Oceanographic data in the EU legislation: a temporal evolution analysis

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Introduction
The management of oceanographic data (fisheries, marine, maritime, water and spatial data) is an increasingly relevant question for European environmental policy and management. To get familiar with the services and tools for data management (access, quality, reutilization), they must be based on clear legal grounds in terms of their access, use and practical support.

The Community Institutions (especially the European Commission) introduced over the past 40 years, a set of legal texts on the oceanographic data concerned with issues related to:
- the guarantees that these data can be used and re-used as widely as possible;
- the best way to interconnect the new and existing oceanographic data infrastructures;
- the coordination of already existing aids in favour of the data infrastructures.

But EU searching to legally commit governments to grant access to ocean data and allow their re-use, does not automatically apply to the large pools of data held by research institutions for the benefit of National Oceanographic Data Centers (NODC).

Objectives
This proposal attempts to analyse the existing information at the European legislation level on oceanographic data. That means that this will focus on examining the temporal distribution of the legal texts, the type of document, the organization that issued them, the type of data which is referred (fisheries, marine, maritime, water and spatial data) and the actions of data management that correspond to their retrieval and compilation, process, custody, distribution and re-use.

Methodology
A database has been compiled with all the valid and binding EU legislation referred to the European Seas and Oceans, available from the EU official gateway to European legislation, EUR-Lex, since 1976 to 2017. This database contains a total of 216 records. A content analysis was performed associated with each of the legal texts, by using a set of seven indicators: type of document, the organization that has approved them, content description, date and place of adoption, geographical scope, type of data, actions applied to these research data.

Results
The analysis unit identifies 20 different types of documents, pointing out that regulations (31%), communications (25%) and directives (14%) are the main sources for the study of the European legislation on oceanographic data; also important were the decisions (8%), the
international treaties (5%) and the laws (4%). Other legal documents (13%) complement the types of legislation. Concerning the body that promotes and approves the applicable legislation, the European Commission should be mentioned with the greater number of legal provisions issued (40%); above the European Parliament (23%) and the European Council (20%).

Oceanographic data management legislation in Europe, begins with the Barcelona Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, originally signed in 1976 by the European Economic Community. Inside the Convention a main activity is data compilation. The last document analyzed is a Report from the Commission to the European Parliament in October 2017. The temporal distribution within these limits shows two main peaks: 2006, when the EU outlined its Integrated Maritime Policy (IMP) and its European Marine Observation and Data Network (EMODnet) and 2008 when the Marine Strategy Framework Directive (MSFD) was promulgated.

According to their geographic framework of application, all the analyzed documents have the overall geographic aim to cover the coasts, seas and oceans of the 23 EU coastal Member States. In relationship to the typology of data managed, reference is made to fisheries (35%), maritime (13%), marine (17%), water (4%), spatial (7%) and other (24%) kind of data. Concerning the actions that can be taken to manage the data and which explicitly appear in the legal texts, data retrieval and compilation rose 64%, process 11% and, to a lesser extent, data custody 6%, distribution 4% and other tasks 15%.
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