The Coastal and Marine Wiki: an Internet encyclopaedia providing up-todate high quality information for and by coastal and marine professionals

Simon Claus, Flanders Marine Institute, Innovocean Site, Wandelaarkaai 7, 8400 Oostende), (Belgium)

Andreas Papatsiotsos, Aristotle University of Thessaloniki, Laboratory of Hydraulics and Hydraulic Works, Egnatia Str., 541

24, Thessaloniki, Greece

Manuela De los Rios, CoastNET, The Gatehouse, Rowhedge Wharf, High Street, Essex, CO5 7ET, UK Wouter Kreiken, EUCC, The Coastal Union, P.O. Box 11232, 2301 EE Leiden, The Netherlands Nicky Villars, WL | delft hydraulics, Rotterdamseweg 185, Delft, the Netherlands Jan Mees, Flanders Marine Institute, Innovocean Site, Wandelaarkaai 7, 8400 Oostende, Belgium Job Dronkers, Waterdienst, Zuiderwagenplein 2, 8224 AD Lelystad, , the Netherlands

ABSTRACT

The Coastal and Marine Wiki (www.encora.eu/coastalwiki) is an Internet encyclopaedia providing up-to-date high quality information for coastal and marine professionals, which is continuously improved, complemented and updated by expert users. To take better advantage of existing knowledge, especially for use in practice and policy, the open source MediaWiki Software was implmented to allow collaborative writing by authors who can add new articles or improve and update existing articles. Main difference between the Coastal and Marine Wiki and the online Wikipedia are the procedures to maintain the quality, consistency and comprehensiveness of the information. The Coastal and Marine Wiki targets professionals who are either generalists who need to update their knowledge about a broad range of subjects or specialists who need to gain an understanding of other sectors or disciplines in order to work in an integrated manner.

The issue: taking better advantage of existing knowledge

There is abundant information on coastal and marine processes and issues. But most of this information is not easy to find or to use. Existing documentation and publication practices do not enable taking full advantage of present knowledge and experience. The present situation is:

- 1. scientific knowledge is communicated mainly among fellow experts; scientific publications focus on specific disciplinary aspects and are almost inaccessible to non-expert coastal and marine professionals;
- 2. integrated assessments of coastal and marine issues often refer to specific field situations and are published as grey literature or brochures, which are hard to find and to get;
- 3. results published on project sites often become inaccessible shortly after the project has ended.

Powerful search systems have been developed to retrieve information from the Internet, but due to the huge proliferation of websites generally not more than a fraction of the relevant information is found. Use of this information is further hampered by lack of coherence among the information pieces and lack of comprehensiveness and context. Some pieces of information may be outdated and others may be unreliable. For these reasons much coastal and marine knowledge existing in research institutes and in practitioners organizations throughout Europe is not fully used and similar studies are carried out more than once. New knowledge dissemination practices are needed for Europe to take better advantage of existing knowledge, especially for use in practice and policy.

The Coastal and Marine Wiki concept

A Wiki is a searchable website that allows visitors to easily add or remove information and otherwise edit and change some available articles. It is the product of collaborative writing by authors who can add new articles or improve and update existing articles. The whole history of additions and improvements can be traced, no information gets definitively lost. The Coastal and Marine Wiki can best be described as an information web equipped with a powerful search tool. Articles of typically 2-3 pages are structured according to different layers of specialisation. Authors focus in their articles on a single topic at a certain level of detail, but are capable to provide a wider context and to provide more detailed information by introducing internal and or external links to related articles. Well chosen links ensure a coherent access to the body of information. you are guided to the information you need. The wikipedia concept complements present knowledge dissemination practices and mitigates major shortcomings: scientific publications only accessible to experts, lack of interdisciplinary links, difficult access to practical knowledge and experience due to dispersal over grey literature sources, lack of comprehensiveness and consistency among sources, not freely accessible literature and sources which are not up to date; unacceptable delays in establishing intellectual property rights through traditional publishing routes.

The Coastal and Marine Wikipedia is a professional Internet encyclopaedia that guarantees high quality information.

Several procedures are implemented to ensure quality, consistency and comprehensiveness. A major difference with the general Wikipedia is the requirement of an editing authorisation for contributors. Anonymous contributions are precluded; authors and co-authors of articles or article revisions are explicitly acknowledged. The access to the Coastal and Marine Wikipedia is free to any coastal and marine stakeholder, but only experts registered in the Wiki Contact Database are entitled to enter new information. This contact database has been developed in house and is managed at a marine datacentre. Editing authorisations will be granted only to users with a professional background, checked by the editorial team. This team will oversee the overall quality of the Coastal and Marine Wikipedia.

Target user groups

The primary users of the Coastal and Marine Wikipedia are professionals, usually with higher education, who are either generalists who need to update their knowledge about a broad range of subjects or specialists who need to gain an understanding of other sectors or disciplines in order to work in an integrated manner. Target user groups are:

- 1. Policy makers: e.g. a coastal mayor, an employee at high management level in regional or national administration, European Commission staff, or managers of influential NGOs;
- 2. Practitioners: e.g. a marine protected area manager, an expert working for administration, a planner or consultant at all administrative levels, employees of firms active in the coastal and marine area;
- 3. Scientists: e.g. a researcher (from any area of marine-related science) needing information from other than his/her own field of interest or as a start-up to enter a new research area;
- 4. Students at academic institutions and trainees, who want to familiarise with concepts of coastal and marine science and with practices of coastal and marine management;
- 5. Public stakeholders with particular interest in coastal and marine information, e.g. water sports practitioners, amateur fishermen, seaside visitors, etc.
- 6. The wider public. With this group in particular, a pro-active approach to the dissemination of research outputs is necessary and foreseen in the project.

The way forward: integrating project-specific information

Besides the internal linking, similar Wiki Articles can also be grouped together using different categories. The combination of internal linking and categorisation allows to create a web of linked information that can be organised and accessed in several ways. The Coastal and Marine Wiki was at first grouped within the Ten Thematic Networks of the European Network of Coastal Research (ENCORA); a revision implemented a additional classification based on a Coastal and marine ontology which starts from 6 main categories: the Natural Environment, Issues and Impacts, Human Activities, Locations, Coastal Management and People and Organisations in ICZM. Recently, SPICOSA (Science and Policy Integration for Coastal System Assessment) and MarBEF (Marine biodiversity and ecosystem functioning), two Coastal and Marine FP6 projects, decided to contribute their project results to the Coastal and Marine Wiki. In this way the major outcomes of their research will be reflected in the Coastal and Marine Wiki enhancing the knowledge dissemination and integration of their project-specific information.

The Coastal and Marine Wiki aims to involve more FP5, 6 and 7 marine and coastal projects in the near future to fill the wikipedia with new insight gained in these projects. The format ensures a coherent and comprehensive presentation, within the context of existing knowledge, and effective guidance of expert and non-expert users to the knowledge they need. The Wiki cross-links provide a quick overview of all related aspects of a particular issue; it provides an information base for performing integrated assessments.

Acknowledgements:

The Coastal and Marine Wik was developed within the framework of ENCORA (FP6-2004-Global-3-518120). Additional funding was provided by the RIKZ (Rijksinstituut voor Kust en Zee).