



EUROPEAN PARLIAMENT

2009 - 2014

Plenary sitting

A7-0295/2013

23.9.2013

REPORT

on marine knowledge 2020: "Seabed mapping for promoting sustainable fisheries"
(2013/2101(INI))

Committee on Fisheries

Rapporteur Maria do Céu Patrão Neves

CONTENTS

	Page
MOTION FOR A EUROPEAN PARLIAMENT RESOLUTION.....	3
EXPLANATORY STATEMENT	13
RESULT OF FINAL VOTE IN COMMITTEE	15

MOTION FOR A EUROPEAN PARLIAMENT RESOLUTION

**on marine knowledge 2020: "Seabed mapping for promoting sustainable fisheries"
(2013/2101(INI))**

The European Parliament,

- having regard to the Commission Green Paper of 29 August 2012 entitled ‘Marine Knowledge 2020: from seabed mapping to ocean forecasting’ (COM(2012)0473),
- having regard to the Commission communication of 8 September 2010 entitled ‘Marine Knowledge 2020: marine data and observation for smart and sustainable growth’ (COM(2010)0461),
- having regard to Council Regulation (EC) No 199/2008 of 25 February 2008 concerning the establishment of a Community framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the common fisheries policy,
- having regard to Council Regulation (EC) No 1224/2009 of 20 November 2009 establishing a Community control system for ensuring compliance with the rules of the common fisheries policy,
- having regard to the Commission proposal of 12 March 2013 for a directive establishing a framework for maritime spatial planning and integrated coastal management (COM(2013)0133),
- having regard to the Commission communication of 13 September 2012 entitled ‘Blue growth: Opportunities for marine and maritime sustainable growth’ (COM(2012)0494),
- having regard to the Directive of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive) (Directive 2008/56/EC),
- having regard to the Directive of the European Parliament and of the Council of 14 March 2007 establishing an infrastructure for spatial information in the European Community (INSPIRE) (Directive 2007/2/EC),
- having regard to the Directive of the European Parliament and of the Council of 17 November 2003 on the re-use of public sector information (Directive 2003/98/EC),
- having regard to Decision No 1982/2006/EC of the European Parliament and of the Council of 18 December 2006 concerning the Seventh Framework Programme of the European Community for research, technological development and demonstration activities (2007-2013),
- having regard to the Commission communication of 17 July 2012 entitled 'Towards better

access to scientific information: Boosting the benefits of public investments in research' (COM(2012)0401),

- having regard to the Commission recommendation of 17 July 2012 on access to and preservation of scientific information (2012/417/EU),
- having regard to the Recommendation of the European Parliament and of the Council of 30 May 2002 concerning the implementation of integrated coastal zone management in Europe (Recommendation 2002/413/EC),
- having regard to the Commission report of 11 September 2012 entitled 'Progress of the EU's Integrated Maritime Policy' (COM(2012)0491),
- having regard to the Commission staff working document of 29 August 2012 on the interim evaluation of the European Marine Observation and Data Network (SWD(2012)0250),
- having regard to the Commission document of 8 March 2012 entitled 'Roadmap for a European marine observation and data network' (Ares(2012)275043),
- having regard to the Commission staff working document of 8 September 2010 on the impact assessment of the European Marine Observation and Data Network (SEC(2010)0998),
- having regard to the Commission communication of 3 March 2010 entitled 'Europe 2020 – A strategy for smart, sustainable and inclusive growth' (COM(2010)2020),
- having regard to the Commission staff working document of 22 January 2010 on the outcome of the public consultation on marine data infrastructure (SEC(2010)0073),
- having regard to the Council conclusions on integrated maritime policy at its 2973rd meeting (General Affairs and External Relations Council) on 16 November 2009,
- having regard to the Commission report of 15 October 2009 entitled 'Progress report on the EU's Integrated Maritime Policy' (COM(2009)0540),
- having regard to the Commission staff working document of 7 April 2009 entitled 'Building a European marine knowledge infrastructure: Roadmap for a European marine observation and data network',
- having regard to the Commission communication of 3 September 2008 entitled 'A European Strategy for Marine and Maritime Research: A coherent European Research Area framework in support of a sustainable use of oceans and seas' and to the resolution of Parliament of 19 February 2009 on applied research relating to the common fisheries policy¹,

¹ OJ C 76 E, 25.3.2010, p.38,

- having regard to the Commission communication of 10 October 2007 on an integrated maritime policy for the European Union (COM(2007)0575),
 - having regard to Rule 48 of its Rules of Procedure,
 - having regard to the report of the Committee on Fisheries (A7-0295/2013),
- A. whereas knowledge of the marine environment is fundamental to promoting, developing and expanding the ‘Blue Economy’, which represents the maritime dimension of the Europe 2020 strategy, linking knowledge and technical innovation, sustainable use of resources, competitiveness and job creation for smart, sustainable and inclusive growth;
- B. whereas knowledge of the marine environment is essential in order to increase and improve information about ecosystems and anthropogenic impacts on the marine environment and permit proper environmental protection, a rational use of resources that is environmentally sustainable in the long term, and a balanced and sustainable growth of ocean-based human uses and activities;
- C. whereas existing data on the marine environment is currently held by numerous different bodies in a dispersed and fragmented way; whereas it is fundamental to ensure availability of and ease of access to the vast reserve of data existing on the marine environment in Europe, in order to maximise resources and promote development, innovation and job creation in the marine and maritime sectors;
- D. whereas fisheries are one of the main human activities carried out in the marine environment, contributing to the availability of food supplies and having tremendous importance, especially for certain coastal communities, and are thus an essential element of the Integrated Maritime Policy; whereas it should be recalled that fishing activities often have significant adverse impacts on marine ecosystems, owing to the variety and quantity of the fish stocks exploited; whereas fisheries are also the sector most affected by the many uses and activities taking place in the marine environment, such as maritime transport and tourism, or urban and coastal development, marine pollution, extractive industries and renewable energies, whose impacts may be cumulative with those resulting from fishing activities;
- E. whereas European seas are highly diverse, with variations in the fishing fleets and types of fishing carried out by the different Member States; whereas the recognition and appreciation of this diversity and specific characteristics depend heavily on the information available regarding fishing activity;
- F. whereas there is an increasing trend not only towards use of information technologies linked to the fishing sector, a factor which has increased the accessibility and transparency of information, but also towards computerising data collection and transfer systems in national and regional administrations and in producer organisations; considers, therefore, that there is no doubt that increased availability of information on fishing activity can unleash a process of encouraging more sustainable fishing practices, not just in environmental terms but also economically and socially;

- G. whereas there is a need to identify and define biogeographically sensitive areas and establish fish stock recovery areas and marine protected areas, in order to ensure the effective protection and preservation of vulnerable marine ecosystems from high-impact fishing practices; recalling that the more and the better the information available on the marine environment and fishing activity, the greater will be the understanding, acceptance and application of better measures to protect ecosystems and manage fisheries and maritime spatial planning;
- H. whereas the Marine Knowledge 2020 initiative opened an exchange of ideas on this topic and undertook a public consultation to sound out opinions regarding the opportunities and challenges provided by access to information on marine monitoring in Europe; whereas the Commission's initiative in publishing the Green Paper 'Marine Knowledge 2020: from seabed mapping to ocean forecasting' is to be welcomed;
- I. whereas it is necessary to release, in line with the established rules, the potential of the huge amount of data on the marine environment which has been collected and stored by numerous public and private bodies at European level, and to make it available and accessible to potential users, highlighting the need for a paradigm shift in relation to data collection and use, in order to replace the current system under which multiple collections of data are made for specific and single uses by a model allowing data to be collected and made available for multiple purposes;
- J. whereas greater availability of and ease of access to data will promote the use of such data in multidisciplinary studies and encourage the creation of intersectoral partnerships, particularly between the public and private sectors, thus providing the mass of data with a capacity and usefulness far greater than the sum of its parts;
- K. whereas this initiative is based on an interdisciplinary strategy which integrates and links all marine observation activities currently being undertaken in the EU; stressing the usefulness and advantages of accessing multiple forms of data via a single-entry digital platform providing data on the marine environment;
- L. whereas the huge importance and diversity of the fishery sector, as an ancestral and traditional marine activity, fully justifies the inclusion of information on fishery management and exploitation among the data to be mapped and made available under the Marine Knowledge 2020 initiative;
- M. whereas the EU has since 2001 been supporting the management of the common fisheries policy (CFP) by funding the collection of data on the fishing sector and its dissemination by the Member States' national authorities; recalling that the EU's fisheries are increasingly being managed by multiannual management plans and subject to precautionary and ecosystemic approaches, with the aim of minimising the impact of fishing activity on marine ecosystems, and that this management strategy involves multidisciplinary research requiring the collection of countless scientific data concerning fish stocks;
- N. whereas the CFP reform currently under way increases Member States' obligations in

terms of collecting environmental, biological, technical and socio-economic data on fishing activity, within the context of the Data Collection Framework (DCF) for fisheries, which is to be allocated increased funding for the 2014-2020 period under the new European Maritime and Fisheries Fund (EMFF);

Information sources and types of data

1. Highlights the existence of a wide range of public and private bodies which store data on fishing activity in the EU, which should be integrated into the publicly available multi-resolution digital seabed map;
2. Stresses that in order to meet their obligations to the EU under the DCF, Member States collect and forward data that constitute an excellent source of information on fishing activity, and that this huge reserve of information is compiled by the Joint Research Centre (JRC) and assessed by experts from the working groups of the Scientific, Technical and Economic Committee for Fisheries (STECF); adds that the data collected by the Member States under the DCF are used by the International Council for the Exploration of the Sea (ICES) to provide scientific information on resources and advice on fisheries management;
3. Emphasises the huge volume of data generated by fishing fleets equipped with vessel monitoring systems (VMS), which would be of great use in mapping fishing activity; recalls the importance of VMS data in mixed fisheries; stresses the desirability of including and mapping additional information, particularly data recorded in electronic and paper-format fishing logbooks, records made by fisheries observers, and data collected during resource monitoring campaigns;
4. Recalls that some producer organisations, especially in the industrial fishing sector, store data on fishing activity which should complement the information currently available; adds that in the case of small-scale fishing, on which fairly limited information exists, fleets should be encouraged to collect data themselves by using their vessels as data collection and fishing monitoring platforms, possibly through the onboard installation of simple real-time monitoring devices using a GPS/GPRS system; also notes that a highly significant amount of fishing data is obtained through research projects;
5. Emphasises the usefulness of making available charts of the spatial distribution of fishing fleets, fishing effort and catch composition and volume, as this would enable potential users to access information on areas with more intensive fishing activity and on species fished and catch volumes in specific areas, among other information; points in particular, within the overall volume of fishing data which should be included in this type of plotting, to certain information relating to type of fleet (e.g. nationality, port, age, length and tonnage, power, crew), fishing effort (e.g. number of sailings or fishing days, number and

features of fishing gear), catches (e.g. target species, secondary species, discards, weight, value); also points out that the availability of VMS data would make it possible to identify the spatial distribution of fleets and that the spatial distribution of catches could be calculated by correlating this information with data from fishing logbooks;

6. Believes that the separate mapping of data according to type of fishing activity, such as small-scale fishing, traditional fishing or industrial fishing, would provide a more realistic picture of the diversity of fisheries; further emphasises that if socio-economic indicators relating to fishing (e.g. age and training of crew members) were made available, they could help provide a more detailed description of the sector;

How to promote the obtainability and availability of data

7. Recognises that numerous parties have a legitimate interest in accessing information on fishing activity and the state of conservation and exploitation of stocks; therefore advocates the creation of mechanisms to provide easy access to relevant data on fishing, under conditions to be established and with different levels of access, and ensuring adequate levels of confidentiality of information and commercial interests;
8. Points out that data collection and fishery resource management are financed by the EU and the Member States and that the data collected must therefore be available for consultation by potential users and the general public; maintains that other fisheries data obtained using public financing or cofinancing (from the EU or the Member States) should also be accessible and publicly available, whereas access to fisheries data that are obtained using private financing and do not contain commercially sensitive information should be subject to authorisation by the organisations holding the data;
9. Points out that the section of the Regulation establishing a Community control system for ensuring compliance with the rules of the CFP which deals with fisheries data and information contains articles geared specifically to the protection of personal data and the confidentiality of professional and commercial secrecy; stresses further that the above Regulation explicitly states that fisheries data whose collection, exchange and disclosure would undermine the protection of the privacy and integrity of the individual or the commercial interests of a natural or legal person, including intellectual property, are subject to the applicable rules on confidentiality and professional and commercial secrecy;
10. Maintains that the position is similar as regards fisheries data resulting from research projects, the expectation being that data obtained in scientific projects financed or co-financed from public sources (EU or Member States) should be accessible and available to potential users and the general public, subject to compliance with conditions applying specifically to project data; points out that some types of fisheries data are produced specifically when models, prototypes, or experimental devices are designed and put to use, and that the dissemination of such data is therefore a particularly sensitive matter;

11. Highlights the existence of Commission communications and recommendations on access to and dissemination and preservation of scientific information, which state that the disclosure of research data must comply with European and national rules on data protection; points out, further, that these documents refer to the need to safeguard the conditions governing the disclosure of data and the restrictions necessary in order to comply with the rules on the protection of personal data, privacy, commercial secrecy, legitimate commercial interests and intellectual property rights;
12. Maintains that, irrespective of whether data are held by public or private bodies or have been obtained using public or private financing, the body responsible for collecting, processing, and communicating the information should invariably be mentioned; also affirms that when the release of information might have implications in terms of competitiveness and competition, or for the revenue of organisations holding information, all that should be publicly available is data products and not raw or processed data; takes the view regarding such cases that if reference had to be made to the data source, stakeholders would be able to approach those holding the original information and ask to be given access to more detailed data or even the raw data;
13. Maintains that when mapping is carried out and data are made available on fishing fleet movements and operations, especially information obtained from VMS reports, fishing logbooks, and logbooks kept by on-board observers, measures must be taken to protect data confidentiality and safeguard commercial interests in compliance with the legal provisions applicable in this context; stresses that this can be achieved by omitting individual information, such as vessel names and registration marks, disseminating aggregated data, possibly grouped by area, fleet segment or type of fishing gear, and allowing a time-lag between data collection and the point when the fishing map is made available; points out, however, that if data are aggregated on too broad a basis and spatial scales and timescales are very long, the level of detail and the precision of the information will be weakened;
14. Maintains that when data are held by public authorities in Member States, the Commission should draw up a comprehensive set of standard guidelines for circulation, schedule collection, processing, and communication within a given time-frame, and should provide the encouragement needed for information to be made available for consultation by potential stakeholders; believes that a minimum set of guidelines needs to be laid down for mandatory communication and that similar data should be communicated and shared, so that all Member States have the same type of fisheries information available for their use;
15. Maintains that when fisheries data are obtained in research projects financed by the EU or Member States or subject to cofinancing, there should be a requirement to communicate the data according to a predetermined timetable once the projects have been completed;
16. Maintains that when data have been obtained from research projects the researchers

concerned must be given reasonable time to publish their studies; takes the view that, following the approach advocated in the Horizon 2020 initiative, this constraint could be overcome by laying down a moratorium allowing time for publication; also maintains that data should be communicated within as short a time as possible and that the moratorium should therefore be no longer than three years, in order to ensure that data are not rendered obsolete and derive maximum benefit from their dissemination;

How to compile and pool data effectively

17. Notes that if data are to be robust and reliable, their quality has to be standardised, verified, and checked, whether they come from Member States' databases or from fisheries research projects;
18. Considers it imperative to establish common protocols/models, harmonised and tested in sampling strategies, and to lay down data collection and processing procedures and the format in which information is to be communicated, these being essential in order to make fisheries data comparable and interoperable; notes that the DCF model could be used for that purpose;
19. Notes that the form in which fisheries data are communicated may vary according to their complexity and that it is necessary to determine which types of data can be made available as raw data, in processed form, or as data products; points out that the most basic/simple parameters could be supplied in the form of raw data, whereas more complex/specific parameters requiring analysis and specialised interpretation should be supplied in the form of processed data or data products; notes that it is important to specify the type of fisheries information made available to potential users, distinguishing between raw data, processed data, and data products, and between parameters obtained by measurement and those resulting from models;
20. Points out that in certain cases, if the data communicated are highly detailed and the mapping resolution is too high, fishing effort could come to be concentrated to an undesirable extent on given resources and vulnerable marine habitats; considers, therefore, that when such information is communicated, steps must also be taken to protect and monitor the resources and habitats concerned; maintains in addition that sensitive information on the spatial distribution of rare or endangered marine species should be withheld in order to protect them;
21. Maintains that if data are to be compiled and communicated effectively, the Commission must provide the necessary coordination and Member States must seek to organise their activities and work together; maintains that coordination by the Commission is essential in order to determine priority objectives, improve the cost-effectiveness of data collection, processing, and communication, and develop synergies between Member States;
22. Maintains that, given the diversity of data collection systems and the volume and type of

data collected by the numerous public and private bodies holding fisheries information, Member States need to coordinate their activities and work together so as to enable the variety, quantity, quality, and format of data to be harmonised; calls for the effectiveness of coordination and cooperation among Member States to be regularly assessed by the Commission;

23. Recommends that Member States designate a national authority to be responsible for data collection, compilation, processing, quality control, pooling, and transmission with a view to integration into a common fisheries information access platform; believes that one possibility might be to set up a specific body for the above purpose at Member State level, funded and coordinated by the Commission;

How to benefit from the processing and interpretation of data

24. Points out that if the maximum benefit is to be derived from this initiative, the governance and operating model has to allow for the necessary collection, processing, interpretation, and communication of fisheries data and secure the participation and genuine involvement of Member States, the scientific world, and local communities;
25. Maintains, as regards governance and operation, that the European Marine Observation and Data Network (EMODnet) should be given permanent status; takes the view, as regards incorporating data and making them available in this platform, that it would be desirable to draw on the experience acquired as the EMODnet concept has been developed, encompassing the specialist groups set up and operating for that purpose and the marine-related thematic portals (hydrography, geology, physics, chemistry, biology, habitats, and human activities);
26. Takes the view, given the importance of the fisheries sector, that fisheries data should preferably be made an additional specific group within the EMODnet platform or, alternatively, integrated into the newly created 'human activities' thematic portal, thus making it possible to access wider-ranging general content;
27. Maintains that the EMODnet platform should be coordinated with the Marine Service of the European earth monitoring programme (Global Monitoring for Environment and Security - GMES), so as to provide as much information as possible and enable fisheries data to be linked to the GMES satellite monitoring data focusing on environmental parameters;
28. Considers that an initiative as ambitious as 'Marine Knowledge 2020', immense in scope and based on a multidisciplinary approach with input in the desired form provided by fisheries information, implies a need for a specific action plan setting out medium- and long-term goals, based on a concerted effort by the EU and the Member States;
29. Maintains that the implementation and success of projects of this kind depends on substantial funding making for continuity and predictability over the long term; calls for the provision of fisheries data suitable for inclusion in the multi-resolution digital seabed

map to receive the necessary encouragement and support from the EU; points out that, in order to produce fisheries information, all sources of funding available at EU and national level will need to be pooled, and notes that the EMFF fully encompasses the support required for every technical means employed to set up and operate EMODnet;

30. Instructs its President to forward this resolution to the Council and Commission, the governments and parliaments of the Member States, the Committee of the Regions, the Advisory Committee on Fisheries and Aquaculture, the regional advisory councils, and the Scientific, Technical and Economic Committee for Fisheries.

EXPLANATORY STATEMENT

In August 2012 the Commission submitted the Green Paper on ‘Marine Knowledge 2020: from seabed mapping to ocean forecasting’, as part of the action being taken to promote, develop, and expand the ‘blue economy’. The blue economy will serve to meet the Europe 2020 strategy targets as regards the sea, combining knowledge and technological innovation, sustainable use of resources, competitiveness, and job creation to achieve smart, sustainable, and inclusive growth.

With that end in view, a seamless multi-resolution digital seabed map of European waters is to be produced by 2020. This is an ambitious, wide-ranging, multidisciplinary project intended to make information available to a wide variety of stakeholders interested in ocean data, whether representing public bodies, industry, education, research, or civil society. Digital mapping of this kind encompasses several areas, including information on seabed topography, geology, habitats, and ecosystems, and on human activities; data will record the physical, chemical, and biological state of the overlying water column, and oceanographic forecasts will be made.

Without underestimating the importance of a holistic view of the oceans, this report cannot cover all of the subjects in the Green Paper, given the immense scope of that document and the multidisciplinary approach on which it is based. Instead, the question to be discussed here is how the fisheries sector can be fitted into the new context, in other words, how it can contribute to, and benefit from, ‘Marine Knowledge 2020’.

The report is accordingly focused on the importance and usefulness of pooling, mapping, and disseminating fisheries data within the wider ‘Marine Knowledge 2020’ initiative, with particular reference to the following key points:

- Information sources and types of data;
- How to promote the obtainability and availability of data;
- How to compile and pool data effectively;
- How to benefit from the processing and interpretation of data.

RESULT OF FINAL VOTE IN COMMITTEE

Date adopted	18.9.2013
Result of final vote	+: 22 -: 0 0: 1
Members present for the final vote	John Stuart Agnew, Kriton Arsenis, Alain Cadec, Carmen Fraga Estévez, Dolores García-Hierro Caraballo, Marek Józef Gróbarczyk, Ian Hudghton, Iliana Malinova Iotova, Werner Kuhn, Isabella Lövin, Gabriel Mato Adrover, Guido Milana, Maria do Céu Patrão Neves, Ulrike Rodust, Struan Stevenson, Isabelle Thomas, Nils Torvalds, Jarosław Leszek Wałęsa
Substitute(s) present for the final vote	Jean-Paul Besset, Izaskun Bilbao Barandica, Gesine Meissner, Jens Nilsson, Antolín Sánchez Presedo
Substitute(s) under Rule 187(2) present for the final vote	Esther Herranz García, Juan Andrés Naranjo Escobar