



Hydrographic Services and Standards Committee

Report of the Republic of Korea (KHOA)

To HSSC6, November 2014

Development of Web Enabled Spatial Database and Map
Service to Support Management of S-11 Part B

Introduction / Background

- ✦ S-11 Part B - Catalogue of INT Charts
 - an MS Word document showing INT chart coverage in a diagram format and metadata in a table format.
 - maintained by the IHB in liaison with all regional INT chart coordinators.



Introduction / Background

- ✦ Some of the shortcomings with the existing publication
 - Metadata can only be made available in document format.
 - Correlating information between the graphical maps (showing INT chart limits) and the metadata tables is not easy.
 - Maintenance of the publication using the present production methods and document formats is time consuming.
 - It is difficult to extract analytical information from the current publication.
 - It is difficult to compare INT chart coverage limits with other types of spatial data such as ENC limits.



Introduction / Background

- ✦ Discussion on S-11 Part B
 - The Baltic Sea INT Charting Coordination Working Group (BSICCWG) meeting in 2011
 - Proposal to Convert the INT Chart Information of S-11 Part B - into Web Enabled Spatial Database and Map Service
 - ✦ The IHB and ROK are working together for establishing a database and web system
 - to support management of S-11 Part B
 - to service web enabled INT Chart Catalogue
- This agenda item reports the progress on this initiative.



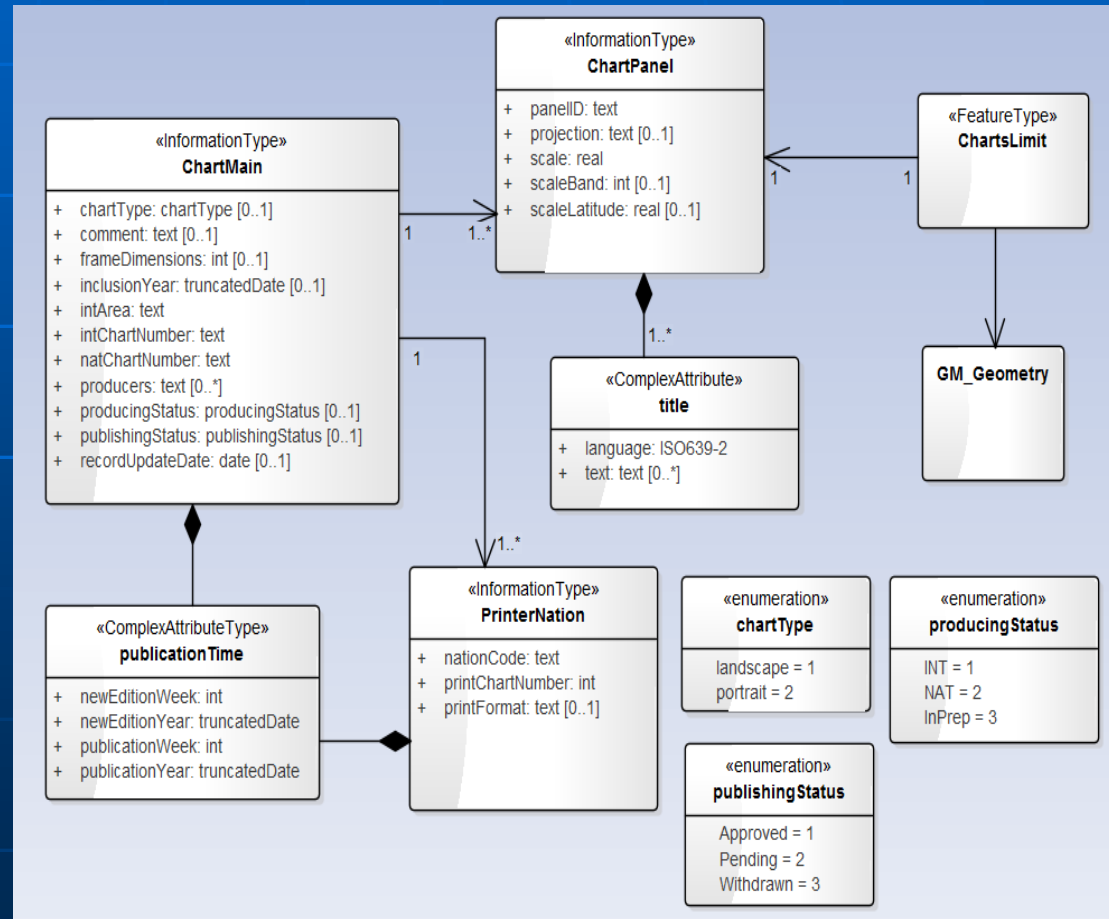
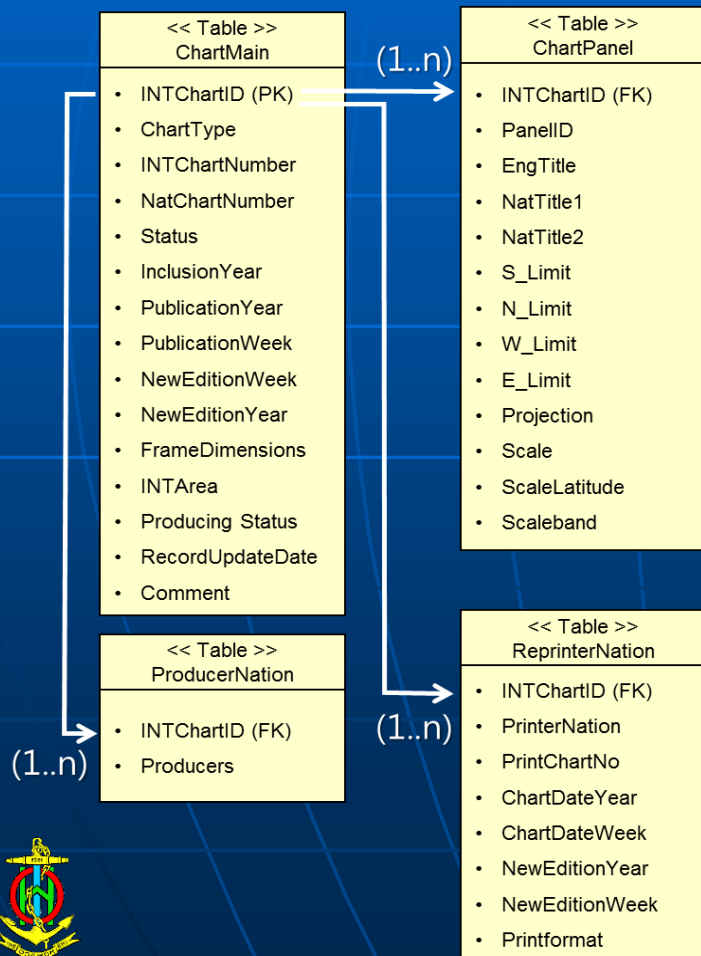
Analysis/Discussion

- ★ Regarding the INT chart model, there are some issues for consideration
 - What additional metadata fields should be included? – e.g. national title
 - How should the data be organized? - grouped by INT Area or by scale band
 - How should data be made available? – as datasets as web map services, or as a “database driven” web map server
 - How will the data be maintained?
 - What about polar coverage?



Analysis/Discussion

- ✦ Normalization of metadata contained in the tables and Data model for exchange dataset were drafted



Analysis/Discussion

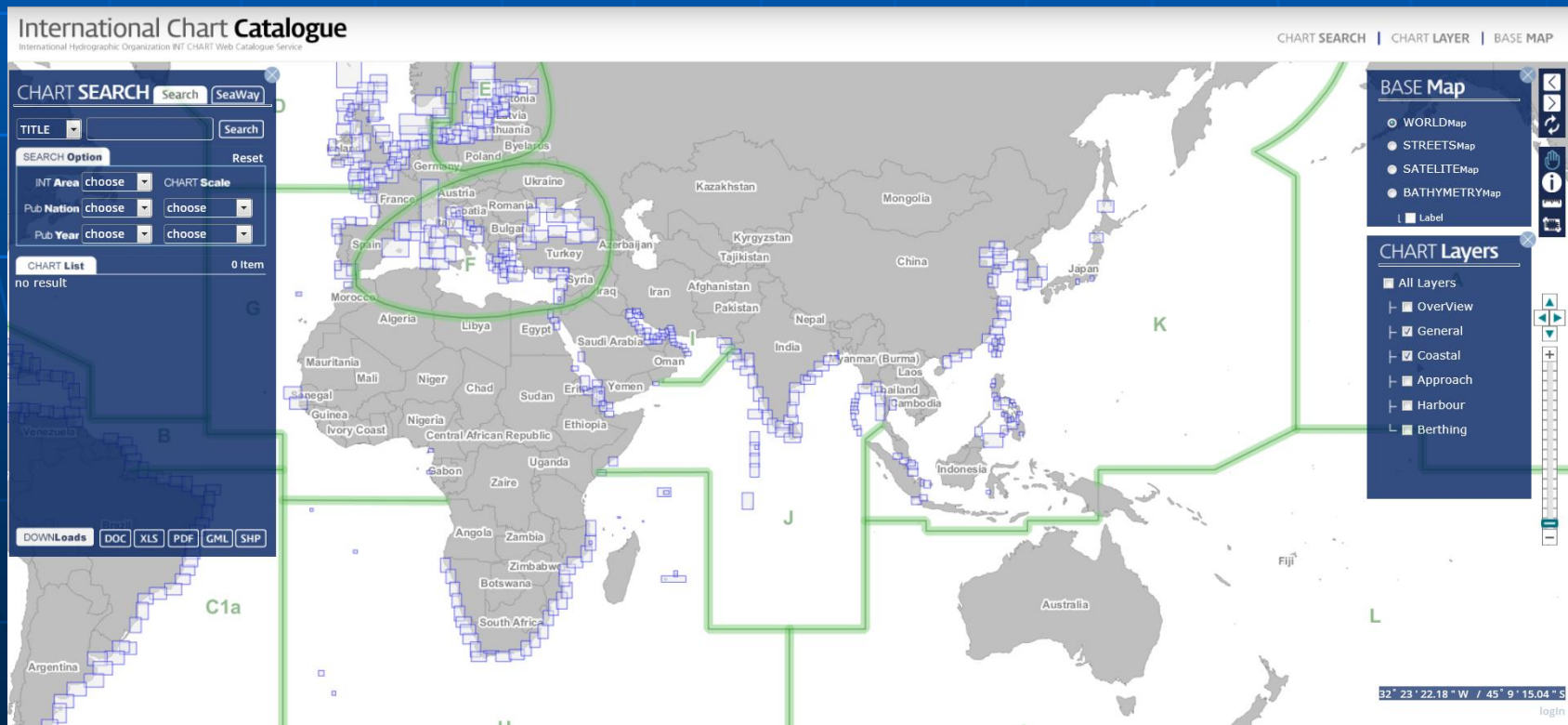
- ✦ To establish web enabled spatial database and map service to support the management of S-11 Part B, some requirements have been identified:
 - Virtual server running under Linux (CentOS or Ubuntu)
 - Postgres with postgis extension for the spatial content as the database
 - PHP, python or java as the building of forms
 - Geoserver or Mapserver that the content can be generated from the postgres database as the web map service function



Analysis/Discussion

✦ Development of prototype

- The GIS file on S-11 Part B was used to establish catalogue database and prototype of web map catalogue was developed
- <http://14.35.194.138:8080/iho/main.do>



Analysis/Discussion

- ✦ Dataset exchange of INT Chart metadata
 - Draft version was developed for adding the updated INT Chart information from the regional coordinator and downloading catalogue datasets on user selected area as exchange datasets
- ✦ As the catalogue datasets for exchange can be designed based on the S-100 data model, a product specification on chart catalogue information could become a matter of discussion within the appropriate HSSC WGs in the future.



Action Required of HSSC

- ✦ The HSSC is invited to:
 - take note of this initiative; and
 - provide recommendations on some issues for consideration regarding to the INT chart model.

