1. Hydrographic Service

Hydrographic Service (HS) is one of the Departments of the Maritime Administration of Latvia (MAL). MAL is a civil organisation - state stock company under the supervision of Ministry of Transport.

HS organisational structure and main functions:

- Surveying
- Hydrographic data processing
- Hydrographic database management

- Paper Charts
- ENCs
- Nautical publications
- Print on Demand service
- Data for National Geodata portal
- Marine Spatial Planning data

- Maritime Safety Information
- Notices to Mariners
- Aids to Navigation database management
- Aids to Navigation supervision

2. Hydrographic Surveys

Surveys in 2018 were mainly provided according to HELCOM Hydrographic re-Survey plan for Baltic Sea and in port areas. All surveys are carried out according the IHO S-44 standards. Survey data since 2002 is processed and made available for Hydrography and Cartography Departments via Hydrographic database.
Coverage of hydrographic surveys in 2018 (until July)

453 km² - on HELCOM routes in the Central (Middle) Baltic and the Gulf of Riga (CAT II);

2.5 km² - Harbour areas


Survey vessels

The Hydrography Division (12 employees) provide surveying, data collecting and post-processing.

Hydrographic vessels owned by MAL:
Kristiāns Dāls - 19 m twin hull survey vessel;
Blesser 505 - 5.5 m single-hull survey-boat on rivers, port and shallow coastal areas;
Sonārs - 7.25 m single-hull survey boat for port and coastal areas survey

For detailed information regarding hydrographic vessels see Annex 1.
3. New charts & updates

Paper Charts

Latvian waters are fully covered with the charts of relevant navigational bands. All paper charts are updated by the monthly Notices to Mariners and are immediately available in Print on Demand system. Print on Demand system is operated by MAL HS Cartography department.

Status of nautical charts within the limits of the Latvian EEZ:

<table>
<thead>
<tr>
<th>Navigational Purpose/Scale</th>
<th>A Charts complying to IHO standard S-4 (Coverage in %)</th>
<th>B Raster navigational charts complying IHO standard S-61 (Coverage in %)</th>
<th>C ENC (Coverage in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offshore passage/Small*</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Landfall and Coastal passage/Medium</td>
<td>100</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Approaches and Ports/Large</td>
<td>100</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Percentage of Group A showing depths in metres</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of Group A referenced to a satellite datum</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Latvia has no offshore passage / small scale charts.

See Annex 2 for detailed information on Chart and ENC coverage.

INT charts

Of 22 paper charts MAL produces only three are not included in INT chart series. 19 INT charts covers most of the Latvian waters. Four large scale port charts received INT number in 2017.


National charts

National paper charts are produced in accordance with IHO standard S-4 requirements. 1 new chart edition was published in 2018.

ENCs

Latvia has 26 ENC cells in navigational purpose bands 2 to 6. 3 new ENC cells in navigational purpose band 3 are published in 2018. ENCs are updated on a monthly basis in accordance with the Notices to Mariners, with possible maintenance and new editions in between. Temporary (T) and preliminary (P) notices to mariners are included into ENCs. All new paper chart editions are followed by new editions of relevant ENCs.

ENC distribution

MAL has ENC distribution agreements with PRIMAR (BA with Norwegian HS) and ENC Derivation Agreements with Garmin LTD, C-map Italia S.r.l, Bist LLC, SeaPilot AB, OceanWise Ltd.

RNCs
RNCs are not produced by MAL.

Other charts
Last edition of the chart collection for leisure craft Leisure Craft Charts. Baltic Sea, Latvia was published on May 2013. New edition of leisure craft chart folio is planned to be published in 2019. Leisure craft charts are not updated by NtMs.

HS also provides production of special charts for governmental services.

4. New publications & updates
Nautical publications Notices to Mariners, List of Aids to Navigation in the waters of the Republic of Latvia, Catalogue of Navigational Charts and Publications, Pilot of Baltic Sea. Latvian Coast are updated monthly by the Notices to Mariners and are available for download at MAL website. All nautical publications are free of charge.

5. MSI
Existing infrastructure for transmission.
National GMDSS VHF network along coastline for broadcasting of local Navigational Warnings. Service is provided by the Maritime Rescue Coordination Centre of the Latvian Naval Forces Coast Guard Service (MRCC Riga) twice per day in English and Latvian. Urgent Navigational Warnings are transmitted immediately on receiving them and then included in next MSI broadcast.

NAVAREA I Baltic Sea Sub-Area Co-ordinator - Sweden is responsible for NAVTEX Service over Latvian waters. Navigational Warnings and other messages for Latvian waters are transmitted by Swedish and/or Estonian transmitters. NAVTEX messages are available at: www.navtex.lv.

Notices to Mariners are published monthly. Each year first edition of Notices to Mariners is Shipping Regulations, which contains updated information regarding ports, reporting requirements, areas prohibited and area restricted for navigation, as well as maritime safety information.

New infrastructure in accordance with GMDSS Master Plan.
Nothing to report.

6. C-55
IHO is informed on updates in 2014.

7. Capacity Building
One hydrographer completed CAT B course organized by Skilltrade BV in Ijmudden, Netherlands.
One cartographer is currently studying 1 year CAT A course organized by Nippon foundation in USA.

8. Oceanographic activities
-
9. Other activities

INSPIRE directive

In conformity with INSPIRE directive, MAL takes part in the geospatial data sharing through the Geoportal of Latvia, that is a lane to the INSPIRE Geoportal. MAL HS has already provided both - metadata and geospatial data sets to relevant authorities.

National Spatial Planning

MAL has completed development of the graphical part for the Maritime Spatial Planning of Latvia waters, but is continuing to participate in the activities regarding Maritime Spatial Planning project.

IHO Working Groups

MAL is participating in NCWG, BSICCWG, TEWG, BSHC.
Annex 1

Detailed information regarding hydrographic vessels.

Vessel KRISTIĀNS DĀLS.

MMSI: 275027000
Call sign: YLAD
Home port: Riga, reg.Nr. 0123
Twin-hull Al 19.8x6.7x1.3; GT 33t; DWT 9t
Engine: 2x165kW IVECO, aux.: NANNI DIESEL 4.220 20 kW
Speed: 11 knots
Crew: 4
Autonomy: 3 days
Built: 2001, FINLAND UUDENKAUPUNGIN TYOVENE OY.
Nav. equipment: Furuno FRS 1000 - radar/plotter/sounder, JLR-21 GPS Compass, Furuno VHF FM 8500 - radiotelephone

Survey equipment: Reson SeaBat 7101 multibeam echosounder, TRIMBLE GNSS SPS 855 with TRIMBLE GSM MSN 940 modem for RTK TRIMBLE VRS Now TEC corrections or Marinestar, Hemisphere Crescent VS110 GPS compass, Leica 530 RTK GPS, Octans EM 1000 motion sensor, SVP-15 sound velocity probe, GeoAcoustics Dual Frequency Side Scan Sonar.
Motorboat **BLESSER 505 WA.**

**Home port:** Riga; reg.Nr.: LV-7323

Mono - hull plastic; 5.05m x 2.40m x 0.40m

**Engine:** 2 x 50HP Suzuki; aux: Honda 0.9kW

**Speed max:** 16 knots

**Crew:** 2+1

**Autonomy:** 1 day

**Survey equipment:** Deso Atlas 15 singlebeam; Hemisphere Crescent VS110 GPS compass; Sound velocity probe SVP-15, Marine Magnetics Explorer Mini Marine Magnetometer, HYPACK software.
Survey boat SONÄRS – model Arronet 23.5 C

MMSI: 275041111
Call sign: YL2893
Home port: Riga, reg.Nr. 3100
Mono-hull Al 7.25m x 2.4m x 0.6m;
Engine: 110.3kW YAMAHA F150ATE, aux: Honda 0.9kW
Navigation equipment: FURUNO GP-32 GPS, ICOM-M323 VHF, FURUNO 1715 RADAR, SATELLITE EPIRB ACR RLB-38
Safety equipment: ARIMAR inflatable liferaft 4 pers., MARINE POOL automatic lifejackets, lifebuoys.
Speed max: 32 knots
Crew: 2+1 (max 8 pers.)
Autonomy: 1 day
Built: 2014, Arronet Teknik AB, Sweden
Survey equipment: Reson SeaBat T20-P multibeam system; positioning system TRIMBLE SPS 461 with TRIMBLE GSM MSN 940 modem for RTK TRIMBLE VRS Now TEC corrections or Marinestar; Sound velocity probe SVP-15, SVP-71; IMU SMC-108 motion sensor; Marine Magnetics Explorer Mini Marine Magnetometer; Teledyne PDS 3.9.5.2 software.
Annex 2

Paper Chart coverage.