

SHORT TERM SCIENTIFIC MISSION (STSM) SCIENTIFIC REPORT

This report is submitted for approval by the STSM applicant to the STSM coordinator

Action number: CA15127-RECODIS
STSM title: Schemes of resilient routing under regional failures
STSM start and end date: 15/08/2019 to 25/08/2019
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PURPOSE OF THE STSM:

The purpose of the STSM was twofold:

- (a) to work jointly with the STSM Host (being the leader of WG1) on the unification of the presentation style of the content of other chapters of the Action final book
- (b) to focus on methods of network resource provisioning able to provide resilience under region failures and schedule the respective contribution to Chapter with the working number 3.2 (on region-disjoint routing schemes) of the Action final book

DESCRIPTION OF WORK CARRIED OUT DURING THE STSMS

The main tasks performed during this STSM included:

- A detailed editorial analysis of twelve chapters of the final RECODIS book;
- The unification of the presentation style of the mentioned twelve chapters;
- Preparation and sending to the respective corresponding authors detailed instructions related to the updates of their chapters.
- The integration of the analyzed chapters into the book structure;
- The investigation of a possible extension of Chapter 3.2 towards the inclusion of a section on methods on network resource provisioning to provide communication resilience under region failures.

DESCRIPTION OF THE MAIN RESULTS OBTAINED

During the STSM, a detailed editorial analysis of twelve chapters of the final RECODIS book was performed. It referred mainly to the chapters planned for inclusion in Parts I and II of the book (i.e., related to the evaluation of the vulnerability of communication networks to disasters, and the design/updates of network architectures to improve their resistance to disaster-induced failures). The respective unification of the presentation style was applied. Also, the corresponding authors were sent detailed instructions related to the updates of their chapters. The chapters were also integrated into the book LaTeX structure.

During this STSM, a possible extension of Chapter 3.2 towards the inclusion of a section on methods on network resource provisioning to provide resilience under region failures was investigated. The respective works related to this issue have been scheduled.

FUTURE COLLABORATIONS (if applicable)

Future collaboration include, e.g., the finalization of Chapter 3.2 (in the nearest future), and the preparation of a research paper on the resilience of communication networks under natural disasters.