

I would have liked talk about the initiatives that we are implementing in this IHM. For SDI implementation we are limited because the IHM server is under the Ministry of Defense and for the moment we cannot install software such as Mapserver, Geonetwork / Geoserver, Mapbender and so on. But I pass some non standard service links published on Internet:

1. Nautical Charts:  
[http://www.armada.mde.es/ArmadaPortal/page/Portal/ArmadaEspañola/ciencia\\_ihm\\_1/prefLang\\_es/02\\_ProductosServicios--03\\_CatalogoCartas](http://www.armada.mde.es/ArmadaPortal/page/Portal/ArmadaEspañola/ciencia_ihm_1/prefLang_es/02_ProductosServicios--03_CatalogoCartas)
2. Light:  
[http://www.armada.mde.es/ArmadaPortal/page/Portal/ArmadaEspañola/ciencia\\_ihm\\_1/prefLang\\_es/02\\_ProductosServicios--021\\_librosFaros](http://www.armada.mde.es/ArmadaPortal/page/Portal/ArmadaEspañola/ciencia_ihm_1/prefLang_es/02_ProductosServicios--021_librosFaros)
  - using only XML/XSL without javascript:  
[http://www.armada.mde.es/ihm/Aplicaciones/LibroFaros/Index\\_LF\\_acc.html](http://www.armada.mde.es/ihm/Aplicaciones/LibroFaros/Index_LF_acc.html)
  - with javascript and Flash:  
[http://www.armada.mde.es/ihm/Aplicaciones/LibroFaros/LF\\_jquery/index.html](http://www.armada.mde.es/ihm/Aplicaciones/LibroFaros/LF_jquery/index.html)
3. Notices to Mariners:  
[http://www.armada.mde.es/ArmadaPortal/page/Portal/ArmadaEspañola/ciencia\\_ihm\\_1/prefLang\\_es/02\\_ProductosServicios--01\\_avisos](http://www.armada.mde.es/ArmadaPortal/page/Portal/ArmadaEspañola/ciencia_ihm_1/prefLang_es/02_ProductosServicios--01_avisos)
4. NAVAREA Warnings:  
[http://www.armada.mde.es/ArmadaPortal/page/Portal/ArmadaEspañola/ciencia\\_ihm\\_1/prefLang\\_es/02\\_ProductosServicios--02\\_NAVAREAS](http://www.armada.mde.es/ArmadaPortal/page/Portal/ArmadaEspañola/ciencia_ihm_1/prefLang_es/02_ProductosServicios--02_NAVAREAS)
5. **In test** - coastline (scale 1:50000) for viewer and download (using technology based on javascript library OpenLayers), all information is Vector (GeoJSON format for viewer and shape for download) and is slow (fail on Internet Explorer, that´s ok for Google Chrome and Mozilla Firefox), we cannot use our own WMS (LAN limitations), but there is links to Spanish IDEE WMS for Land information. Test link:  
[http://www.armada.mde.es/ihm/Aplicaciones/pruebas/costa/index\\_en.html](http://www.armada.mde.es/ihm/Aplicaciones/pruebas/costa/index_en.html)

On the other hand we have published on our intranet a CSW (using Geonetwork) with information about Nautical Charts, Bathymetric Charts, photographs, ENC, and so on. And a viewer (using Intergraph Geomedia Web Map) with some layers and raster drawing tools for planning.

There are plans to create a web portal for SDI in the Ministry of Defence (IDEDF) where probably we can incorporate our initiatives, but financial resources are low.

In addition our problems on creating a NSDI are:

1. technological limitations due to our own organization in the Ministry of Defence.
2. Staff training on technology and concepts on SDI: Metadata, OGS-Standard, Web Service and so on.
3. Deciding information, not sensitive, to show, given the legal responsibility of nautical information.

Best Regards  
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