

THE VLIZ MARITIME BOUNDARIES GEODATABASE

Deckers Pieter and Edward Vanden Berghe

Vlaams Instituut voor de Zee
Wandelaarkaai 7, B-8400 Oostende, Belgium
E-mail: pieter.deckers@vliz.be

Maritime boundaries are important for many applications; they could, for example, be used in marine biogeography to create national marine species lists. As there was no global public domain cover available, VLIZ decided to develop it, and make it available to the scientific community. The information needed for this exercise comes from different sources. Treaties between countries were gathered and the coordinates that are published herein were imported in a GIS. When no treaties were available, maritime boundaries were calculated as bufferlines or as equidistant lines, according to the regulations of the United Nations Convention on the Law of the Sea. This led to the production of two global GIS-covers in ESRI shapefile-format. The first contains polylines that represent the maritime boundaries of countries. This shapefile also includes information about how the boundaries were made (treaty, buffer or equidistant line) and have, where relevant, a link to additional information (in most cases this is the digital document of the treaty). The second GIS-cover contains polygons that represent the surface of countries' Exclusive Economic Zones. This layer can be used to georeference distribution lists to countries. The geodatabase is now also consultable through a website (<http://www.vliz.be/vmdcdata/marbound>) where one can search and download extra information about the maritime boundaries. It is, for example, possible to download the used treaties in PDF and the coordinates of the boundaries in GML (Geography Markup Language). The geodatabase is not only consultable through a web form, but also through a map-interface where one can zoom, pan or query the GIS-layers. The latter was implemented using the open-source MapServer, a development of the University of Minnesota that supports Open-GIS standards. This will allow making the GIS-layers available in the future through WMS (Web Map Services) and WFS (Web Feature Services). Another development planned for the near future is the possibility for users to upload point locations so they get back a list of their locations with their corresponding EEZ. Last but not least, the website includes feedback options; it is hoped that users will draw our attention to mistakes and omissions, allowing us to improve the existing data.