Minutes of RainGain 4th Project Meeting

Prepared by Auguste Gires and Rosa Vicari

Date: Monday 21st October 2013

Venue: École des Ponts ParisTech (FR)

Purpose of the meeting:

4th Project Meeting

Present:

Name		Organisation
Susana Ochoa Rodriguez	(SO)	Imperial College London (UK)
Cedo Maksimovic	(CM)	Imperial College London (UK)
Barry O'Brien	(BO)	Local Government Flood Forum (UK)
Andrew Johnston	(AJ)	Local Government Flood Forum (UK)
Andrew Walker	(AW)	Local Government Flood Forum (UK)
Christophe Zobrist	(CZ)	Veolia (FR)
Isabelle Baudin-Bizien	(IBB)	Veolia (FR)
Marie-Claire ten Veldhuis	(MTV)	TU Delft (NL)
Guendalina Bruni	(GB)	TU Delft (NL)
Erik de Haan	(EDH)	Province of Zuid Holland (NL)
Steven Kroll	(SK)	Province of Zuid Holland (NL)
Johan Van Assel	(JVA)	Aquafin (BE)
Patrick Willems	(PW)	KU Leuven (BE)
Laurens Cas Decloedt	(LCD)	KU Leuven (BE)
Damian Murla Tulys	(DMT)	KU Leuven (BE)
Rosa Vicari	(RV)	Ecole des Ponts Paris Tech (FR)
Ioulia Tchiguirinskaia	(IT)	Ecole des Ponts Paris Tech (FR)
Daniel Schertzer	(DS)	Ecole des Ponts Paris Tech (FR)
Auguste Gires	(AG)	Ecole des Ponts Paris Tech (FR)
Daniel Goedbloed	(DG)	Gemeente Rotterdam (NL)
Johan Verlinde	(JV)	Gemeente Rotterdam (NL)
Herman Russchenberg	(HR)	TU Delft (NL)
Ricardo Reinoso	(RR)	TU Delft (NL)

Name		Organisation
Timothy Darlington	(TD)	Met Office (UK)
Jacqueline Sugier	(JS)	Met Office (UK)
David Goutx	(DG)	Météo France (FR)
Abdellah Ichiba	(AI)	Conseil Général du Val-de-Marne (FR)
Philippe Bompard	(PB)	Conseil Général du Val-de-Marne (FR)
Alwin Wink	(AW)	TU Delft (NL)
Regina Edoo	(RE)	TU Delft (NL)
Agnès Dauvergne	(AD)	Ecole des Ponts Paris Tech (FR)
George Fitton	(GF)	Ecole des Ponts Paris Tech (FR)
Agathe Giangola-Murzyn	(AGM)	Ecole des Ponts Paris Tech (FR)
Julien Richard	(JR)	Ecole des Ponts Paris Tech (FR)
Yacine Mezemate	(YM)	Ecole des Ponts Paris Tech (FR)
Pierre-Antoine Versini	(PV)	Ecole des Ponts Paris Tech (FR)
Ali Fadel	(AF)	CNRS Libanais (LB)

Apologies:

Name		Organisation
Karleskind Eve		Conseil Général du Val-de-Marne (FR)
Natalija Stancic		Conseil général de Seine-Saint-Denis (FR)
Jean-Luc Chèze		Météo-France (FR)
Pierre Tabary		Météo-France (FR)
Li-Pen Wang		KU Leuven (Belgium)
Pat Mackenzie		Met Office (UK)
Laurie Thraves		LGIU (UK)
Tirza Molegraaf		Province of Zuid Holland (NL)
Erik van der Wal		Province of Zuid Holland (NL)
Dave Mayenburg		Gemeente Rotterdam (NL)
Marc Moreau		Veolia (FR)

MINUTES

The first day consisted of an update on recent activities by WP leaders, communication officer and management team. The more scientific and technical discussions on specific topics was scheduled the dedicated second day.

1) Introduction

MTV welcomes the participants

2) Communication activities

RV updated participants on communication activities in the last 6 month: media coverage, 2 newsletters with new format, Festival de l'Oh, Exhibition at fund raising event at ENPC, RainGain "itinerant laboratory".

RV presented the new website, blog, twitter and vimeo channel. The last three are social platforms where RainGain partners are expected to actively contribute. In particular, it was requested to Phd students, postdoc' to write a monthly post on Raingain blog.

RV described the next objectives in communication activities: bimonthly review of intranet access, online questionnaire to assess website's performance, periodic questionnaire to target groups, posters, brochures for general public. According to the project description, partners are expected to organise yearly press conferences, but RV suggested that this target might not fit with the time schedule of the project outputs.

RV presented some suggestions that could improve communication impact: press kit, interesting external events, to vary contents, style and format of press releases, to contact international media. This presentation ended with a brainstorming about the most frequently asked questions on the projects. All participants contributed and the results (ATTACHEMENT 1) will be used to create a FAQ page on the website.

3) WP1 update

DS updated participants on WP1 activities (see presentation available on the website).

DS mentioned that the distribution of activities between WP1 and WP2 should be clarified, especially with regards to the validation of the radar data.

Some issues with regards to the difficulties of the installation of the newly acquired radars were discussed (weight of structures in the Paris case, possible vibration in the Rotterdam case, health and security issues).

DS also added that it would be beneficial to improve communication between Paris and Rotterdam, since they are facing similar difficulties.

The updated target date for the installation of the new radars is the beginning of 2014 for both Paris and Rotterdam. The lending to ICL by Selex of a "Rain Scanner" radar has been extended till the end of 2014.

4) WP2 update

PW updated participants on WP2 activities. See presentation available on the website: http://www.raingain.eu/sites/default/files/wp2_update_pwillems_4pm.pdf

5) WP3 update

SO updated participants on WP3 activities. See presentation available on the website: http://www.raingain.eu/sites/default/files/wp3_update_susana_ochoa_4pm.pdf

6) WP4 update

MTV updated participants on WP4 activities. See presentation available on the website: http://www.raingain.eu/sites/default/files/wp4_update_marie-claire_ten_veldhuis_4pm.pdf

7) National observers Groups and 2 dissemination platforms

MTV, DS and SO presented the results of the NOG meeting.

The main outcomes of the 2nd Dutch NOG meeting were that 3TU Datacentre can support data management (exchange, standardization, archiving of data and research, dissemination and training on data). Furthermore NOG members confirmed that high-resolution rainfall data are needed for better forecasts (available hours to day in advance), for operational water management and for improved models.

DS summarised the results of the 2nd French NOG meeting: it was an opportunity to discuss the radar implementation plan presented by the radar manufacturer Selex and to initiate a discussion about management and use of radar data. Further details are available in the minutes of the meeting :
http://www.raingain.eu/sites/default/files/minutes_2nd_fr_nog_22042013.pdf

SO mentioned that the 2nd UK NOG meeting was an opportunity to discuss about the alternatives to improve current surface water flood forecasting and warning systems. Attendees expressed their interest in adopting the techniques developed as part of the RainGain project (e.g. MWH Global, Scottish Environment Protection Agency).

RV presented the GPY Rad-X platform and the INET Rad-X platform, mentioning that time has come to define background needs, objectives, users, organisation, contents and formats. She distributed to the participants a questionnaire designed to capture an

insight of partners' expectations. The questionnaire and the results are here attached (ATTACHMENT 2).

8) Progress report and payment claims

RE summarised in short the progress report, including the major changes (delays in radar construction in Rotterdam and Paris) and the problems encountered (concerning rainfall data, water and flood level monitoring networks and availability of data for the pilot locations).
She recalled that the progress report is online and she underlined some points of the Monitoring report: the Interreg logo on the website was not visible enough but this has been solved thanks to the recent restyle of the website; all partners should take care that Interreg and RainGain are mentioned in any press article referring to the activities funded by the Programme.

AW gave an overview of finance on total level, as well as on budget line. He referred to the encountered problems and to the monitoring report from JTS. He reminded attendees what are the deadlines for the next payment claims.

ATTACHMENT 1

SHORT BRAINSTORMING ON FAQ's

What are the 3 questions about RainGain you are asked most often?

Characteristics and benefits of X-band Radar technology

- What is the benefit of the radar (common public)?
- What's the difference between the RainGain radar and the Regenradar (C-band)?
- What is the difference with regular C-band radars?
- What is the difference with common radars?
- What is the added value of X-band radar?
- Added value of x-Band systems *vs* existing systems

Need of high-resolution rainfall measurements

- Why is it important to measure rainfall at small scale?
- What is the added value of detailed street level data?
- After extreme rain: is this climate change?

Radars installation and implementation: costs, expected results, radar management

- How the radar will be financed?
- When and where the radar will be installed?
- When will the radar of Marne-la-Vallée work? (signed : PB)
- How accurate will it be?
- Who are going to be the main users and beneficiaries?

Future access to data

- Availability of the data?
- Who will be able to have an access to the data?
- How can we access to the data?

Rainfall and flood predictions

- What is prediction time in advance?
- What is the prediction time?
- Predictability of rainfall: lead time, spatial extent, uncertainty
- Is it really possible to predict sewer floods (or even house) level in a reliable way?

Flood risks reduction

- You know how much it rains, but will it prevent flooding?
- How can improved observation help? Isn't it too late then?
- In sewer nowcasting, the maximum lead-time is around 1-2 hours. Is it sufficient for city authorities to be prepared/warned in time?
- How will high-resolution radar help to prevent flooding?

- What can we do about/against extreme rainfall?
- What will change? After all sewer system seems to work.
- What are the benefits?
- What is the benefit?

Project results dissemination and implementation

- Can RainGain results be used in a long-term adaptation strategy?
- What is expected of me?
- How much will it cost to implement?

Miscellaneous

- What is it about?
- How do you work with agencies outside Europe?
- Aren't you becoming sad with administrative European framework? (signed: PB)

ATTACHMENT 2

INDEPTH BRAINSTORMING ON GPY-RadX AND INET-RadX Platforms

1. **What are the major gaps of information that you have encountered among stakeholders and the general public you have been in contact with?**

DG & JV: They are still unaware of how the data will be distributed among the stakeholders, and how they will be able to use them, and what the benefits are.
JVA: A lack of understanding of the general (basic) principles of rainfall characteristics and the response of the sewer system/catchment to different types of rainfall.
BO: Knowing when it will become available. Iphone app? Costs?
AG: General public: not understanding of the need to measure rainfall. Stakeholders: why radars are needed, raingauges are doing well.
DS: To understand that rainfall is a complex process that is nevertheless better understood.
CM: How to make sure that the majority of stakeholders get a proper insight in what is going on in the RainGain project.
PB: They don't know that radars are used to measure rain. For most of French persons, radar is used to detect cars speeding! But we try to inform.
DMT: Stakeholders have more access to information so they can be more aware about the situation, while general public is normally not aware that there is that kind of research done in this way.
IT: Lack of knowledge on the radar, the methods on weather prediction.
RRR: Lack of knowledge.
GB: Lack of Knowledge about how much the data is certain: products should be associated to an uncertainty range.
LCD: Benefits and limitations of the radar data, accuracy of the models (sewer and floodings).

2. **What kind of training is needed for the stakeholders that will benefit of the outputs of the project?**

DG & JV: How to use and interpret the produced data. Buienradar. Data must be incorporated in the operational system (Lizard / Fews).
JVA: Cfr. Above; how to read a radar image; how to understand results from a hydraulic model; how to estimate the potential flood risks.
BO: Guide developed with ICL/LGFF to help go through what to do prior and during a flood. Will there be a website? Do they need to understand radar or not easy? Local Authorities have done flood risk audits.
AG: Scientific: lack of knowledge on rainfall properties and also on modelling to a smaller level – very few people understand them and their limits among stakeholders. Operational: bridging the gap between science and operational level.
DS: Overview of the main issues.
IBB: Very important: how to use the data, how to interpret the data? How to manage the sewer system with these data?

CM: For decision makers: what is all about. For operational managers: technical stuff.
PB: If we succeed in elaborating a forecasting method, this method has to be learnt.
DMT: Guidelines, training courses on the different actions that must be done in case of flood prediction.
IT: Using models which use data.
RRR: Radar data interpretation.
GB: Decision support systems.
LCD: Information on possibilities and limitations of our data, methods and output products.
JS: How to use radar data? What are strengths and weaknesses? How to communicate messages to general public? When to use warnings?

3. In your city, region or country who should be trained to use the results of the project?

DG & JV: Emergency response unit; civil servants of the municipality and the waterboards (Rhyswaterstaat) and Province (these are advisors with a technical background but don't do any modelling themselves); modellers from engineering firms; operators of the central control room sewer system; programmers.
JVA: Local Authorities representatives, consultants, surface water managers (as they can benefit from the outputs for their own forecast systems).
BO: Local government to gain a better understanding and warnings of urban floodings with data supplied by RainGain. Funding by EA to assist flood risk managers in training due to major cutbucks in fundings, but will need for more creative partnership funding. Flood risk managers, council leadership (executive, cabinet), community leaders, key operators in emergency planning and technical staff.
AG: Local Authority in charge of urban drainage. Large companies that are sometimes in charge of it.
DS: Advertise and see who volunteers.
IBB: Managers of sewer systems.
CM: Decision makers and operational managers.
PB: Young people at school (already done), population of boroughs with flooded areas, engineers from Local Authorities, operators of sewer management service.
DMT: Local Authorities, water management companies, educational institutions (universities, institutes, high schools, etc.).
IT: Local authorities, students.
RRR: water board, urban flooding managers, municipality board.
LCD: Water managers, emergency planners and services, fire department, sewer system managers.
JS: Local Authorities, emergency response unit.

4. Cite 3 groups of non-specialised audiences that need to be informed?

DG & JV: Operators of the central control room; advisors on urban water system; directors, managers, politicians, general public, journalists.
JVA: Local politicians, educational staff, media.
BO: Local communities, media, politicians (local).

AG: Politicians, students, kids (kinder garden and primary school – they will teach their parents better than we do and it will support science dissemination in the society).
DS: General public, secondary schools, politicians.
CM: Schools (pupils), people working with the aged population, social housing representation through LGFF.
PB: Young people at school (already done), population of boroughs with flooded areas.
DMT: Educational organisations, local neighbourhoods of recent flooding areas, media companies.
IT: People who lives near to the radar (who can see it), schools (children).
LCD: Habitants of flood-prone areas (urban areas), users of services in flood-prone areas (e.g. subways), general public (interested in these developments).
JS: Reporters/broadcasters, general public, Local Authorities.

5. **Cite 3 tools, approaches or techniques for effective communication and/or educational activities?**

DG & JV: Oral instructions (presentation) and guidelines; app; website; open data for others to use.
JVA: Easy to understand (video demonstrations, web based), apps for mobile devices.
BO: Social media (engages with all levels of society – keep them interested, explain the benefits as well as it shortcomings as it develops), involve local schools (children involvement can involve parents about the importance and benefits).
AG: Sharing an intern (or more generally doing something together with a framework), tutorials in classrooms.
DS: E-learning, RainGain booth at festivities, web site(s).
PB: Having a stand like the one at festival de l'Oh, going in the schools, being interviewed by journalists.
DMT: Training courses to stakeholders; TV, radio, social network dissemination; individual communication to local neighbourhoods by guidelines.
IT: User-friendly model (workshop), article or newspapers, doing lessons/courses.
RRR: Magazines, web videos, workshops.
LCD: Presentations, videos, folders of flyers.
JS: Youtube video, webinar, apps.

6. **Did you experience any good practice in education or communication that could be repeated in the framework of these platforms?**

DG & JV: App. Buienradar.
JVA: Web based river flood forecast systems: only need to find proper adaptation of the much shorter time scales for urban flooding.
BO: Greater London Authority (Drainage Forum) engages with local communities that have experienced flooding to set up their own action plan to inform community and prepare for flooding (e.g. put sand bags out): Brackley Sq, Holland Park, Herne Hill, Purley (2007…).
AG: Preparing training material together with scientists and operationals.
DS: Not yet in e-learning, but 2 others, yes.

CM: Susana's platform.
PB: Quiz at Festival de l'Oh. For engineers we could invent a case study.
DMT: Mid-long term publicity on Tv-radio-newspapers on the main activities that need to be done personally by each citizen during flood events.
IT: Festival de l'Oh experience.
RRR: Workshops, web videos.
LCD: Not really.

7. **Who in your organisation will be part of the committee that will plan and monitor the two platforms?**

DG & JV: Information managers.
JVA: To be checked internally (depending on degree of commitment).
BO: Andy Johnston and Laurie Thraves to liaise with LGFF or ICL.
AG: I could contribute with Rosa Vicari managing.
DS: Rosa.
PB: I'm obliged to wait and see the use of the results of the project.
DMT: Master and PhD students, under the supervision of Prof. Patrick Willems.
IT: Rosa Vicari.
LCD: Phd researchers supervised by professors.

8. **How these platforms can continue to be active and effective after the end of the project?**

JVA: Set up proper collaboration documents well before the end of the project!
BO: Partnership funding to encourage local authorities to consider purchasing radar for their high flood risk areas. Private-sector company to support work – funded by local government in UK. UK has no money, there has to be very good justification for it.
AG: A need to do something together (ex. trainees). Data needs to be available and used.
DS: Rosa.
PB: If structures involved in it find an interest to continue to work together, they could build a think thank or work with an existing one that they could "hire" to do this.
DMT: Being updated with future needs and possible uses. Keeping participants active and making them feel part of the organisation.
IT: Involving external people to make active the platform. We don't have to limit the access and the maintenance to RainGain partners.
RRR: By engaging/compromising stakeholders, by increasing the number of publication and real practice.
LCD: Generate lot of interest by that time, involve motivated and interested people, then the platforms will become alive.