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Explanatory Note
Item B5
The Netherlands

# LAT-conversion: report of progress

In 2005 the decision was made not to wait until the new production system SHIP2 was introduced, but convert to LAT independently. In 2005 LAT model data was requested from the National Institute for Coastal and Marine Management (RIKZ) to make a suitable LAT matrix for use of the transition from MLLWS to LAT. The LAT matrix is based on 3 tidal models of RIKZ. Use has been made of the Dutch Continental Shelf Model and two more detailed models for inland waters like the Waddenzee and Westerschelde.

The average difference between MLLWS and LAT is about 2 to 3dm, but can be as large as 5dm near the amphidromic point. In a small area North of IJmuiden the LAT surface is above MLLWS. The LAT-matrix is implemented in the databases of NLHS. Firstly, existing depth figures relative to MLLWS are converted to LAT without operator interference. Newly measured depths are inserted in the databases relative to LAT. The two survey vessels of NLHS will be equipped with the LAT matrix in their surveying software.

The first LAT charts of the north-eastern coastal area (charts 1555 and 1460) will be published at the end of 2006. Early 2007 charts 1456 and 1458 and 1800 series charts 1811 and 1812 will follow. In succession, the charts will be converted to LAT from north to south. As charts overlap, and areas are published at different scales, ports will be presented on one chart referenced to LAT and on other charts referenced to MLLWS.

For the Netherlands Antilles the tidal range is not significant. A note will be put on the charts to state that the Chart Datum approximates LAT. Suriname will decide when charts of their charting area will change to LAT, since the Netherlands only have a cartographic role in the production of the charts.

The tide table of HP33 (Tidal Heights Streams along Coastal waters of the Netherlands and adjacent areas) presents the High- and Low Waters and the hourly values in decimetres for 2 Belgian and 15 Netherlands locations.
For the HP33 there will not be a one step transition to LAT. Per year an inventory will be made which locations will appear on LAT referenced charts and which will not. Clear notes will indicate which level is used for the tidal predictions. For each location the difference between LAT and MLLWS will be provided.

HP33D – NLTides, launched in 2005, is a computer program that provides tidal height predictions for all significant ports from Nieuwpoort in Belgium to List in Germany and streams for the Southern North Sea, the Netherlands part of the Waddenzee, Scheldt, Tidal river area and main port approaches. NLTides is an annual edition providing tidal predictions valid for that year. NLHS issues the program NLTides as an official equivalent of paper tide tables in accordance with SOLAS V/2.2 and V/19.2.1.5. It may replace traditional paper tide tables provided that

appropriate back-up arrangements are available (e.g. print facility or 2nd installed program).
During the transition period to LAT the navigator using HP33D may choose as to which of the two levels the tidal heights will be referenced.