MANMADE

MINUTES

2nd Management Committee Meeting 28th-29th June 2007 LIUC University, Castellanza (VA), Italy

Present at the meeting were:

- D. Arrowsmith (QMUL) (DA)
- F. Bono (JRC) (FB)
- E. Gutiérrez (JRC) (EG)
- I. Janosi (COLB) (IJ)
- W. Just (QMUL) (WJ)
- L. Kocarev (MASA) (LK)
- D. Moynihan (QMUL) (DM)
- C. Noè (LIUC) (CN)
- H. Sivonen (NESA) (HS)
- F. Strozzi (LIUC) (FS)
- T. Rossi (LIUC) (TR)

MMC members absent:

All member institutions represented.

Minutes

June 28 13:30-18:00:

- DA welcomed the group and the participants introduced themselves. New participants included:
 - Favio Bono from JRC with responsibility for technical assistance with datasets and Forum data
 - o Carlo Noè from LIUC (full Professor, Director of Tecnologies Institute)
 - Tommaso Rossi from LIUC (Researcher at Technologies Institute)
- DA reviewed the agenda and noted that the start of the Friday session would be 9:30am. FS distributed a package of materials including:

- o LIUC background information
- o The minutes of the January 07 meeting
- A document tracking action items from the January 07 meeting ("MANMADE 'TO DO' items up to June 07 meeting Tracking Document")
- The current GANTT chart of the MANMADE project plan
- The Gender Action Plan Tracking Document
- DA reviewed the *MANMADE 'TO DO' items...* document with the group:
 - Network stakeholders:
 - NESA is on board and Hannu Sivonen is in attendance.
 - EG noted that Fingrid energy and market authority (EMA) is involved.
 - EG noted that EDF-UK has shown interest in the project. EDF provides electricity to London and the southeast UK area. They have provided data regarding their network distribution. This is another interesting data transmission and distribution dataset. It is not geographic but does have place names. "EDF" is part of a French company with the acronym representing "Electricity du France". EDF is interesting when considering the build up to the London Olympics.
 - EG said that the Spanish power operator is very interested, particularly related to network fragmentation schemes.
 - EG noted that it is key that stakeholders show interest in the project.
 - DG and EG summarized by noting that the set of stakeholders is looking appropriate and on track. DM is to update and maintain website documentation on stakeholders. [action required]
 - o DA reviewed the Scientific committee:
 - The current confirmed members are Mario di Bernardo and Maria Carla Calzarossa. It was stated that this is sufficient and the Scientific Committee is considered "In Place".
 - DA explained that in the first (January 07) and current (June 07) meetings, the project could still be considered to be in the "startup" phase. As such, DA decided that it would be counterproductive (a poor use of their time) to invite the Scientific Committee members. However, DA indicated that they will be invited to the 3rd meeting, tentatively scheduled for January 08. [action required]
 - DA and EG did note that the EU Project Manager, Alejandro Martin-Hobdey, was invited and will be to each meeting, but that the EU project manager usually does not attend project meetings at early stages. It was noted that he might attend if an upcoming meeting were to be held near Brussels.
 - o DA, EG, and DM discussed the Gender Action Plan:

- The team discussed the intention to invite an external participant into the project to monitor the Gender Action Plan.
- DM presented the Gender Action Plan tracking document and called for continued input from the members. [action required]
- EG noted that the Gender Action Plan is not about "political correctness" but a goal to make the "best effort" to meet project gender objectives. We are to report on our efforts, including attempts to address female participation that are unsuccessful, as this demonstrates commitment to the goals.
- FS noted that 2 students who will participate from LIUC are female (Margherita Pero and Claudia Colicchia).
- LK noted that a MASA has a female participant.
- The group discussed outreach issues:
 - DM will ask for media contacts from each member and will coordinate between these individuals. [action required]
 - EG noted that we have a responsibility to reach out to policy makers:
 - EG noted that he has shared information with the EU Directorate-General for Energy and Transport
 - EG noted that the EU Directorate-General for Justice, Freedom, and Security would be interested in the project, particularly from an infrastructure and protection perspective.
 - DA asked everyone to report any interaction with policy makers to DM for inclusion in subsequent reporting. [action required]
- EG reported on datasets:
 - HS provided good data regarding the electricity spot market, and all groups have that data now.
 - PLATTS Research and Consulting firm has an extensive georeference database. FB will prepare the database to share with the team but the sensitive data will be hidden. [action required]
 - EG notes that datasets might be delayed because FB just beings working July 1, but there are no fundamental problems to moving forward. Things are looking pretty well.
 - There is a possible data set from the Italian market, available on the web. IJ will put a link on the forum. [action required]
 - There was a discussion regarding timeseries datasets related to blackouts:
 - 4.5 years of data available.
 - Data items are blackouts and each has a name identifier, date, info on power lost.

- It would be very interesting to georeference the blackout timeseries on to the topology data, linking the risk of blackouts to distribution and topology.
- The group will have a grid of NORDEL.
- HS has price data nut not blackout data. Spot prices have not been synced with blackouts.
- HS noted that the NORDEL rules say that when there is a problem then market forces should be allowed to "handle it", related to the European Energy Exchange.
- EG noted that people assume spot pricing is related to blackouts, and an analysis of any correlation in the data would be interesting.
- IJ and LK noted that their workshops (deliverables D4.2 and D6.2) can potentially be swapped in the schedule, and they will confirm final decision on this. [action required]
- DM is to make sure everyone has access to the Forum member list. EG noted that once forum is being used widely usage analysis can be conducted. [action required]
- EG noted that we may want to redefine "stakeholders" into two "levels", one for those "sitting members" who participate in the project (for example, HS), and the 2nd group who are "interested in the project" and have some interaction without actually participating on a continuing basis. This will help us track the impact of the project on a broader set of stakeholders.
- FS delivered the presentation "*Analysis of NORDPOOL spot price data*", related to task T5.2 and deliverable D3.1. Presentation materials are available on http://www.manmadenet.eu/
- WJ delivered the presentation "*Time series analysis of the Norwegian electricity spot prices*", related to deliverable D3.1. Presentation materials are available on http://www.manmadenet.eu/
- IJ delivered the presentation "Assessment Report on Wind Energy Potential over Europe—Part 1: Wind Speed Distribution", related to work package WP4. Presentation materials are available on <u>http://www.manmadenet.eu/</u>
- LK delivered the presentation *"WP6 Vulnerability of Interconnected Networks"*, related to work package WP6. Presentation materials are available on http://www.manmadenet.eu/
- As a wrap-up to the days meeting, DA made the following comments:
 - He is pleased to see the progress on the science, demonstrating that the project is underway.
 - The team needs to ensure that we develop connections between the various work groups, focusing on communication, sharing work, and using the forum. [action required]

- We need to bring related papers together, for example, the complimentary work by FS and WJ. [action required]
- End of 28 June meeting.

June 29 09:30-13:00:

- FB delivered the presentation "*WP2 Network Collation: GIS Data, Forum Activities, Networking*", related to work package WP2. Presentation materials are available on <u>http://www.manmadenet.eu/</u>
- EG and FB led a discussion regarding datasets:
 - EG asked for the group to please offer feedback about the data needs, early, so that there is time to respond. He noted that it would be ineffective for the team if a group waited until the last minute and then raised concerns. [action required]
 - DM, FB, and EG noted that there will be adequate security for datasets, and that a mechanism (secure FTP site, etc) would be developed and deployed. [action required]
 - EG noted that FB will be assisting with GIS aspects of the data.
 - WJ and EG noted that there may need to be agreements with certain data providers for use/distribution of data prior to publications. In other words, contractual obligations regarding the data providers must be considered as part of the publication process.
 - EG noted that there may need to be confidentiality agreements for the project team members as a condition to accessing data.
- EG noted that all publications should be submitted to the project Management Committee prior to publication, to permit discussion. [action required]
- HS delivered the presentation "*Risk assessment based on network interdependencies*" and demonstrated a spreadsheet-based model. Presentation materials are available on <u>http://www.manmadenet.eu/</u>
- DA led a discussion of Work Package status for each work package. The following items are part of this that discussion:
- DA led a discussion of staffing levels at each member group:
 - DA indicated that QMUL accepted a postdoc in April, but this individual leaves in September. QMUL will replace the individual.
 - LJ reported that MASA has 3 students working with the project, and some senior staff.
 - IJ reported that COLB has 1 postgrad student on the project since 1-May-07, and that more will be recruited in September.
 - FS reported that LIUC has 3 students (2 PhD and 1 Masters) and 1 full time professor working on the project. The LIUC individuals are:
 - Manera Matteo (full professor of Econometrics Department of Statistical Sciences, University of Milan Bicocca. Working paper

in the Frameworks of Manmade project: "Spot electricity prices and changing market states: comparing different non linear approaches"

- Pozzi Mauro(PhD Student in Electric Engineering. "Modeling and simulation of risky events on power networks")
- Pero Margherita (PhD Student In Industrial Engineering. "Modeling and simulation of industrial supply chains").
- Colicchia Claudia (LIUC Master Thesis in Industrial Engineering)
- EG noted that we need to track person years for the project, and that we will need to report on this as part of the scheduled project reports. DA and DM indicated that we would track staffing levels, and DA asked the members to assist by providing staffing details on a continuing basis.
 [action required]
- EG reported on WP2, noted that FS would provide a status of WP2 in one month (including a workplan for WP2).
- EG and DA noted that any data contribution can be documented as a deliverable. They cited the contributions from NESA as an example.
- Regarding WP3, FS and DA indicated that they will coordinate the work between QMUL and LIUC regarding deliverables. Hartmut at QMUL will be assigned this task. [action required]
 - LK noted that he hopes MASA can collaborate with QMUL as well. DA indicated that Hugo Touchette at QMUL can work with LK on this. [action required]
- IJ reported on WP4:
 - A student has been hired to work on deliverables, including a network analysis and a topological analysis of the grid data.
 - IJ and LK noted that they will finalize the decision on the schedule of the 2 workshops they are considering swapping. [action required]
 - EG noted to the group that during the contract planning phase, the EU project manager, Alejandro Martin-Hobdey made the point repeatedly that the project must show that the teams have worked together to generate something "new", not simply just bringing in existing research from individual sites. Coordination is essential.
- FS reported on WP5:
 - Some steps have been completed for deliverable D5.1.
 - For deliverable D5.2, some of the ongoing work was presented in the previous day's presentation. Currently, there is no correlation with blackout data.
 - DA is looking for collaboration on the Hurst parameter and coordinated ways forward to work together (QMUL and LIUC). [action required]
- LK reported on WP6:

- The main problem is trying to find more mathematical and theoretical approaches to understand the question.
 - This is in part to support the learning requirements for the PhD student involved in the project.
 - LK noted that the work can't just be a practical analysis, but must explore the theoretical aspects as well.
- EG concurred, reminding the group that MANDMADE is considered a "basic science" project.
- DA concurred, noting that there is a minimum level of theoretical mathematics that needs to be involved in the project work to meet the needs of the students who are involved.
- DA once again reminded the group that the main theme for the upcoming 6 month period should be further collaboration between groups. [action required]
- EG suggested that all members should go back and re-read what was in the project objectives and ensure that their work on the deliverables remains consistent with these. We should document instances where the deliverables are consistent with the objectives, and document other things that extend beyond the objectives. Also, team members should use the forum to discuss ideas regarding the objectives, compare thoughts, etc. The objectives included vulnerability, scaling, feedback, etc. These items are in the project proposal [note: see Annex I, "description of work", sections 2 "Project Objectives", at http://www.manmadenet.eu/output/MANMADE%20Description%200f%20Work%20(public).pdf] [action required]
- The group discussed the timeframe and logistics of the next meeting, considering December vs. January and locations including Paris and Budapest. DA decided that the meeting will be in late January 2008. DA noted that QMUL has access to a facility in Paris that can be reserved for the group. DA indicated that he would give the location further consideration and get back to the group for more discussion. [action required]
- EG noted that team members should consider traveling between member sites if this would benefit the project work. EG noted that each site should be aware of their available travel budgets for the project.
- DA led a discussion regarding increasing the projects visibility in the wider community of complexity studies:
 - Team members should be aware of the <u>http://www.giacs.org/</u> website.
 - DA asked for suggestions on participating in upcoming conferences:
 - The [ECCS] complexity conference in Dresden this year is a good forum, but it is too late to arrange a formal conference "satellite" session this year. However, this would be a good topic for next year's conference. Next year will be held at a different location. [website: <u>http://vwitme011.vkw.tu-dresden.de/TrafficForum/dresden/index.html]</u>

- EG noted that it is more appropriate for the project to participate in European hosted conference rather than US based events, but that it's not impossible to participate in a US event if appropriate.
- HS noted that in June there is a Nordic Logistics meeting where the MANMADE group could give a presentation.
 - EG noted that this would be good for public awareness, and asked HS if he could arrange this for the group. [action required]
- EG noted that we need to raise awareness of NEST/Pathfinder projects, and there is a special budget given to NEST to publicize projects. It is also a focus regarding STREP projects.
- DA summarized by reminding the group that it is vital for each institution to send a participant to these regular management meetings, and he looked forward to seeing everyone again in January.

The meeting was adjourned.

These minutes, the agenda for this meeting, are available online at http://www.manmadenet.eu/meetings/

Prepared by D. Moynihan

Last updated: 17 – July 2007