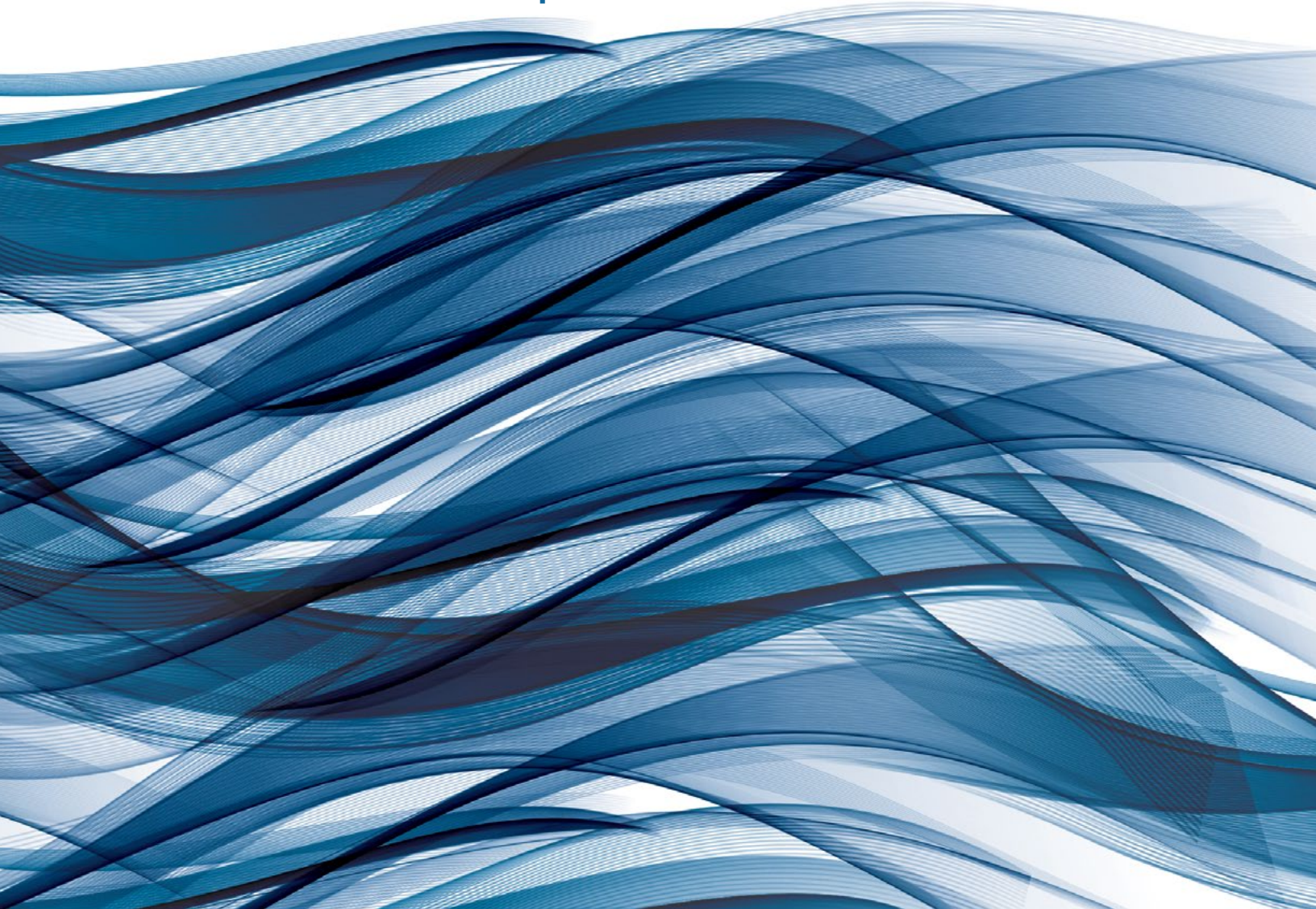




Newsletter #9
May 2019

RANGER

RAdars for lo**NG** distance maritime surveillance**E**
and Search and Rescue op**er**ations



www.ranger-project.eu

Contents

Foreword **2**

Project news & Meetings **3**

“RANGER project and the Privacy Impact Assessment (PIA)” article **4**

1st Maritime Situational Awareness Workshop (MSAW) 2019” article **6**

Related Conferences & Events **7**

Dear Readers,

Welcome to the ninth issue of the RANGER newsletter. RANGER is a 42-month European project, co-funded by the European Union’s Horizon 2020 research and innovation programme. The consortium comprises 10 partners from 7 countries: a balanced blend of Radar technology industrial organizations, academic/research institutes, high-tech SMEs, and highly relevant end-user organizations. RANGER combines innovative Radar technologies with novel technological solutions for early warning, in view of delivering a surveillance platform offering detection, recognition, identification and tracking of vessels, beyond current radar systems’ capabilities, thus drastically improving the response and intervention capacity of European Search and Rescue operations.

This issue features an article about Privacy Impact Assessment (PIA) and an article about the 1st Maritime Situational Awareness Workshop (MSAW) 2019. It also includes project news and updates as well as related conferences & events.

Enjoy reading and don’t forget to visit our website for more information!

The Project Coordinator



2nd RANGER Review Meeting

7 February 2019
| Brussels, Belgium

On the 7th of February 2019 the RANGER project partners met in Brussels, Belgium for the 2nd review meeting. The coordinator and project partners provided an in-depth update of the progress of the action and presented the work that was performed in each work package, highlighting the major achievements and results. Special emphasis was given in the positive results derived from the 1st RANGER Pilot demonstration which was held few months ago. The project officer and reviewer, showed great interest in the work of the RANGER project and provided valuable feedback. We are proud to say that the review was totally successful and we are looking forward to continue with the last and most important period of the project in which 3 more Pilot demonstrations are going to be held. One day before the review meeting, on 6th of February, the RANGER project partners met in Brussels in order to rehearse all presentations and got prepared for the review meeting.



For more Information

Please visit the RANGER website
www.ranger-project.eu

You can also keep up with more of what is happening at RANGER project by following us on:





RANGER 2nd French Pilot Demonstration preparations

16 May 2019 | France

The preparations of the RANGER team for the 2nd French Pilot Demonstration that took place on 16th May 2019, off the shore between Marseille and Port-Vendre, in France, had been in full progress for several days. The RANGER Platform and the Radars (PE-MIMO and OTH Radar) were integrated and tested; vessel detection and tracking, Data fusion, Machine Learning, Early Warnings, integration with AIS, legacy radars and satellite data as well as integration with the Greek CISE node had already been accomplished beforehand. The control room, from which the consortium is monitoring the demonstration, had been located at Diginext premises in Aix-En-Provence. The 2nd French Pilot was a great chance to demonstrate how the RANGER platform works through several demonstration scenarios that are executed aiming at testing and validating the capabilities of the RANGER system in real environment conditions.

You will get fully informed with all the details about the 2nd French Pilot in our next issue!

RANGER 1st Pilot Video

During the realization of the 1st RANGER Pilot Demonstration in October 2018 the RANGER team created a wonderful video. Watch [it](#) and experience the RANGER adventure!

Updated RANGER leaflet

The updated RANGER leaflet is available on RANGER website [here](#)

RANGER and the Privacy Impact Assessment (PIA)

by Tuomas Tammilehto, Laurea University of Applied Sciences.

RANGER aims to resolve tangible challenges of today's maritime surveillance world as well as those of the future. This means that RANGER solutions cannot be developed in a void, i.e. not taking into account how the European societies are changing.

Arguably, three intertwined factors are prioritising the importance of privacy when designing any new solutions. Firstly, there are significant changes in the society: privacy has become something valuable. One indicator of this are the new legislation around it, for example the new General Data Protection Regulation that became effective in May 2018. The second manifestation of the importance of privacy are the European Commission's statements on this subject. For example, respecting personal privacy has become a requirement in European funded projects. Thirdly, the RANGER consortium itself has realised the importance of privacy when designing the solutions, and for example, the advisory board and ethical and privacy experts of the project have recommended to take privacy issues into account. Thus, RANGER has adopted a so-called privacy by design approach.

One efficient and functional way when tackling possible privacy concerns is to perform a so-called Privacy Impact Assessment (PIA). This assessment looks into every aspects of the RANGER solutions from a data and other privacy point of view, and thus identifies possible problem areas. RANGER Privacy Impact Assessment used a specific tool designed for this purpose. The software tool was developed by French Commission Nationale de l'Informatique et des Libertés (CNIL), and it is available online for free of charge. The reasons why RANGER chose this was not only that it was recommended by the ethical experts, but more so because the CNIL PIA tool was designed around three principles, that suited RANGER well. First, the tool has a didactic interface to carry out PIAs: the tool relies on a user-friendly interface to allow for a simple management of the PIAs even for non-experts. Second, it clearly unfolded the privacy impact assessment methodology step by step. For example, it has several visualisation tools that offer ways to quickly understand the risks around privacy. Third, it

has an updated legal and technical knowledge base that includes the legal points ensuring the lawfulness of processing and the rights of the data subjects. It also has a contextual knowledge base, available along all the steps of the PIA, adapting the contents displayed.

The CNIL tool is a modular tool, too. It is designed to help to build compliance of any solution, thus could be customised to the specific needs of RANGER. Further, it is published under a free licence, therefore saving European taxpayers money – another good reason for RANGER to use it.

The RANGER PIA, or more precisely the first PIA, since the objective is to do several rounds of them, e.g. for each pilot, was a joint effort of the coordinator, technical partners and Laurea, but included also the help of the advisory board and ethical and data privacy experts. The first PIA concentrated on the first French pilot, but naturally, it serves the whole project and end-results. It examined, for example, the different data processed, and answered questions such as how the data subject were informed etc.

The RANGER PIA revealed, that during the first-phase pilot, the only personal data processed was AIS data, and that from this data, persons can be identified only indirectly. RANGER itself does not process any additional data, which could make the identification possible. Thus, the potential risks related to data subject rights are negotiable and/or limited: the challenges lay in illegitimate access to data, unwanted modification of data, and data disappearance. Another finding was that, obviously, general data security applies also to the personal data protection.

Based on the PIAs outcome the following activities are to be taken into account: First, a Data Sharing Agreement between the RANGER partners (especially for those who are joint controllers), and secondly, anonymization procedures to put in place regarding to possible personnel data of the operators of RANGER.

All in all, PIA is a very important tool to ensure to make RANGER as a successful and applicable solution, and RANGER is very proud that it takes privacy concerns seriously.

1st MARITIME SITUATIONAL AWARENESS WORKSHOP (MSAW 2019)

Science and technology meet operational needs



The RANGER consortium is proud to announce that along with its partner NATO Science and Technology Organization Centre for Maritime Research and Experimentation (STO-CMRE) are organising a workshop to present and discuss advanced technologies, innovative concepts, and emerging scientific challenges with respect to current and future Maritime Situational Awareness (MSA) operational needs. MSAW 2019 foresees productive collaboration and synergistic discussion among MSA specialists from technical and non-technical areas. The workshop is going to be held on 8-10th October 2019 in Lerici (La Spezia), Italy.

Objective

Focusing on Maritime Situational Awareness, the objective of MSAW 2019 is to bring together scientists, engineers, researchers from scientific communities with national and international authorities, end users and operators, and industrial representatives. MSA specialists will present and discuss scientific and operational challenges, advanced technologies and knowledge gaps, in order to facilitate future collaboration and research activities. MSAW 2019 encourages contributions from EU H2020 projects, as well as other research initiatives, to present on-going progress, results, and/or live demos. The topics are available [here](#)

Instructions for authors

The Programme Committee invites scientists, engineers, managers and operators from governments, military, academia and industry to submit manuscripts to be considered for the

MSAW. The papers should describe the scope of the contribution, the relevance to the meeting in line with (but not limited to) the MSA topics outlined in this announcement for paper, aim, method, results and conclusions of the work. Inclusion of figures and/or photographs to support the work is encouraged.

Submissions content

- Title of the abstract
- Authors names, affiliation and email address
- Manuscript between 2 and 5 pages, including figures and bibliography
- Authors of selected papers will be invited to send a final version of their work together with the copyright form, following the instructions available [here](#).

Accepted papers will be presented at the MSAW and published in the MSAW proceedings.

Important Dates

- 31 May 2019 Paper Submission
- 30 June 2019 Rejection/Acceptance Notification
- 30 June 2019 Registration Open
- 15 July 2019 Final Version and Copyright Transfer
- 08 Sep 2019 Registration Closed

The call for papers is available [here](#)

SPIE. SECURITY+
DEFENCE

SPIE Security & Defence 2019

9-12 September 2019, Strasbourg, France

<https://spie.org/conferences-and-exhibitions/security-and-defence?SSO=1>



International Radar Conference

23-27 September 2019, Toulon, France

<https://www.radar2019.org/>



Pacific International Maritime Exposition

8-10 October 2019, Sidney, Australia

<https://www.pacificexpo.com.au/Index.asp>



Milipol 2019

19-22 November 2019, Paris , France

<https://en.milipol.com/>



ISSCC 2019 IEEE International Solid-State Circuits Conference

17-21 February 2019, San Francisco, USA

<http://isscc.org/>



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For more Information

Please visit the RANGER website

www.ranger-project.eu

You can also keep up with more of what is happening at RANGER project by following us on:



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