



SeaDataCloud

WP4: The communication, dissemination and exploitation development

Leda Pecci - ENEA

3° Plenary Meeting, Brest, France, 17 October 2019
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Overview of activities over the last year

1. The deliverables
2. Tasks:
 - WP4.2 Dissemination and promotion activities, incl. SeaDataNet portal
 - WP4.4 - Preparation, coordination and validation of User Workshops
 - Future plans



WP4: The deliverables

- D4.21: “IPR (Intellectual Property Rights) recommendations in the perspective of the cloud” released by RBINS in November (20/11/2018)
- D4.10: “Newsletter n° 3”, released in July, by MARIS and the collaboration of partners
- D4.6 : Poster and leaflet v3, released by ENEA, in June 2019;
- D4.19: “Mid-term report on SeaDataNet AISBL”, by RBINS delivered in May 2019;
- D4.3: “Promotion and dissemination plan v2”, prepared by ENEA in August 2019;



Technical publications

Intergovernmental Oceanographic Commission (2019)
Ocean Data Standards, Vol.4: **SeaDataNet Controlled
Vocabularies for describing Marine and
Oceanographic Datasets - A joint Proposal by
SeaDataNet and ODIP projects.** Oostend, Belgium,
IODE/UNESCO, 31pp., IOC Manuals and Guides, 54, Vol.

4



Tasks WP4.2

On line Best Practices




The Ocean Best Practices System Repository is maintained by the [International Oceanographic Data and Information Exchange \(IODE\)](#) of the [UNESCO-IOC](#)

- Boldrini, E. and Nativi, S. (2019) SeaDataNet Cruise Summary Report (**CSR**) metadata profile of ISO 19115-2 – XML encoding., Version 4.0.0
- Boldrini, E. and Nativi, S. (2019) **SeaDataNet metadata** profile of ISO 19115–XML encoding, Version 11.0.0
- Boldrini, E. and Nativi, S. (2019) **SeaDataNet metadata** profile of ISO 19115. Version 11.0.0
- Boldrini, Enrico and Nativi, Stefano (2019) SeaDataNet Cruise Summary Report (**CSR**) metadata profile, version 4.0.0

On line Best Practices

- Lowry, R.; Fichaut, M. and Bregent S. (2019) **SeaDataNet NetCDF format definition**, version 1.21
- Lahbib, S.; Claus, S.; Oset, P.; Fichaut, M. and Thyssen, M. (2018) **Flow Cytometry (FCM) data**: format and examples of SeadataNet ODV data and CDI xml metadata files
- Lahbib, S.; Claus, S.; Oset, P.; Fichaut, Mi. and Thyssen, M. (2019) **Ingesting, validating, long-term storage and access of Flow Cytometer data**



   <https://www.oceanbestpractices.net>



OceanBestPractices

Repository of Ocean Community Practices in
Ocean Research, Observation and
Data/Information Management

Scientific publications

To be published as extended abstract: S. Simoncelli, M. Fichaut, D. Schaap, R. Schlitzer, A. Barth, C. Fratianni (2019) **Marine Open Data: a way to stimulate ocean science through EMODnet and SeaDataNet initiatives**, Miscellanea INGV, ISSN 2039-6651

Tintoré Joaquín (CSIC), Pinardi Nadia (UniBo), et al., comprising Antonio Novellino (ETT), Simona Simoncelli (INGV), Zavatarelli Marco (UniBo), Zodiatis George (ORION), **Challenges for Sustained Observing and Forecasting Systems in the Mediterranean Sea**, Frontiers in Marine Science, vol.6, 13 September 2019



Tasks WP4.2

Scientific publications

1. Martín Míguez Belén, et al., comprising Novellino Antonio (ETT), Vinci Matteo (OGS), Claus Simon, Calewaert Jan-Bart, Giorgetti Alessandra (OGS), Iona Sissy (HCMR), Schaap Dick (MARIS), Pinardi Nadia (UniBo), Gorringe Patrick (EUROGOOS), Simoncelli Simona (INGV), **The European Marine Observation and Data Network (EMODnet): Visions and Roles of the Gateway to Marine Data in Europe**, Frontiers in Marine Science, vol. 6
2. Frontiers in Marine Science, 07 August 2019, **Ocean FAIR Data Services**, Toste Tanhua et al.;
3. Frontiers in Marine Science, 04 June 2019, **Evolving and Sustaining Ocean Best Practices and Standards for the Next Decade**, Jay Pearlman et al.



Tasks WP4.2

Scientific publications

3. E. Zhuk (Marine Hydrophysical Institute of Russian Academy of Science, Russia), G. Zodiatis (University of Cyprus), 2019. [EastMedAtlas: online data access system](#), SPIE Proceedings volume 11174, Seventh International Conference on Remote Sensing and Geoinformation of the Environment (RSCy2019), 27 June 2019
4. JL. Ruiz, S. Diez, A. Hernández, J. Sorribas, 2019. **Servicio de Datos de la Unidad de Tecnología Marina** (UTM-CSIC), Revista internacional de ciencias de la tierra MAPPING March/April 2019 - IX jornadas ibéricas de infraestructuras de datos espaciales

International events

Tasks WP4.2

In collaboration with the Environmental research infrastructures (ENVRI) community, Franco Reseghetti (ENEA) promoted SDN/SDC at the ENVRI booth during the ESA Living Planet Symposium held in Milan





International events

Tasks WP4.2

8 May 2019, Michèle Fichaut, Dick Schaap - **Working in partnership with SeaDataNet - EMODnet - BODC 50th anniversary** - Liverpool, United-Kingdom

International conferences

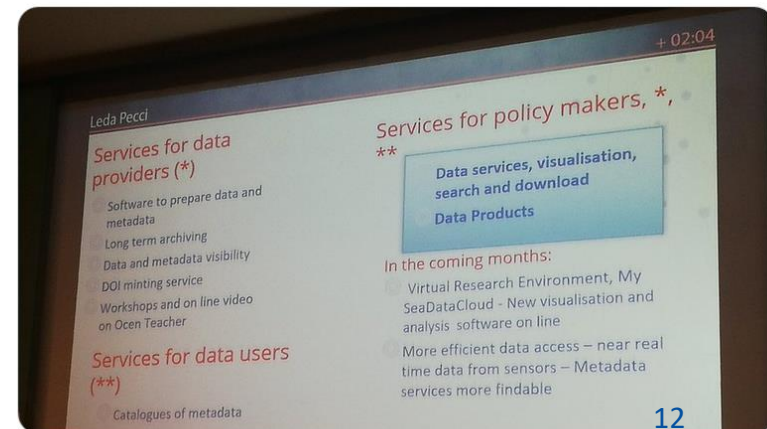
- 25/09/2019, Leda Pecci, Michele Fichaut, Dick Schaap - SeaDataNet, an enhanced ocean data infrastructure giving services to scientists and society, 11th International Symposium on Digital Earth (ISDE11) held on 24 - 27 September 2019 at the Palazzo dei Congressi in Florence, Italy
- An extended abstract has been submitted for external approval

Twitter



Simone Mantovani @SimoneMantovan3 · Sep 25

Leda Pecci summarizing the "coming soon" from [#SeaDataNet](#)
Nice to see Virtual Research Environment and effective data services as key elements





International conferences

- Alexandra Kokkinaki presented SeaDataNet experience and contribution at EPOS (European Plate Observing System) IPC meeting, 27th September 2019, Madrid, Spain



Tasks WP4.2

International conferences

- 19/09/2019, Dick Schaap promoted SDN/SDC in a presentation about Ocean Data Interoperability Platform at Ocean Obs conference in Honolulu, Hawaii;
- 16-20/09/2019, H. Sagen, presented the poster: SeaDataCloud, Temperature and salinity climatologies for the european marginal seas.
- Justin Buck (BODC) presented a poster on Terminologies for Ocean Observations: the NERC Vocabulary Server





International conferences

Task WP4.2

Informatics in Oceanography and Ocean Science (ESSI 1.1)

(chaired by Simona Simoncelli and Cristian Muñoz Mas)

4 oral presentations (1 related to EMODNet Chemistry project that uses the SDN standards)

3 posters

Oral presentations:

From in situ observations to gridded fields using DIVAnd and the cloud, Charles Troupin, Alexander Barth, Sylvain Watelet, Jean-Marie Beckers, Merret Buurman, Yohann Legrand, Mikael Karlsson, Sebastian Mieruch, Giorgio Santinelli, and Peter Thijsse



Vienna | Austria | 7–12 April 2019

International conferences

Informatics in Oceanography and Ocean Science (ESSI 1.1)

The European High Frequency Radar Node, Lorenzo Corgnati, Carlo Mantovani, Jose Luis Asensio Igoa, Anna Rubio, Julien Mader, Emma Reyes, Antonio Novellino, Patrick Gorringe, and Annalisa Griffa

Delivering marine data from the cloud - Recent developments on the SeaDataCloud Discovery and Access service, Peter Thijsse, Dick M.A Schaap, and Michele Fichaut

International conferences

Informatics in Oceanography and Ocean Science (ESSI 1.1)

Developing the first pan-European Marine Litter database within EMOdet Chemistry, Maria del Mar Chaves Montero, Matteo Vinci, Maria Eugenia Molina Jack, Alberto Brosich, Elena Partescano, Alessandro Altenburger, and Alessandra Giorgetti

International conferences

Metadata, Data Models, Semantics, and Collaboration
(ESSI 2.1) chaired by Paolo Diviacco and Jon Blower,
Oral presentation: 1

Oral presentation:
**Enhancing discoverability of the European Directory of
Marine Environmental Data (EDMED) with schema.org,,**
Alexandra Kokkinaki, Justin Buck, Adam Leadbetter, Rob
Thomas, and Mark Hebden

International conferences

Oral presentations in collaboration with the ENVRI community at lunch time

Leda Pecci - The contribution of the SeaDataNet infrastructure in the Arctic studies

Leda Pecci - The contribution of the SeaDataNet infrastructure in the extreme weather events study

SDC workshop was promoted at the booth



SeaDataCloud user workshop - Splinter Session

- 1. Recent developments of discovery interface and access services (Peter Thijsse - MARIS)**
- 2. Bringing the Ocean Data View (ODV) Software to the Web (Sebastian Mieruch-Schnülle - Alfred Wegener Institute)**
- 3. Data-Interpolating Variational Analysis (DIVA) software tool (Charles Troupin - University of Liege GHER)**

International conferences

	Oral presentations	Posters
ESSI 1.1	4	3
ESSI 2.1	1	
SDC workshop	3	
ENVRI community booth	2	
Total EGU	10	3

International conferences

- 18-22/02/2019, Michele Fichaut presented SDN/SDC with the poster version 2 (Deliverable D4.5) at IODE XXV and Scientific conference in Tokyo, Japan
- Patrick Gorringe (EUROGOOS) presented orally and by a poster SDN/SDC, Marine Data & Information Sharing Developments in Europe

Marcin Wichorowski (IO-PAN) presented a poster related to SDN/SDC: Development of the Polish National Oceanographic Data Committee

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Tasks WP4.2

10-11/12/2018, Conference MARTECH - (MARine TECHnology) – oral presentation on **EMODnet Physics and interaction with SDN and the other federated sources** by Antonio Novellino (ETT)

12–13/09/2019, Marcin Wichorowski (IO-PAN) presented orally "**eCUDO.pl - Oceanographic Data and Information System for Polish NODC**», at CODATA 2019 Conference, Beijing 2019 (related with SDN/SDC)



International Conference
on Marine Data and Information Systems

Participants: 184 from 36 countries

	Oral presentations	Posters
SeaDataCloud/SeaDataNet	7	9



International workshops

- **Acknowledgement for the use of the data in the paper** presented to MetroSea 2019, Estimate of the robustness of XBT temperature measurements from SOOP in the Mediterranean by comparison with ARGO profiles, Authors: F. Reseghetti¹, F. Pennecchi, G. Raiteri¹, L. Repetti, Affiliations: (1) ENEA, (2) INRiM, (3) IIM and presentation of the SDC poster





Training courses/seminars

6/02/2019 - Alexandra Kokkinaki and Gwen Moncoiffe (BODC) gave a presentation as part of the UK's National Oceanography Centre (NOC) seminar series attended by scientists from NOC and Liverpool University. This was about **controlled vocabularies and included an** overview of SeaDataNet /SeaDataCloud as an important means of exposing UK marine data/metadata assets and further developing the infrastructure.

26/11/2018 - Michele Fichaut presented SDN during a conference at Brest university, for post graduate students (around 20 people) - **SeaDataNet, une infrastructure Européenne pour les données Océanographiques**



Links with other projects or initiatives

24-26/04/2019, Genova, Italy, **9th International Ferrybox Meeting** – Oral presentation by Antonio Novellino (ETT) on FerryBox data flow in EMODnet Physics, SeaDataNet and INSTAC

Patrick Gorringe (EUROGOOS) presented orally:

4-6/03/2019, the European HFR Node: from the standard data and QC model to data distribution **at WERA HFR Workshop**, Hamburg, Germany

23-25/01/2019, **ESA Atlantic from Space Workshop**, NOC Southampton, UK EMODnet your gateway to marine data in Europe

Links with other projects or initiatives

4-5/12/2018, Genova, workshop, **MONGOOS WS-**
MONGOOS Workshop on downstream applications using
EMODnet Physics, CMEMS INSTAC and SDN data services

20-21/11/2018, Brussels, **Meeting DATAMEQ - (EuroGOOS**
working Group dealing with data harmonisation,
standards and interoperability) – Interoperability and
coordination between SDN, EMODnet Physics, Data
Ingestion, Chemistry and CMEMS INSTAC



Links with other projects or initiatives

22-24/10/2018, Bilbao, **HFR – Technical workcamp for HFR operators**. The event was planned to give the overview of HFR data flow and share common tools to apply the same QC/QF and be linked to SDC, EMODnet Physics and CMEMS INSTAC

26-27/09/2018, Galway (Ireland), an extended discussion on the interoperability between SDC and EMODnet Physics at **JERICO-NEXT Annual Assembly** - took place during the meeting,



Links with other projects or initiatives

Tasks WP4.2

Oral Presentations

21/03/2019, Further developing the SeaDataNet pan-European infrastructure for marine and ocean data management, Gilbert Maudire (IFREMER) presented SDN/SDC during the **CMEMS (Copernicus Marine Environment Monitoring Service) in situ TAC assembly**, held in Brest (France)



Presentations at national level

Tasks WP4.2

Oral presentations

18-20/02/2019, Marcin Wichorowski (IO-PAN) Conference "Transgresie 2019", Poland 2019, invited talk "Morze danyh, ocean wiedzy" at technology conference for commercial companies;

26/06/2019, Leda Pecci, presented at an ENEA representative of other colleagues coming from different ENEA Research Centers at ENEA Marine Research Centre, La Spezia (Italy)

Presentations at national level

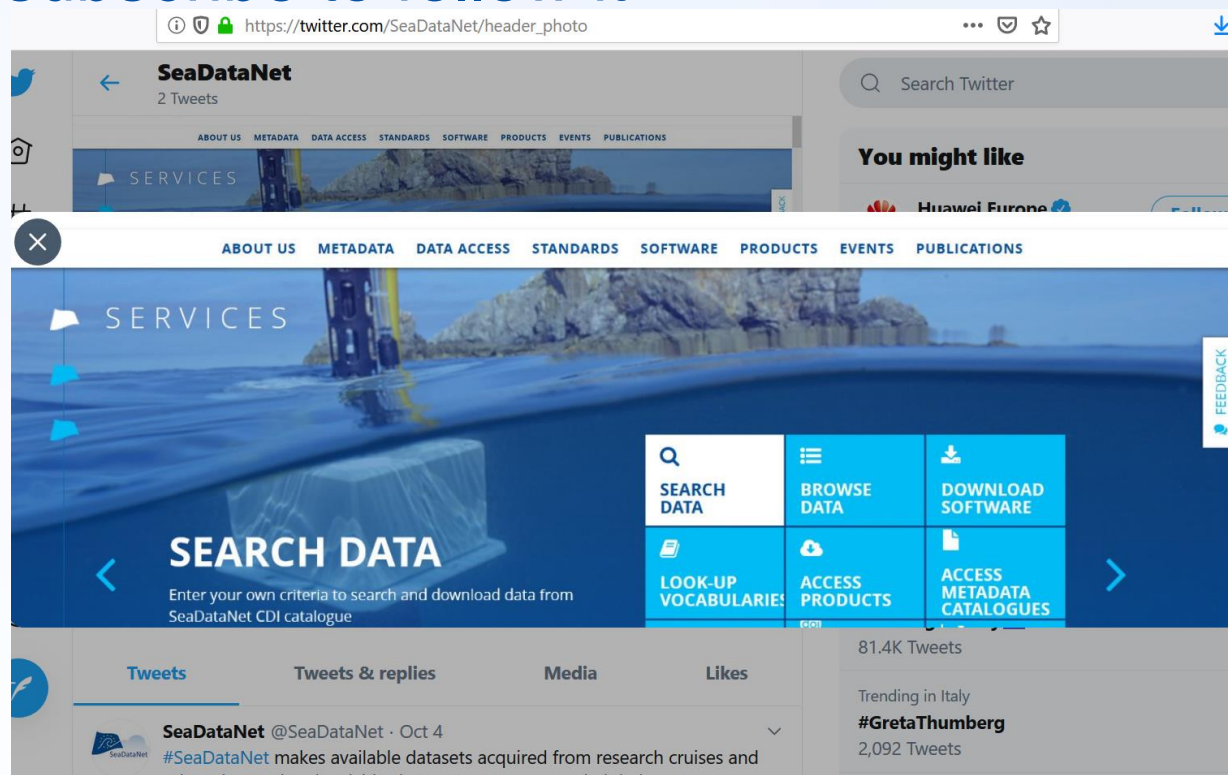
Tasks WP4.2

Oral presentations

17/04/2019, Internal presentation at the ENEA Marine Research Centre, La Spezia (**Italy**), Data is not just data, an opportunity to give long life to our data, Lorenzo Corgnati, Carlo Mantovani (CNR)

Tasks WP4.2

- A SeaDataNet twitter account has been published, please, subscribe to follow it



- How to reach researchers and academia

The main goal of this initiative is to extend the use of the infrastructure delivering information towards people that really use ocean data in their work. The names of scientists and researchers will be taken by ENEA from a careful analysis of different scientific publications carried out on studies concerning the scientific marine disciplines in the Mediterranean Sea.

The process of gathering the researchers' information through the bibliographic collection may be extended to other partners in other sea regions.



Presentations at national level

Tasks WP4.2

Oral presentations

26/03/2019, Internal presentation at IFREMER, Brest (**France**), SeaDataNet, une infrastructure Européenne pour les données Océanographiques to IRISA (Research Institute Computer And Systems Aléatoires) and GENCI (Grand Equipement National de Calcul Intensif) representatives,



Presentations at national level

Tasks WP4.2

Oral presentations

5 October 2018, Susana Diez, Juan Luis Ruiz - What the UTM does and what can do with the data of your oceanographic cruises, at national and international level (SeaDataCloud, EMODNet) - Institute of Marine Science, ICM - CSIC, Barcelona;

17 October 2018, Juan Luis Ruiz, Susana Diez - Data Service of the Marine Technology Unit - Iberian Conference on Spatial Data Infrastructures 2018, Minorca



The SDN infrastructure and the SDC project was presented, by ENEA, in a **supplement** of the “Il Sole 24 Ore”, in the Platinum n. 63 November 2018 Research&Innovation.

Platinum is distributed in newsstands and by direct mailing with the “Il Sole 24 ore” in: Italy, France, Spain, Germany, UK, Netherlands and Belgium, in English language; via web in OpenAccess mode <https://platinum-online.com/releases>

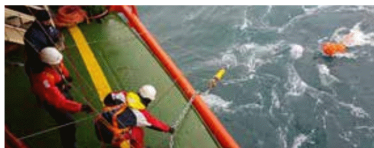
research&innovation

All the seas on just one website

An important technological innovation for the pan-European SeaDataNet infrastructure



For many years now there has been a pan-European infrastructure dedicated to oceanographic data, called SeaDataNet. This is an essential reality for every type of information related to the Europe-



MOORING POSITIONING

all the seas of the European continent, and ENEA is among its partners, through its S.Teresa Marine Environment Research Centre. “Our centre is one of the data producers - explains Leda Pecci from ENEA -. Im-

Citations in articles

- Frontiers in Marine Science, 07 August 2019, Ocean FAIR Data Services, Toste Tanhua et al.
- Frontiers in Marine Science, 04 June 2019, Evolving and Sustaining Ocean Best Practices and Standards for the Next Decade, Jay Pearlman et al.

Events at national level

29-30/09, 01/10 2019, Celebrations for the 20 years of INGV, Simona Simoncelli presented orally SDN/SDC:

- 30/09/2019, 5 min presentation to Institutions and Directors of other Research Institutes (ISPRA, ISTAT) mentioning SeaDataNet
- 01/10/2019, presentation to the scientific community mentioning SeaDataNet

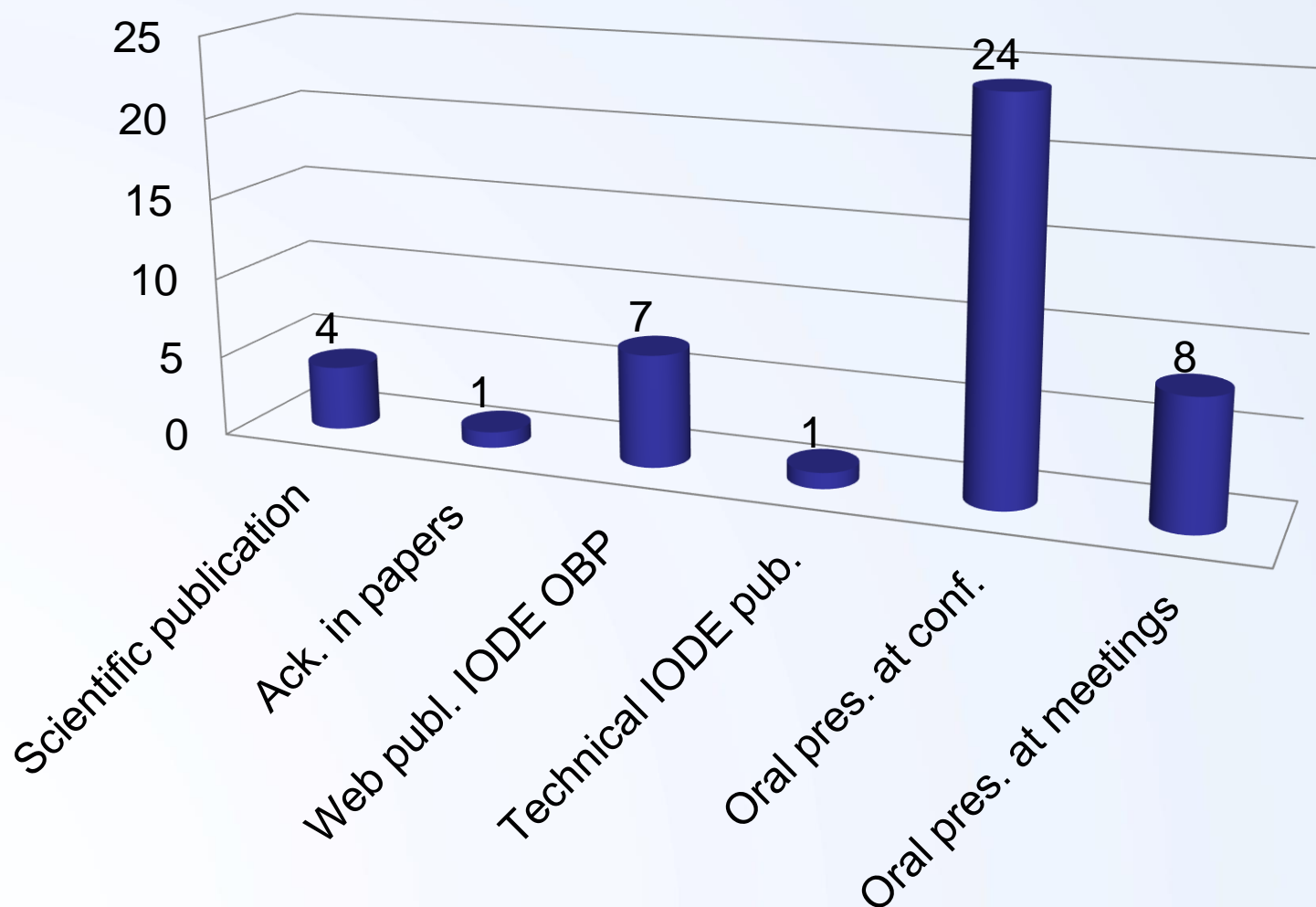
Simona Simoncelli and Antonio Guarnieri promoted SDN/SDC with SDC poster and leaflets at booth for Ocean and Climate.

26/06/2019, presentation of SDN/SDC at the INGV conference on Marine Environment, Rome

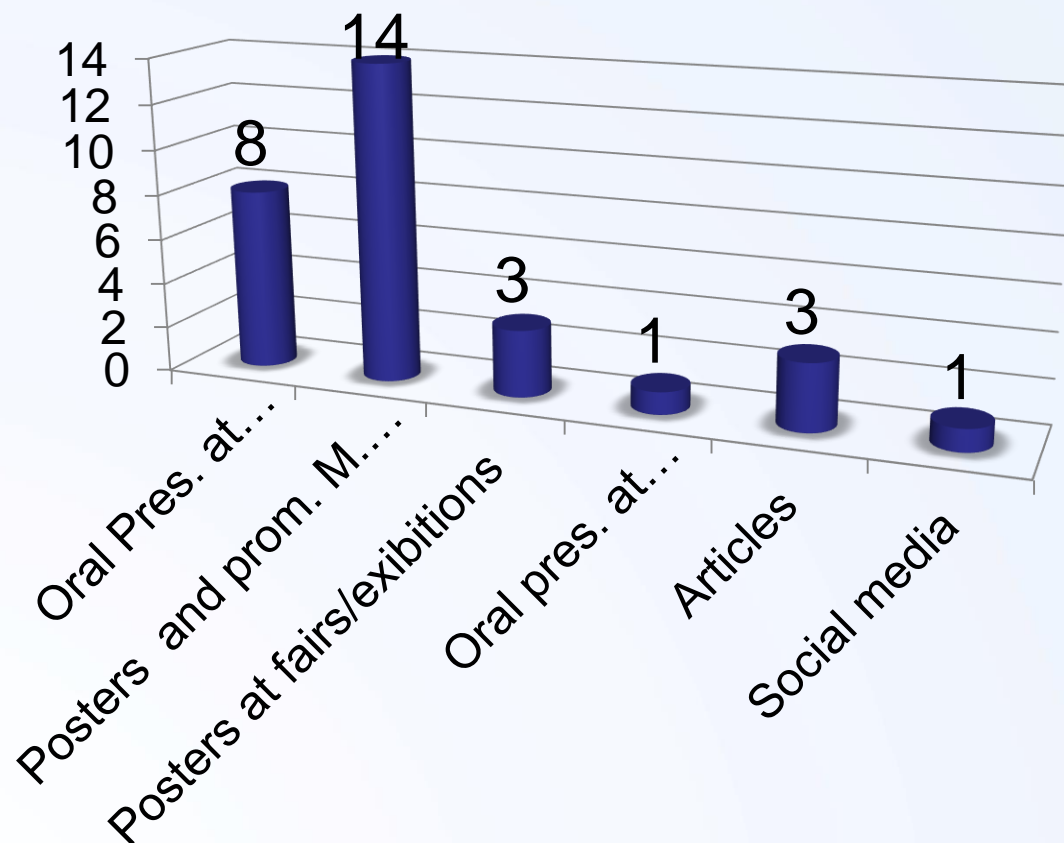
Events at national level

17-18/05/2019, Luminita Buga promoted SDN/SDC by means of poster and leaflet, as well as a short oral presentation at Naval technique and didactic equipment exhibition for naval education "Sailing to the future" organized by "Mircea cel Batran" Naval Academy, Constanta, Romania.

Synthesis of the activities over the last year 1/2



Synthesis of the activities over the last year 2/2



■ Total per activity

Tasks WP4.2

- Some partners are no active in the promotion and dissemination activities



- How to reach researchers and academia

The main goal is to extend the use of the infrastructure delivering information towards people that really use ocean data in their work. The names of scientists and researchers will be taken by ENEA from a careful analysis of different scientific publications carried out on studies concerning the scientific marine disciplines in the Mediterranean Sea.

The process of gathering the researchers' information through the bibliographic collection may be extended to other partners in other sea regions.



Future plans

Tasks WP4.2

- GOAL: to send an e-mail inviting them to visit the web portal, give feedback and subscribe the newsletter
- In consideration with the “regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data”, briefly General Data Protection Regulation (G.D.P.R.), we asked the ENEA’s Data Protection Officer how to proceed in compliance with the legislation.



LA SPEZIA NAVY BASE 23RD 27TH JUNE 2020

MEET THE INNOVATION

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INFO@SEAFUTURE.IT

IN COLLABORATION WITH



Tasks WP4.2

- Booth at the GEO week in Canberra (4-8 Nov 2019)
- ENVRI community will be present at the 100th Advancing Earth & Space Science – American Geophysical Union meeting organized in December 9-13 in San Francisco
- Booth at the EGU 2020

Tasks WP4.2

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