

INDEX

ERVO MEETING 16TH

The 16th ERVO (European Research Vessels Operators) Annual Meeting was organized by the CSIC (UTM-CMIMA), Barcelona (Spain) from Tuesday the 10th to Thursday the 12th of June 2014.

19.00 - Tuesday 10th June 2014

A guided visit and icebreaker at the Maritime Museum of Barcelona where a finger buffet and refreshments were available.

09.00 - Wednesday 10th June 2014

Welcome and practical arrangements: registration – posters installation – coffee breaks, wireless connection in the meeting room by Juanjo Dañobeitia (CSIC, Spain).

09.10 - Welcome address by Alberto Figueras, CSIC-UTM Director

A. Figueras expressed his satisfaction to host the 16th ERVO meeting and set out the main activities of the CSIC-UTM from Nano-technologies to Marine infrastructures management including R/Vs *Sarmiento de Gamboa*, *Hesperides* and *Garcia del Cid*.

09.20 - Introduction ERVO meeting – Chairman : Giuseppe Magnifico (CNR, Italy)

G. Magnifico thanked J. Danobeitia and Miguel A. Ojeda (CSIC) for the icebreaker. He expressed his pride for being the ERVO Chairman and explained how happy he was to chair a annual meeting with a growing number of attendees and even some new faces, totalizing 37 participants from 28 organizations of 16 European countries, plus Japan as observer (see the attendance list in Annex 1 and the presentation on the ERVO website, <http://www.ervo-group.eu/np4/21.html>).

Per Nieuwejaar (IMR) added that, while the ERVO meeting held ten years ago in Barcelona had gathered a small group of fleets' operators, it is highly satisfying to observe that ERVO meetings attract more and more participants year after year.

Round table: each ERVO participant briefly introduced herself or himself.

09. 50 – Approval of 2013 ERVO minutes

No comment was made. The ERVO 2013 minutes were approved. They are available on the ERVO website at:

http://www.ervo-group.eu/np4/file/9/ERVO_MEETING_15th_minute_def.pdf

10.00 - ERVO way ahead – G. magnifico (CNR, Italy)

After a short presentation on ERVO background and main objectives as European RV operators forum, G. Magnifico reminded previous discussions on ERVO status and aiming to:

- evolve into a (more) formal and pro-active group in order to become a more visible organization;
- develop true co-operation in addition to the annual informative meetings;
- develop a strategy paper and/or work-plan for the following 5 years for ERVO which could be revised periodically;
- establish an annual membership fee to cover the running costs of ERVO;
- avoid overlaps with IRSO and other fora;
- develop and maintain a strategy for the future growth of ERVO in terms of membership, topics and activities;
- make an effort to maintain and improve relationships with EurOcean, ESF/Marine Board, EUROFLEETS (1&2), IRSO, OFEG, ESFRI, etc.

Then, he presented the list of structuring measures or actions carried out by the group since 2010, which can be summarized as follows:

- Terms of Reference of the ERVO Group, adopted in 2011 at the 13th ERVO meeting in Oristano (Italy)
- Annual membership fee (300 Euros), established at the 14th ERVO meeting (Faial, Portugal, 2012) to cover the costs of the services provided by the EurOcean Office to the ERVO Group
- EurOcean/ERVO Agreement, officially signed in April 2014
- EUROFLEETS has participated actively in all the ERVO meetings (topic in the ERVO agenda since 2008, 10th ERVO meeting, Varna, Bulgaria)
- Since 2012 ERVO is a permanent invitee to EUROFLEETS meetings and its present and future chairs are beneficiaries of EUROFLEETS2. Moreover, 13 (42%) EUROFLEETS2 beneficiaries are active members of the ERVO Group.

And finally, G. Magnifico put forward the following proposal for the ERVO future, aiming to create an ad-hoc group:

- To initiate a strategic discussion about aspirations, goals and opportunities;
- To draft a document to be presented during the following ERVO meeting;

With the following suggested topics:

- EUROFLEETS legacy;
- Relations between OFEG and IRSO;
- Cooperation with EurOcean;
- Regional approach (decentralized organization by European maritime eco-region or groups of them).

It was consequently decided to set up a strategic working group about the ERVO future/way ahead:

- The group members will be composed of: G. Magnifico (CNR, Italy), O. Quédec (Ifremer, France), A. Fitzgerald (MI, Ireland), P. Nieuwejaar (IMR, Norway), E. Koning (NIOZ, The Netherlands), D. Cattrijsse (VLIZ, Belgium) and V. Mazauric (EUROFLEETS2 Coordinating team) as an observer.

The topics proposed for discussion are:

- EUROFLEETS2 legacy. Lessons learned from EUROFLEETS 1&2 projects. Mostly the Trans National Access (budget, EU funding, etc.);
- IRSO/ERVO relationships/overlapping? Meetings too close together. Too similar topics. Smaller and larger RV's operators. Regional approach for ERVO;
- Collaboration with EurOcean;
- A legal framework / "legal body" for ERVO? Stay an informal structure or become more formal ?

- The group will mainly work by e-mail exchanges (to collect suggestions and ideas) and, when necessary, some face-to-face meetings will be organized.

The session was concluded by a discussion on the ERVO website. P. Nieuwejaar (IMR) expressed that it is necessary to add the new members (Sweden, ...) to the contact list. E. Koning (NIOZ) suggested that a classification by country and not by name could be used in the list.

The website was considered as not clear enough at the moment and it was recommended to develop an easier access to the ERVO webpage. Some e-newsletters could be a good mean to disseminate on the group activity. It was also suggested to use one extra-budget for its promotion.

For more information, please see the presentation at <http://www.ervo-group.eu/np4/21.html>

10.30 – Coffee break and national update posters

The following posters were presented during the meeting:

- "SONNE": a New Deep-Sea Research Vessel – K.V. Brökel (Geomar)
- German Research Vessels – K Lackschewitz (Geomar)
- RV Simon Stevin – D Cattrijsse (VLIZ)
- Italian Update 2014 - G Magnifico (CNR)
- RV Belgica Activity 2013 - L Naudts (RBINS-OD Nature)

For more information, please see the posters at <http://www.ervo-group.eu/np4/21.html>

11.00: On-going EUROFLEETS2 activities – Valérie Mazauric (Ifremer, France)

V. Mazauric set out EUROFLEETS2 first results, mainly focused on the TransNational Access Activity and the training actions carried out during the first year of the project.

In total, three ship-time calls and one equipment-time call were organized and closed: the first Regional call for Polar and Subpolar areas, the Super-Integration call aiming to select a flagship project requiring access to several research vessels or to research vessels in combination with other infrastructures, and the second Regional call for Polar/Subpolar areas, North Atlantic, North Sea, English Channel, Celtic Sea, Baltic Sea and Bay of Biscay. At the moment, this has resulted in three scientific projects funded within the first Regional Call and run on board RV *G.O.Sars* from Norway and RV *Sanna* from Greenland, and one project funded within the Super-Integration Call and involving the RV *Sarmiento de Gamboa* from Spain and the RV *Aegaeo* from Greece. One proposal has been selected for funding within the equipment-time call, with the aim to deploy the ROV Max Rover (HCMR, Greece) from the RV *Sarmiento de Gamboa* during a scientific cruise nationally-funded.

Proposals received in the frame of the Regional 2 call are under evaluation by the EUROFLEETS2 Scientific Review Panel and results should be known in August 2014, allowing to launch in September 2014 the third and last Regional call focused on Mediterranean, Red and Black seas.

Progress status of four other activities run in the project was presented:

- The flagship initiative for polar access (WP3) by M. Ojeda (CSIC, Spain)
- The definition of a multifaceted scheme for Regional virtual fleet transnational cooperation (Deliverables D4.1-WP4) by G. Magnifico (CNR, Italy)
- Regional RVs guidelines and generic designs (WP11) by Arturo Castellon (CSIC, Spain)
- New standards for on-board software development (resulting from a collaboration between EUROFLEETS2 and SeaDataNet2 FP7 projects) by Jordi Sorribas (CSIC, Spain).

Referring to the presentation by J. Sorribas and to the Common Interface (Web Service) developed within EUROFLEETS2 to ensure the transmission onshore of En-Route Information (Ship Summary Report –SSR- and Common Data Index – ER-CDI-), Aodhan Fitzgerald (MI, Ireland) explained that the system used on board MI's RVs is the Shipboard Computer System (SCS) developed by NOAA and inquired about the compatibility of this system with the onboard EUROFLEETS2 Web Services. J. Sorribas answered that tests were ongoing and that more information will available soon.

Finally, V. Mazauric concluded by stressing that EUROFLEETS2 fully benefited from EUROFLEETS1 results and that this would contribute to get more operational results at the end of the project in 2017. The ERVO group will be yearly informed about the project's progress.

For more information on EUROFLEETS2, please see the presentations at <http://www.ervo-group.eu/np4/21.html> or the project website <http://www.eurofleets.eu> .

12.20 - Two on-going new Norwegian build projects, a polar vessel and a tropical vessel – P. Nieuwejaar (IMR, Norway).

Norway is currently running two projects of Research Vessel renewals to replace RV *Lance* and RV *Dr. Fridtjof Nansen*.

P. Nieuwejaar presented the new multipurpose RV *Konprins Haakon* (100.00m long) with ice breaking capacity. The building contract was signed with the Italian yard group Fincantieri in November 2013, and the vessel delivery is planned early 2017, with ice tests in spring 2017. The vessel will be co-owned by three national institutions: 30% by the Norwegian Polar Institute, 50 % by the University of Tromsø and 20% by IMR. RV *Konprins Haakon* will be operated by IMR.

Then was described the ongoing project to build the new RV *Dr. Fridtjof Nansen* (74.10m long) for operation in Africa, Asia and Latin America on foreign aid programs. The Spanish yard Astilleros Gondan was contracted in March 2014, and Skipsteknisk AS will complete the Basic Design and share the Detailed Design with the yard during 2014. The vessel delivery is planned in spring 2016. The vessel will be owned by the Norwegian Foreign Aid Directorate and will be operated by IMR.

For more details, see the presentation at <http://www.ervo-group.eu/np4/21.html>

13.00 – Lunch at CSIC-UTM

14.00 – Upgrades of two Italian RVs: *Urania* and *Minerva Uno* – A.Grazzini (SO.PRO.MAR, Italy)

Two projects are currently carried out by SO.PRO.MAR for the improvement and the strengthening of RV *Urania* and RV *Minerva Uno*. This upgrade is funded by the EU and the Italian government.

The capability of RV *Minerva Uno* will be enhanced on several points (new bow to improve sea keeping, new DP system, various platform enhancement in terms of electricity generators, fresh water production, fuel purification, garbage management etc. see the presentation for all details), and the scientific equipment will be renewed through the installation onboard of a ship positioning system, the upgrade of the Reson Seabat 8160 by the Reson 7160 with a high resolution and precision, a high resolution Side-Scan Sonar for depths up to 3000 m and a oceanic box corer to collect bottom sampling and compare with Side Scan Sonar data, a magnetometer for depths up to 3000 m, a new low frequency sub-bottom profiler and a ROV with high definition video cameras.

The project involving RV *Urania* will concern her lengthening and upgrades and strengthening of the platform. The interventions will give the ship a new shape and new capabilities, to provide an improved and more powerful tool for scientists. The ship lengthening will consist in adding a new section of 6 m long. Among others, this “jumboisation” will allow to four new cabins for scientists, scientific refrigerators overhaul, scientific winches inspection, safety equipment adaptation to current rules, a bigger dry lab;

new fuel tanks with endurance improvements and arrangements for possible active stabilizer fins. Several enhancements will be brought to the platform, such as a new DP system, new more powerful bow thruster, more powerful generators and a new stern A frame. See the presentation for all details.

The presentation was followed by a discussion about the impact of a lengthening process on the ship stability.

For more information, please see the presentation at <http://www.ervo-group.eu/np4/21.html>

14.20 – Construction of RV *Sonne*: from steel plate to research vessel within 17 months – Klaus Von Brökel

K.V. Brökel presented the different steps of construction of RV *Sonne*, with a start in December 2012, all blocks assembled in August 2013, the first floatage in September 2013 and the vessel leaving the shipyard the 9th May 2014. RV *Sonne* is currently in tests at sea, with a delivery to science planned in October 2014.

P. Nieuwejaar asked about the new bow design and the possible impact of bubbles on the hull equipment. K.V. Brökel replied that it was too early to have a result and that tests are ongoing. He will report about this key point at the next meeting.

For more information, please see the presentation at <http://www.ervo-group.eu/np4/21.html>

14.40 – Significant investment in marine infrastructure at the University of Gothenburg: a new research vessel and mobile underwater systems (AUV and ROV) – Michael Klages

See the presentation at <http://www.ervo-group.eu/np4/21.html>

The University of Gothenburg (UG) is currently building a new ship to replace the RV *Skagerak* (39 m long). The new vessel will be 45.5 m long and is planned to have 14 days of endurance at sea. She will be operated by a crew of 5 members and will include 16 berths for special personnel. M. Klages explained that a lot of emphasis has been put on multi-disciplinary, he presented the main characteristics of the ship, together with the design considerations and challenges leading to compromises with regard to the hull form. In particular, he presented the different alternatives for the hull form, the results of CFD-analyses and model tests. M. Klages also introduced the project aiming to build a national core facility for marine research composed of a ROV and an AUV with adequate instrumentation.

M. Klages expressed that GU was investigating the opportunity to apply for membership in OFEG, or at least OFEG-TECH.

The presentation was followed by a discussion concerning the size of the crew (5 persons) versus the endurance at sea (14 days max.). This was considered as likely inadequate, and A. Fitzgerald noticed that MLC 2006 regulation stipulates to have a minimum crew of people to shiftwork on the bridge for a 24h/day navigation.

For more information, please see the presentation at <http://www.ervo-group.eu/np4/21.html>

14.55 - RV OGS-Explora: current status and incoming refitting - R. Codiglia

R. Codiglia described the *OGS-Explora* activity, characterized by many Antarctic surveys since she was acquired by OGS in 1987, and gave an overview of research and services run by the ship since 2005 in Mediterranean Sea and in the North Atlantic, including its involvement in the EUROFLEETS TNA with the SALTFLU cruise run in 2012.

He presented the incoming refitting aiming to comply with Special Purpose Ship requirements (substitution of the A-frame, modifications of the side frame, building of a multipurpose moon pool facility etc.), to improve the safety standard to improve the comfort onboard, to re-arrange the back deck facilities and to upgrade scientific equipment. The upgrade of the MBES system is already in progress and the instrumentation upgrade also includes the purchase of a 1500m streamer for the MCS system usually deployed from *OGS-Explora* for geophysics surveys. Please see the presentation for more details on the on-board instrumentation.

For more information, please see the presentation at <http://www.ervo-group.eu/np4/21.html>

15.10 - The New Norwegian deep water ROV, the NORMAR ROV – P. Nieuwejaar (IMR, Norway)

P. Nieuwejaar presented a new national infrastructure: the Norwegian Marine Robotics Facility ROV for Deep Sea Research (6000m) funded by the Norwegian Research Council (46 million NOK) and built in the frame of a partnership between the University of Bergen, IMR and the Christian Michelsen Research.

The ROV will be built a variety of scientific payload samplers, chemical and physical sensors, optical and acoustic imaging, as well as with appropriate tooling and handling systems for Seafloor Observatories (for connection, maintenance etc.).

For more information, please see the presentation at <http://www.ervo-group.eu/np4/21.html>

15.25 - Manned Submersible Ictineu 3 - C. Parareda (Ictineu, Spain)

The Ictineu company presented its manned submersible Ictineu 3 developed for operations at 1200 m water depth and allowing to embark two observers (plus one pilot). Ictineu 3 can be suitable for any underwater task, especially for research, underwater intervention or filming, and can embark a 200 kg max. payload.

The submersible Ictineu 3 was described as multipurpose and flexible equipment, capable to adapt to users' needs and C. Parareda expressed that, despite a capability to work for industry, the Ictineu company is open to collaborate and strongly wishes that the submersible works in priority for science.

For more information, please see the presentation at <http://www.ervo-group.eu/np4/21.html>

15.40 - CSIC RV chartering experience – J.J. Dañobeitia (CSIC, Spain)

The CSIC-UTM operating three Research Vessels under competitive national calls (the Global RV *Hesperides*, the Oceanic RV *Sarmiento de Gamboa* and the Regional RV *García del Cid*), has developed an extended experience in chartering with RVs for the offshore industry. J. Danobeitia introduced the different scenarios for public-private sector collaboration and took stock of the experience accumulated in chartering the RV *Sarmiento de Gamboa*, in particular in respect of high standards required by industry, as well as Health, Safety and Environment (HSE) policy. He concluded by stressing the benefits for national research vessels to develop such chartering activity, in terms of use of the RV's spare time, maintaining high level training for crew members, keeping and maintaining large scale infrastructures, reaching industry standards and helping national research programs in difficult times.

For more information, please see the presentation at <http://www.ervo-group.eu/np4/21.html>

15.55 - Coffee break & national update posters at CSIC-UTM

See the list of posters on page 3 of these minutes.

16.20 - Successful OFEG exchange (seismic system + technicians) – Colin Day (NERC, UK)

CSIC and NERC jointly use a multichannel seismic equipment in the frame of a collaboration initiated in 2007 and resulting in 2010 in a first seismic cruise in Mediterranean.

C. Day presented mutual interest of both institutes to jointly use this equipment, in terms of increased efficiency, costs decrease through sharing of resource, developing a pool of equipment to support joint seismic operations and a pool of technicians able to operate on each others ships to jointly support each others cruises. He illustrated this successful collaboration with two science cruises run on board RV *James Cook* with a joint technical team, the first cruise for NERC in August 2013 in North Atlantic with the CSIC 3km-streamer and NERC airguns, and the second cruise for CSIC-UTM in February 2014 in the Pacific with the CSIC 6 km-streamer, CSIC OBSs and NERC airgun system.

For more information, please see the presentation at <http://www.ervo-group.eu/np4/21.html>

16.40 - FARO - Forum of Arctic Research Operators and ARICE – an initiative for joint use of research icebreakers - Magnus Tannerfeldt (SPRS, Sweden)

FARO is the Forum of Arctic Research Operators gathering 20 member countries and aiming to promote dialogue on logistics and operational support for scientific research in the Arctic. M. Tannerfeldt gave an overview on how FARO can help Research Operators involved in the Arctic, in order to promote synergies, to facilitate implementation of transnational planning, to help to integrate scientific priorities with long-term planning of infrastructures and capacities, or to make inventories of existing infrastructures to identify gaps to be addressed on the pan-Arctic scale.

Then M. Tannerfeld introduced the ARICE topic proposal (Arctic Research Icebreaker Consortium) initiated and coordinated by SPRS and AWI, and positively evaluated by the EC for future Integrating Infrastructures Initiatives (I3) in Horizon 2020. This initiative, gathering 16 key European partners and 5 International and non-European organizations, will aim to increase the coordination of available European heavy icebreakers and to promote cost-effective usage through transnational harmonization, especially in the High Arctic.

For more information, please see the presentation at <http://www.ervo-group.eu/np4/21.html>

17.05 - Seas-Era Marine Research Infrastructures updated overview, European integration and vision of the future - Beatriz Morales-Nin (CSIC, Spain)

The FP7 Seas-ERA project aims at giving an updated and comprehensive overview of the Marine Research Infrastructure (MRI). B. Morales-Nin, Coordinator of the project, presented the main outcomes and recommendations made by the project and addressed through the following issues:

- 1) the mapping of the facilities, through 6 categories of Research Infrastructures (RI) covering all usual marine sciences, and including RVs and their underwater vehicles (see the MRI Database available at <http://rid.eurocean.org>);
- 2) the different cases of open and transnational access to MRI, in the frame of FP7-I3 projects, joint programmes or specific access with transnational opportunity (like in OFEG) or in the frame of a shared use of infrastructures like in some ongoing initiatives (2 cases studies for Atlantic and Med. Regions in Seas-Era Common programmes, 3 regional projects piloted by the EC DG Environment, 2 pilot actions in JPI Oceans or in H202 Blue Growth topics);
- 3) the complementary uses of MRI for both monitoring and research, under the framework of a European Ocean Observing System (EOOS);
- 4) the need to set-up common procurement strategies and to develop common business models, with the recommendation for Regional vessels in particular to foster less but modern, multipurpose and standardized vessel together with mutual programming and use processes at regional level;
- 5) the integration of distributed MRIs into networks, with light “Central Offices” heading up the national components to bring the adequate degree of European coordination;
- and 6) the fostering of Public-Private collaboration on MRIs based on shared uses and shared development.

The 4-year FP7 Seas-ERA project is completed since April 2014. For more information, please see the presentation at <http://www.ervo-group.eu/np4/21.html> or the project website (<http://www.seas-era.eu>).

17.30 – End of day 1

20.30 – Dinner at “La fonda del Port Olympic”

09.00 - Thursday 12th June 2014 - Opening - Practical arrangements day 2 – J.J. Dañobeitia

09.10 - How to benchmark RV operational costs – Andre Cattrijsse (VLIZ, Belgium)

Followed by an interesting discussion about how to benchmark costs ? C Day (NERC) pointed out that the benchmark is complicated to create and that, first, we must be sure that we are comparing the same things. Have we got the same model of management? Not sure. D Cattrijsse (VLIZ) and G Magnifico (CNR) proposed a working group to produce the benchmark. The group agreed. It was suggested that a member interested in following up the benchmark issue should directly contact other people with a “supposed same model” of fleet management.

For more information, please see the presentation at <http://www.ervo-group.eu/np4/21.html>

09.30 - Cost/benefit analysis of a RV: a first approach to sharing a methodology – P. D’Anselmi

O Lefort (Ifremer) asked if this analysis also concerned the CNR vessels/cruises. P D’Anselmi (CNR) said no, only an institute cost/benefit analysis. C Day (NERC) said that this exercise has been done in U.K. with tangible results and that a public document is available. P D’Anselmi (CNR) adds that six reports are available on the CNR website.

For more information, please see the presentation at <http://www.ervo-group.eu/np4/21.html>

09.50 - Certification process for a DNV GL certified integrated ISM/ISO quality and safety management system - P. Nieuwejaar (IMR, Norway)

R Codiglia (OGS) asks about the IMR organization for that certification. P Nieuwejaar (IMR) explained that it’s made up of a small team and that everybody is involved (crew and technicians for feedback...) and responsible for his own part. J.J. Dañobeitia (CSIC) asked if that certification would be necessary in order to be able to submit to an H 20/20 bid. P Nieuwejaar (IMR) replied that you would need certification in almost everything in order to bid for money.

For more information, please see the presentation at <http://www.ervo-group.eu/np4/21.html>

10.10 - The Maritime Labour Convention (MLC) – Code - J.J. Dañobeitia (CSIC, Spain)

Followed by an open discussion on this subject: different obligations, cost of training courses, who is consider as a seafarer, could be complex when you have on board different technicians from different companies with different nationalities,...

For more information, please see the presentation at <http://www.ervo-group.eu/np4/21.html>

10.30 - Coffee break + photo group at CSIC-UTM

See the list of posters on page 3 of these minutes.

10.50 - Fostering European Coordination Activity at Regional basin: a concrete example, the IEO/IFREMER cooperation in the Bay of Biscay - O. Quédec (Ifremer, France)

In 1996, the French R/V Thalassa has been co-funded by Ifremer (France) and IEO (Spain). O Quédec (Ifremer) explained that in the last eighteen years, thirty IEO PELACUS cruises (total 890 days) has been successfully undertaken on board of that vessel in the Bay of Biscay. Recently, the crisis has « polluted » this efficient situation/collaboration due to a lack of budget in Spain. A Spanish vessel was available alongside in Vigo (R/V Miguel Oliver) and the Spanish government decided to fund/used that ship for the PELACUS fisheries stock assessments cruises in the Gulf of Biscay.

For more information, please see the presentation at <http://www.ervo-group.eu/np4/21.html>

11.05 - Diplomatic clearance problems - O. Quédec (Ifremer, France)

O Quédec (Ifremer) presented two unfortunate Ifremer experiences about dip clear in the European waters and suggested to ERVO members the utilization of a « tool » in order to share Dip Clear experiences (good or bad) for an improved efficiency. During the annual ERVO meeting, a systematic update on this topic (efficiency, possible improvements,...) was also proposed.

For more information, please see the presentation at <http://www.ervo-group.eu/np4/21.html>

11.20 - Contribution of the EUROFLEETS Fleet Evolution Group to ERVO: update of the EurOcean RV Infobase and renewal follow-up plans – Olivier Lefort and V. Mazauric (Ifremer, France)

In liaison with the work carried through the EUROFLEETS Fleet Evolution Group (FEG), Olivier Lefort set out the proposals made by the group to update the fields and apply “filters” on the European RV Infobase maintained by EurOcean, in particular to allow i) to better identify RVs involved in research and survey activities, in logistics or in private research, and ii) to provide a RVs’ classification into five categories (Global, Ocean, Regional, Coastal and Local) in accordance with classification already used for US and UK research fleets.

P. Nieuwejaar stressed the need to have a better RVs classification in the RV Infobase allowing to filter the vessels which are really Research Vessels. The RV Infobase should stay the main reference for European RVs and he suggested that a mention such as “Stamped by ERVO” could be added on the Infobase portal.

C. Day suggested to implement this update of the Infobase using National contacts.

Then V. Mazauric presented the follow-up made in EUROFLEETS(1) of the European RVs, including the renewal plans and the national roadmaps when available. This database will be maintained up-to-date in EUROFLEETS2. It will be so updated with information collected during this ERVO meeting and send to all ERVO members for to collect further data.

For more information, please see the presentation and the renewal plans database at <http://www.ervo-group.eu/np4/21.html>

12.00 - OFEG updating progress on Ocean/Global RVs – E. Koning (NIOZ, Netherlands)

E Isidro asked about how to certify people (training courses)? A Fitzgerald explained that was clearly specified in the STCW text and that he would forward the document.

For more information, please see the presentation at <http://www.ervo-group.eu/np4/21.html>

12.10 - IRSO and ERVO: how to work more closely – A. Fitzgerald (MI, Ireland)

Aodhan Fitzgerald, as current IRSO vice-Chair, expressed that IRSO and ERVO groups need to try to co-ordinate their organizations in order to avoid a risk of overlapping. In addition, he suggested that ERVO would be more focused on Regional RVs. See

During the first day of the meeting it was already decided to adopt a strategic working group about the ERVO future/way ahead. One of the topics could be the IRSO/ERVO relationship/overlapping?

G Magnifico reminded the participants that ERVO is concerned by all facilities involved in the operations/cruises undertaken in the European waters.

In order to avoid a scheduling conflict of the meetings dates, it was proposed to keep the ERVO meeting in May/June and the IRSO meeting in September/ October.

For more information, please see the presentation at <http://www.ervo-group.eu/np4/21.html>

12.30 - EurOcean/ERVO cooperation - Sandra Sá (EurOcean, Portugal)

G Magnifico informed the group that the new agreement between ERVO and EurOcean was signed last Spring in parallel of the EUROFLEETS2 General Assembly in Rome.

S Sá then presented different versions of the ERVO logo prepared by EurOcean. A discussion followed and it was decided that S Sá would send by email a new version of the ERVO logo prepared on basis on inputs discussed during this meeting, so that ERVO members can make suggestions and express what is their preferred version.

For more information, please see the presentation at <http://www.ervo-group.eu/np4/21.html>

12.50 – Topics, date & place ERVO 2015 – G. Magnifico (CNR, Italy)

Jointly G Magnifico and A Fitzgerald proposed to hold the next meeting in Galway – Ireland, by end of May or early June 2015.

12.55 - Closing of ERVO 2014 – G. Magnifico (CNR, Italy)

G Magnifico thanked all meeting participants for the good job done during this meeting and the CSIC-UTM team for the excellent organization.

13.00 - Lunch at CSIC-UTM

14.00 - Departure
