



triangulum

DEMONSTRATE · DISSEMINATE · REPLICATE

***D3.5 Communication and participation
at city level - Manchester***

WP 3, Task 3.5

January, 2016 (M12)

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.	D 3.5 Communication and participation at city level Manchester		
Diss. Level	PU		
Status		Working	
		Verified by other WPs	
	x	Final version	
Due date	Date final version		
Work Package	WP 3 - City Implementation Manchester		
Lead beneficiary	P- 4(MCC)		
Contributing beneficiary(ies)	P-6 (UoM), P-5 (MMU), P-7 (Siemens), P-8 (CL)		
DoA	Aggregation of a varied set of communication tools in digital and print format, including the projects portal, a brochure, newsletters, animated films and any other solution which may generate awareness, especially to citizens and is in line with projects cope and objectives.		
Date	Version	Author	Comment
20/01/2016	1	Michelle Oddy (MCC)	
28/01/2016	2	Nora Fanderl (FhG)	Cross-check
01/02/2016	3	Michelle Oddy (MCC)	NF Amends
02/02/2016	4	Trinidad Fernandez (FhG)	Format and editing



Table of Content

1. Introduction	4
2. Tools/Channels/Mechanisms	5
3. Citizen engagement strategy	9
4. Key activities Months 1-12.....	19
5. Plans for months 13-24	22



1. Introduction

The local dissemination and communication coordinators work closely together with work package 7. The "D&C Secretariat" is responsible for all dissemination and communication within the Triangulum project on an overall and a local level.

The secretariat involves:

- Hans van Amelsvoort, Dissemination and Communication Eindhoven
- Michelle Oddy, Dissemination and Communication Manchester
- May Endresen and Camilla Lunde, Dissemination and Communication Stavanger
- Saskia Heyde, WP 7-Leader

The overall corporate identity of the project has been developed together and can be used for all local purposes (e.g. flyer layout, rollup layout). Furthermore, there have been several dissemination and communication meetings and telephone conferences, where the state of affairs has been presented and next steps have been discussed.

This report provides an update on the communications plan that was developed in Nov 15. It summarises the communication and dissemination activities that have taken place in months 1-12 and the plans for months 12-24.

Communication in the first 12 months has aimed to raise the general awareness of the project. Now the mobility technical implementation report and energy technical implementation report have been completed communication activities will be focus on engaging stakeholders in specific tasks related to the project.



2. Tools/Channels/Mechanisms

Each theme of the project has a different audience and therefore the engagement strategy and subsequent communication tools differ according to the specific activity. The general approach to dissemination of the findings of the Triangulum project is discussed below.

Overall dissemination approach

The publication of the results of Triangulum is a core project activity. The outcomes of the project will be presented and delivered to relevant internal and external target groups from the industry, research, and academia, through to decision makers at national and European levels. The overall approach described in this section defines relevant steps for successful dissemination of the results during the term of the project.

According to Harmsworth (Harmsworth & Turpin, July 2000), three levels of dissemination for a project can be identified, as shown in Figure 1 below:

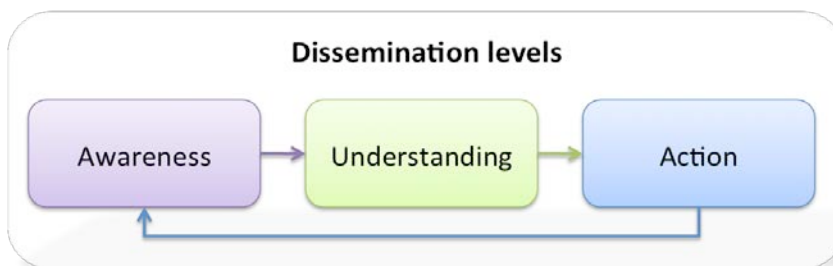


Figure 1: Different levels in the dissemination approach

Awareness is necessary regarding the project, its objectives and outcomes. This will be achieved using various dissemination media such as communication channels as well as conferences as a presentation platform. For example, project summaries in newsletters and journals can raise awareness of the project existence.

Groups that are fully aware of the Triangulum project may be interested to **understand** the work of the consortium and therefore to benefit from the project and its outcomes. The disseminated outcomes of the project may have to be adapted for particular target groups and their standard of knowledge – for example the level of abstraction of a scientific publication may be different



to the one of a presentation for the industry. A Triangulum community of interest will be established bringing together potential beneficiaries and users of the results of the project, and building upon the privileged contacts and relationships of each participant.

Action, the third level of dissemination results in a change of practice caused by the adoption and use of the results of Triangulum. The target group for this avenue of dissemination is the industry, building owners and public authorities that are in the position and have the influence to achieve such a change of practice.

An appropriate dissemination strategy will raise **awareness** and deeper **understanding** of the work of the project and will lead to **action** based on the projects outcomes.

Broadening the impact of Triangulum **sustainability** can be seen as one of the main requirements towards dissemination. The European Commission defines the term “sustainability” as follows: “Sustainability is the capacity of the project to continue its existence and functioning beyond its end. The project results are used and exploited continuously. Sustainability of results implies use and exploitation of results in the long term.” (European Commission, 2006)

For Triangulum, this implies raising awareness for the project in the ICT, Mobility and Energy sectors as well as in associated scientific and research communities. Triangulum aims at influencing these sectors in the long-term by means of the knowledge created by the project and its results, thereby enhancing the energy and mobility efficiency within smart city districts over their lifecycles through ICT.

Three main patterns are identified as a part of building a building a robust framework depending on objectives and needs:

1. Networking activities
2. Scientific and research dissemination
3. Wider dissemination

The three dissemination patterns are presented below with specific associated activities and channels.

NETWORKING

Objective: create effective communication channels and raise awareness about Triangulum project.

Internal dissemination

- Meetings – *face-to-face meetings and workshops*
- Newsletter – *Information support for news in an accessible format*



- EMdesk – *Principal way to distribute administrative, policy and procedural documents for use by Triangulum partners*
- Internal lists – *Electronic mailing lists that include members of the project team from each partners*
- Reports – *Synthesize and disseminate project results*

External dissemination

- Working groups – *Focus on specific practical issues*
- Newsletter/external lists – *Digital archiving covers many areas.*
- Website – *Display news and project progress, especially events information, keep the community informed*
- Participation to join road mapping activities – *Construct consensus and coordinate project and technologies development*

Several levels of networking are identified: Public, restricted to the team project, restricted to a group, and confidential.

SCIENTIFIC AND RESEARCH DISSEMINATION

Objective: Knowledge spread and scientific community creation. At a minimum this includes:

- Targeted informational literature designed to raise awareness about Triangulum and its activities
- Instructional literature derived from experience (methodological guidelines, strategic guides to good practice)

Events

- Organization of dedicated workshops, tutorials and seminars
- Attendance to conferences, symposia and other scientific forums
- Major international conferences

Publications

- Journals & magazine articles
- Conference publications
- Academic dissemination



WIDER DISSEMINATION

Objective: To aim a wider audience to communicate about Triangulum whereabouts and results

Promotion of the project to the outside world

- Website - *Display news and project progress, especially events information, to keep the community informed*
- Attendance to public forums and conferences

Synergies with education and training activities

- Leaflet.



3. Citizen engagement strategy

Collective activities

2 virtual learning networks will be established which will enable organisations to be directly connected to the project and share learning. Specific events and on line learning will be organised around these 2 networks.

The nature and membership of these networks will be agreed by the Technical Board that has been established to provide technical oversight across the 3 workstreams. The first meeting of the Technical Board will take place in Feb 2016 with a view to setting up the learning networks in July 2016.

Short videos will be produced for each theme of the project. This will be sub contracted in July 2016. In order to follow local procurement regulations, 3 quotes will be obtained to ensure value for money.

Thematic activities

The Triangulum project within the City of Manchester involves a varied set of stakeholders across each theme and therefore the citizen engagement strategy is different for each task within the implementation plan.

1. Energy workstream

The energy workstream has 3 key activities:

- Trialling of a central energy controller- delivering a Central Controller that connects to existing and new energy infrastructure across multiple buildings providing an extra mechanism for optimising energy generation, storage and demand.
- An energy optimisation initiative- optimising the energy infrastructure within individual buildings by making recommendations to: a) change current processes; b) implement energy control devices; and c) encourage building users to make more efficient use of energy through the development and implementation of behaviour change campaigns.
- Installation of low carbon technologies- procuring, installing and operating assets within the corridor which generate a target of 1500MWh of low carbon energy over the course of the Triangulum project. The assets will be installed within MCC, MMU and UoM buildings. The initial stages of the work package will involve technical evaluation of low carbon energy generation technologies and of the sites. Additional



assets will be then procured, installed and tested together with any sub metering to measure output.



Engagement strategy for Energy workstream

Activity	Key Stakeholders	Key message	Objective	Activity	Key dates
Central Controller	Building managers at MCC, MMU, UoM	Sell the benefits of the central controller to the organisation in terms of lower carbon emissions, energy savings	Building managers buy into the concept of the central controller and “enable” the project	Individual meetings with Siemens and Building managers to promote understanding and buy in.	Sept 15-Jan 16
		Disseminate results of central controller	Building managers want to extend use of central controller beyond project funding	Meetings with building managers to articulate potential benefits of scaling up	Jan 19
	Corridor Manchester Executive	Disseminate results of central controller	Corridor Manchester Executive want to extend and expand use of central	Presentation of findings as results become available	Jan 19



			controller beyond project funding		
Energy optimisation Initiative	Building managers at MCC, MMU, UoM	Sell the benefits of the energy optimisation initiative in terms of lower carbon emissions and energy savings	Building managers buy in to the concept of the energy optimisation initiative and “enable” the project	Individual meetings with Building managers at MCC, MMU, UoM to promote understanding and buy in.	Sept 16-Feb 16
	Building users-staff, students, third parties at MMU and UoM	Use staff and student groups to shape and promote the campaign	Campaign has a successful outcome	Involve staff/students in design of campaigns through environmental strategy teams	Feb 16-July 16
Installation of low carbon technologies	Building managers –MMC, MMU, UoM	Work with building managers to determine most effective sites/technology	Building managers buy in to the technology and “enable” the project	Individual meetings with Building managers at MCC, MMU, UoM to promote understanding and	Jan 16



				buy in.	
--	--	--	--	---------	--



2. Mobility

The workstream has 2 key activities:

- The replacement of some existing diesel estate fleet vehicles at MMU and UoM with E/V's and increasing charging infrastructure
- The procurement of electric pedal assist cargo bikes to be used small level deliveries at MMU, UoM and the Central Manchester University Hospital Trust.

Engagement strategy for the Mobility workstream

Activity	Key Stakeholders	Key message	Objective	Activity	Key dates
E/Vs	MMU and UoM sustainable travel teams	Importance of tracking data re E/V use	Tracking data is captured and transferred to open data platform	Set up mobility task group with MMU and UoM to shape specification and ensure tracking data is captured and available on open data platform. Align charging infrastructure to energy	Jan 16 onwards



		Share tracking data and cost/ carbon savings with MMU, UoM travel teams	MMU and UoM continue to replace diesel fleets	workstream	Jan 17 onwards
	Corridor Manchester Executive	Disseminate results of E/V project	Corridor Manchester organisations continue with investment in E/Vs	Presentation of results as they come available	Jan 17 onwards
Cargo bikes	MMU,UoM ,CMUHT sustainable travel teams	Sell benefits of cargo bike use in terms of carbon savings, fuel savings, health benefits	To encourage use of cargo bikes for specific small scale deliveries across the estates of MMU, UoM and CMUHT	Via mobility task group above involve group in specification of cargo bikes to facilitate certain types of delivery	Jan 16 onwards
	Corridor	Disseminate	Corridor	Presentation of	Jan 17 onwards



	Manchester Executive	results of cargo bike project	Manchester organisations make further investment in cargo bikes	results as they come available	
	SME's	Encourage trial of cargo bikes	To encourage use of cargo bikes for small scale deliveries	Trial event as part of national bike week	July 2016

3. ICT workstream

The workstream has 3 key elements:

- Develop an open data platform and service engine
- Develop a visualisation platform and incubation structures
- Engage with open market app developers

Activity	Key Stakeholders	Key message	Objective	Activity	Key dates
Open data platform	OSI soft	Requirements of system for	Facilitate use of platform by	Meeting with Siemens/OSI soft	Dec 15



		Triangulum	project partners		
	Data sources- project partners, TFGM, others	Encourage data to be transmitted to data platform	Add maximum content to data platform	Individual meetings with data owners/suppliers	Jan 16 onwards
Visualisation platform	Other City maps GM infrastructure map- New Economy, Arup 3d map	Explore barriers to open data	Help to develop use cases	Individual meetings with New Economy, Arup	Nov 15
	Data users/developers	Develop use cases	Analyse capabilities to identify generic services which could be provided by visualisation platform	Individual meetings	Nov 15 onwards
Engagement with open market app	Open market app developers	Publicise launch of visualisation	Define processes and standards for deploying the	Innovation challenge event (workshops,	July 16



developers		platform	visualisation platform more widely. Develop 3 exemplar apps	hackathons, online collaboration) Meetings with successful app developers	
	App users	Benefits of the apps	Embed use of the app within the City	Launch event	Jan 17 onwards
	City managers	Benefits of MCR-I	Handover of MCR-I platform to City managers	Planning meetings	Jan 19 onwards



4. Key activities Months 1-12

All partners have undertaken initial awareness raising activities:

1. Triangulum on partner websites:

http://www.siemens.co.uk/pool/news_press/news_archive/2015/triangulum-launch-10-feb-2015.pdf

<http://universitylivinglab.org/news/horizon-2020-triangulum-demonstrate-disseminate-replicate-smart-green-growth>

<http://www.manchester.ac.uk/discover/news/article/?id=13110>

<http://clicksandlinks.com/>

<http://manchester.gov.uk/smartercities>

2. Presentation at meetings/conferences

Steve Turner, MCC smart Cities programme manager has presented at the 2015 events below:

February 11th – Launch and Inception Meeting, Manchester Art Gallery, Manchester

February 24th – Low Carbon Scotland, Edinburgh

March 23-27th – UK China - Smart Green Cities workshops and presentations, Beijing and Wuhan

March 30th – Presentation to Tianjin officials, Tianjin

April 21st – UK Core Cities presentation, Glasgow

April 27th – Ovum Smart to Future Cities, London

May 7th – UKTI Smart Cities Investment, Brussels

May 13th – Scottish Core Cities, Edinburgh

May 21st – Smart Cities Panel, IP Expo, Manchester

June 2nd – Huawei Digital Cities in Europe, Amsterdam

September 14th – Siemens Smart Digital Cities, London

September 16th -18th – Nordic Edge, Stavanger

September 21st – 25th – UK China Investment Summit workshops, panels and presentations, Beijing, Wuhan and Chengdu

October 8th – UK All Party Parliamentary Group on Smart Cities, London

October 21st – Daily Telegraph Britain's Smart Cities, London

November 2nd – Arab Smart Cities Summit, Dubai



November 17th – 19th – Smart Cities Expo presentations, panels and workshops, Barcelona

3. A Triangulum leaflet has been produced for the City of Manchester by the Communications Department within Manchester City Council.

This is to raise general levels of awareness of the project scope in Manchester. Following the development of the Energy Technical Implementation Plan and the Mobility Technical Implementation plan we are now able to articulate the specific tasks within each of the themes.

4. A Triangulum animation has been produced for the City of Manchester.

This animation has been developed by Corridor Manchester and will be displayed on the digital screen owned by Corridor Manchester which is located in a prominent position along Oxford Rd.

5. Social Media

@smartcitymcr is Manchester City Councils twitter account to post communications regarding all smart city projects including Triangulum. The account has 4000 followers and has been used to retweet posts from the main triangulum-eu twitter account and will be used to disseminate key information about Triangulum during the lifetime of the project.



6. Triangulum Infographic

In the initial stages of the project an infographic was developed by Siemens to give an overview of the project

The infographic is displayed in a web browser window. The browser's address bar shows the URL: http://www.siemens.co.uk/pool/news_press/news_archive/2015/triangulum_infographic_10feb2015.pdf. The browser's title bar reads 'siemens triangulum'. The infographic content is as follows:

SIEMENS

Triangulum: A Landmark Project

At a Glance

- Worth around £4.5million (EUR 6 million)
- Transforms the 'Manchester Corridor' into a 'smart quarter'
- Learnings will be used to develop smart quarters in other European cities
- Employs latest energy management technologies
- Autonomous energy grid demonstrates how the entire district could be supplied with heat and electricity
- Greater use of electric vehicles

Triangulum by Numbers

<p>1 Manchester Oxford Road Corridor</p>	<p>Horizon 2020: €80bn of EU funding over 7 years</p>	<p>19 bids across EU for Smart Cities funding May 2014</p>	<p>3 Lighthouse Project winners</p>	<p>€28bn Triangulum project funding</p>
--	---	--	-------------------------------------	---

The browser's taskbar at the bottom shows the system tray with the date and time: 11:00 01/02/2016. Open applications include Citrix Receiver, Michelle Oddy - I..., Triangulum D.5 C..., and Pages - Default - ...



TRIANGULUM - GA No.
646578

triangulum
DEMONSTRATE · DISSEMINATE · REPLICATE

5. Plans for months 13-24

1. Energy workstream

TARGET GROUP	COMMUNICATION AND DISSEMINATION TOOL	DETAILS	IMPACT	DATE	COST	RESPONSIBILITY
Social / local / trade / national media	<p>PR (releases, media briefings articles in trade press – likely to be more interest once there are concrete findings towards end of project)</p> <p>Social Twitter and LinkedIn updates from project team (great to communicate smaller milestones which don't warrant a PR)</p> <p>End of project media event / briefing to launch findings report</p>	<p>Regular drip feed of various key milestones.</p> <p>E.g. Central controller implementation approach (May 16); Central controller use cases (May 16); Building Optimisations agreed (April 16); Implementation of EDCs agreed (April 16); Operation of ECDs agreed (Nov 16); Biomass/CHP installation (Sept 16)</p>	<ul style="list-style-type: none"> • Raise awareness of project • Generate pride and goodwill in the project • Thought leadership platform for Siemens to talk about Smart Cities and for MCC to be perceived as a leading smart city (integrated with all aspects of Triangulum project) 	Ongoing	EW time for press releases Cost for end of project report/press event TBA	Siemens Communications with input from all partners



	(jointly with all partners)					
Energy Thought leaders	Global experts in smart/future cities	Social media plan to create interest from around the world in the Manchester project (linked to above) but targeting key influencers and get them following (Steve Turner to input)	Elevate the project to a global audience	Ongoing	Time	All involved in project to review social network connections and leverage these
Local building users & managers	Information leaflets Direct communication (meetings etc) Dedicated web page with relevant details	Various key milestones	Explain programme, key milestones, the relevant group's role in it and overall benefits	Ongoing	TBA	Siemens project team with comms support if/when collateral needed
Triangulum project lead and follower cities	Dedicated web pages Update webinars City visits End of project event and report Meeting at regular intervals anyway	Various key milestones	Keep lead cities connected and mutually supporting each other Keep follower cities inspired / committed to replicating. Investigate use of http://info.stickyworld.com/about	Ongoing	TBA	Siemens project team with comms support if/when collateral needed



	with WP 7 cities?					
Local residents Local businesses	Signage Information leaflet Exposure to media coverage via PR	Various key milestones	Generate local interest/pride/engagement Investigate use of http://info.stickyworld.com/about	TBA	TBA	Siemens comms to lead PR jointly with MCC and other stakeholders Siemens project team with comms support if/when collateral needed



2. Mobility

TARGET GROUP	COMMUNICATION /DISSEMINATION TOOL	DETAILS	IMPACT	DATE	COST	RESPONSIBLE
Project partners mobility theme	Set up task group-communication	Set up task group with MMU, UoM, MCC, CMHT, Supplier, WP2 rep	Manage, monitor, promote –cargo bike, EV workstream	Jan 16-then monthly	Person months only	M Oddy-MCC
Staff at MMU, UofM, CMHT	Introductory meeting with estates team	Introduce estate staff to cargo bikes	Raise awareness of cargo bikes	March 16	Person months only	Mobility task group
Staff at MMU, UoM,CMHT	Focus group	Focus group with users to obtain feedback	Obtain feedback on cargo bike use	July 16	Person months only	Mobility task group
Corridor Manchester	Presentation at meeting	Prepare report updating Corridor Board on mobility project	Raise awareness of mobility workstream	Jan 16	Person months only	M Oddy-MCC
General public	Press release	Article in local press/other to co-incide with launch of cargo bikes/EV's-liaise with MCC press office	Raise awareness of mobility workstream	April 16	Person months only	Mobility task group
Corridor partners-MMU, UoM,CMHT,SME's	Launch /demo event for cargo bikes	Launch event with local partners	Raise awareness of cargo bikes with local partners	April 16	Hospitality costs	Mobility task group



General public	MCC website-Smart Cities website	Summary of launch event	Raise general awareness of mobility projects	April 16	Person months only	M Oddy-MCC
EU partners	Triangulum website	Summary of launch event	Raise general awareness of mobility projects	April 16	Person months only	M Oddy-MCC
EU partners	Triangulum twitter	Tweets re launch event	Raise general awareness of mobility projects	April 16	Person months only	M Oddy-MCC
Cycling community	Participation in national bike week	Cargo bike trial	Raise awareness of cargo bike benefits	Sept 16	Person months and marketing costs	Mobility task group
Course leaders-MMU/UoM	Meeting with course leaders	Audit of EV skills within current electrical courses Identify opportunities to embed EV skills into academic courses	Develop local skills set	Feb 2016	Person months	Mobility task group
Mobility community	Presentation conferences at	Eurocities-joint mobility event	Disseminate results	Oct 2016	Person months, travel, conference	Mobility task group



					fees	
Other smart city projects	Meeting with City Verve project team	Explore opportunities to link with cargo bike element of City Verve project	Add value to Triangulum project	Feb 2016 onwards	Person months	Mobility task group
ICT workstream	Transfer tracking data to MCR-I	Ensure mobility data is on open data platform	Facilitate development of mobility apps	July 2016 onwards	Person months, tracking costs	Mobility task group



3. ICT

TARGET GROUP	COMMUNICATION AND DISSEMINATION TOOL	DETAILS	IMPACT	DATE	COST	RESPONSIBILITY
Corridor Manchester Students	Website (probably at www.corridormanchesterdata) / internal student facing communications	Present opportunities for challenges that can be	A range of student projects making use of the open data generated by the Triangulum project	September 2016	Free (labour from project)	UoM / MMU
Energy / Networks Industry	LCNI Conference in Manchester in 2016	Present work being done as part of the Triangulum project at the LCNI event with a call to action for people who could make use of the open-data being generated by the project	An increased number of industry stakeholders making use of the data being generated along the corridor	October 2016	Approx. £4k for exhibition stand	UoM
Open application Market place	Innovation Challenge	hackathon	Development of apps	July 2016	£50,000	Clicks and Links



4. Collective activities

TARGET GROUP	COMMUNICATION AND DISSEMINATION TOOL	DETAILS	IMPACT	DATE	COST	RESPONSIBILITY
Smart Cities Community- local, national, european, international	Video and social media	3 x short videos for each theme – placed on project and partners websites- seeded through social media	Disseminate key findings in accessible way	July 2016 onwards	£9000	Communication task group via third party
Smart Cities Community – national, european, international	Presentation at Smart City conferences	Smart Cities World-London	Raise awareness of project	April 2016	Tbc-exhibition costs, travel	Communication task group
		Smart City event Amsterdam		June 2016	Tbc-exhibition costs, travel	
Smart Cities Community – national,	Smart City network groups	UK Smart City advisory group All party political groups	Raise awareness of project/disseminate findings	On going	Person months, travel costs	Smart City Programme manager



europaean, international						
Smart Cities Community – national, europaean, international	Establish Technical learning networks- energy, ICT, mobility	Develop a technical learning network and on line learning events (include follower cities)	Share learning and experience and develop replication potential	July 2016	Person months, venue hire,	Technical Board
Smart Cities Community – national, europaean, international	Establish policy learning network	Develop a policy learning network and on line learning events (include followe cities)	Share learning and experience and develop replication potential	July 2016	Person months,venue hire	Communications task group
Corridor Manchester Board	Report	Quarterly report on activities Yearly impact report	Raise awareness of project/present findings. Ensure continued support	Jan 16 onwards	Person months	MCC
Political-	Report	Quarterly report on activities	Ensure continued	Jan 16	Person months	MCC



Elected members		Yearly impact report	support	onwards		
European City of Science attendees	Participation in fringe events	Explore opportunities to present Triangulum at fringe events	Raise awareness of project/present findings	July 2016	Person months	Communications task group

