



cost
EUROPEAN COOPERATION
IN SCIENCE AND TECHNOLOGY

COST Office
Avenue Louise 149
1050 Brussels, Belgium
t: +32 (0)2 533 3800
f: +32 (0)2 533 3890
office@cost.eu

www.cost.eu

Valletta, 17 March 2016

Subject | Minutes of the Eighth Management Committee Meeting of COST Action IC1201 “Behavioural Types for Reliable Large-Scale Software Systems (BETTY)”

**Valletta, Malta
17 March 2016**

1. Welcome to participants

The participants were welcomed by Professor Simon Gay, Chair of the Action. Professor Gay chaired the meeting.

2. Adoption of the agenda

The agenda for the meeting was adopted (Annex 1). 17 parties were present, and so the meeting was quorate.

3. Approval of the minutes of the last meeting; matters arising from the minutes

The minutes of the last meeting were approved. Prof Gay said that matters arising from the minutes would be covered by later agenda items.

4. Update from the Action Chair

Prof Gay reported that the Action has 22 parties, the same as at the time of the last meeting.

Prof Gay summarised the budget that has been approved for the third and final grant period, 1st June 2015 – 25th October 2016. The most significant items in the budget are the MC/WG meeting in Madrid (September 2015, €30.8k), the present MC/WG meeting in Valletta (€30.8k), the Training School (Summer 2016, €35.3k), the final meeting of the Action (October 2016, €35.6k), and STSMs (€19.2k). Dissemination costs are €3.5k and overheads are €23.3k. The total budget is €178.5k.

Concerning STSMs, Prof Gay reported that this year there is again a system of calls and deadlines for STSM applications. The 15th July deadline had 5 applications, of which 3 were funded within the budget that had been set for that deadline. The 15th September deadline had 6 applications, all of which were funded. The 1st December deadline had 3 applications, all of which were funded. The 1st March deadline had 4 applications, all of which were funded. The reason for rejecting two applications from the 15th July



deadline was that he couldn't increase the STSM budget before knowing the actual expenditure on the September meeting. The budget for subsequent STSM deadlines had been increased slightly. Prof Gay reminded members that there would be one more deadline, 1st June, and encouraged them to submit applications. STSMs should be completed by the end of September.

Prof Gay thanked the STSM coordinator, Professor Silvia Ghilezan, the deputy coordinator, Dr Ilaria Castellani, and the WG chairs, for their work on the STSM committee, and also reminded participants to acknowledge STSM funding in their publications and to send him details of STSM-based publications for the Action website.

5. Promotion of gender balance and of early stage researchers

Prof Gay noted that BETTY activities continue to show a good gender balance and significant involvement of early stage researchers. Approximately 50% of STSMs since the beginning of the Action have been by early stage researchers.

6. Follow-up of MoU objectives

(a) Reporting

The chairs of the Working Groups reported on the status of the state-of-the-art reports (SOARs). The WG1 (Foundations) SOAR has been accepted for publication in ACM Computing Surveys. The WG2 (Security) SOAR has been published in the Journal of Logical and Algebraic Methods in Programming (Volume 84, Issue 6, pages 763-780, November 2015). The WG3 (Languages) SOAR has been accepted for publication in Foundations and Trends in Programming Languages. Prof Gay thanked the WG chairs and all the authors of the SOARs for their hard work. He noted that the production of the SOARs had become a much larger task than we originally anticipated, and is a significant achievement of the Action. Prof Gay further noted that WG4 activity would be covered by the production of a book at or after the end of the Action; this would be discussed later in the agenda.

(b) Working Group activity

Prof Gay noted that there has been substantial research in all four Working Group areas, and that research is more balanced between the WGs than it was as the beginning of the Action; initially there was more theoretical work and less on tools and applications, but this is no longer the case. The aim of the Action, namely to move research on behavioural types from theory into practice, is being achieved.

Prof Gay asked members to check three areas of the Action website and send him any necessary additions: the list of publications, the list of software tools (currently listing 17), and the list of funded projects (currently listing 9).

(c) Dissemination

Prof Gay noted that many journal and conference publications had been produced by Action members, including many resulting from STSMs. The State-of-the-Art Reports had already been mentioned. The forthcoming Summer School would be another form of dissemination. Prof Gay asked members to tell him about any other tutorials that they would be presenting at conferences or other training schools.

(d) Funding applications

Prof Gay reported that a group led by Dr Hans Hüttel is working on a proposal for an H2020 call in April. The proposal is called Extracting Dynamic Interfaces for Interoperable Code, Efficiently (EDIFICE).



7. Scientific Planning

(a) Scientific strategy

Prof Gay summarised the plans for Year 4 of the Action, from the original proposal. WG1: overall assessment of results and list of open problems; WG2: software tools and applications to case studies; WG3: general-purpose and domain-specific languages; tools; adapters for inter-language working; WG4: implementation and case studies; industrial workshop. The final Action meeting (6th & 7th October in Lisbon, Portugal) will review progress and present highlights of the Action's research, and will be an opportunity to showcase our results to industry; it will be the industrial workshop mentioned in the original project plan.

(b) Budget planning

Prof Gay noted that the budget has now been fixed until the end of the Action, for the meetings and activities agreed at the MC meeting in April 2015.

(c) Long-term planning

Prof Gay reminded members that the training school will take place in Cyprus from 27th June to 1st July, and encouraged them to send their PhD students and post-docs. The application deadline is 8th April.

Prof Gay noted that the Action will end on 25th October 2016. The final meeting will take place in Lisbon, Portugal, on 6th and 7th October, organised by the vice-chair, Dr António Ravara. Dr Ravara gave a short presentation about the plans for the meeting. The meeting should be open to all, not just Action members, and will be advertised on the usual mailing lists. There will be three sessions: one for presentation of research highlights; one for presentation of tools; and one for presentation of industrial collaborations. There will be a call for proposals for presentations in each session. The research highlights session should include summaries of research themes that have produced series of publications. Dr Ravara agreed to set up an EasyChair submission system, and to discuss deadlines with Prof Gay. They will also investigate the possibility of publishing a proceedings in EPTCS or LIPiCS.

Prof Gay reported that he had contacted two publishers about the possibility of producing a book at the end of the Action. They are Springer, and River Publishing, which has published books for other Actions. The intention is that the book will focus on software tools, becoming in effect the State-of-the-Art Report for WG4; it will describe the state-of-the-art achieved during the Action, rather than at the beginning of the Action. There will be an open call for contributions to the book, and the developers of the tools listed on the Action website will be encouraged to contribute. Prof Gay said that contributions can describe tools about which papers have already been published at conferences, as the book will allow the authors to write at greater length or in a more tutorial style.

There was some discussion about the possibility of applying for another COST Action after the end of this Action. Similarly to the previous MC meeting, Prof Gay stated that it would not be possible to request a direct continuation of this Action, and that any follow-on application involving this community would need to have a different, probably broader, theme and involve new participants; it would also need to be led by different people. The TYPES community (associated with earlier EU projects and networks of excellence) has successfully applied for a COST Action. Dr Tarmo Uustalu (MC member for Estonia) is involved in it. Prof Gay will be an invited speaker at the TYPES conference in May, which is an opportunity to strengthen contact with that community and explore the idea of involving some of them in our final meeting.

(d) Dissemination planning (publications and outreach activities)

Prof Gay reminded Action members to inform him about publications, projects and news, for the website. The website will continue to exist after the end of the Action, as a record of our activities.



(e) The future of the BEAT workshop series

The meeting discussed the BEAT (Behavioural Types) workshops that had been organised in January 2013, September 2013, September 2014 and (in combination with WS-FM) September 2015. There had not been many submissions to the workshops and the question was whether or not to organise another one. A relevant factor is the PLACES workshop series, which is also organised by Action members and attracts many members of our community. PLACES seems to be more successful than BEAT in attracting submissions. After some discussion, Professor Matthew Hennessy, MC member for Ireland, proposed that we should not organise another BEAT workshop. The motion was seconded by Dr Ravara, MC member for Portugal. The motion was passed with 15 votes in favour, none against, and 2 abstentions.

Professor Gay reported that a Dagstuhl Seminar was being organised in January 2017 by himself, Professor Nobuko Yoshida, Professor Philip Wadler and Professor Vasco Vasconcelos, as part of the UK ABCD project. Many Action members would be invited to it. Dr Ivan Lanese said that there is a similar centre in Leiden, Netherlands, and that we could propose a meeting there for later in 2017 or 2018. Dr Lanese agreed to investigate this possibility, in collaboration with Dr Jorge Pérez as a contact in the Netherlands.

8. Requests for new members

None.

9. Non-COST applications to the Action

None.

10. Any Other Business

None.

11. Location and Date of Next Meeting

October 6th or 7th 2016, in Lisbon, Portugal, as part of the final Action meeting.

12. Summary of MC Decisions

The summary of the MC decisions was left for the minutes.

13. Closing: Prof Gay thanked the local organiser, Dr Adrian Francalanza, and thanked everyone for their participation.



**Draft Agenda
Management Committee Meeting**

COST Action no. IC1201

**Action Title: Behavioural Types for Reliable Large-Scale Software Systems (BETTY)
Venue Valletta, Country Malta from 17th March 2016 to 17th March 2016**

1. Welcome to participants
2. Adoption of agenda
3. Approval of minutes and matters arising of last meeting
4. Update from the Action Chair
 - a. Status of Action, including participating countries
 - b. Action budget status
 - c. STSM status and new applications
5. Promotion of gender balance and of Early Stage Researchers (ESR)
6. Follow-up of MoU objectives
 - a. Progress report of working groups
7. Scientific planning
 - a. Scientific strategy
 - b. Action Budget Planning
 - c. Long-term planning (including future activities: Summer School, final meeting)
 - d. Dissemination planning (Publications and outreach activities)
 - e. Report on Horizon 2020 proposals
8. Requests for new members
9. Non-COST applications to the Action
10. AOB
11. Location and date of next meeting
12. Summary of MC decisions
13. Closing