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 Stimulating the development of downstream services and service evolution

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D7.2 Dissemination plan

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PU	Public	X
PP	Restricted to other programme participants (including the Commission)	
RE	Restricted to a group specified by the consortium (including the Commission)	
CO	Confidential, only for members of the consortium (including the Commission)	

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SUMMARY

The dissemination plan covers the dissemination activities all through the project.

The structure of the report follows the tasks of the WP7 as in the proposal.

1 Objectives

Deliverable 7.2 will serve as a reference to follow-up all the planned dissemination actions all through the project.

The project dissemination will have a special target on Arctic stakeholders, in particular through the members of the Norwegian Polar Academy, member of the International Arctic Science Committee and the Arctic Council through the members of its working group Protection of the Arctic Marine Environment (PAME).

2 Dissemination tasks

2.1 Public web site (NERSC)

NERSC will set up the SWARP web site (<http://swarp.nersc.no>) at the beginning of the project for dissemination of project information and results to all interested users and media. NERSC will prepare presentations and product examples for scientific and industrial users of SWARP. NERSC will also prepare promotional material, brochures and fact sheets for a wide audience of potential users, decision makers and the general public. NERSC and Ifremer will prepare web stories on waves observed in sea ice aimed for publication for instance on the ESA website, which reaches a very broad audience.

A short educational movie will be prepared using videos taken on field experiments, satellite images and model simulations. A private company will be contracted for making a professional animation merging satellite and model results in order to sensitize users to the dynamics of waves in ice and raise public awareness about the associated risks. The movie should be ready mid 2015 well before the user workshop.

2.2 Data distribution (NERSC)

The same data that will be included in NAVTOR's services in WP4 will also be distributed publicly on the existing data servers at NERSC and Ifremer. The goal is to stimulate other services in the MIZ such as search and rescue and oil spills response.

The new parameters generated by the project (maximum floe size) will be added to the output NetCDF files following CF1.4 conventions or above for compliance with standard Web Map Services, and using keywords from the NERC Vocabulary Server (<http://vocab.nerc.ac.uk>) to mark up the SWARP products.

The open data service will be set up using FTP and OPeNDAP protocols and will conform to the INSPIRE directive, allowing the following services: view, download, subset and invoke. The data services will be made available through the European Marine Information System (EUMIS) NETMAR portal (<http://netmar.nersc.no>) and the SOLab Arctic Portal (<http://bit.ly/15k2FDW>). This will increase the project visibility by making the data products searchable with an established ontology from the SeaDataNet community.

2.3 Service sustainability (NAVTOR)

This task will evaluate the costs of the SWARP service as marginal costs above the existing services running at NERSC, Ifremer, NERC and NAVTOR. The existence of competing services will be investigated and the positioning of the SWARP services will be analyzed in the evolving landscape.

Different business models will be studied beyond the project duration for each partner separately, considering the involvement of users in the private and public sectors. National and European support for innovative services will also be sought. A database of potential and existing users will be maintained in the course of the project and the users will be actively be updated of the results from test cases. The feedback from the user workshop at Mo 30 will be used as input to this report.

3 Means of dissemination

3.1 A short movie

NERSC will put together a short movie (10 minutes) for raising awareness of the users on events of waves in ice-covered seas. Part of this film will consist of animations of numerical simulations and satellite data.

Two interviews (of V. A. Squire and D. Dumont resp. from UO and ISMER) have been taken by the company Filmkollektivet in Bergen during the kick-off meeting and will be followed by interviews onboard ships equipped with NAVTOR's systems later in 2014.

The movie will also reuse video material from ISMER capturing sea ice breakage under the action of waves in the St Lawrence estuary.

The movie will be shown on different occasions (for example the yearly meeting at NERSC, the user workshop, conferences and side events).

3.2 User workshop

Organization of a user workshop (at Mo 30) addressing shipping, oil industry, insurance companies, met-ocean services and fisheries. In particular, the users targeted in the proposal will be invited (FedNav, TOTAL E&P and NAVTOR's clients as well as the operational ocean forecasting community)

3.3 Presentation to scientific and technical meetings

Here is a list of planned meetings where SWARP will be presented.

- The 48th Congress of the Canadian Meteorological and Oceanographic Society (CMOS), "Northern Exposure: the implications of changes in cold environments. Rimouski 1-5th June 2014. D. Dumont (ISMER) will hold an invited talk and will promote SWARP. <http://www.cmos.ca/congress2014>
- Shipping in Changing Climates: Provisioning the Future" to be held on the 18-19th June 2014 in Liverpool. Y. Aksenov (NERC) has submitted an abstract with NERSC co-authorship. <http://www.mace.manchester.ac.uk/our-research/centres-institutes/tyndall-manchester/conferencesandseminars/>
- 22nd IAHR International Symposium on Ice, 11 – 15 August 2014, Singapore. T. Williams (NERSC) has submitted a paper.
- 6th IICWG/ICE-ARC workshop on sea ice modelling and data assimilation, Sept 15-16 2014, Toulouse. IFREMER will present first results of the wave model.
- Annual Meeting of the UK National Centre for Ocean Forecasting later in 2014 (dates not fixed). <http://www.ncof.co.uk/Meetings-and-workshops.html>
- V. Squire (UO) will keep on giving his 5 keynote talks per year relevant to SWARP (scientific conferences).

- The AGU session on waves-ice interactions lead by the SWARP partners has been a success in December 2013 and may be continued in the coming years.
- Other relevant conferences: EGU assembly (Vienna) Arctic Frontiers (Tromsø), Arctic technology Conference (Houston), Arctic Science Summit Week (Toyama, Japan, 27-30th April 2015), WMO's Year of Polar Prediction (YOPP) Symposium (Bergen, June 2015), IMAREST events (<http://www.imarest.org/events-courses/events-conferences>).

3.4 Promotional material to the media and public

Waves in ice and polar regions in general are of sufficient general interest to justify communication to institutes training ship officers, the general public via participation to exhibitions, articles in general media and to undergraduate schools.

A 1-page brochure will be produced as part of the FP7 Space 6th call.

http://ec.europa.eu/enterprise/policies/space/research/resources/index_en.htm#h2-2

3.5 Publication of results in scientific and technical journals

We expect several scientific and technical papers from the project, scientific papers from the second year onwards and technical demonstration papers in the third year. Open-access journals like The Cryosphere will be used in priority. Here are a few planned articles:

- Williams and Squire. The *Wave-induced strains in ice floes* conference paper for the 22nd IAHR International Symposium on Ice will evolve into a full paper.
- Williams et al. paper (J Phys Oc?) with presentation of 2d WIM with some basic validation using SAR/photos (cruise).

The authors are reminded that the submitted papers should acknowledge the funding from the European project SWARP under the FP7 grant number 607476.

3.6 Planning of spin-off projects

The SWARP project is expected to lead to further industry-supported projects and research projects from Horizon2020 and other funding agencies.

A Canadian project proposal has been submitted by ISMER to the MEOPAR programme for operational predictions of surface drift, including the wave-ice interactions in the St. Lawrence estuary. See <http://meopar.ca/stresearch/combining-innovative-models-and-observations-of-seasonally-ice-infested-water-for-improving-surface-drift-forecasts/>

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