



triangulum

DEMONSTRATE · DISSEMINATE · REPLICATE

D3.1 Revised City Implementation Plan

Manchester

WP 3

June 2015



H2020-SCC-2014-2015/H2020-SCC-2014: "Smart Cities and Communities solutions integrating energy, transport, ICT sectors through lighthouse (large scale demonstration - first of the kind) projects"

Collaborative Project – GRANT AGREEMENT No. 646578

Project Acronym		TRIANGULUM	
Project Title		Triangulum: The Three Point Project / Demonstrate. Disseminate. Replicate	
Project Coordinator		Damian Wagner (Damian.Wagner@iao.fraunhofer.de) Fraunhofer IAO	
Project Duration		1 st February 2015 – 31 st January 2020 (60 Months)	
Deliverable No.		D3.1 Revised City Implementation Plan Manchester	
Status			Working
Due date		06/ 2015	
Work Package		WP 3 - City Implementation Manchester	
Lead beneficiary		Manchester City Council (MCC), Local Coordinator Steve Turner	
Contributing beneficiary(ies)		MMU, UoM, Siemens, CL	
DoA		<p>Subtask 3.1.1 City Implementation Project Plan (Lead: MCC, months 1-3)</p> <p>A key first task will be the production of a Project Plan as the key reference document for managing the deliverables across Tasks 2-5. The plan will confirm in detail, key timescales, lead partners and budgets with links and feedback loops into the overall Project Plan and project management undertaken in WP01. It will be used as a performance measurement tool to ensure partners deliver key tasks as well as identifying and mitigating risks. It will be developed through the project board with the support of 3 x technical groups with the Corridor Partnership Board acting as a decision making body.</p>	
Date	Version	Author	Comment
01/06/2015		Steve Turner	



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1. Revised City Implementation Plan

Chapter 1 provides the overall overview of the revised city implementation plan of Manchester including tasks, subtasks and activities as well as responsibilities and a Gantt chart (next page)





2. Deliverables related to WP 3

Chapter 2 provides an overview and brief description of the deliverables related to WP3.

Deliverable No	Title	Lead Beneficiary	Type	Dissemination Level	Due Date
D3.1	Revised city implementation plan Manchester	MCC	Report	Confidential, only for members of the consortium (including the Commission)	4
D3.2	1st technical implementation report Manchester	MCC	Report	Confidential, only for members of the consortium (including the Commission)	12
D3.3	2nd technical implementation report Manchester	MCC	Report	Confidential, only for members of the consortium (including the Commission)	24
D3.4	3rd technical implementation report Manchester	MCC	Report	Confidential, only for members of the consortium (including the Commission)	36
D3.5	Communication and participation at city level Manchester (1)	MCC	Websites, patents filling, etc.	Public	12
D3.6	Communication and participation at city level Manchester (2)	MCC	Websites, patents filling, etc.	Public	24
D3.7	Communication and participation at city level Manchester (3)	MCC	Websites, patents filling, etc.	Public	36
D3.8	Communication and participation at city level Manchester (4)	MCC	Websites, patents filling, etc.	Public	48
D3.9	Communication and participation at city level Manchester (5)	MCC	Websites, patents filling, etc.	Public	60



3. Internal Deliverables

Chapter 3 provides an overview and brief description of the internal Deliverables (iD) for the Lighthouse City Manchester.

iD No	Title	Description	Lead Beneficiary	Due Date
D3.1.1	City Implementation Project Plan	This will be the overarching plan for WP3 across Manchester and the key Tasks 2-5.	MCC	4
D3.2.1	Energy Technical Implementation Report/Detailed Design	This will set out the detailed design and delivery of the technical elements of Task 2. It will focus on ensuring that the investments proposed are delivered in an integrated way to ensure optimal performance.	Siemens	12
D3.2.2	Energy Operation and Evaluation Report/Construction and Installation	The results from this operational phase will be drawn the data collected through the MCR-i in Task 4 to produce altogether utilising quantitative validation and assessment of the technical investments made. The results of this will feed into WP02 Task 5 on communication as well as WP02, WP06 and WP07.	Siemens	12
D3.3.1	Mobility Technical Implementation Report/Detailed Design	This will set out the business case and detailed design and delivery of the technical elements of Task 3. It will focus on ensuring that the investments proposed are delivered in an integrated way to ensure optimal performance.	UoM	24
D3.3.2	Mobility Operation and Evaluation Report/Procurement and Implementation	The results from the operational phase will be drawn together setting out the actual benefits can be replicated elsewhere. It will draw on the data collected through the MCR-i in Task 4 to produce a quantitative validation and assessment of the investments made. The results of this will feed into Task 5 on communication as well as WP02, WP06 and WP07.	UoM	24



D3.4.1	Open Data and Service Engine (ODSE)/Establish Open Data and Service Engine	Stable, resilient, scalable version of data and service platform, connected to sensor network and configured for open market app developers to use it.	UoM	36
D3.4.2	Full MCR-i platform/Ongoing Running and Monitoring of Open Data and Service Engine	Combination of the ODSE plus the Visualisation platform and three Exemplar Apps to demonstrate its capabilities and help open market developers understand how to use it.	UoM/C&L	36
D3.4.3	Suite of Open Market Apps/Establish Visualisation Platform and Incubation Structures	Curated suite of applications created by open market app developers.	C&L	36
D3.4.4	Combined Evaluation Report/Support MCR-i and Open Application Marketplace	Identification of key lessons learned after 3 years of live operations, and their implications for replication and on-going support across a much wider geographical area.	C&L/UoM	36
D3.5.1	Communication Plan	Production of Communication Plan for use by Manchester partners in accordance with those of the other consortia partners an in accordance to WP07.	MCC	12
D3.5.2	Communication Tools	Aggregation of a varied set of communication tools in digital and print format, including the project's portal, a brochure, newsletters, animated films and any other solution which may generate awareness and is in line with the project scope and objectives.	MCC	12
D3.5.3	Communication Events	A programme of events will be held for technical and policy based organisations throughout the duration of the project, including a launch and final dissemination event. This will include the establishment of 3 x learning networks around energy, mobility and ICT.	MCC	12
D3.5.4	Final Communications Package	Aggregation of a range of communications tools in digital and print format covering the key results, conclusions and impacts of the project linked to WP07.	MCC	12



4. Milestones WP 3

Chapter 4 provides a brief description of the milestones (MS) related to WP 3.

Milestone Nor	Title	Lead	Due Date
MS2	Revised city implementation plans lighthouse cities	1 - FhG	4
MS8	1st technical implementation reports Lighthouse cities	1 - FhG	12
MS10	2nd technical implementation reports Lighthouse cities	1 - FhG	24
MS11	3rd technical implementation reports Lighthouse cities	1 - FhG	36



5. Risks

Chapter 5 lists and describes the critical implementation risks and mitigation actions for Triangulum and WP 3.

Risk No	Description of risk	WP Number	Proposed risk-mitigation measures
R1	Delays in or low quality of input from project partners	all	The manageable size of the consortium allows the project management team to closely follow up and monitor the quality of the tasks and activities of all partners. The careful selection of the partners in view of their expertise and the quality of work they generally deliver, reduces the risk of facing timing or quality issues. Still, if a partner repeatedly fails to deliver, the project management team will put this on the agenda of the next consortium meeting and if required will decide on a transfer of workload and corresponding resources to one or more of the other partners.
R2	Conflicts between project partners	all	The project management team will resolve potential consortium conflicts. In case of conflict, decisions will be taken by majority vote.
R3	Partner Bankruptcy	all	Majority of partners are large organisations, academic institutions or local authorities who have been established for over 100 years, there is therefore very little chance of bankruptcy. Project management structure would identify any early risks however.
R4	Failure to deliver against deliverables, budgets and objectives	all	Establishment of project management, steering committee and local project management boards in the lighthouse cities overseen by local governance structures (e.g. high level Corridor Board in Manchester) constituted by partners within which lies jurisdiction for decision making and associated powers to address delivery failure.
R5	Delivery of a large and complex project that is integrated within an even larger programme	all	Selection of a high level team to oversee delivery with the right experience, capability knowledge and level of seniority to manage the project effectively



R6	Disputes over ownership of IP amongst consortium partners	WP 1	The whole consortium of the Triangulum project has experience in both RTD and industrial projects as well as in European projects. The establishment of a Steering Committee assures the capability of solving IPR issues.
R7	Breach of IPR conditions within consortium agreements	WP 1	The whole consortium of the Triangulum project has experience in both RTD and industrial projects as well as in European projects. The establishment of a Steering Committee assures the capability of solving IPR issues.
R8	Lack of responsibility for clearing rights in projects with multiple partners	WP 1	The management structures of the Triangulum project as well as the different responsibilities are clearly defined. The responsibility about rights is clearly established in both the Management structure and procedures and the Management of knowledge (Intellectual property).
R9	Target audience not reached properly	WP 7, but also local dissemination	Several occasions/media at city level, national and EU level will be used to attract targeted audiences (citizens, technical audience, broader public, press, local authorities, decision makers, industry, SME...). Assessment of participation and engagement will allow an early alert to modify the communication media / channels. Even joint events and connections with established initiatives and platforms will enable the partners to reach the general public.
R10	Internal disputes on access rights on project results	all	The Consortium Agreement will work out the access to background and give a first idea on access to project results (foreground). Based on this internal exploitation workshops will continue to work on IPR issues and access rights in the first project year, so no conflict is expected in the implementation phase.
R11	Lack of information for dissemination and communications activities	WP 7, but also local dissemination	WP Leader for Dissemination and Communication is participating at each project meeting, participating at Steering committee meetings, at important telcos of the Cities, is in in close contact to the technical coordinator and WP Leader for the Smart City Framework, Replication and Exploitation.
R12	Financial problems regarding implementation in Lighthouse cities.	WP3, WP4, WP5	Financial problems during implementation in Lighthouse cities are very unlikely to occur, since sound finance plans were part of the project development process and lighthouse cities have allocated specific investments for project-related tasks and procurement.



R13	Financial problems regarding implementation in Follower Cities.	WP6	Follower Cities have 3 years to channel investments into smart city development and to secure additional funding sources (including additional EU-sources e.g. EFRE / DG Regio / Jessica / etc.) for smart city implementation. Furthermore, developing sound business models for replication of solutions represent one main aspect of WP 06 and core stakeholders for this process are the involved business partners. A significant share of smart city solutions will thus be replicable via marketable and bankable projects. Still, a minor risk remains that Follower Cities have not secured financing and funding for parts of their implementation projects. Thus the project management will actively support follower cities in their process of project development w.r.t. funding and financing.
R14	Work behind the schedule due to personal reasons (illness, job rotation, dropping out, pregnancy, vacations etc.)	all	The integrated management and coordination structure helps avoid surprises – since proactive communication is embedded in the structure and processes. In addition all stakeholders are obliged to communicate project-relevant alterations of their schedules and fields of activity within a period of 1 week. Project stakeholders will install and regularly update a joint vacation calendar at the shared workspace environment. Top-level project management via gant chart allows on-going evaluation of work progress and a quick identification of process lags.
R15	Citizen contra	WP3, WP4, WP5	Citizen involvement is a main aspect in our proposal. All city partners have integrated the task “communication and citizen integration” in their WP. Conflicts or disputes with citizens will thus be countered proactively. Most of the larger investments in Trinagulum will be made for public buildings and public infrastructure – thus citizen contra will not occur here.
R16	Delays or difficulties obtaining data from reporting partners	WP2, also WP3, WP4, WP5	Engage key data providers early in project cycle and ensure local universities work closely with partners to help ensure timely delivery of data.
R17	Lack of access to data / delays establishing data hub	WP2, WP6, also WP3, WP4, WP5	Work closely with other WP leaders to ensure that Data Hub is interoperable with Lighthouse ICT architecture and WP6 Smart City Planning Tool and maximise use of open access registry software.



R18	Data accuracy – not known or erroneous	WP2	Ensure margins of error are fully understood and decisions are made cognisant of this. Testing of sensor technology and establishment of controls.
R19	Land or properties are not available for implementation	WP3, WP4, WP5	Already pre-selected on availability within timeframes with supporting letter of interest
R20	Planning – project require planning permission – delays to programme	WP3, WP4, WP5	Projects pre-selected where planning has already been provided or where it is not required
R21	Learning is not disseminated to other cities	WP6, WP7 (also all)	The lighthouse cities represent in their size the majority of European cities. Dissemination of results and direct learning between lighthouse cities and follower cities is explicitly addressed within WP06 and WP07. In addition the extensive networks of all stakeholders will be used to help bridge gaps and ensure communication/ dissemination is well planned through communications plan
R22		all	

Please do not hesitate to contact the Project Coordinator:

Damian Wagner

Project Coordinator *Triangulum*

Fraunhofer-Institut für Arbeitswirtschaft und Organisation IAO

Urban Systems Engineering

Nobelstraße 12 | 70569 Stuttgart | Deutschland

Office: +49 (0) 711 - 970 23 06

Mobile: +49 (0)152 - 28835261

Mail: damian.wagner@iao.fraunhofer.de

