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**MINUTES FROM THE 5<sup>th</sup> MANAGEMENT COMMITTEE  
MEETING OF  
COST Action IC 1104**

**Random Network Coding and Designs  
over  $GF(q)$**



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**Palmela**

19 September 2014

14:10 – 15:00

## 1. Welcome

Dr Marcus Greferath, Chair of Action IC1104, welcomed the participants to the meeting.

A quorum (2/3 of Parties) was not reached: 16 representatives of 10 countries out of 26 attended the meeting: The list of participants is given in **Annex 1**.

The MC substitute member Dr. Anamari Nakic (Croatia) kindly agreed to accept responsibility for the sources underlying these minutes.

## 2. Adoption of the agenda

The Agenda as listed in **Annex 2** was adopted without any amendment.

## 3. Approval of the minutes of the MC Meeting in Bordeaux on June 20th , 2014

The Minutes of the previous MC meeting in Bordeaux as listed in **Annex 3** were adopted by the present members without any amendment.

## 4. Update from the Action Chair

### a. Status of the COST Action

The chair explained that the COST Action had successfully entered its third year, and that the Work and Budget plan of the current grant period had been endorsed by the partners in Brussels. According to this plan there is a total budget of 172,000 EUR for the Action to spend.

The chair informed the present MC members that due to a miscommunication the opportunity to vote on the invited speaker Prof. Muriel Medard to the Working Group meeting in Palmela had been missed. He announced that this would be done retroactively by e-mail within the coming days. The electronic voting resulted in unanimous support (see **Annex 4**).

### b. STSM Status

In the previous grant period (2013-2014) 15,620 EUR have been spent on 7 STSMs. These are described by the following table.

Name	From	To	Period	Grant	ID	Approved	Title
<b>Grant Period 2: 2013-2014</b>							
Ms Anamari Nakic	Zagreb	Prof. Leo Storme, Ghent	2013-09-23 to 2013-12-	2 500.00	14464	2013-06-14	Analysis of properties of designs over

			20				finite fields
Dr Cristina Martinez	Barcelona (AUB)	Prof. Camilla Prof. Hollanti, Aalto University	2013-09-30 to 2013-10-11	1 700.00	15081	2013-08-22	Coding theory of elliptic curves and abelian varieties
Prof. Camilla Hollanti	Aalto University	Dr. Montserrat Alsina, Polytechnic University of Catalunya	2014-01-01 to 2014-02-28	2 500.00	15082	2013-08-23	Quaternion algebras and Fuchsian codes
Dr Iván Blanco-Chacón	Aalto University	Dr. Montserrat Alsina, Polytechnic University of Catalonia	2014-01-20 to 2014-02-10	2100.00	15483	2013-11-07	Arithmetic Fuchsian groups, Shimura curves and applications to communications
Amaro Barreal Fernandez	Aalto University	Prof. Maria Angeles Vazquez Castro, Universidad Autonoma de Barcelona	2014-01-26 to 2014-02-22	2300.00	16289	2013-12-20	Physical Layer Network Coding and Distributed Storage
Dr. Marcus Greferath	University College Dublin	Prof. Mario-Osvin Pavcevic, University of Zagreb	2014-07-15 to 2014-7-25	2120.00	20548	2014-06-13	Coloured constant Composition Designs and Designs over GF(q)
Dr. Francisco Monteiro	University Institute of Lisbon	Prof. Ioannis Chatzigerogiou, Lancaster University	2014-07-03 to 2014-07-31	2400.00	20613		Fountain Codes and Physical Layer Network Coding

The budget for STSMs during the current budget year (2014-2015) has been designed to allow for 10 STSMs each of them at a rate of 1,920 EUR on average.

Prof. Wassermann, the STSM Coordinator reported that up to the current MC meeting, 5 STSMs have been applied for and approved. These are described in the following table. Prof. Hollanti explained that more STSMs will be applied for from candidates at Aalto University during this grant period.

Name	From	To	Period	Grant ID	Approved	Title
<b>Grant Period 3: 2014-2015</b>						

Dr. Andrea Svob	University of Rijeka	Prof. Leo Storme, Ghent University	2014-09-01 to 2014-11-29	2500.00	19068	2014-05-06	Random Network Coding and Designs over GF(q)
Emilio Suárez Canedo	Universidad Autónoma de Barcelona	Prof. Leo Storme, Ghent University	2014-09-01 to 2014-11-29	2500.00	20393	2014-06-13	Designs and Coding Theory
Roland David Barrolleta	Universitat Autònoma de Barcelona	Prof. Leo Storme, Ghent University	2014-09-01 to 2014-10-31	2500.00	20394	2014-06-13	Designs and Coding Theory
Amaro Barreal Fernandez	Aalto University	Prof. Joachim Rosenthal, University of Zuerich	2014-11-17 to 2014-12-19	2500.00	20668	2014-06-26	Algebraic Methods for (Physical Layer) Network Coding
Dr. Jens Zumbraegel	Technical University of Dresden	Prof. Vitaly Skachek University of Tartu, Estonia	2014-09-22 to 2014-10-04	1185.00	21368	2014-09-11	Non-binary Linear Batch Codes

### c. News about the Vademecum

The Chair informed the MC that there are no news regarding the Vademecum. He took the opportunity to remind the participants again of a fact that in order to represent the Action at two major conferences, researchers can be partially supported up to €500 towards the registration fees for such an event. Apart from that, the usual rules for reimbursement will apply.

## 5. Promotion of Early Stage Researchers (ESR), Gender Balance

The Chair informed the Management Committee, that six of the seven STSMs awarded during the last grant period were to ESRs. Of six researchers awarded STSMs during the Grant Period 2, three were male and 3 were female. Among the five STSMs that have been approved for Grant Period 3, all are ESRs, only one was female. 42% of the participants in the WG meeting in Bordeaux were ESRs and 28.6% of all participants in that meeting were female.

## 6. Update from Grant Holder

The Chair informed the MC Start from the Grant Period 3, University of College Dublin has opted in to introduce what is called Strong Authentication in the reimbursement process for the COST Action. Strong Authentication enables faster on-line travel

reimbursement request forms to be submitted fully on-line without printed copies of signatures. The participants do not need to post their original and signed hard copy document. It will significantly improve the efficiency of reimbursement processes and reduce processing time.

## **7. Update from the COST Office**

No representative of the COST Office was present during this MC meeting. Dr. Ralph Stuebner (Brussels) however asked the Chair to convey the following messages:

The COST Association, which has been founded in September last year, has been awarded with a Framework Partnership Agreement by the European Commission to implement COST in H2020.

With the transition to H2020 COST revises its proposal submission and evaluation system as well as its monitoring and assessment of running Actions. The latter one is of importance for the Action and I recommend to recall and follow the objectives of the Action as stated in the MoU.

Furthermore COST has to respond on research policy requests and therefore will put a strong emphasis on the support of researchers from the COST Inclusiveness Target Countries. The Actions are requested to respond to this policy by running meetings in this countries, giving special support for researchers from these countries etc.

In addition, Dr. Stuebner, sent a few graphs generated from data provided from e-COST on how Action IC1104 is balanced with regard to gender, ESR, and countries. Looking at the graphs, he suggested, that the Action should improve on gender balance and on the share of reimbursements to COST Inclusiveness Target Countries.

The original e-mail message including the graphs is appended as **Annex 5**.

## **8. Update from DC Rapporteur**

The DC Rapporteur was not present to provide an update.

## **9. Annual Progress Conference**

The Chair informed the MC that a time and venue for the next APC has not yet been determined by the COST office in Brussels.

## **10. Follow-up of MoU objectives: Progress reports**

The Working Group leaders who were present reported on the recent scientific activities of the Working Groups. They provided brief updates for the benefit of the members of other Working Groups. Dr. Greferath asked all WG leaders to provide their information in brief e-mail messages. These are appended to this document as **Annexes 6, 7, 8, 9**.

**(a) Working group I and IV - report by T. Etzion and J. Rosenthal**

See **Annex 6**.

**(b) Working group II - report by A. Vazquez Castro**

See **Annex 7**.

**(c) Working group III - report by S. Blackburn**

See **Annex 8**.

**(d) Working group V - report by C. Hollanti**

See **Annex 9**.

## **11. Scientific Planning**

**(a) Update by Alfred Wassermann regarding ALCOMA2015**

Alfred Wassermann explained that the conference ALCOMA 2015 which will be held in Kloster Banz near Bamberg from 15<sup>th</sup> till 20<sup>th</sup> March 2015, is in preparation. He informed the MC that first announcements had been already sent out. He informed the MC that additional funding might be provided from external sources. The deadline for early registration (150 EUR conference fee) will be December 15h, 2014.

**(b) Update by Miloš Stojaković regarding upcoming Working Group meetings in Novi Sad (Serbia)**

Miloš Stojaković, representing the group of Action members from the University of Novi Sad, explained that there are three possible time slots for the meeting in Novi Sad. The possible starting dates are May 21<sup>st</sup>, May 28<sup>th</sup>, and June 5<sup>th</sup>. The MC suggested to adopt the latter option, i.e. June 5<sup>th</sup> as preferred date for the meeting.

**(c) Update by Eda Tekin on a planned WG meeting in Istanbul (Turkey) during grant period 4**

The MC representative from Turkey, Gunes Zeynep Kurt had asked the WG member Eda Tekin to give a presentation on the envisaged WG meetings in Istanbul Turkey. The time for this meeting will be September 2<sup>nd</sup> till 4<sup>th</sup>, 2015. Dr. Monteiro particularly asked

for the hotel rates during that time of the year in Istanbul. Ms Tekin showed that these rank between 80 and 120 EUR per night and person. The chair explained that these expenses will be easily covered by the (unchanged) hotel flat rate of 120 EUR per night and person.

#### **(d) Long-term planning**

The Chair reminded the MC of the final conference for the Action in Dubrovnik in early 2016. He explained that there will be a full budget for the final year despite the fact that it will be a shorter year ending already on April 25<sup>th</sup>, 2016.

Dr. Greferath again emphasized the important role of this conference in the final evaluation of the Action. They explained that his event should enjoy larger funding to make sure that all or as many as possible Action members are able to participate. Moreover, a dedicated volume in a reputed journal is envisaged as the Actions concluding publication.

Dr. Greferath explained that, should there be interest and any suggestions, there might be budget in the 4<sup>th</sup> year to be spent on a 3<sup>rd</sup> event in that year. Prof. Hollanti indicated her interest in organizing an event in Helsinki, Finland.

#### **(e) Dissemination planning**

The Chair reminded the MC that the current Work and Budget Plan has two allocations to represent the Action at conferences.

### **12. Requests for new members: Sweden**

The Chair explained that Sweden has joined the Action in June 2014.

### **13. Non-COST applications to the Action**

No non-COST applications have been filed to the Action.

### **14. AOB**

Prof. Hollanti suggested that the Actions website should be equipped with maintained versions of the Action's mailing lists. Dr. Greferath promised to convey this request to Jens Zumbraegel who has adopted responsibility for the website.

### **15. Location and date of next meeting**



The MC will have its next meeting on March 20<sup>th</sup>, 2015 at Kloster Banz, near Bamberg, following the international conference ALCOMA 2015 at the same location.

## **16. Summary of MC decisions**

No decisions were taken during the MC meeting itself.

## **17. Closing**

The MC Chair thanked all MC members present and closed the meeting at 15:00.

## **List of Annexes**

Annex 1: Signed list of Participants of current meeting

Annex 2: Agenda of current meeting

Annex 3: Minutes of the MC meeting in Bordeaux (June 2014)

Annex 4: MC decision approving support of invited speaker Muriel Medard for the Palmela WG meetings. (e-mail from 23.09.14, unanimous support)

Annex 5: Message from COST office (Dr. Stuebner) (e-mail from 15.09.2014)

Annex 6: Working Group 1 & 4 report (received 05.10.14)

Annex 7: Working Group 2 report (received 19.09.2014 )

Annex 8: Working Group 3 report (received 06.10.14)

Annex 9: Working Group 5 report (received 12.10.14)