

For this workshop the participants do not need to work on a case study in advance. The participants should look at the case studies that are made public on the workshop wiki. Monday morning (D1.1) is reserved for modelling in groups at the workshop. The groups should then demonstrate the state of the art (of their tools) by way of the worked out case studies (D1.3). The participants should not arrive with perfectionised tool presentations (that they may have given before...) but these demonstrations should be more ad-hoc using the tools themselves in the demonstration. The reasoning behind this is to create a more open atmosphere at the workshop inviting discussion on modelling methodology and the actual use of the tools. The participants will be given time at the workshop to prepare ad-hoc presentations (e.g. D1.2).

On day two in the morning (D2.1) it will be investigated how the case studies could be improved by tool integration. This activity is intended as a motivator to try out integration. Integration at the workshop can also be done by translating parts of models by hand to analyse it by means of another tool and possible technical solutions be discussed. Concrete integration techniques will be discussed in a plenum discussion that follows the integration attempt (D2.2), followed by a discussion how funds could be secured for such activities (D2.3).

On day 3 (D3.1) participants will give short presentations on (max 10 min!) on tools for comprehensive modelling. This is a spot where everyone could say why the main feature of their tool should be part of comprehensive modelling and how it fits into the picture of comprehensive modelling with respect of the concepts that were discussed in particular in (D1.3).

On day 4 some of the claims from D3.1 should be made more manifest by demonstrating the described approaches. It may be a good idea to base this on practical work done in D2.1. But this may not always be possible. Having attempted integration we can start thinking about notation and tools for future FM (D4.2). This should not be too constrained. But we should address challenges, such as: can (certain) FM be unified? What are the research perspectives in a unified and non-unified world? How can one make the common characteristics (and also differences) of state-based rigorous methods explicit? What are the challenges and needs in combining state-based formal method tools? Can one define meaningful benchmarks for comparing state-based formal methods and tools? Are individual rigorous methods (which ones?) best for specific tasks (which ones)? How to quantify economic realities of using rigorous methods? How can one best teach skills for applying rigorous methods in academia and industry? What is the vision for the future for an "ideal" state-based formal method with "ideal" tool support? The agenda of this session should be decided upon by the participants. In a free time slot the participants should discuss how a comprehensive FM should look like (D4.3) and present this in (D4.4). Some participants should commit to contributing book chapters on "comprehensive FM and FM tools".

On day 5 we will deal with contributions to be made by participants after

the workshop and find a conclusion to the workshop hopefully being able to formulate a common vision for future FM tools, in particular, those that the participants would like to develop.

## Day 1

9:00 -- 9:30 - opening

9:30 -- 10:30 - Short presentation of participants (3 slides per presentations, all presentations in 1 hour!)

10:30 -- 12:00 - D1.1 (SG1) Modelling case study in groups (use case studies from wiki)

12:15 -- 13:30 - Lunch

13:30 -- 15:15 - D1.1 (SG1) Modelling case study in groups (use case studies from wiki)

15:15 -- 15:30 - Coffee break

15:45 -- 17:30 - D1.2 (SG1) Prepare presentation of model to show state of the art

19:30 -- 21:30 - D1.3 (SG1) Presentation (20 min for each method)

## Day 2

9:00 -- 12:00 - D2.1 (SG1/SG2) Integration party -- Could the case studies from D1.1 be improved by combined tool usage, is there an easy way to integrate? Try it!

12:15 -- 13:30 - Lunch

13:30 -- 15:15 - D2.2 (SG3) Plenum discussion of integration techniques and concrete possibilities

15:15 -- 15:30 - Coffee break

15:45 -- 17:30 - D2.3 (SG4) Plenum discussion: How can possible integrations be realised and financed?

## Day 3

9:00 -- 12:00 - D3.1 (SG5) Short presentations on concepts and features of tools for comprehensive rigorous modelling

12:15 -- 13:30 - Lunch

13:30 -- 17:30 - Excursion

Day 4

9:00 -- 10:30 - D4.1 (SG2/SG5) Demonstrate use of concepts and features by way of the case studies

10:30 -- 12:00 - D4.2 (SG6) Plenary discussion on Future State-based FM

12:15 - 13:30 - Lunch

13:30 -- 15:15 - D4.3 Free discussion (in the light of D4.4)

15:15 -- 15:30 - Coffee break

15:45 -- 17:30 - D4.4 (SG4) Formulation of comprehensive FM (Collection of book chapters for later publication)

Day 5

9:00 -- 11:00 - D5.1 (Closing) Conclusions, Proceedings, Book on (SG5/SG6)