Call 2016 template

1. Header

Select Action Line for Proposed Activity	ULM Future Urban Life and Mobility
Priority Area	ULM 2 | Priority 2: Citizen engagement and empowerment
Action Line Leader	BETIS, G.B. (Gilles) | THALES Communication and Security SAS | THALES Communication and Security SAS
Email Action Line Leader	gilles.betis@eitictlabs.eu
Business Developer	Herlin, (Thomas) | INRIA | INRIA
Email Business Developer	thomas.herlin@eitictlabs.eu
Assigned Business Developer	Herlin, (Thomas) | INRIA | INRIA
Email Assigned Business Developer	thomas.herlin@eitictlabs.eu
New or Existing Activity	(●) New Activity ( ) Continuation of Existing Activity
New Activity : Proposed Activity Name	Env&You
Activity Web Site (if applicable)	
Generated ID	16344
Lead Partner	INRIA 018 INRIA
Activity Leader of Lead Partner	Issarny, V. (Valérie) | INRIA | INRIA
Email Activity Leader	valerie.issarny@inria.fr
Start / End Date	01-Jan-2016 — 31-Dec-2016

2. KIC Activity

Activity Title	Env&You
Activity Purpose: one crisp line (max 500 characters)	Env&You delivers the whole picture of urban pollution, from the individual exposure to neighborhood-by-neighborhood and day-to-day variation, to citizens and governments, informing their decisions for healthy urban living.
Elevator Pitch: elaborate on the Activity Purpose above in no more than 1000 chars.	Our knowledge of urban pollution is incomplete, leading to actions and decision that harm our health. Governments monitor air pollution in just a handful of fixed locations and usually locations away from the worst sources of air pollutions like busy roadways. The result is a view of air pollution that misses important place-by-place and hour-by-hour variation and decisions, in the design of cities that places citizens in harms way. Those who would be interested in having an accurate picture of pollution have no choice but to rely on this incomplete data. For example, citizens, particularly those with respiratory illnesses, need pollution data to make decisions

about where they live and where they go. Real estate developers and financiers need pollution data to accurately value property. Given technology, we don't need to rely on an incomplete picture of pollution in our cities. Mobile sensing of pollution can provide the needed personalized pollution data.

Business Pain: what is the customer problem that needs to be solved (max 2000 characters)	When governments rely on incomplete data for environmental pollution, their decisions on environmental protection cannot assure the protection of health. This results in human and social costs. Technology that leverages citizens as sensors of pollution and its effects can optimize decision-making. Reliance on incomplete data by citizens impacts their own decisions with regards to their activities, and the failure of governments to provide reliable or credible pollution data to its citizens often results in conflict and distrust. Technology now allows citizens to be co-producers of their pollution data, allowing a more personalized picture of exposure and a more informed way to engage with government on pollution issues. Real estate developers and consumers are also relying on government data, and development decisions based on incomplete data may not balance the benefits and harms of development. Given property is valued in part based on its environmental quality, incomplete pollution data also results in imprecise property valuation.
Value Proposition (max 2000 characters)	Env&You: (1) Provides governments a new spatially and temporally refined source of urban pollution data supporting the environmentally safe and sustainable growth of cities. (2) Provides citizens a means to assess their own personalized exposure to environmental hazards, allowing them to make more informed decisions about their activities and choices of location, and better protect their own health (3) Provides Real Estate developers and consumers with new environmental quality information to support location choices and appropriate property valuation.
Expected Outcomes and Impact of the Activity on Society (max 500 characters)	Env&You provides tools for citizens to be better informed about their cities -with a focus on air and noise pollution as a starter- and position themselves to influence political decisions and personal behaviors toward environment-friendly cities. Overall, Env&You contributes to improved cooperation between citizens and government bodies.
Why Now (max 1000 characters)	More people are living in cites and cities are developing rapidly often with negative impacts on health and environmental quality. While high-density urban centers have planetary benefits, deteriorating environmental quality within cities has significant social impacts. The World Health Organization estimates that globally ambient air pollution accounts for 6.7% of all deaths. In Western Europe, Analysis by WHO and the European Commission further indicates that at least one million healthy life years are lost every year from traffic-related noise. Citizens are increasingly engaged in monitoring and protecting their own health status. Personalized information on environmental quality will have immediate information value to city residents. Citizens well informed about their own pollution exposures are very likely to demand the policy and action from governments needed for healthy and sustainable urban development.
Competitive Situation (max 1000 characters)	The market for infrastructure for smart cities is expected to grow from $411.31 billion in 2014 to $1,134.84 billion in 2019 as analyzed in the report by marketsandmarkets.com in January 2015. Technologies for monitoring urban environment quality are rapidly evolving with several new technological solutions now available for distributed and personalized monitoring. No single system has reached maturity and none proposes integrating information from multiple public and private sources. While the sensor technologies are providing growing precision, no system has solved the challenge of sustained consumer engagement. Env&You will leverage innovative state-of-the-art mobile embedded sensors and data assimilation middleware for urban data collection & sharing with user interfaces that engage citizen, business, and government users.
Team Setup: the groups involved, their strengths and collaborations (at Activity level) (max 500 characters)	Env&You gathers a unique team of academic, entrepreneurs & environmental health domain experts who have developed cutting-edge technologies supporting Env&You vision: crowdsensing middleware (Ambientic & Inria), air quality simulation and data assimilation (Numtech & Inria), and quantified self app for combined environmental and health awareness (The Civic Engine & Inria). Cap Digital and Forum Virium bring business and deployment. The partners initiated related collaborations since 2013.
Link to Video Pitch (optional)	https://www.youtube.com/watch?v=cB0vLEtXImQ ; https://www.youtube.com/watch?v=oNfPgHRq24k
EIT Funding (€)	395,000.00 €
Partners Co-Funding (€)	342,500.00 €
Total Catalyst Funding (€)	737,500.00 €
Carrier Funding (€)	1,365,274.00 €
Co-Funding Leverage (%)	58.30 %
EIT Leverage (%)	18.78 %
Total FTE	5.70 FTE
Extra EIT Information (if applicable) (max 1000 characters)	

3. Market & Strategy

Target Market

Target Customers (max 1000 characters)	Various customers are targeted by Env&You: - Government agencies at the national, state, and regional level currently acquire pollution data from a limited network of fixed sensors and pollution modeling; and they use this data to regulate polluting activities and inform land use planning. Data from distributed sensors could improve the resolution and scope of available data for government decision-making. - Health and Wellness activities could utilize analysis of combined pollution and health data.

Consumers further having a growing awareness of health hazards related to pollution and a growing interest in quantified self mobiles apps, are a significant customer base for Env&You. - A growing real-estate information industry is developing applications to inform consumers and businesses about the qualities of their neighborhoods and workplaces. These applications rely on and licence uniform data sources.

Target Geographies (max 1000 characters)

The activity targets both EU and US (focused on California to start) markets. To do so, experiments will be undertaken in both EU and California cities, in order to have impact in both regions. In Europe, 2 cities (Paris and Helsinki) will be targeted for our experiment. In California, cities including Los Angeles, San Francisco and Oakland are being considered and the cities will be selected in the first quarter of 2016. It should be highlighted here that Env&You is a transatlantic innovation activity that leverages the newly operated EIT Digital hub in San Francisco, and the Inria@SiliconValley (https://project.inria.fr/siliconvalley/) initiative launched in 2011 and carrying out a transatlantic smart city program (https://citylab.inria.fr/) since 2013.

Total Addressable Market Size (euro)

3,000,000,000.00 €

Evidence/Reference for Addressable Market Size (max 1000 characters)

Env&You spans the markets of pollution monitoring, quantified self apps, and IoT Cloud platforms: - According to MarketsandMarkets, the global Air Quality Equipment Market is expected to reach $6.1 Billion by 2019. Most of the growth will be spurred by growing consumer interest in health issues and stringent government regulation. We thus expect consumer-oriented systems providing personal daily exposures (as opposed to industry-oriented sensing systems deployed in plants) to be the major market driver for this growth over the next few years. - The market size for quantified-self apps and wearable sensors is expected to be $5 Billion in 2016. - Increasingly, complex IoT solutions require more advanced communication platforms and middleware that facilitate seamless integration of devices, networks and applications. Berg Insight estimates that total revenues especially for third-party IoT platforms will grow at a compound annual growth rate of 32.2% and reach € 2.4 billion in 2020.

Time to Market (launch year)

2017

Business model (max 1500 characters)

The delivery channels are B2G, B2B and B2C, targeting the customers mentioned above: - For Government agencies at the national, state, and regional level, it will be necessary to obtain more precise and qualified data on pollution and on health impact to minimize the cost for the society of health problems due to urban pollution. For instance, for France, the estimated cost is around €20 billions per year. It will be B2G direct business. - Health and Wellness activities may utilize the analysis of combined (air and noise) pollution and health data. Thanks to the development of connected objects, it will be possible to send to people personalized information with the impact of the local pollution, their initial health condition and the activity they are doing (for example jogging in a polluted area for an asthmatic guy). It will be B2C business with smartphone applications. - A growing real-estate information industry is developing applications to inform consumers and businesses about the qualities of their neighborhoods and workplaces. These applications rely on and licence uniform data sources. It will be B2B business.

Self Assessment

Technological Risk Assessment

Technological Key Risk Factors (max 500 characters)

Env&You leverages and integrates various advanced technologies and further targets deployment at urban-scale which introduces high risk despite the maturity of the base technologies. As a result, the project can encounter challenges such as: 1) bad quality of sensed data rendering it useless; 2) usability and performance issues of the app; 3) scalability issues in crowdsourcing and data assimilation backends, and 4) security and privacy.

Likelihood of failure due to technology-related issues

30

Commercial Risk Assessment

Commercial Key Risk Factors (max 500 characters)

1) Governments are slow to take up new technology and may be reluctant to rely on crowdsourced information 2) Consumers likely to value and use data but unlikely to pay 3) Real estate information industry has been leading edge of applying new big data sources and has the highest likelihood of driving the market for the technology. Winning this market requires providing the highest quality and most reliable data.

Likelihood of failure due to commercial issues

30

Outlook: what time, key achievements and KAVA budget will be required to achieve targeted activity goals and KPIs after 2016 (max 1000 characters)

The key goal of the 2016 activity is to integrate the technologies contributed to by the partners and experiment in cities to gather feedback from our target customers: government agencies, consumers, health and real estate professionals. This will allow identifying the most promising business opportunities for the Env&You offer and develop accordingly the Env&You business in 2017. This will further allow the involved business partners (Ambientic, Numtech and The Civic Engine) to leverage this use case to take their individual businesses to the next level. The creation of a startup dedicated to urban pollution awareness based on Env&You solutions will also be investigated as part of the innovation activity. Obviously, the startup would license the underlying technologies.

Contribution to long term strategic goals (max 1000 characters)

Our vision includes the availability of dashboards and decision aiding tools for urban authorities. We believe that the most advanced tools will include information from observations (incl. crowdsourced), numerical simulation and citizen perception. There is a need to collect, redistribute and merge these information sources from different fields like traffic management, air quality or noise pollution. Env&You puts in place important steps toward the envisioned monitoring and control systems for cities. We believe it is important to start from practical applications from which to expand to the interlinked urban systems and to include new services. Overall, Env&You contributes to the strategic steps envisioned by ULM for Priority 2 on Citizen engagement and empowerment, spanning: collaborative behaviors, real-size experiments, liaison with city governments, and last but not least investigating business models to deliver new services to the market and possibly launching a startup.

Contribution to KIC sustainability (max 1000 characters)

We envision two complementary paths for sustainability: (i) through urban-scale experiment, we intend to attract cities as KIC partners, (ii) 2% of the benefit of the Env&You spinoff that we envision to create in 2017 and/or of Env&You technology licensing to major industry players. While the latter is expected to lead to revenues for EIT Digital in few years, the former may be effective starting the 2nd year. Last but not least, the activity is also expected to contribute to the development of EIT Digital in the Bay area.

Expected Revenues (KIC) €

0.00 €

4. Carriers

Carriers

Carrier ID	C1601
Carrier Title	H2020 Fiesta-IoT
Task Leader	Issarny, V. (Valérie) | INRIA | INRIA
Carrier Website	http://www.fiesta-iot.eu/
Carrier Description	The main goal of the FIESTA-IoT project is to open new horizons in the development and deployment of IoT applications and experiments at an EU (and global) scale, based on the interconnection and interoperability of diverse IoT platforms and testbeds.
Why chosen	FIESTA-IoT develops solutions to the interconnection and interoperability of diverse IoT platforms and testbeds. This in particular includes testbeds oriented toward mobile crowdsensing, which are investigated by Inria. Developed technologies are thus key to the Env&You solution, as they provide interoperability solutions to integrate the various wearable sensing technologies that are being developed, as well as solutions to mobile crowdsensing.
Start Date	01 Feb 2015
End Date	31 Jan 2018

Carrier ID	Partner	Year	Complementary funding (any source,except EIT) (€)
C1601	INRIA	2015	92,000 €
C1601	INRIA	2016	200,000 €

Carrier ID	C1602
Carrier Title	French ANR Estimair
Task Leader	Mallet, V.M. (Vivien) | INRIA | INRIA
Carrier Website	http://www.agence-nationale-recherche.fr/?Projet=ANR-13-MONU-0001
Carrier Description	Uncertainty quantification for air quality at urban scale.
Why chosen	ESTIMAIR investigates the propagation of uncertainties in air quality models so as to provide an improved description of spatial error covariances in the simulated maps, which will be key inputs in the assimilation of mobile observational data.
Start Date	01 Sep 2013
End Date	31 Aug 2017

Carrier ID	Partner	Year	Complementary funding (any source,except EIT) (€)
C1602	INRIA	2015	40,000 €
C1602	INRIA	2014	40,000 €
C1602	INRIA	2016	41,000 €

Carrier ID	C1603
Carrier Title	French PRIMEQUAL/ADEME
Task Leader	Mallet, V.M. (Vivien) | INRIA | INRIA
Carrier Website	http://primequal.suhali.net/
Carrier Description	Evaluation of air quality in low emission zone, incl. data assimilation over Paris.
Why chosen	In this project, the assimilation of observations of nitrogen dioxide and particulate matter concentrations was carried out in Paris and Île-de-France.
Start Date	01 Sep 2011
End Date	30 Sep 2014

Carrier ID	Partner	Year	Complementary funding (any source,except EIT) (€)
C1603	INRIA	2013	20,000 €
C1603	INRIA	2014	27,000 €

Carrier ID	C1604
Carrier Title	French iLab
Task Leader	Mallet, V.M. (Vivien) | INRIA | INRIA

Carrier Website	http://www.inria.fr/en/innovation/inria-smes/inria-and-smes-joint-labs2/inria-innovation-labs/seth-numtech
Carrier Description	An R&D collaboration between Inria and Numtech on meteorology and air quality, which covers several topics: assimilation in atmospheric dispersion, overall forecasts, scale reduction, uncertainties, and statistical methods.
Why chosen	Baseline to the solution to air quality simulation and data assimilation
Start Date	01 Jan 2014
End Date	31 Dec 2016

Carrier ID	Partner	Year	Complementary funding (any source,except EIT) (€)
C1604	INRIA	2014	70,000 €
C1604	INRIA	2015	70,000 €
C1604	INRIA	2016	70,000 €

Carrier ID	C1605
Carrier Title	FP7 CONNECT
Task Leader	Issarny, V. (Valérie) | INRIA | INRIA
Carrier Website	https://www.connect-forever.eu/
Carrier Description	FET IP on the study of automated solutions to making networked systems interoperable.
Why chosen	CONNECT brings advanced interoperability solutions that are leveraged in the Env&You underlying middleware.
Start Date	01 Feb 2009
End Date	01 Jan 2012

Carrier ID	Partner	Year	Complementary funding (any source,except EIT) (€)
C1605	INRIA	2011	200,000 €

Carrier ID	C1606
Carrier Title	CIP ICT-PSP / Commons4EU
Task Leader	Niemi-Hugaerts, K (Hanna Niemi-Hugaerts) | Forum Virium | Forum Virium Helsinki Oy
Carrier Website	http://commonsforeurope.net/
Carrier Description	Commons4EU project aims to build an answer for Cities when they face a scenario characterized by shrinking budgets, increasing demands of services from their citizens and the need to reinvent themselves in their quest to become Smart Cities. 7 cities are working together.
Why chosen	Code for Europe strives to solve local civic challenges, by enabling agile temporary teams of developers to create solutions that are easily reusable in other European cities. E.g., Helsinki has Codefellows who have been working with the city's datacatalog that could also provide environmental data from the city.
Start Date	01 Nov 2011
End Date	31 Dec 2014

Carrier ID	Partner	Year	Complementary funding (any source,except EIT) (€)
C1606	Forum Virium Oy	2012	60,000 €
C1606	Forum Virium Oy	2015	60,000 €
C1606	Forum Virium Oy	2014	70,274 €

Carrier ID	C1607
Carrier Title	Inria@SiliconValley
Task Leader	Issarny, V. (Valérie) | INRIA | INRIA
Carrier Website	https://project.inria.fr/siliconvalley/
Carrier Description	Inria program for transatlantic research and innovation collaborations.
Why chosen	The UrbanCivics projects that is leveraged by Env&You benefits from seed funding of Inria, including postdoctoral grant of Sara Hachem and Sabbatical of Valerie Issarny
Start Date	01 Jan 2011
End Date	31 Dec 2016

Carrier ID	Partner	Year	Complementary funding (any source,except EIT) (€)
C1607	INRIA	2014	140,000 €
C1607	INRIA	2015	140,000 €

Carrier ID	C1608
Carrier Title	French Plan filière régional
Task Leader	Cunha, C. (Carlos) | Cap Digital | Cap Digital
Carrier Website	http://www.capdigital.com/filiere/plan-filiere/
Carrier Description	This is a regional public financial support for the acceleration of r&d spinoff and high potential startups.
Why chosen	Relevant for the creation of a startup that is considered as an outcome of the Env&You activity.
Start Date	01 Jan 2015
End Date	31 Dec 2015

Carrier ID	Partner	Year	Complementary funding (any source,except EIT) (€)
C1608	Cap Digital	2015	25,000 €

5. Catalyst (KAVA)

Key Outputs (max 500 characters)

Env&You delivers a new pollution monitoring service, which is further deployed in EU and California cities for assessment. Key outputs, which leverage partner technologies, are: a quantified-self app for combined health & pollution awareness, a city dashboard providing interactive pollution maps, a distributed middleware for urban scale pollution data crowd-sensing and monitoring, and an assimilation server for pollution data. Business model for the service will also be delivered.

Workplan (max 2000 characters)

Env&You is structured around 3 main areas of work: (1) urban scale pollution data collection, (2) integrated data assimilation, and (3) experiment with use cases relevant to our target customers. 1. Sensing and collecting pollution data: - Engage sensor projects working in the distributed air quality sensing ecosystem on open data standards to support interoperable distributed sensing data. - Engage community, public health, and environmental interest to deploy sensor tools in target cities. - Integrate and scale existing urban middleware for mobile and fixed, social and physical sensing. 2. Urban-scale data assimilation: - Assimilation of pollution data combining simulation and various data sources (fixed and mobile) 3. Apply assimilated data for government, business, and consumer use cases: - Conduct consumer research with government air quality regulators and with community, public health, and environmental interest groups to refine the value of sensor tools and data products; - Develop consumer-facing well-being app that integrates pollution and biometric data; - Develop derivative data streams and associated APIs, to meet governmental regulatory needs; - Design public-facing city pollution dashboard informed by civic interest groups, and supporting data analytics. Resulting milestones are as follows: - M1 (01-16 or 11-15 if early bird): Kick off with all partners. - M2 (04-16): Deployment plan with cities, user base build-up and air quality sensor acquisition - M4 (07-16): Env&You service prototype release (integrating aforementioned technologies). - M5 (10-16): Deployment in Paris, Helsinki & California city. - M6 (12-16): Env&You business model and assessment with relevant stakeholders.

Role of the KIC partner(s) (max 1500 characters)

Core EIT Digital partners: - Inria: Coordinates the overall activity and contributes by leveraging and integrating technologies in the areas of data assimilation, urban-scale mobile distributed sensing, and quantified self app for combined pollution and health awareness. Inria will also assist with the deployment and experiment in Paris and in the California region. - Cap Digital: Carries out business development for EU market. Cap Digital is the biggest European digital innovation cluster. Since 10 years, it coaches high potential startups on their strategy, business modeling, mix, funding and design. - Forum Virium: Undertakes experiment in Helsinki, further leveraging relevant pollution monitoring by the city.

Key Deliverables

Deliverable Description
Source code and documentation of Env&You system for urban scale pollution monitoring, at individual and community levels.
Report on city deployment in EU and California cities, and analyses of transferability to other cities.
Business models for financial sustainability of Env&You technologies and services.

Catalysts

Catalyst ID	A1601
Catalyst Title	Technology Transfer
Task Title	Urban air quality simulation and data assimilation
Task Leader	Mallet, V.M. (Vivien) | INRIA | INRIA
Description	An air quality numerical model will compute maps of nitrogen dioxide and particulate matter, over the entire target cities. The maps will be corrected by the assimilation of the mobile observations.
Partner Qualification	
Carriers	French ANR Estimair;French PRIMEQUAL/ADEME;French iLab

Deliverables	Source code and documentation of Env&You system for urban scale pollution monitoring, at individual and community levels.
TT1 | What is the technology to be transferred and what exactly will be contained in the transfer package?	The data assimilation software for mobile observations will be integrated in the final package.
TT2 | From which partners or other stakeholders does the technology come from?	The technology comes from joint collaboration between Inria and Numtech.
TT3 | To whom will it be transferred to and for which business case will it be used?	It will be part of the solution to generate a dashboard for cities and to provide better exposure estimation for individuals.
TT4 | What are the milestones and the success criteria of a completed transfer?	Success criterion is better quantification of the exposure to pollution of individuals and of the population at large.

Catalyst ID	Partner	Responsible	Role	Fte	Personnel (all types) (€)	Travel and subsistence costs (€)	Equipment and Infra depreciation (€)	Other direct costs (€)	Indirect costs (according H2020) (€)	Sub Granting (€)	Sub Contracting (€)	Prizes (€)	EIT Contribution (€)	Co funding (any source, except EIT) (€)	Total (€)
A1601	018 INRIA	Mallet, V.M. (Vivien)	Task Leader	1.50	90,000 €	0 €	0 €	0 €	22,500 €	50,000 €	0 €	0 €	100,000 €	62,500 €	162,500 €

Catalyst ID	A1602
Catalyst Title	Technology Maturation
Task Title	Pollution data sensing & collection
Task Leader	Georgantas, (Nikolaos) | INRIA | INRIA
Description	This task is focused on the integration of existing air quality sensing technology with middleware solution for urban scale pollution data sensing and collection.
Partner Qualification	
Carriers	H2020 Fiesta-IoT;FP7 CONNECT;Inria@SiliconValley
Deliverables	Source code and documentation of Env&You system for urban scale pollution monitoring, at individual and community levels.
TM1 | What is the baseline status of the technology/product before the planned maturation?	Inria has developed the UrbanCivics middleware solution for urban scale pollution data sensing and collection, which comes along with a mobile app that allows plugging in various pollution sensor drivers. An instance of the app, called SoundCity, already exists for noise pollution sensing. Within Env&You, it will be enriched with air quality sensing by leveraging the wearable sensors that are now coming out on the market. The UrbanCivics middleware further leverages the GoFlow crowdsourcing platform from Ambientic, which is open in Beta, with REST and Android client libraries. It is currently used by small and medium scale mobile applications.
TM2 | What are the missing target features/performance requirements to support the planned business case?	One objective is to integrate exisiting air pollution sensing technologies in the UrbanCivics Middleware and further extend the SoundCity app to Env&You app for broader pollution awareness. Another objective is to validate the scalability of the GoFlow crowdsourcing server underlying UrbanCivics, and its support for various mobile/IoT platforms and protocols. We also plan to validate IoT-oriented crowdsourcing abstractions and backend processing methods to expedite mobile applications development.
TM3 | What are the steps and milestones to achieve the market / tech-transfer readiness?	1. Develop plug in for integration of wearable air quality sensors (to be selected in the first quarter at the latest). 2. Ensure the GoFlow server scales.
TM4 | What will be the status after completion of the task and who will take up the results?	The experimentation will serve validating sensing and server technologies, prior to commercial deployment.

Catalyst ID	Partner	Responsible	Role	Fte	Personnel (all types) (€)	Travel and subsistence costs (€)	Equipment and Infra depreciation (€)	Other direct costs (€)	Indirect costs (according H2020) (€)	Sub Granting (€)	Sub Contracting (€)	Prizes (€)	EIT Contribution (€)	Co funding (any source, except EIT) (€)	Total (€)
A1602	018 INRIA	Georgantas, (Nikolaos)	Task Leader	1.00	60,000 €	0 €	40,000 €	0 €	25,000 €	50,000 €	0 €	0 €	115,000 €	60,000 €	175,000 €

Catalyst ID	A1603
Catalyst Title	Technology Transfer
Task Title	Individual and Global pollution awareness
Task Leader	Agarwal, (Rachit) | INRIA | INRIA
Description	The task develops the UIs for the target consumers of Env&You, that is, the quantified self app for the individual that correlates air quality with health-related data, and the city dashboard producing air quality maps over time. The resulting systems will be deployed/experimented in Europe (Paris and Helsinki) and in California (e.g., Oakland).
Partner Qualification	
Carriers	H2020 Fiesta-IoT;French ANR Estimair;French PRIMEQUAL/ADEME;CIP ICT-PSP / Commons4EU;Inria@SiliconValley
Deliverables	Report on city deployment in EU and California cities, and analyses of transferability to other cities.
TT1 | What is the technology to be transferred and what exactly will be contained in the transfer package?	A Java-based quantified-self application for Android that provides information on environmental pollution, personal exposure to noise and air pollution, and well-being data from bio-sensors in addition to pollution maps generated based on data assimilation techniques.
TT2 | From which partners or other stakeholders does	Inria Mimove will provide the quantified self application, Clime will provide the air mapping components, ambientic will provide the urban-scale crowd-sourcing server

the technology come from?	
TT3 | To whom will it be transferred to and for which business case will it be used?	Citizens and civic authorities. The application will be used for the now-popular personal well-being tracking and global pollution monitoring. Well-being tracking will be assessed based on exposure to pollution and personal data from bio-sensors.
TT4 | What are the milestones and the success criteria of a completed transfer?	The transfer should be considered successful when sufficient urban information on pollution along with exposure and health information become available and enable the system to correlate various data types towards identifying the effects of pollution on citizens' health

Catalyst ID	Partner	Responsible	Role	Fte	Personnel (all types) (€)	Travel and subsistence costs (€)	Equipment and Infra depreciation (€)	Other direct costs (€)	Indirect costs (according H2020) (€)	Sub Granting (€)	Sub Contracting (€)	Prizes (€)	EIT Contribution (€)	Co funding (any source, except EIT) (€)	Total (€)
A1603	018 INRIA	Agarwal, (Rachit)	Task Leader	1.50	90,000 €	5,000 €	0 €	0 €	23,750 €	20,000 €	0 €	0 €	50,000 €	88,750 €	138,750 €
A1603	102 ForumVirium	Niemi-Hugaerts, K (Hanna Niemi-Hugaerts)	Contributor	0.50	40,000 €	0 €	0 €	0 €	10,000 €	0 €	0 €	0 €	40,000 €	10,000 €	50,000 €

Catalyst ID	A1604
Catalyst Title	Business Launch
Task Title	Business plan
Task Leader	Cunha, C. (Carlos) | Cap Digital | Cap Digital
Description	The task is focused on elaborating the business plan for Env&You solution, including investigating the possible creation of a startup company.
Partner Qualification	
Carriers	Inria@SiliconValley;French Plan filière régional
Deliverables	Business models for financial sustainability of Env&You technologies and services.
BL1 | What is the starting point for the business scenario/model that will be developed (e.g. what sales channels exist, which markets are known, etc.)?	Will consider the already listed business channels: government, health, real-estate and quantified self apps.
BL2 | What are the specific business modelling and go-to-market steps towards a business launch?	Opportunities regarding the envisioned business channels will be assessed in both EU and USA, and will be prioritized.
BL3 | What is the expected result of the completed Business Launch task?	Business plan for the creation of a startup.

Catalyst ID	Partner	Responsible	Role	Fte	Personnel (all types) (€)	Travel and subsistence costs (€)	Equipment and Infra depreciation (€)	Other direct costs (€)	Indirect costs (according H2020) (€)	Sub Granting (€)	Sub Contracting (€)	Prizes (€)	EIT Contribution (€)	Co funding (any source, except EIT) (€)	Total (€)
A1604	036 Cap Digital	Cunha, C. (Carlos)	Task Leader	0.20	30,000 €	0 €	0 €	0 €	7,500 €	0 €	0 €	0 €	30,000 €	7,500 €	37,500 €
A1604	018 INRIA	Issarny, V. (Valérie)	Contributor	0.20	30,000 €	0 €	0 €	0 €	7,500 €	30,000 €	0 €	0 €	30,000 €	37,500 €	67,500 €

Catalyst ID	A1605
Catalyst Title	Innovation Leader
Task Title	Activity lead
Task Leader	Issarny, V. (Valérie) | INRIA | INRIA
Description	Management of the overall activity, including overall coordination of the work.
Partner Qualification	
Carriers	Inria@SiliconValley
Deliverables	
IL1 | Why is the proposed person well positioned to make the activity a success (expertise, experience, profile, soft skills…)? Please provide a crisp answer with specific examples.	Valerie Issarny (https://mimove.inria.fr/members/valerie-issarny/) is directrice de recherche at Inria since 2002 and has been leading the Inria ARLES project-team from 2002 to 2013. Valerie has been acting as PI but also coordinator of EU grants among which the FP6 STREP PLASTIC project and the FP7 FET IP CONNECT project. In 2013 she was awarded an « Etoile de l'Europe » by the French ministry of research in recognition of her coordination of CONNECT. Valerie has also been acting as node director of the Paris node of EIT Digital in 2012. Since 2013, she is scientific director of the Inria@SiliconValley program to promote collaboration between Inria and universities and industry in the Bay area. She is also leading the CityLab@Inria initiative dedicated to smart cities and that includes transatlantic collaboration like UrbanCivics with the Civic engine and CITRIS at UC Berkeley.
IL2 | Would you be interested in the optional	Yes

Entrepreneur Matchmaking mechanism? (yes/no; Please refer also to the Call for Proposals 2016 document for further explanations).

Catalyst ID	Partner	Responsible	Role	Fte	Personnel (all types) (€)	Travel and subsistence costs (€)	Equipment and Infra depreciation (€)	Other direct costs (€)	Indirect costs (according H2020) (€)	Sub Granting (€)	Sub Contracting (€)	Prizes (€)	EIT Contribution (€)	Co funding (any source, except EIT) (€)	Total (€)
A1605	018 INRIA	Issarny, V. (Valérie)	Task Leader	0.80	80,000 €	5,000 €	0 €	0 €	21,250 €	0 €	0 €	0 €	30,000 €	76,250 €	106,250 €

KPI targets for 2016

KPI Info	KPI Title	KPI Target Value
	# involved customers	100
	CLC01.01 Number of people working daily in CLCs	1
	EIT03.01 Number of business ideas incubated	2
	EIT04.01 Number of start-ups/spin- offs created	1
	EIT05.01 Number of knowledge adoptions (by KIC partners) that are direct output of a KIC Activity	1
	EIT05.02 Number of knowledge transfers that are direct output of a KIC Activity	1
	EIT06.01 Number of new or improved products/services/processes launched into the market	3

Justification

1. Personnel Justification

The FTE related budget for the catalyst tasks is 420,000.00 €. The planned FTE for the catalysts tasks sums up to 5.70 FTE with an average cost of 73,684.08 € / FTE.

Personnel is as follows: - 1.5 FTE will carry out the assimilation of mobile observations, as opposed to fixed observations in currently available technology. This means taking into account the lower quality measurements, their spatial error correlations and their specific contributions compared to fixed monitoring stations. - 1 FTE will contribute to the task on air pollution sensing & data collection, ensuring urban scale data collection. - 0.5 FTE will carry out deployment in the city of Helsinki. - 1.5 FTE will deal with the overall integration and the deployment in Paris and the Bay area. - 0.4 FTE will carry out the business modeling. - 0.8 FTE will be devoted to activity management and coordination.

2. Travel & Subsistence Cost Justification

Travel & Subsistence Costs to an amount of 10,000.00 €.

Travel costs relate to the deployment in the 3 cities of Paris, Helsinki and the Bay area.

5. SubGranting Justification

SubGranting to an amount of 150,000.00 €.

For all the subgrantees, exact amount will be based on actual hours spent plus incurred processing/storage cost. - NumTech (http://www.numtech.fr/index.php?l=en) brings in its advanced technology on the production and forecasting of air quality figures. NumTech Tech Transfer subgranting of 50k€ is to carry out hourly numerical simulations of air quality (nitrogen dioxide and particulate matter) over the target cities and compare them to field observations for quality assessment. This requires the inclusion of various data sources: weather data, road network and geometry, traffic simulations and associated emissions, estimation of background pollution imported from regional sources. - Ambientic (https://goflow.ambientic.mobi/) provides the pollution-dedicated crowdsourcing services needed by Env&You. Ambientic Tech Maturation subgranting of 50k€ is for the maturation of the GoFlow crowdsourcing server and includes: IoT protocols integration for off-the-shelf fixed sensors, plugins development for backend integration, and support on mobile app development and experiments. - The Civic Engine (http://www.thecivicengine.org) brings domain expertise in medicine (e.g consumer healthcare), environmental health, government environmental monitoring and regulation.The Civic Engine subgranting of 50k€ is: (i) to assist in the deployment in a chosen California city for 20k€ (Tech Transfer) and (ii) carry out business model for the Env&You solution in the USA for 30k€ (Biz Launch).

6. CAPEX Justification

Capital Expenditure to an amount of 40,000.00 €.

40k€ will be dedicated to the purchase of mobile NO2 and particulate matter sensors to be provided to users during experimentations. Various vendors already provide such devices, and many startups are leveraging new manufacturing processes to quickly deliver engaging consumer devices with various, cutting-edge sensors (e.g., see Mytzoa, RTI microPEM, Aethlabs MicroAeth). We will issue a call for tender for the selection of the air quality sensors to be used in our experiments.

Main location(s) of execution (max 3)

- [ ] Berlin CLC
- [ ] London CLC
- [x] Paris CLC
- [ ] Stockholm CLC
- [ ] Eindhoven CLC
- [ ] Milano Satellite
- [ ] Rennes Satellite
- [ ] Trento CLC

☑ Helsinki CLC ☐ Munich Satellite ☐ Sophia Antipolis Satellite ☑ Other

Other main location of execution

EIT Digital @ Silicon Valley

6. Remarks

Endorsed by BDA

Remarks History

30 May 2015 18:46 PM | Issarny, V. (Valérie) | Author
Activity definition edited so as to address the provided comments, leading to edits in few places. If detail needed, please feel free to get in touch with me (Valerie.Issarny@inria.fr).

27 May 2015 00:00 AM | Quality Check | Quality Check
Marianne daSilva : Tab 2 (Impact):ok
Tab 2 (Team Set Up):ok
deliverables: please click on the info button and read what is accepted as deliverables. some of Yours do not match this definition
Tab 5: key outputs: what will you concretely deliver at the end of one year; workplan: adding milestones would be of added value. Kic partner: please only kist KIC partners and not subgrantees!
budget justification: for each subgrant, please explain why you have chosen the specific SMEs?
Achim Luhn : "Extra EIT Information": the content does not match what is requested in this field - see the help text for this field.

7. Uploads (optional)

Uploads

File Name	Description	Submitted By	Submitted On	Download
No records to display.				

Time Stamp: 30 May 2015 18:46 PM