Cost Action ES1305 (ENRAM): Minutes of MC meeting 24th February 2017

Museo Nazionale Romano di Palazzo Massimo – Largo Villa Peretti 2, Rome

Action points highlighted in yellow

1.-4. Welcome, Adoption of Agenda and Approval of minutes

At 14:30 Dr. Jason Chapman (JC, Action chair) welcomes all MC representatives which briefly state name and country of origin to check for quorum. The meeting agenda is adopted and the minutes of the previous MC meeting (Malta, April 2016) are accepted by Natalino Fenech and seconded by Dr. Judy Shamoun-Baranes (JSB).

5.-6. Update from Action Chair and Grant Holder

JC presents the state of the current budget and mentions the present grant period will run until 30th April 2017. Although about 10% of the budget has been used so far, the current meeting, training school and conference are yet to be payed and these will take a large part of the year budget.

For grant period 6, (running from 01.05.2017 to 20.10.2017) the total budget is 50,417 Eurs, which accounting for 15% of overheads, results in 44,000 Eurs for this final grant period. Dr. Nir Sapir (NS) asks if there are more options for funding and Dr. Deniz Karaca (COST Science Officer) states that a special budget of ca. 10,000 Eurs is available for a final publication (e.g. book) to be completed up to six months before the end of the action. Furthermore, additional funding can be available to help support a final conference as a dissemination action, but this requires a clear and strong scientific justification.

Dr. Silke Bauer (SB) indicates that 16 STSMs have taken place during the current grant period but there are currently no new STSM requests for the next grant period. JC highlights that several of these STSMs have produced scientific publications one of which in Science. JSB mentions that all reports are available on-line on ENRAM's website as are other outputs such as visualizations. A call for STSMs is made to all MC members present.

7. Update from COST Association

Dr. Deniz Karaca states that COST Association is coming to an end in its current format and future funding will likely be more focused towards establishing links with industrial companies as well as in promoting ECI. Next funding deadline is September 2017 and ENRAM could submit a new proposal (but see below). COST monitoring has also changed and there is now a single committee from the 36 COST countries.

8. Monitoring of the Action

Previous annual report will be assessed and a new report is to be delivered soon. Final report has to be delivered within one or two months past the action's deadline (JC will confirm), but surely before the end 2017.

9. Implementation of Cost policies on:

- a) Gender balance & ECI JSB states that ENRAM has improved considerably in terms of attracting young female participants with the following percentages in recent events (all in 2017): Training School 40%; Conference 25%; STSMs 50% and W Europe Flyway workshop (Sempach) 35%;
- b) Inclusiveness developing well within ENRAM with examples from countries such as: Bulgaria, Portugal, Slovenia, Turkey, Malta.

JC highlights that during ENRAM's first year the action was 96% male biased, making it the worst in of all COST actions that year, so the progress made is considerable.

10. Follow up on MoU objectives: WG progress report

WG 1: Classification and Retrieval of Biological Data from European Weather Radars – Dr. Adriaan Dokter

Update on several WG milestones: 1. Algorithm for vertical profile of birds – completed and running on BALTRAD; 2. MoU for data exchange OPERA-ENRAM – achieved; 3. Testing biological retrievals – working on some cases but not all with two impossible cases (Hungry and Spain) while others require further work; 4. Data infrastructure – it has been constructed but does not have much data currently available, hopefully will start flowing soon. 5. Knowledge Transfer - R package "BioRad" developed and operational; 6. Training – training school in Rome had 45 participants from four continents.

Challenges currently and future activities: very strong meteorological filters in many radars; data harmonization is lacking; improve data quality & insect algorithms by building on recent calibration campaigns.

JC states that implementing the bird algorithm was much more complex than anticipated at the start of the action and given that so much depended on it, the progress done in this front has been incredible. In addition, the training and dissemination has been very efficient towards promoting the next generation of researchers. Dr Pavel Zehtindjiev points out that ENRAM needs to stimulate participation of SE Europe countries (i.e. those not covered by OPERA); NS responds that the best way to get more countries and researchers involved is to produce a showcase and the W Europe Flyway mosaic is probably the best way to do so. Jarmo Koistinen agrees but indicates that SE European countries likely won't have an interest in bird migration *per se* but rather in other radar weather applications, for example pest forecasting.

WG 2: Improvement of Weather Radar Data Quality and Validation of Biological-classification Algorithms – Dr. Felix Liechti

Felix provides an update on several calibration campaigns with results being presented during the conference (e.g. Nadja and Pavel presented posters and Baptist an oral communication). Nadja's paper is accepted and Robin also preparing an MS. Felix underlines the fact that funding for publication might be available should be explored.

WG 3: Visualizing Spatio-temporal Patterns of Animal Movement – Hans van Gasteren

Hans highlights the recent paper in PLOS One that resulted from the hackathon in the previous year, as well as, other outputs such as on-line visualizations and scientific conference presentations in large events, e.g. British Ornithologists' Union Annual Conference in 2015 and at the British Ecological

Annual Meeting in 2016. The WG's main task is currently to create a roadmap for the future of visualization research.

JC highlights the excellent work done with visualizations and in making these accessible to other scientists and members of the public.

WG4: Significance and potential of Animal Movement Research – Dr. Ommo Huppop

Ommo highlights the conference and training school, as well as, the workshop on W Europe Flyway paper, which took place in January 2017.

Regarding publications, SB has led the resubmission of the "grand challenges paper" to Bioscience; NS is also developing an MS on environmental effects; Ommo is leading a perspective/forum paper in bird and bat conservation work using radars; while other publications are being considered also.

11. Scientific planning

a) Scientific strategy

It was decided that priority should be given towards setting a data repository (which would operate in open access). There is currently a pipeline set up at BALTRAD and transformed data can be stored in a repository already set up by Peter Desmet (PD) and Stijn Van Hoey, and be used by ENRM members. Discussion follows on the possibility of storing raw data an on how to include data that is not moving through the BALTRAD pipeline. It was noted that in some cases data is being processed locally via the bird algorithm but it is not coming in via BALTRAD (e.g. Israel), and should also be added to the repository.

ACTION POINT: MC asks WG1 to estimate how much man power and funding would be required to set up data storage and operating system for data that is not coming in via BLATRAD and on maintaining it. The same is requested to WG 3 regarding the roadmap on how to proceed with visualizations.

The W Europe flyway paper is another major goal and WG2 is moving forward with data analysis. SB updates that the paper is on the writing stage, with some sections already outlined and with specific tasks already assigned.

JSB puts forward the idea of considering publishing a special issue in a scientific journal to compile several papers that are currently in progress (e.g. WGs 2 and 4 papers). This could take the form of end of action dissemination (given that COST has funding for such a publication) and serve as an end result of the activities developed over the course of the action. The idea is well received.

ACTION POINT: JC suggests that within two weeks MC members contact him regarding potential outlets and a list of potential contributions.

c) Long-term planning

PD initiates the discussion regarding the future of ENRAM beyond the present COST action. Adriaan mentions that given the current MoU with OPERA, ENRAM needs to be an entity in order for the MoU to be enforced into the future. Discussion follows regarding the creation of a legal entity or another

format, for example a core group of voluntary people that meet three to four times a year in representation of ENRAM. Funding applications are also discussed with a Marie Currie Training Network being a possibility for an application in January 2018. Application for a second COST action is possible but success rate is currently at 3%.

Denise states that there are more funding opportunities, within Horizon 2020 for COST action continuation. This is now being discussed but when it is defined we should be advised. Jason raised that given Brexit having a leading institution which is not UK based.

d) Dissemination planning

ACTION POINT: JC offers to write a dissemination document, targeted at the non-radar community, providing a simple blueprint on how to process & analyse weather radar data, although he will require extensive help

Discussion follows about organising additional international conferences, following the success of the first conference in Rome in 2017.

ACTION POINT: JC will look assess options for holding additional conferences.

b) Action Budget Planning

JC indicates that there are ca. 36,000 Eurs for a final MC meeting and 6,000 for STSMs. PD and Robin Brabant (RB) offer to host the MC meeting in Belgium (Gent) in September and present a budget for a two day meeting for ca. 50 participants at 36.,000 Eurs. Alternatively, the final MC meeting it could take place in Brussels at COST Office, with support of coffee-breaks and meeting room.

ACTION POINT: PD and RB to provide details regarding the possibility of holding the next MC meeting in Ghent in autumn 2017.

- **12.** Request to join the Action no additional request.
- **13. AOB** no comments were made.
- **14.** Location and date of next meeting Belgium (Gent/Brussels); September 2017

15. Summary of MC decisions:

- 1. Prioritize the structure for data repository (roadmap to be done by WG1);
- 2. W Europe flyway paper core group to move this forward;
- 3. JC to produce a simple blueprint on how to use and process weather radar data;
- 4. MC members to present ideas for a special issue potential journals and list of papers;
- 5. MC members to formulate ideas for an application to a Marie Currie TN and follow up funding by COST for our action;
- 6. Roadmap for visualization research to be developed by WG3.

Dr. Deniz Karaca states that the MC has work well and COST office was very happy with the progress of the action and thanks JC for running ENRAM.

JC thanks all MC members present and out local host, Giacommo Del'Ommo and closes the meeting at 16:50.

Minutes compiled by José Alves (01.03.2017)