

Inland ECDIS in South America

Duvoel Ltda from Montevideo, Uruguay have created ENC's of the Hidrovja, a river network over the countries Brazil, Argentina, Paraguay and Uruguay, mainly composed of the rivers Paraguay and Paraná. Great importance was attached to the bathymetry and to updating the existing river banks. In 105 days more than 20,000km were surveyed, generating a navigational channel covering nearly 3,000km of the rivers.

The ENC's were created using the SevenCs ENC Tools production suite. The bases of the ENC's were existing paper charts which were scanned and geo-referenced with ENC Referencer. The river banks and navigational aids were then captured using the semi-automatic vectorise function of ENC Designer. As a result of the survey data process the depth contours were first converted into DXF format and then into S-57 utilising DXF Converter. The resolution of the depth contours was 0,25m for the range from 0m to 5m, 1m for the range from 5m to 10m and 5m for depths deeper than 10m. All group 1 objects (skin of the earth) were then automatically created by a special plug-in of ENC Designer. With ENC Optimiser the performance of the ENC's could be further improved. Finally the quality checks were carried out by ENC Analyser.

The controlled distribution of the ENC's is achieved by using ENC Dispatcher which combines S-57 data sets into copy-protected ENC units in directENC format. The chart access keys which are required for loading the charts into the respective end applications are calculated with ENC Master.

The river navigation software CEACT was utilised for checking the digitised river banks and for recording the navigation tracks during the survey. CEACT is now also being used on the push tows of Transbarge.

<https://www.hydro-international.com/content/article/inland-ecdis-in-south-america>
