agreements shall be provided the Catapult. As part of such agreement the applicable data controlling Piloter(s) shall ensure that no Personal Data are processed for any other purpose than that of the Pilot and that processed data are pertinent and not redundant insofar as concerns the purposes for which they were collected and subsequently processed.
- 8.5** With the sole exception of those cases in which the preservation of data is required by law, the Personal Data will be erased or at least anonymized by the data controllers and/or processors, from wherever they are stored, as soon as the Personal Data are no longer necessary for the specific Pilot purposes; such erasure mechanisms being either destruction, demagnetisation or overwriting. In the event of termination of this Agreement for any cause, the [Piloter / Pilot Group (any one of them)] will no longer be permitted to process Personal Data through the SynchroniCity Framework.
- 8.6** The [Piloter / Pilot Group] acknowledges that the SynchroniCity Framework comply with the required standard data security measures according to any laws as applicable to the [Piloter / Pilot Group]. The [Piloter / Pilot Group], moreover, acknowledges that the Catapult and any other SynchroniCity Partners, if appointed as data processors, are not responsible for compliance with any data protection or privacy law applicable to the [Piloter / Pilot Group] and not directly, explicitly and specifically applicable to data processors.
- 8.7** Notwithstanding the above, the Parties agree that any SynchroniCity Framework, Pilot Results, Feedback, Confidential Information and/or any and all data and/or information that is possibly, disclosed or otherwise made available between the Parties during the implementation of the Pilot and/or for any Exploitation activities ("Shared Information"), shall not include – if not strictly necessary for the purposes of the Pilot and in full compliance with applicable Data Protection Legislation – Personal Data. Accordingly, the Parties agree that they will take all necessary steps to ensure that all Personal Data is removed from the Shared Information, made illegible, or otherwise made inaccessible (i.e. de-identify) to the other Parties prior to providing the Shared Information to such other Parties.]
- 8.8** In deploying their pilots, the [Piloter / Pilot Group] must comply with all requirements of the GDPR, including where necessary the appointment of a Data Protection Officer, and fulfilling any other roles foreseen by the GDPR including for example completing Data Protection Impact Assessments. In no cases the Catapult

or any of the SynchroniCity partners will be responsible to ensure compliance on behalf of the [Piloter / Pilot Group].

- 8.9** The [Piloter / Pilot Group] acknowledges and agrees that it shall enter into a data sharing agreement with relevant SynchroniCity Partners that shall govern the sharing of data between those parties.

9. Non-disclosure of confidential information

- 9.1** All information of whatever nature and in whatever form or mode of communication, which is disclosed by a Party (the "Disclosing Party") to another Party (the "Recipient") in connection with the Pilot during its implementation and which has been explicitly marked as "confidential" or "secret" at the time of disclosure, or when disclosed orally has been identified as confidential at the time of disclosure and has been confirmed and designated in writing within thirty (30) calendar days from oral disclosure at the latest as Confidential Information by the Disclosing Party, or is Feedback, is "Confidential Information". However, notwithstanding the foregoing or anything else in this Agreement, Feedback shall be considered Confidential Information of the Catapult and/or the other SynchroniCity Partners or, in the case that the Feedback relates to a particular part(s) or component(s) of the SynchroniCity Framework, shall be considered the Confidential Information of the SynchroniCity Partners who, or whose Affiliated Entities, provided, developed, own or control such part(s) or component(s) (the "Owning SynchroniCity Partners"); and (to avoid doubt) Feedback shall not be considered Confidential Information of the [Piloter / Pilot Group] or any of them. Accordingly, the [Piloter / Pilot Group] shall in respect of Feedback comply with the confidentiality obligations as a Recipient in this Section 9. However, in the case that, in the unanimous opinion and full discretion of the Owning SynchroniCity Partners, having taken into account the advice of the Catapult, the Feedback, if made public, would not constitute adverse publicity for the Pilot and/or the Action, and/or any of the SynchroniCity Partners and/or their Affiliated Entities, then the Owning SynchroniCity Partners shall, following written request from the [Piloter / Pilot Group (or any of them)], without undue delay in writing waive the confidentiality obligations in relation to the applicable Feedback.
- 9.2** Each Recipient hereby undertakes for the duration of the Pilot and a period of four (4) years after the end date of the Pilot as detailed in Schedule 2 ("Pilot Specifics") or earlier termination of this Agreement:
- a) not to use Confidential Information otherwise than for the purpose for which it was disclosed;
 - b) not to disclose Confidential Information to any third party including Affiliated Entities without the prior written consent by the Disclosing Party, wherein the Recipient must ensure that an arrangement is in place prior to such disclosure

that subjects the Affiliated Entities or applicable third party to provisions at least as strict as provided in this Section 9;

- c) to apply for the security of Confidential Information at least the same degree of care as it applies for the security of its own Confidential Information (but in any case shall apply not less than reasonable care); and
- d) to ensure that internal distribution of Confidential Information by such Recipient and its Affiliated Entities shall take place on a need-to-know basis.

9.3 The above shall not apply for disclosure or use of Confidential Information, if and in so far as the Recipient can show that:

- a) the Confidential Information becomes publicly available by means other than a breach of the Recipient's confidentiality obligations;
- b) the Disclosing Party subsequently informs the Recipient that the Confidential Information is no longer confidential;
- c) the Confidential Information is communicated to the Recipient without any obligation of confidence by a third party who is to the best knowledge of the Recipient in lawful possession thereof and under no obligation of confidence to the Disclosing Party;
- d) the disclosure or communication of the Confidential Information is foreseen by provisions of the Grant Agreement;
- e) the Confidential Information, at any time, was developed by the Recipient completely independently of any such disclosure by the Disclosing Party; or
- f) the Confidential Information was already known to the Recipient prior to disclosure; or
- g) the Recipient is required to disclose the Confidential Information in order to comply with applicable laws or regulations or with a court or administrative order subject to Section 9.5 hereunder.

9.4 Each Recipient shall promptly advise the corresponding Disclosing Party in writing of any unauthorised disclosure, misappropriation or misuse of Confidential Information after it becomes aware of such unauthorised disclosure, misappropriation or misuse.

9.5 If a Recipient becomes aware that it will be required to disclose Confidential Information in order to comply with applicable laws or regulations or with a court or administrative order, it shall, to the extent it is lawfully able to do so, prior to any such disclosure:

- a) promptly notify the Disclosing Party of said request, and
- b) use reasonable efforts to protect the confidentiality of the information at the Disclosing Party's expense and make such disclosure only to the extent it is compelled.

9.6 The Catapult's disclosure of Confidential Information to the European Commission shall be governed exclusively by the terms of the Grant Agreement. Accordingly, nothing in this Agreement shall prevent the Catapult from complying with its

obligations, including its reporting obligations, towards the European Commission, and any such disclosures shall be subject to the terms of the Grant Agreement.

10. Dissemination & communication

- 10.1** The Piloter (or, where the Pilot is to be delivered by a Pilot Group the Pilot Lead) shall ensure that the Catapult is fully and systematically informed, in a timely manner and in writing, of any expected dissemination or communication activities relating to the Pilot and its Pilot Results, and that the SynchroniCity Partners are actively invited to dissemination/communication events and to dissemination/communication possibilities. All dissemination/communication activities must be conducted so as not to breach obligations under Section 9 (Non-Disclosure of Confidential Information).
- 10.2** Any such dissemination or communication activity (including publications, presentations, contributions to any standard's organization or marketing materials) by the [Piloter / Pilot Group] shall:
- a) be done in a reasonable and consistent manner using both the SynchroniCity name/logo and in accordance with the requirements of GA Article 38 as reproduced in Schedule 5 ("GA Flow-Down Obligations");
 - b) indicate that it reflects only the [Piloter's / Pilot Group's] view and that neither the SynchroniCity Partners nor the European Commission are responsible for any use that may be made of the information it contains;
 - c) be conducted in an open and inclusive manner providing open access (free of charge online access for any user) to the authorized publications/presentations and data, however, always in accordance with Data Protection Legislation; and
 - d) comply with the guidelines for communication and engagement provided to the [Piloter / Pilot Group] by the Catapult at any time.
- 10.3** Nothing in this Agreement shall be construed as conferring rights to use in advertising, publicity or otherwise the name of any of the SynchroniCity Partners or any of their logos or trademarks without their prior written approval.
- 10.4** The Catapult and the other SynchroniCity Partners shall be entitled to include the main issues and information regarding the Pilot in their reporting towards the European Commission.

11. Term and termination

- 11.1** This Agreement shall commence on the Effective Date and shall continue until the end date of the Pilot as detailed in Schedule 2, when (unless agreed otherwise between the parties in writing) this Agreement shall automatically terminate. Neither the Catapult nor any of the other SynchroniCity Partners have any obligation to procure the solution of the [Pilot / any member of the Pilot Group] on expiry or termination of this Agreement,
- 11.2** This Agreement may be terminated by the Catapult by written notice having immediate effect, and without prejudice to any other rights of the Catapult and the other SynchroniCity Partners under this Agreement:
- a) if the [Piloter / any member of the Pilot Group] are in material breach of any of their obligations, representations or warranties hereunder and have failed to effect any remedy in due time after a written notice requiring such remedy has been given by the Catapult specifying a time of not more than thirty (30) days within which the remedy is to be effected;
 - b) if [the Piloter / any member of the Pilot Group] is subjected to receivership, bankruptcy, suspension of payments or insolvency, or makes an assignment for the benefit of creditors, or goes out of business, or is subject to any similar event or proceeding; or
 - c) if [the Piloter / any member of the Pilot Group] is subject to a Force Majeure event, which prevents the [Piloter / Pilot Group] from performing its obligations hereunder and such circumstances have lasted, or can reasonably be expected to last, more than three (3) months. The [Piloter / Pilot Group through the Pilot Lead] shall notify the Catapult in writing of any Force Majeure without undue delay, describing the Force Majeure event, and its anticipated duration, and the [Piloter / affected Piloters] shall use reasonable efforts to mitigate the impact of such Force Majeure event and to resume performance of their respective obligations as soon as possible.
- 11.3** Access Rights granted to the [Piloter / Pilot Group] shall cease immediately upon the effective date of termination of this Agreement, without prejudice to Section 5.1.3 or any separate agreement entered into pursuant thereto.
- 11.4** In case of early termination of this Agreement under Section 11.2 the [Piloter / Pilot Group] shall refund all Financial Support payments [it has / they have] received except the amount of any Financial Support contribution accepted by the Catapult to be not refundable. Other costs incurred after the termination (i.e. after the notified date on which termination takes effect) shall in no circumstances be considered to be Eligible Costs.
- 11.5** The parties acknowledge and agree that the provisions of Sections 4, 5, 6, 7, 8, 9, 10, 11, 12 and 13 of this Agreement are intended to survive, and continue in effect after, any termination or expiry of this Agreement, provided that where this Agreement is terminated by the Catapult under Section 11.2, the Piloters' Access

Rights, and rights to request or be granted Access Rights, under Section 5.1 shall terminate with immediate effect upon such termination.

12. Miscellaneous

- 12.1** The Catapult rules the Pilot Cities and the [the Piloter / any member of the Pilot Group] based on this Agreement, the attached Sharing Agreement and the Consortium agreement.
- 12.2** Should any provision of this Agreement be or become invalid, illegal or unenforceable, it shall not affect the validity of the remaining provisions of this Agreement. In such a case, the Parties concerned shall be entitled to request that a valid, legal, enforceable and practicable replacement provision be negotiated which fulfils the purpose of the original provision.
- 12.3** No [Piloter / member of the Pilot Group] shall be entitled to act or to make legally binding declarations on behalf of the Catapult or any other SynchroniCity Partner, and nothing in this Agreement shall be deemed to constitute a joint venture, agency, partnership, interest grouping or any other kind of formal business grouping or entity between the Parties or between the [Piloter / Pilot Group (or any of them)] and any SynchroniCity Partner.
- 12.4** No rights or obligations of the [Piloter / Pilot Group (or any of them)] arising from this Agreement may be assigned or transferred, in whole or in part, and no obligations of the [Piloter / Pilot Group (or any of them)] may be sub-contracted, without the Catapult's prior formal written approval; and such approval shall not exempt the [Piloter / Pilot Group (or any of them)] from any of their obligations hereunder. The [Piloter / Pilot Group] shall ensure that any permitted sub-contractor is bound by the same obligations as provided hereunder, including the GA flow-down obligations set forth in Schedule 5.
- 12.5** Although (with the exception of the Catapult) the SynchroniCity Partners and their Affiliated Entities are not Parties to this Agreement, they are intended by the Parties to be third party beneficiaries under this Agreement and accordingly shall be entitled to enforce the terms of this Agreement against the [Piloter / Pilot Group] and in particular (without limitation) shall be entitled to the benefit of, and to enforce, Section 5.2, Section 5.3, Section 9.1, any exclusion or limitation of liability of the SynchroniCity Partners contained in this Agreement and any indemnity in favour of the SynchroniCity Partners contained in this Agreement.
- 12.6** [All obligations of the Piloters under this Agreement apply to the Piloters jointly and severally and accordingly each such obligation may be enforced in full against the Piloters collectively and each of them individually.] ***[Drafting Note: Only applicable where Pilot consortium is used otherwise to remove and leave]***

- 12.7** Amendments and modifications to the text of this Agreement require a separate written agreement to be signed between all Parties.
- 12.8** This Agreement is drawn up in English, which language shall govern all documents, notices, reports, court/arbitral proceedings and processes relating thereto. Notices, reports, invoices and other forms of communication regarding this Agreement shall be forwarded to the other Party using the contact details listed in Schedule 2. Any change of the listed contact details shall be communicated in writing to the other Party to become effective.
- 12.9** In case of any inconsistencies between Schedule 2 ("Pilot Specifics") on one part and the remainder of this Agreement on the other part, the provisions of the remainder of this Agreement shall prevail.

13. Applicable law and venue

- 13.1** This Agreement shall be construed in accordance with and governed by the laws of Belgium excluding its conflict of law provisions. However, nothing in this Agreement shall be deemed to require a Party to breach any mandatory statutory law under which the Party is operating.
- 13.2** All disputes directly arising under this Agreement (other than disputes relating to the infringement and/ or validity of Intellectual Property Rights which shall be the exclusive jurisdiction of the competent court), which cannot be settled amicably, shall be subject to the jurisdiction of the competent court in Brussels.
- 13.3** The foregoing shall be without prejudice to the right of any Party to seek injunctive relief or other equitable compensation before any court in any place where any unauthorised use of its Intellectual Property Rights or Confidential Information occurs or threatens to occur.

14. SIGNATURES

For an on behalf of the Catapult:

Date and place: Signature:

[Drafting Note: Piloter signature details to be amended depending on whether an individual Piloter organisation or a consortium is being appointed]

[For an on behalf of [Official name in full of Pilot Lead]

Date and place: Signature:

For an on behalf of [Official name in full of Piloter]

Date and place: Signature:

For an on behalf of [Official name in full of Piloter]

Date and place: Signature:

For an on behalf of [Official name in full of Piloter]

Official name in full of Piloter

Date and place: Signature:

For an on behalf of [Official name in full of Piloter]

Official name in full of Piloter

Date and place: Signature:

For an on behalf of [Official name in full of Piloter]

Official name in full of Piloter

Date and place: Signature:

For an on behalf of [Official name in full of Piloter]

Official name in full of Piloter

Date and place: Signature:]

Schedule 1: SynchroniCity Framework

[To be inserted – this will be based on the SynchroniCity Guidance for Applicants document]

Schedule 2: Pilot Specifics

[TBA]

This section will be a copy automatically generated from the applicants proposal and budget.

Schedule 3: Model for Technical Report

[TBA]

Schedule 4: Model for Financial Statements

[TBA]

Schedule 5: GA Flow-Down Obligations.

ARTICLE 18 — KEEPING RECORDS — SUPPORTING DOCUMENTATION

18.1 Obligation to keep records and other supporting documentation

The beneficiaries must — for a period of five years after the payment of the balance — keep records and other supporting documentation in order to prove the proper implementation of the action and the costs they declare as eligible.

They must make them available upon request (see Article 17) or in the context of checks, reviews, audits or investigations (see Article 22).

If there are on-going checks, reviews, audits, investigations, litigation or other pursuits of claims under the Agreement (including the extension of findings; see Articles 22), the beneficiaries must keep the records and other supporting documentation until the end of these procedures.

The beneficiaries must keep the original documents. Digital and digitalised documents are considered originals if they are authorised by the applicable national law. The Commission may accept nonoriginal documents if it considers that they offer a comparable level of assurance.

18.1.1 Records and other supporting documentation on the scientific and technical implementation

The beneficiaries must keep records and other supporting documentation on scientific and technical implementation of the action in line with the accepted standards in the respective field.

18.1.2 Records and other documentation to support the costs declared

The beneficiaries must keep the records and documentation supporting the costs declared, in particular the following:

- (a) for **actual costs**: adequate records and other supporting documentation to prove the costs declared, such as contracts, subcontracts, invoices and accounting records. In addition, the beneficiaries' usual cost accounting practices and internal control procedures must enable direct reconciliation between the amounts declared, the amounts recorded in their accounts and the amounts stated in the supporting documentation;
- (b) for **unit costs**: adequate records and other supporting documentation to prove the number of units declared. Beneficiaries do not need to identify the actual eligible

costs covered or to keep or provide supporting documentation (such as accounting statements) to prove the amount per unit.

In addition, **for direct personnel costs declared as unit costs calculated in accordance with the beneficiary's usual cost accounting practices**, the beneficiaries must keep adequate records and documentation to prove that the cost accounting practices used comply with the conditions set out in Article 6.2, Point A.

The beneficiaries may submit to the Commission, for approval, a certificate (drawn up in accordance with Annex 6) stating that their usual cost accounting practices comply with these conditions (**'certificate on the methodology'**). If the certificate is approved, costs declared in line with this methodology will not be challenged subsequently, unless the beneficiaries have concealed information for the purpose of the approval.

- (c) for **flat-rate costs**: adequate records and other supporting documentation to prove the eligibility of the costs to which the flat-rate is applied. The beneficiaries do not need to identify the costs covered or provide supporting documentation (such as accounting statements) to prove the amount declared at a flat-rate.

In addition, for **personnel costs** (declared as actual costs or on the basis of unit costs), the beneficiaries must keep **time records** for the number of hours declared. The time records must be in writing and approved by the persons working on the action and their supervisors, at least monthly. In the absence of reliable time records of the hours worked on the action, the Commission may accept alternative evidence supporting the number of hours declared, if it considers that it offers an adequate level of assurance.

As an exception, for **persons working exclusively on the action**, there is no need to keep time records, if the beneficiary signs a **declaration** confirming that the persons concerned have worked exclusively on the action.

18.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, costs insufficiently substantiated will be ineligible (see Article 6) and will be rejected (see Article 42), and the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 22 — CHECKS, REVIEWS, AUDITS AND INVESTIGATIONS — EXTENSION OF FINDINGS

22.1 Checks, reviews and audits by the Commission

22.1.1 Right to carry out checks

The Commission will — during the implementation of the action or afterwards — check the proper implementation of the action and compliance with the obligations under the agreement, including assessing deliverables and reports.

For this purpose the Commission may be assisted by external persons or bodies.

The Commission may also request additional information in accordance with Article 17. The Commission may request beneficiaries to provide such information to it directly.

Information provided must be accurate, precise and complete and in the format requested, including electronic format.

22.1.2 Right to carry out reviews

The Commission may — during the implementation of the action or afterwards — carry out reviews on the proper implementation of the action (including assessment of deliverables and reports), compliance with the obligations under the Agreement and continued scientific or technological relevance of the action.

Reviews may be started **up to two years after the payment of the balance**. They will be formally notified to the coordinator or beneficiary concerned and will be considered to have started on the date of the formal notification.

If the review is carried out on a third party (see Articles 10 to 16), the beneficiary concerned must inform the third party.

The Commission may carry out reviews directly (using its own staff) or indirectly (using external persons or bodies appointed to do so). It will inform the coordinator or beneficiary concerned of the identity of the external persons or bodies. They have the right to object to the appointment on grounds of commercial confidentiality.

The coordinator or beneficiary concerned must provide — within the deadline requested — any information and data in addition to deliverables and reports already submitted (including information on the use of resources). The Commission may request beneficiaries to provide such information to it directly.

The coordinator or beneficiary concerned may be requested to participate in meetings, including with external experts.

For **on-the-spot** reviews, the beneficiaries must allow access to their sites and premises, including to external persons or bodies, and must ensure that information requested is readily available.

Information provided must be accurate, precise and complete and in the format requested, including electronic format.

On the basis of the review findings, a '**review report**' will be drawn up.

The Commission will formally notify the review report to the coordinator or beneficiary concerned, which has 30 days to formally notify observations ('**contradictory review procedure**').

Reviews (including review reports) are in the language of the Agreement.

22.1.3 Right to carry out audits

The Commission may — during the implementation of the action or afterwards — carry out audits on the proper implementation of the action and compliance with the obligations under the Agreement.

Audits may be started **up to two years after the payment of the balance**. They will be formally notified to the coordinator or beneficiary concerned and will be considered to have started on the date of the formal notification.

If the audit is carried out on a third party (see Articles 10 to 16), the beneficiary concerned must inform the third party.

The Commission may carry out audits directly (using its own staff) or indirectly (using external persons or bodies appointed to do so). It will inform the coordinator or beneficiary concerned of the identity of the external persons or bodies. They have the right to object to the appointment on grounds of commercial confidentiality.

The coordinator or beneficiary concerned must provide — within the deadline requested — any information (including complete accounts, individual salary statements or other personal data) to verify compliance with the Agreement. The Commission may request beneficiaries to provide such information to it directly.

For **on-the-spot** audits, the beneficiaries must allow access to their sites and premises, including to external persons or bodies and must ensure that information requested is readily available.

Information provided must be accurate, precise and complete and in the format requested, including electronic format.

On the basis of the audit findings, a 'draft audit report' will be drawn up.

The Commission will formally notify the draft audit report to the coordinator or beneficiary concerned, which has 30 days to formally notify observations ('**contradictory audit procedure**'). This period may be extended by the Commission in justified cases.

The '**final audit report**' will take into account observations by the coordinator or beneficiary concerned. The report will be formally notified to it.

Audits (including audit reports) are in the language of the Agreement.

The Commission may also access the beneficiaries' statutory records for the periodical assessment of unit costs or flat-rate amounts.

22.2 Investigations by the European Anti-Fraud Office (OLAF)

Under Regulations No 883/2013¹ and No 2185/96² (and in accordance with their provisions and procedures), the European Anti-Fraud Office (OLAF) may — at any moment during implementation of the action or afterwards — carry out investigations, including on-the-spot checks and inspections, to establish whether there has been fraud, corruption or any other illegal activity affecting the financial interests of the EU.

22.3 Checks and audits by the European Court of Auditors (ECA)

Under Article 287 of the Treaty on the Functioning of the European Union (TFEU) and Article 161 of the Financial Regulation No 966/2012³, the European Court of Auditors (ECA) may — at any moment during implementation of the action or afterwards — carry out audits.

The ECA has the right of access for the purpose of checks and audits.

22.4 Checks, reviews, audits and investigations for international organisations

Not applicable

22.5 Consequences of findings in checks, reviews, audits and investigations — Extension of findings

22.5.1 Findings in this grant

Findings in checks, reviews, audits or investigations carried out in the context of this grant may lead to the rejection of ineligible costs (see Article 42), reduction of the grant (see Article 43), recovery of undue amounts (see Article 44) or to any of the other measures described in Chapter 6.

¹ Regulation (EU, Euratom) No 883/2013 of the European Parliament and of the Council of 11 September 2013 concerning investigations conducted by the European Anti-Fraud Office (OLAF) and repealing Regulation (EC) No 1073/1999 of the European Parliament and of the Council and Council Regulation (Euratom) No 1074/1999 (OJ L 248, 18.09.2013, p. 1).

² Council Regulation (Euratom, EC) No 2185/1996 of 11 November 1996 concerning on-the-spot checks and inspections carried out by the Commission in order to protect the European Communities' financial interests against fraud and other irregularities (OJ L 292, 15.11.1996, p. 2).

³ Regulation (EU, Euratom) No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union and repealing Council Regulation (EC, Euratom) No 1605/2002 (OJ L 298, 26.10.2012, p. 1).

Rejection of costs or reduction of the grant after the payment of the balance will lead to a revised final grant amount (see Article 5.4).

Findings in checks, reviews, audits or investigations may lead to a request for amendment for the modification of Annex 1 (see Article 55).

Checks, reviews, audits or investigations that find systemic or recurrent errors, irregularities, fraud or breach of obligations may also lead to consequences in other EU or Euratom grants awarded under similar conditions (**'extension of findings from this grant to other grants'**).

Moreover, findings arising from an OLAF investigation may lead to criminal prosecution under national law.

22.5.2 Findings in other grants

The Commission may extend findings from other grants to this grant (**'extension of findings from other grants to this grant'**), if:

- (a) the beneficiary concerned is found, in other EU or Euratom grants awarded under similar conditions, to have committed systemic or recurrent errors, irregularities, fraud or breach of obligations that have a material impact on this grant and
- (b) those findings are formally notified to the beneficiary concerned — together with the list of grants affected by the findings — no later than two years after the payment of the balance of this grant.

The extension of findings may lead to the rejection of costs (see Article 42), reduction of the grant (see Article 43), recovery of undue amounts (see Article 44), suspension of payments (see Article 48), suspension of the action implementation (see Article 49) or termination (see Article 50).

22.5.3 Procedure

The Commission will formally notify the beneficiary concerned the systemic or recurrent errors and its intention to extend these audit findings, together with the list of grants affected.

22.5.3.1 If the findings concern **eligibility of costs**: the formal notification will include:

- (a) an invitation to submit observations on the list of grants affected by the findings;
- (b) the request to submit **revised financial statements** for all grants affected;
- (c) the **correction rate for extrapolation** established by the Commission on the basis of the systemic or recurrent errors, to calculate the amounts to be rejected if the beneficiary concerned:
 - i) considers that the submission of revised financial statements is not possible or practicable
 - or
 - ii) does not submit revised financial statements.

The beneficiary concerned has 90 days from receiving notification to submit observations, revised financial statements or to propose a duly substantiated **alternative correction method**. This period may be extended by the Commission in justified cases.

The Commission may then start a rejection procedure in accordance with Article 42, on the basis of:

- the revised financial statements, if approved;
 - the proposed alternative correction method, if accepted
- or
- the initially notified correction rate for extrapolation, if it does not receive any observations or revised financial statements, does not accept the observations or the proposed alternative correction method or does not approve the revised financial statements.

22.5.3.2 If the findings concern **substantial errors, irregularities or fraud** or **serious breach of obligations**: the formal notification will include:

- (a) an invitation to submit observations on the list of grants affected by the findings and
- (b) the flat-rate the Commission intends to apply according to the principle of proportionality.

The beneficiary concerned has 90 days from receiving notification to submit observations or to propose a duly substantiated alternative flat-rate.

The Commission may then start a reduction procedure in accordance with Article 43, on the basis of:

- the proposed alternative flat-rate, if accepted
- or
- the initially notified flat-rate, if it does not receive any observations or does not accept the observations or the proposed alternative flat-rate.

22.6 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, any insufficiently substantiated costs will be ineligible (see Article 6) and will be rejected (see Article 42).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 23 — EVALUATION OF THE IMPACT OF THE ACTION

23.1 Right to evaluate the impact of the action

The Commission may carry out interim and final evaluations of the impact of the action measured against the objective of the EU programme.

Evaluations may be started during implementation of the action and up to five years after the payment of the balance. The evaluation is considered to start on the date of the formal notification to the coordinator or beneficiaries.

The Commission may make these evaluations directly (using its own staff) or indirectly (using external bodies or persons it has authorised to do so).

The coordinator or beneficiaries must provide any information relevant to evaluate the impact of the action, including information in electronic format.

23.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the Commission may apply the measures described in Chapter 6.

ARTICLE 35 — CONFLICT OF INTERESTS

35.1 Obligation to avoid a conflict of interests

The beneficiaries must take all measures to prevent any situation where the impartial and objective implementation of the action is compromised for reasons involving economic interest, political or national affinity, family or emotional ties or any other shared interest ('**conflict of interests**').

They must formally notify to the Commission without delay any situation constituting or likely to lead to a conflict of interests and immediately take all the necessary steps to rectify this situation.

The Commission may verify that the measures taken are appropriate and may require additional measures to be taken by a specified deadline.

35.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43) and the Agreement or participation of the beneficiary may be terminated (see Article 50).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 36 — CONFIDENTIALITY

36.1 General obligation to maintain confidentiality

During implementation of the action and for four years after the period set out in Article 3, the parties must keep confidential any data, documents or other material (in any form) that is identified as confidential at the time it is disclosed (**'confidential information'**).

If a beneficiary requests, the Commission may agree to keep such information confidential for an additional period beyond the initial four years.

If information has been identified as confidential only orally, it will be considered to be confidential only if this is confirmed in writing within 15 days of the oral disclosure.

Unless otherwise agreed between the parties, they may use confidential information only to implement the Agreement.

The beneficiaries may disclose confidential information to their personnel or third parties involved in the action only if they:

- (a) need to know to implement the Agreement and
- (b) are bound by an obligation of confidentiality.

This does not change the security obligations in Article 37, which still apply.

The Commission may disclose confidential information to its staff, other EU institutions and bodies. It may disclose confidential information to third parties, if:

- (a) this is necessary to implement the Agreement or safeguard the EU's financial interests and
- (b) the recipients of the information are bound by an obligation of confidentiality.

Under the conditions set out in Article 4 of the Rules for Participation Regulation No 1290/2013⁴, the Commission must moreover make available information on the results to other EU institutions, bodies, offices or agencies as well as Member States or associated countries.

The confidentiality obligations no longer apply if:

- (a) the disclosing party agrees to release the other party;
- (b) the information was already known by the recipient or is given to him without obligation of confidentiality by a third party that was not bound by any obligation of confidentiality;
- (c) the recipient proves that the information was developed without the use of confidential information;
- (d) the information becomes generally and publicly available, without breaching any confidentiality obligation, or
- (e) the disclosure of the information is required by EU or national law.

⁴ Regulation (EU) No 1290/2013 of the European Parliament and of the Council of 11 December 2013 laying down the rules for participation and dissemination in "Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020)" (OJ L 347, 20.12.2013 p.81).

36.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 38 — PROMOTING THE ACTION — VISIBILITY OF EU FUNDING

38.1 Communication activities by beneficiaries

38.1.1 Obligation to promote the action and its results

The beneficiaries must promote the action and its results, by providing targeted information to multiple audiences (including the media and the public) in a strategic and effective manner.

This does not change the dissemination obligations in Article 29, the confidentiality obligations in Article 36 or the security obligations in Article 37, all of which still apply.

Before engaging in a communication activity expected to have a major media impact, the beneficiaries must inform the Commission (see Article 52).

38.1.2 Information on EU funding — Obligation and right to use the EU emblem

Unless the Commission requests or agrees otherwise or unless it is impossible, any communication activity related to the action (including in electronic form, via social media, etc.) and any infrastructure, equipment and major results funded by the grant must:

- (a) display the EU emblem and
- (b) include the following text:

For communication activities: *"This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 732240".*

For infrastructure, equipment and major results: *"This [infrastructure][equipment][insert type of result] is part of a project that has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 732240".*

When displayed together with another logo, the EU emblem must have appropriate prominence.

For the purposes of their obligations under this Article, the beneficiaries may use the EU emblem without first obtaining approval from the Commission.

This does not, however, give them the right to exclusive use.

Moreover, they may not appropriate the EU emblem or any similar trademark or logo, either by registration or by any other means.

38.1.3 Disclaimer excluding Commission responsibility

Any communication activity related to the action must indicate that it reflects only the author's view and that the Commission is not responsible for any use that may be made of the information it contains.

38.2 Communication activities by the Commission

38.2.1 Right to use beneficiaries' materials, documents or information

The Commission may use, for its communication and publicising activities, information relating to the action, documents notably summaries for publication and public deliverables as well as any other material, such as pictures or audio-visual material received from any beneficiary (including in electronic form).

This does not change the confidentiality obligations in Article 36 and the security obligations in Article 37, all of which still apply.

If the Commission's use of these materials, documents or information would risk compromising legitimate interests, the beneficiary concerned may request the Commission not to use it (see Article 52).

The right to use a beneficiary's materials, documents and information includes:

- (a) **use for its own purposes** (in particular, making them available to persons working for the Commission or any other EU institution, body, office or agency or body or institutions in EU Member States; and copying or reproducing them in whole or in part, in unlimited numbers);
- (b) **distribution to the public** (in particular, publication as hard copies and in electronic or digital format, publication on the internet, as a downloadable or non-downloadable file, broadcasting by any channel, public display or presentation, communicating through press information services, or inclusion in widely accessible databases or indexes);
- (c) **editing or redrafting** for communication and publicising activities (including shortening, summarising, inserting other elements (such as meta-data, legends, other graphic, visual, audio or text elements), extracting parts (e.g. audio or video files), dividing into parts, use in a compilation);
- (d) **translation**;

- (e) giving **access in response to individual requests** under Regulation No 1049/2001⁵, without the right to reproduce or exploit;
- (f) **storage** in paper, electronic or other form;
- (g) **archiving**, in line with applicable document-management rules, and
- (h) the right to authorise third parties to act on its behalf or sub-license the modes of use set out in Points (b), (c), (d) and (f) to third parties if needed for the communication and publicising activities of the Commission.

If the right of use is subject to rights of a third party (including personnel of the beneficiary), the beneficiary must ensure that it complies with its obligations under this Agreement (in particular, by obtaining the necessary approval from the third parties concerned).

Where applicable (and if provided by the beneficiaries), the Commission will insert the following information:

“© – [year] – [name of the copyright owner]. All rights reserved. Licensed to the European Union (EU) under conditions.”

38.3 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

ARTICLE 46 — LIABILITY FOR DAMAGES

46.1 Liability of the Commission

The Commission cannot be held liable for any damage caused to the beneficiaries or to third parties as a consequence of implementing the Agreement, including for gross negligence.

The Commission cannot be held liable for any damage caused by any of the beneficiaries or third parties involved in the action, as a consequence of implementing the Agreement.

46.2 Liability of the beneficiaries

Except in case of force majeure (see Article 51), the beneficiaries must compensate the Commission for any damage it sustains as a result of the implementation of the action or because the action was not implemented in full compliance with the Agreement.

⁵ Regulation (EC) No 1049/2001 of the European Parliament and of the Council of 30 May 2001 regarding public access to European Parliament, Council and Commission documents, OJ L 145, 31.5.2001, p. 43.

Schedule 6: Eligible Costs Criteria

1. For the purpose of assessing whether costs claimed by a Piloter under this Agreement shall be deemed to be Eligible Costs, the Piloter shall be entitled to raise a claim for reimbursement of its costs associated with each of the activities mentioned below, provided that such activities take place after the Effective Date of this Agreement and (in the Catapult's reasonable opinion) contribute to maturing, sustaining, and further developing SynchroniCity digital single market. All costs claimed must relate to activities summarised below:
 - a. Planning, preparation and customisation of the Piloting phase, including activities associated with exploration of SynchroniCity features and organising initial SynchroniCity stakeholder meetings. The Catapult shall be organising a specific customisation workshop for all winning participants and Pilot cities to ensure stakeholder alignment. The costs of this activity should be included in the budget set out in Schedule 2.
 - b. Technical integration and adaptation.
 - c. Deployment of the solution and adaptation to the SynchroniCity technical environment.
 - d. Testing and Piloting activities
 - e. Activities related to bringing maturity for market take-up. For example, development of features in the Piloter's solution that have been identified together with the partners, Pilot cities and local ecosystems as important for being prominently considered in their procurement pipeline.
 - f. Generation of reports and publications related to the Pilot
 - g. Supporting the rest of technical activities in the project, by providing feedback about the use of the technical environment and identifying gaps for the development of appropriate standards that can help mature SynchroniCity in the future. The Piloter will be required to do this as a condition of funding.
 - h. Reporting the necessary effort and costs according to H2020 rules and management practices requested by the Catapult. The Piloter will be required to do this as a condition of funding.
 - i. Translation activities which are essential for the Piloter's solution to be integrated in the Piloting geography.
2. To be eligible⁶ for funding the costs must:
 - a. be incurred and paid between the Piloter's project start and end dates.
 - b. be directly related to the activities listed in the previous section.
 - c. be best value for money.
 - d. be indicated in the estimated budget.

⁶ Eligible costs must comply with the Financial Regulation No 966/2012 and the Horizon 2020 Eligible costs for all types of action are in accordance with the Financial Regulation No 966/2012 and the Horizon 2020 Rules for Participation Regulation No 1290/2013.

- e. be incurred in connection with the project as described in the application and necessary for its implementation.
 - f. be identifiable and verifiable, in particular recorded in the Piloter's accounts and in accordance with the accounting standards applicable in the Piloter's country and according to the Piloter's organisation's usual cost accounting practices.
 - g. comply with the applicable national law on taxes, labour and social security.
3. The Piloter is allowed to include the following in any claim for Eligible Costs:
- a. Direct personnel costs;⁷
 - b. subcontracting ⁸costs and costs of other goods and services;
 - c. Other direct costs (travel costs, depreciation costs, costs of renting or leasing equipment);
 - d. Costs of other goods and services
 - e. Indirect ⁹costs on the basis of a flat-rate of 25% of the eligible direct costs¹⁰.
4. Ineligible costs are costs that do not comply with the conditions set out above, and will include:
- a. costs related to return on capital.
 - b. debt and debt service charges.
 - c. provisions for future losses or debts.
 - d. interest owed.
 - e. doubtful debts.
 - f. currency exchange losses.
 - g. bank costs charged by the beneficiary's bank for transfers from the Agency.
 - h. excessive or reckless expenditure.
 - i. deductible VAT.
 - j. costs incurred during suspension of the implementation of the action.

⁷ Regarding staff costs, the eligible labour costs will be salary amounts actually incurred and paid (monthly/hourly).

⁸ Regarding subcontracting costs: if necessary to execute the project, the Piloter may subcontract part of the activities in the project. Subcontracting may cover only a limited part of the pilot. If the Piloter need a substantial part of the project to be carried out by a third party, they should be invited as partners. Note that subcontracting may not be rewarded to any SynchroniCity partner or part thereof due to conflict-of-interest the SynchroniCity cannot fund projects where funds are awarded to SynchroniCity partners.

⁹ 'Direct costs' are costs that are directly linked to the action implementation and can therefore be attributed to it directly. They must not include any indirect costs.

¹⁰ 'Indirect costs' are costs that are not directly linked to the action implementation and therefore cannot be attributed directly to it.

SYNCHRONICITY

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Contributing partners



Switzerland



South Korea



Mexico

SYNCHRONICITY

DECLARATION OF HONOUR

Declaration of honour on exclusion criteria and absence of conflict of interest

1. As the legal representative of [insert legal entity name], I declare that the entity is not:

- a. bankrupt or being wound up, is having its affairs administered by the courts, has entered into an arrangement with creditors, has suspended business activities, is the subject of proceedings concerning those matters, or is in any analogous situation arising from a similar procedure provided for in national legislation or regulations;
- b. having powers of representation, decision making or controlling personnel being convicted of, or having been convicted of an offence concerning their professional conduct by a judgment which has the force of res judicata;
- c. having been guilty of grave professional misconduct proven by any means which the contracting authority can justify including by decisions of the European Investment Bank and international organisations;
- d. failing to be compliant with obligations relating to the payment of social security contributions or the payment of taxes in accordance with the legal provisions of the country in which it is established or with those of the country of the contracting authority or those of the country where the contract is to be performed;
- e. having powers of representation, decision making or controlling personnel having been the subject of a judgment which has the force of res judicata for fraud, corruption, involvement in a criminal organisation or any other illegal activity, where such illegal activity is detrimental to the Union's financial interests;
- f. subject to an administrative penalty for being guilty of misrepresenting the information required by the contracting authority as a condition of participation in a grant award procedure or another procurement procedure or failing to supply this information or having been declared to be in serious breach of its obligations under contracts or grants covered by the Union's budget.

2. I declare that the natural persons with power of representation, decision-making or control over the aforementioned legal entity are not in the situations referred to in b) and e) above.

3. I declare that I

- a. am not subject to a conflict of interest and will take all reasonable measures to prevent any situation where the objectives of the SynchroniCity project might be compromised due to undeclared shared interests;
- b. have not made false declarations in supplying the required information to the project formally detailed as SynchroniCity, and have not failed to supply the required information;
- c. am not in one of the situations of exclusion, referred to in the abovementioned points a) to f).

4. I certify that I:

- a. am committed to participating in the aforementioned project as part of the legal entity detailed above;
- b. have stable and sufficient sources of funding to maintain its activity throughout its participation in the aforementioned project, and will provide any counterpart funding necessary;
- c. have or will have the necessary resources as and when needed to carry out its involvement in the above-mentioned project.
- d. will comply with my responsibilities and obligations under the SynchroniCity project, including those set out in the Data Sharing Agreement.

- e. will respect any third-party rights in relation to data provided for processing under the SynchroniCity project.
- f. will abide by international, EU and national laws and regulations that might apply to the substance, or outcome, of data sharing arrangements as relevant to activities that I/my entity will be involved in under the SynchroniCity project.
- g. will not share or disseminate data received through the SynchroniCity project without the explicit prior consent of the data provider and any others with proprietary rights in relation to that data.
- h. will take all reasonable measures to safeguard data provided to me/my entity for use in the SynchroniCity project against possible misuse and unauthorised access.
- i. will abide by international, EU and national laws imposing privacy and data protection requirements including the General Data Protection Regulation (GDPR) (Regulation (EU) 2016/679)) as relevant. In particular, personal data shared under the SynchroniCity project will not be re-used for purposes outside the project without the explicit prior consent of the data controller.
- j. will act in good faith as far as reasonably possible under the Project and fully apply the principles of the Privacy Policy.

5. I declare that, to the best of my knowledge, I am eligible to apply for the SynchroniCity Open Call and all the information I have provided is true.

