Executive summary

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:

- Head of Hydrographic Service
  - Hydrography Department
    - Surveying
    - Hydrographic data processing
    - Hydrographic database management
  - Cartography Department
    - Paper Charts
    - ENCs
    - Nautical publications
    - Print on Demand service
    - Notices to Mariners
    - Data for National Geodata portal
    - Marine Spatial Planning data
  - Navigation Information Department
    - Maritime Safety Information
    - Notices to Mariners
    - Aids to Navigation database Management
    - Aids to Navigation supervision

2. Hydrographic Surveys
Surveys were mainly provided according to HELCOM Hydrographic re-Survey plan for Baltic Sea and in port areas in 2016. 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 2016 (September)
717.18 km² - on HELCOM routes in the Central (Middle) Baltic and the Gulf of Riga (CAT II);
11.16 km² - Harbour areas


Survey vessels

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

Survey vessels of 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 charts of relevant navigational bands. All paper charts are produced and updated by Cartography Department. “Print on Demand” system is in use.

Status of nautical charts within the limits of the 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 ENCs (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**

MAL folio contains 15 INT charts.

**National charts**

MAL chart folio contains 22 paper charts all of which are produced in accordance with IHO standard S-4. All paper charts are updated monthly and available in Print on Demand system. 6 new chart editions produced in 2015 - 2016.

**ENCs**

Latvia has 23 ENC cells in navigational purpose bands 2 to 6. ENCs are updated on a monthly basis, with possible maintenance and new editions in meantime. Temporary (T) and preliminary (P) notices to mariners are included into ENCs. Within 2015 – 2016 all new paper chart editions were 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, Jeppesen Italia S.r.l, Bist LLC, ChartWorld, SeaPilot AB, OceanWise Ltd, Transas, Jeppesen Italia S.r.l.

**RNCs**

RNCs are not produced by MAL.
Other charts

The last Collection of charts “Leisure Craft Charts. Baltic Sea, Latvia” was published on May, 2013. New edition is planned within next 2 years. Leisure craft charts are not updated, but HS is considering to incorporate next edition of Leisure craft charts into Notices to Mariners update system.

HS also provides production of special charts and electronic data for Governmental Institutions.

4. New publications & updates


5. MSI

Existing infrastructure for transmission.

Local Navigational Warnings are broadcasted using National GMDSS VHF network along coastline. Service is provided by the Maritime Rescue Coordination Centre (MRCC Riga) of the Latvian Naval Flotilla Coast Guard Service 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 of ports, on reporting requirements, 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 cartographer is receiving CAT B training course, financed by NIPPON Foundation, on nautical cartography at UKHO, September – December, 2016.

8. Oceanographic activities
9. Other activities

**INSPIRE directive**

MAL according to the INSPIRE directive is responsible for provision of several kind of data to the Latvian Geoportal, that is a gateway to the INSPIRE Geoportal.

**National Spatial Planning**

MAL completed participation in the Maritime Spatial Planning of Latvia as the developer of graphical part, which was supervised by the Ministry of Environmental Protection and Regional Development.

**IHO Working Groups**

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

**Participation in EU Projects**

Coastal mapping, FAMOS, High resolution Seabed Mapping
Detailed information regarding hydrographic vessels.

Vessel KRISTIĀNS DĀLS.

- **MMSI:** 275027000
- **Call sign:** YLAD
- **Home port:** Riga, reg.Nr. 0123
- **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 SONÅRS – 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.
ENC coverage.