SYNCHRONICITY The Open Call

Dr Gemma Guilera SME Programme Lead, Future Cities Catapult IoT Week – 7 June 2018 – Bilbao



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





SYNCHRONICITY

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LOBE HOPE

KORT

611

109

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.

SMEST

PILOT GROUPS

SOLUTIONS

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Anthon chester

Carouge

Milan

Santander

Porto

2018

3M€

FUND



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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.



European Large-Scale Pilots





SYNCHRONICITY



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



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OPEN CALL OPENS 1st June 2018 - 17:00 CEST* OPEN CALL CLOSES 30th September 2018 - 17:00 CEST* *Brussels Time

Objectives

Model for Large-scale standards-based innovation and procurement

Demonstrate Interoperability, Replicability, Reusability and Scalability of IoT human-centric solutions across cities

Ecosystem building for Expansion and Sustainability

Help shape and adopt new smart city standards

Who is it for?



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Lead SMEs working in IoT (apps or full-stack solution), TRL≥6 Other complementary SMEs New cities wanting to become part of Synchronicity Large Businesses wanting to become part of Synchronicity

Pilot Groups



Main characteristics?



€3 M Open Call



Selection of 10-25 city solutions

End Nov 2018



Piloting in at **least 2 cities** simultaneously (but preferably more)



Up to 6 month demonstration period

Feb-Sept 2019



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

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.

- Co-fund 80% of the total individual budget. The remaining 20% must be provided by the applicants either as in-kind support or by bringing in funding to the project.
- Cities and large businesses eligible for funding can claim a maximum of €60,000 of the total allocated budget for fundable activities.



Where can I learn more?

- Come to our booth IoT Week 2018
- Visit our website: http://synchronicity-iot.eu/open-call
- Read "Open Call at a Glance"
- Webinar for Applicants : Introducing SynchroniCity Open Call

Date and time Tuesday 12th of June 2018 10:00 – 12:00 CEST (Brussels' time)



Partners





SYNCHRONICITY

Visit our website synchronicity-iot.eu

Follow us on Twitter @SyncCityIoT

Follow us on Facebook @SynchroniCityiot

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



Timeline



Timeline





Support during application



Ask questions or review answers to previous questions. This repository will be the quickest way to find answers. helpdesk@syn chronicityiot.eu For private questions. Launch Event and Clinic where applicants will receive support in person during the open call application period. There will be two webinars for those applicants that cannot physically attend some of the Launch Events and Clinics.

Section on the website to facilitate the encounter of other SMEs and partners which want to participate in the open call. It is though the responsibility of each applicant to find the right partner if they wish to form a Pilot Group.

Who is it for?





New Cities and Large Businesses can only apply in a Pilot Group



SMEs

- Lead SME: IoT applications or full-stack solutions
- Not Lead SME: complementary to Lead SME, either IoT enabled or expert knowledge on the application
- Solutions that have already been demonstrated in a relevant environment (TRL≥6)

New cities wanting to become part of Synchronicity

Large Businesses wanting to become part of Synchronicity

Pilot Groups

Lead SME + SME and/or City and/or Large Business



Common Technical Ground

- 1. Neutral branding (OASC based on standards and consensus specifications)
- 2. Minimal Interoperability Mechanisms (MIMs)
 - Open APIs
 - Common data models
 - Objective: interoperability, replicability, reuse
- 3. Reference implementation (standards-based)
- 4. Hosted cloud option



Technology Readiness Level

- TRL 1 basic principles observed
- TRL 2 technology concept formulated
- TRL 3 experimental proof of concept
- TRL 4 technology validated in lab

TRL 5 – technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)

TRL 6 – technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)

TRL 7 – system prototype demonstration in operational environment

TRL 8 – system complete and qualified

TRL 9 – actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)



SynchroniCity Framework

- **IoT Management:** to interact with the devices that use different standards or protocols making them compatible and available to the SynchroniCity platform.
- Context Data Management: to manage the context information coming from IoT devices and other public and private data sources.
- **Data Storage Management:** to provide functionalities related to the data storage and data quality interacting with heterogeneous sources.
- **Marketplace:** to 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.
- **Security**: to provide crucial security properties such as confidentiality, authentication, authorization, integrity, non-repudiation, access control, etc.
- Monitoring and Platform management: to provide functionalities to manage platform configuration and to monitor activities of the platform services.

Baseline: SynchroniCity Cities/Reference Zones, OASC, FIWARE, EIP-SCC, NIST IES-CF.

Related standards: ITU-T SG20*/FG-DPM* (*drafts), ISO TC268.

Spec. doc.: Reference Architecture for IoT Enabled Smart Cities (D2.10) http://synchronicity-iot/about

The Cities & the Technical Framework

Interoperability Points represent the main interfaces that allow a city and IoT solutions to interact with SynchroniCity platform

Cities are currently adopting the minimum interoperability points and mechanisms of the SynchroniCity framework.

You will need to regularly check the website for live updates

https://synchronicity-iot.eu/open-call/pilot-

cities

Interoperability Mechanisms

Interoperability Point	Description	Specification document (<u>synchronicity-iot.eu/about</u>)	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 Cities + 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]

Evaluation and
Application Process

How am I going to be evaluated?

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?

Impact (0-5 points)

• Does your project address a challenge recognised or prioritised by the cities? **KPIs?** 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 (0-5 points) ! (Technical, Team, Budget & Workplan)

• 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?

Sustainability (0-5 points) !

• How credible is your methodology in proving the scalability of product/service? How can you **demonstrate the interoperability, replicability and reusability of your solution**? What's your exploitation/commercialisation plan for this solution? How clear is your revenue model and monetisation strategy? Will your solution support the goal of creating more jobs across Europe?

What next?

- Download the **Open Call Toolkit for Applicants** package
 - For SME and Large Business Applicants
 - For New City Applicants

Only read if you want to apply for the open call

1st June

4 pm UK time

Become a New Open Call Applicant City

