

Minutes from the Workshop: WSSTP – Urban Pilot Theme 1: Managing rain events and flooding in urban areas.

Dates: 24 – 25 September 2007

Venue: Aarhus Water&Wastewater, Bautavej 1, 8210 Aarhus V, Denmark

Participants:

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Agenda:

Monday 24 September:

09:00 – 09:30: Welcome and introduction to Aarhus Water&Wastewater

09:30 – 11:00: Presentation and discussion of potential pilots/demonstration sites

Aarhus, Barcelona, Berlin (Postponed to Tuesday morning due to a cancelled flight)

11:00 – 11:30: Coffee/the break

11:30 – 13:00: Presentation and discussion of potential pilots/demonstration sites

Eindhoven, Genoa, Lyon

13:00 – 14:30: Lunch at the Harbour

14:30 – 17:00: Excursion to sites and infrastructure included in the Aarhus project – having a look at the real world – and ending at the hotel.

19:30 - Dinner at the river side in the town centre

Tuesday 25 September: (re-designed after first day)

09:00 – 09:15: Introduction – Expected outcome of Workshop

09:15 – 09:45: Presentation/discussion of Berlin potential pilots/demonstration site

09:45 – 10:15: Risk Assessment (G6, E29)

10:15 – 10:45: Flooding (G10)

10:45 – 11:15: Break

11:15 – 12:30: Discussion: Topics -> Group of Topics -> Projects ?

12:30 – 13:00: Lunch

13:00 – 14:30: Discussion: Topics -> Group of Topics -> Projects ?

14:30 – 15:00: Conclusions – further work

Presentation and discussion of potential pilots/demonstration sites

The 6 cities - Aarhus, Barcelona, Berlin, Eindhoven, Genoa, Lyon - presented their possible pilots/demonstrations, as described in their fact sheets. The presentations will be distributed (if possible to compress them enough for e-mail). Focus was on the questions addressed in the presentation template:

Project overview

- Why are you doing the project
- What are the problems to be solved
- Why do you want to make it under WSSTP

Project Presentation

- The infrastructure
- The analysis of the problems
- The expected outcome
- The suggested solutions

Research Topics

- Which theme 1 research topics are the most important for your project
- Are you aware of any existing EU projects that addresses (more or less) these topics

Instruments

- Which instruments fits best your project and organisation
 - Training
 - Networks
 - Research
 - Demonstration

Excursion to sites and infrastructure included in the Aarhus project

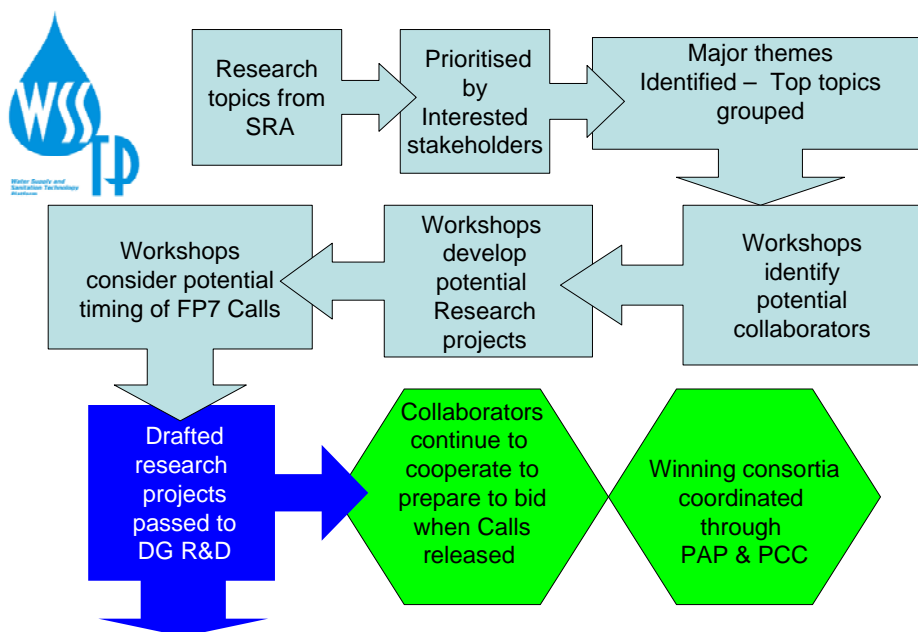
The program was put together in order to give the participants an overview of the Aarhus Pilot – in real world:

- Visit to construction site for a basin to reduce the effects of storm water overflows – especially Phosphorus load due to the use of Iron-containing sludge from waterworks. The construction of the basin is a part of the EU-LIFE treasure – program.
- Visit to Aaby WWTP. To reduce the effect from the WWTP on the river, there will be established UV-oxidation, retention basin and increased hydraulic capacity (clarifier).
- Visit to “Carl Blochs Gade” – planned retention basin. The size of the basin was calculated to approx. 21.000 m³ – but due to space limitations it is only possible to build 11.000 m³, which then is planned to include treatment by chemical oxidation.
- Visit to the “Trojborg basin”, which is a newly built basin (volume: 16.000 m³) including cleaning system (flushing)
- A walk along the downtown part of river Aarhus, to get an impression of what the City development is all about. Construction work is still ongoing, however pictures show one of the finished stretches before and after.



Introduction – Expected outcome of Workshop

As more participants the first day/evening expressed the wish of having a better knowledge of what the WSSTP is and what the process has been until now, a short introduction was given using powerpoints from the Paris meeting in June.



WSSTP – Pilot Implementation Process

In short we are one of the workshops working in the middle row of the boxes above. To find yourself in the organisation WSSTP has defined 6 pilot programs – we are under no. 2 – also known by the short name “the Urban Pilot”. Each pilot is going through the process as indicated by the boxes, where a split is performed into sub-themes going from the upper row to the middle row.

For the Urban Pilot (which has Mike Farrimond, UKWIR as chairman) this split became a reality during a meeting in Paris in June 2007, where we became the Urban Pilot Theme 1. More information concerning WSSTP and the process of formulating Research Projects can be found on <http://www.wsstp.org>, where also the Strategic Research Agenda (SRA) can be found. The SRA also includes the research topics we are discussing.

So we are supposed to:

- Identify potential collaborators
- Develop potential Research projects
- Consider potential timing of FP7 Calls

for the Urban Pilot Theme 1: Managing rain events and flooding in urban areas.

In order to get a better overview of the City priorities concerning the research topics a matrix of Cities vs. topics was handed out – to be filled in (using a ranking from 1 to 3) before/during the break.

Risk Assessment (G6, E29)

As the topics G6 and E29 did not come out clearly from the received fact sheets, a presentation concerning these had during the planning of the workshop been agreed with Carsten Jacobsen. Carsten presented the use of a risk assessment tool applied to a case (sewer systems) in Copenhagen, Denmark. Discussions were focused on calculation methodologies and how to present the results.

Flooding (G10)

As the topic G10 did not come out clearly from the received fact sheets, a presentation concerning this had during the planning of the workshop been agreed with Richard Ashley, who gave a lecture in Flood Risk Management and covered most of the other topics as well. A lot of work is done in UK on flooding and Richard also gave a list on existing EU projects on this topic. There was a short discussion on how to include UK, as no Cities have sent fact sheets. Richard agreed to identify 1 – 3 Cities (known as the “UKs”), who then will have to send a fact sheet, to be included in the documentation from UPT1.

API	Identify the “UKs” (1-3 Cities)	Richard	15-10-2007
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Discussion: Topics -> Group of Topics -> Projects ?

Following the discussion on the “UKs” also a discussion on the number of participating cities took place, but as this workshop is a step in an open process, there is no wish to limit the number – one single project can easily have more demonstration sites. However, we agreed that all cities who want to participate in UPT1 have to fill in the matrix handed out and to produce a fact sheet (which will be collected by Inge/Anders) within the timeframe given and with the format requested (but to identify themselves asap) – otherwise it will be impossible to produce the documentation to the Urban Pilot manager. Therefore Oslo also filled in the matrix - and Richard did so, on behalf of the “UKs”.

AP2	New Cities identified to produce fact sheet and fill in matrix	City rep.	01-11-2007
AP3	Oslo to produce fact sheet	Eldrid	01-11-2007
AP4	“UKs” (1-3 Cities) to produce fact sheet(s)	UK rep.	01-11-2007

The filled in matrices were collected, however not all were completely filled in, so this was done on a slide on the projector “on the fly”. During this process Maria and Pascal had to leave to catch their flights - so they will complete their line in the matrix after getting home. (Pascal also to consider the “1s” in brackets – several participants suggested to put these in.)

AP5	Report missing priorities in matrix for Barcelona to Inge/Anders	Maria	28-09-2007
AP6	Report missing priorities in matrix for Lyon to Inge/Anders	Pascal	28-09-2007

Then we looked at the topics again and how these would fit City priorities, and if we could group these, so they in fact could reflect the City pilots/demonstration sites. The result was 4 “groups” of the most related topics, which is reported in the matrix together with the City priorities.

”City” vs. Topic



	G6 I	G8 II	G10 IV	G11 III	G14 IV	E1 II	E2 II	E12 III	E29 I	E31 III
Aarhus	3	2	3	1	2	1	1	1	3	1
Barcelona	2	3	3	2	1	3	2	1	1	2
Berlin	3	1	3	3	2	1	2	3	3	3
Eindhoven	1	2	1	2	1	1	2	2	2	3
Genoa	2	1	1	3	1	1	2	3	3	1
Lyon	(1)	1	2	3	1	1	1		(1)	
UK	1	3	1	3	1	1	2	3	1	1
Oslo	3	1	3	3	1	1	3	3	3	1

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For easy reference the topics in UPT1 are (decision made to include E1 and partly E12):

Generic Research

- G6: Integrated risk assessment on urban water systems

- G8: Optimization of systems monitoring (water quality, hydrology and hydraulics of rain events)
- G10: System solutions for flood management and reduction (integrated forecasting modelling and control, online storage, individual retention)
- G11: Design forecasting and early warning systems suited to quick events in large urban areas
- G14: Integrated modelling platforms of sewer and drainage systems including storage and treatment

Enabling Technologies

- E1: Cheap, reliable and maintenance less energy sources and sensors
- E2: On-line monitoring of water quality and of treatment processes, for collective systems
- E12: Real time monitoring/control of treatment plants (focus on control during rain)
- E29: Multi-hazard and multi-risk modelling tools (natural events, technological hazards, assets failures)
- E31: Real-time forecasting and management of drainage systems and retention facilities

Next step was to put words on the “groups” in order to start to imagine these as projects, and to list cities with a “1” and a “2” in a topic under the project number. The city with most “1s” became the lead. The resulting slide is shown below:



Projects...

- **I: Risk assessment and hazard – tools (G6,E29)**
 - 1:Barcelona, Eindhoven, (Lyon), UK/lead
 - 2:Genoa
- **II: Sensors, monitoring, control... (G8,E1,E2)**
 - 1:Everybody (Except Barcelona) – Lyon/lead
 - 2:Barcelona
- **III: Real time operation..... (G11,E12,E31)**
 - 1:Aarhus/lead, Barcelona, Genoa, UK, Oslo
 - 2:Eindhoven
- **IV: QQ planning and solution..... (G10,G14)**
 - 1:Barcelona, Eindhoven/lead, Genoa, Lyon, UK, Oslo
 - 2:Aarhus, Berlin

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It might be that these 4 projects can be combined to 2 or even 1, but we agreed that each lead should write/coordinate a short description using a template, which will make it easy to convert the text into the usual format used for FP7 Calls – and then see how far that will bring us.

AP7	Suggest project title and produce draft description acc. to template	City Leads	01-11-2007
AP8	Suggest project description template	Anders	01-10-2007

Resulting descriptions should be sent to the workshop participants, who will comment. Inge/Anders will collect the comments, and if deemed necessary (too many outstanding issues, more new cities than expected, etc) we will need to have a 1 day meeting at an easy reachable City (for all) before we finish the descriptions. Berlin was suggested and Kai volunteered to arrange a possible meeting. We could agree that we should reserve the dates 27-28-29 November.

AP9	Comments on draft descriptions to Inge/Anders	All	08-11-2007
AP10	Decision on possible meeting in Berlin – consultation between leads	City Leads	12-11-2007
AP11	Reservation of dates (27-28-29 Nov) for possible 1 day meeting	All	01-10-2007

Conclusions – further work

We will need to consult the Urban Pilot manager (Mike Farrimond) to check if our timing is correct, if we want to be a part of the next round in FP7.

AP12	Contact to Mike Farrimond concerning the timing of UPT1	Anders	28-09-2007
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The final document from UPT1 shall include:

- City priorities – matrix and comments (Fact sheets as Annex)
- Project Descriptions
- List of existing EU projects and if /how they are related to the suggested projects (Starter for the list from Richard’s presentation attached)

AP13	Add to list (from Richard) of existing EU projects to Inge/Anders	All	01-11-2007
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AP14	Produce final document based on all contributions	Inge/Anders	20-12-2007
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Aarhus, 01-10-2007
Inge and Anders

Summary of Action Points

APno.	Description	Responsible	Deadline
AP1	Identify the “UKs” (1-3 Cities)	Richard	15-10-2007
AP2	Possible new Cities identified to produce fact sheet and fill in matrix	City rep.	01-11-2007
AP3	Oslo to produce fact sheet	Eldrid	01-11-2007
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AP14	Produce final document based on all contributions	Inge/Anders	20-12-2007

Re.: AP12: Contact to Mike Farrimond to-day confirms our timing !!

Existing EU projects working on the same area as Urban Pilot Theme 1

Project Name	Type of Project	Project Objective	Link to UPT1
NORIS	INTERREG IIIb		
Urban Water Cycle	INTERREG IIIb		
CABANA	COST C22 action	Floods and droughts	
CRUE	EraNet	Resilience and non-structural responses to FRM	
Daywater	Citynet cluster		
C4DWC	Citynet cluster		
Watertime			
Floodsite			
SWITCH			
NeWater			