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Subject | Minutes of the Roundtable of COST Action TD1207 “Mathematical Optimization in the decision Support Systems for Efficient and Robust Energy Network”

*Institute Henri Poincare (IHP), Paris (FR)
2nd September 2013 – from 15.50 till 17.30*

The Roundtable, moderated by Sandrine Charousset and Martin Mavissen (WG leaders of WG3 and WG4, respectively), discussed the following three topics:

- WG3 and WG4 activities;
- Cost website;
- Wiki.

Sandrine Charousset presents few slides on WG3 and WG4 related to Validation and Software.

The objective of the WG3 is to address the question of the technical validity of the mathematical models. The question is if the validation WG will enrich the wiki, for instance by classifying industrial problems and by describing the problems themselves.

One task could be to classify industrial problems and how to go from industrial problems to mathematical problems.

Martin Mevissen discusses on the possible objectives of the WG4 such as the analysis of the state of the art of existing software or the distinction between the different types of software.

Andrea Lodi suggests aiming for the wiki such that everybody is responsible for the design of the wiki. The possibility of publishing books or writing papers is not excluded but the Action Chair did not plan it.

The point is how to split problems. The Action Chair reminds the Action classification on short term, mid term and long term problems that should be taken into account. Chair Action states that it could be a good opportunity for the Action to be involved in the activities of the smart cities laboratory in Dublin.

The discussion moves on confidentiality from company side. Sandrine explains her experience at EDF. For instance data are there but they are too aggregated to be used in mathematical models.

Antonio Frangioni asks what kind of data formats can be used and obtained by the companies. Data extraction could be complex. So, there should be some method for data reduction. Andrea Lodi states that even the world of MILP and MINLP changes a lot. So that there should be no request to companies of special formats in order to increase the chance to get the data. Christoph Helmberg asks if it could be difficult to get real data and if there are typical databases. Sandrine states that the best solution is to have real data in order to have all characteristics preserved. Andrea Lodi states that



in the first year the funds will be used to work on the wiki, however in subsequent years it will be possible to think about investing some money in data analysis and conversion to format useful to both academia and industry.

Takis Mathiopulous suggests to start with specific tasks, then the general problem will come. He suggests starting from the presentations even if this is specific and do not cover everything. All presentations will be collected by Antonio Frangioni as WG1 State of the Art leader.