

Horizon 2020



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Communication, Dissemination and Exploitation Report

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Abstract

Throughout the first year of the SINet project several activities concerning communication, dissemination and exploitation took place. These include not only the presentation of research results but also the importance of H2020 Marie Curie Actions in the scientific community. This report summarises such activities.

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1 Introduction

This report presents the communication activities, as well as dissemination and exploitation efforts undergone during the first year of the SINet project. They are presented in Sections 2 and 3 respectively, summarising each activity and providing links to external resources.

2 Communication Activities

The different communication activities were divided into two categories, social media/web and direct outreach to general audiences.

2.1 Web and Social Media

Most of the web-based communication activities are strongly based on SINet's website ¹. In its blog 4 publications were made available, including additional information about the project or links redirecting to other resources. In fact, the main goal of the website has been the aggregation of information or content.

The Twitter account connected to the SINet project includes more updates and generic information, with a total of 25 tweets. These tweets include updates about ongoing project activities, Marie Curie actions and other information related with the subject of SINet.

Additional web presence took form as an interview to Euraxess Norway, presenting the view of mobility and research abroad, reflecting on my own experience with SINet ².

2.2 General Audiences Outreach

In the effort of closely engaging non-experts in research activities, the SINet project was present at the Researchers' Night November 2016 at NTNU. It included a booth presenting the project's early results, research at the department of Telematics and a poster about mobility of researchers and Marie Curie actions.

¹<https://sinet.item.ntnu.no>

²<http://www.euraxess.no/norway/research-norway/excellent-assistance-all-practical-needs>

3 Dissemination and Exploitation

This chapter presents dissemination activities that concern the promotion of the results obtained by the project, focusing on, but not limited to, expert audiences or academia. Dissemination resulted both from presentations in different events and preliminary peer-reviewed publications. Another form of promotion has taken place through the publishing of bug reports in open-source software repositories. In particular, throughout SINet activities, bugs on the Linux kernel, a CoAP implementation, Docker and Contiki have been reported. In this scope SINet has contributed with patches to fix the reported bugs, as well as improvements, which were later included in some of the main distributions (i.e. master branch).

Exploitation activities are focused on engaging industrial actors in order to adequately use SINet's results. These have a limited impact due to the project's early stage. Nonetheless, interest and future possibilities have been registered by contacts established with the industry. Additionally, exploitation of the acquired knowledge throughout this first year of research has also targeted new research projects, with one successful outcome.

3.1 Dissemination Activities

The following list contains the venues where SINet was presented, discussing its goals and results, as well as the importance of Marie Curie actions in the promotion of mobility between researchers. These activities were mostly focused on academic audiences, but also included the presence of the industry in some workshops.

- Github Repository¹ – (Academia and Industry)
- Invited talk at University of Coimbra – December 2016 (Academia)
- Invited talk at University of Madeira – December 2016 (Academia)
- Presentation at the 2nd CleanSky Conference, Trondheim, Norway - August 2016 (Academia)
- Presentation at the SDN Workshop², Stavanger, Norway – May 2016 (Academia and Industry)
- Presentation at Gemini Workshop³, Trondheim, Norway – May 2016 (Academia and Industry)
- Presentation at H2020 MSCA Workshop, NTNU, Norway – May 2016 (Academia)

The research work conducted in the scope of the SINet project has led to the interaction with researchers in different scientific fields. Aligned with the original SINet description, the multi-disciplinary nature of the project emphasised the cooperation with researchers in the fields of autonomous vehicles and satellites, even before the official start on the project. Additionally, the limited access to resources and networking challenges faced in the Arctic have also resulted in contributions to the Internet of Things/Fog Computing in Healthcare.

¹<https://github.com/PalmaITEM>

²<http://cipsijoomla.uv.uis.no/2016.sdn/index.php>

³<http://www.sintef.no/en/ocean/initiatives/gemini-centre-for-maritime-communication/>

The following publications have resulted from the work conducted in SINet:

- R. Birkeland, A. Zolich, D. Palma, “Integrated SmallSats and Unmanned Vehicles for Networking in Remote Locations”, 68th International Astronautical Congress, September 2017.
- F. A. Kraemer, A. E. Braten, N. Tamkittikhun, D. Palma, “Fog Computing in Healthcare – A Review and Discussion”, IEEE Access (*submitted*)
- A. Zolich, D. Palma, K. Kansanen, K. Fjortoft, J. Sousa, K. H. Johansson, Y. Jiang, H. Dong, T. A. Johansen, “Survey on Communication and Networks for Autonomous Marine Systems”, Journal of Intelligent and Robotic Systems (*submitted*)
- A. Zolich, D. Palma, R. Birkeland, Y. Jiang, “A multi-hop intermittent wireless sensor network with unmanned aerial vehicles and satellite links for the Arctic”, Remote Controlled and Autonomous Measurement Platforms Flagship (ReCAMP) Workshop, April 2016, Tromsø, Norway.

3.2 Exploitation

The exploitation of SINet results has been focused on ensuring the continuation of research activities related to networking in challenging and resource constrained environments. In order to achieve this goal, I have contacted different potential partners, presenting concepts related to SINet in face-to-face meetings, conference calls and dedicated events. The main outcome from these endeavours was the successful acceptance of the ART research project, involving colleagues from multi-disciplinary areas at NTNU.

The following list includes the main exploitation activities:

- Accepted research project, ART – Autonomous Resource-Constrained Things (Norwegian Research Council, IKTPLUS)
- Meetings with Tieto Finland and IBM Norway regarding the autonomous management of resource-constrained networks.
- Presentation of a research proposal for resource-constrained IoT devices at ICTurkey 2016, Turkey.
- Presentation of SINet at the KID workshop at NTNU (October 2016) with more than 10 companies in the audience, including Nordic Semiconductor, Telenor and Statoil.

SINet

The SINet project

April 30, 2017

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