



Document title	Progress in reporting data to the impulsive noise register
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Reference	Outcome of PRESSURE 4-2016, para 3.22

Background

PRESSURE 4-2016 noted the national arrangements planned/undertaken in order to deliver data to the regional registry by September 2016 for the use in the Second Holistic assessment (HOLAS II) ([Outcome of PRESSURE 4-2016](#), para 3.22).

This document contains updated information on the progress in reporting national data to the regional impulsive noise register since the last PRESSURE meeting.

Action requested

The Meeting is invited to note and, if needed, provide additional information regarding upcoming data reporting to the registry.

Progress in reporting data to the impulsive noise register

The current status of reporting data to the impulsive noise register is available in the following link <http://underwaternoise.ices.dk/accessions.aspx>. Currently, Denmark, Germany and Sweden have reported data for the Baltic Sea area:

- Denmark has delivered data on seismic and pile driving events occurred in 2015 to the registry although they did not take place in the HELCOM area;
- Germany has reported pile driving events occurred in the years 2013 to 2015;
- Sweden have delivered data on sonar events, airguns and underwater explosions for events occurred in 2015.

Visualisation of reported data

The Pulse Block Days (PBD) approach has been chosen to visualise the reported data. This method is the same one used for the North Sea data. In this approach data are pulled together in so called PBD for each sound source and displayed in the ICES Statistical Rectangle Coding System. According to the guidance of TG-Noise (Dekeling et al., 2014¹) sound sources are divided in sound intensity categories (very low, low, medium, high, very high).

In the following Figures (1-4) data are taken from the registry and presented in separate layers for each sound intensity category over ICES sub-squares. Data reported in Swedish waters for 2015 refer to sonar sources. Data reported in the German EEZ for 2013 refer to pile driving. Both Denmark and Germany have reported data to the European impulsive noise registry at ICES for 2015, but for both countries the events took place in the North Sea. In Figure 2 data are drawn indicatively together, although they refer to different sources and different time periods. In Figure 5, the total PBD as reported in the Baltic Sea per sound intensity category for the years 2013 and 2015 are compiled.

¹ Dekeling, R.P.A., Tasker, M.L., Ainslie, M.A., Andersson, M., André, M., Castellote, M., Borsani, J.F., Dalen, J., Folegot, T., Leaper, R., Liebschner, A., Pajala, J., Robinson, S.P., Sigray, P., Sutton, G., Thomsen, F., Van der Graaf, A.J., Werner, S., Wittekind, D. and Young, J.V. 2014. Monitoring Guidance for Underwater Noise in European Seas - 2nd Report of the Technical Subgroup on Underwater noise (TSG Noise). Part II Monitoring Guidance Specifications. Interim Guidance Report. 26pp.

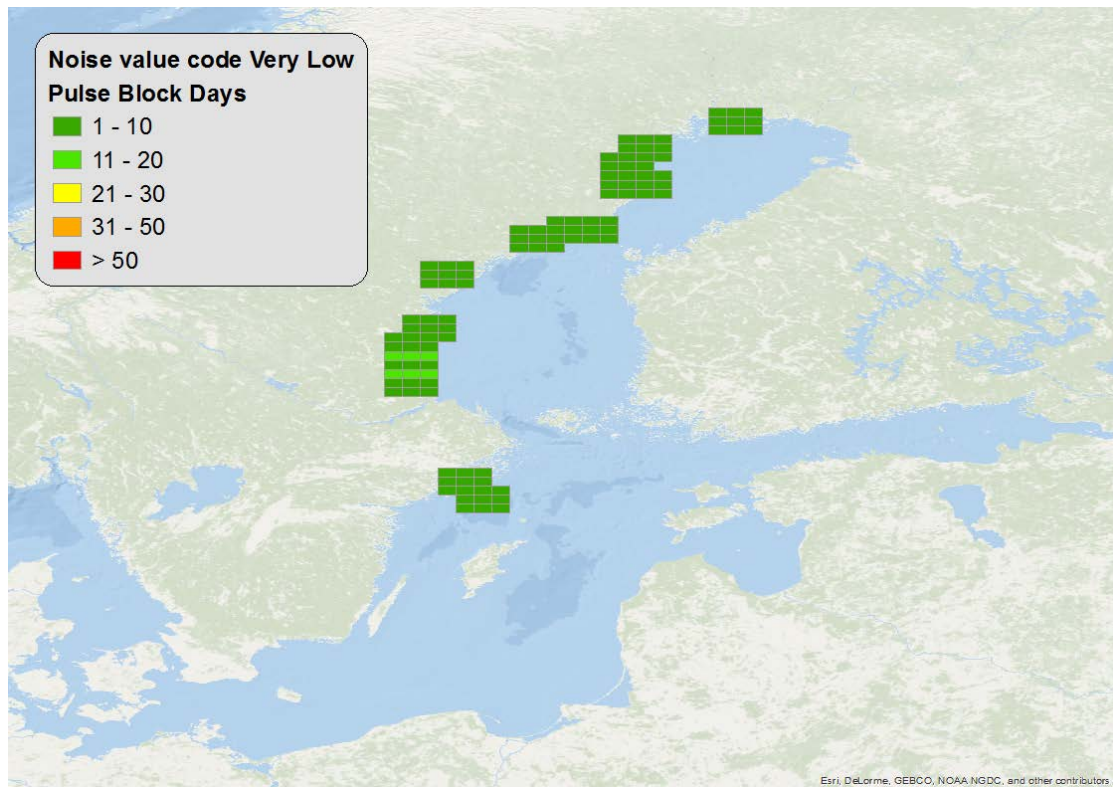


Figure 1 - Pulse block days in 2015 with sound intensity category very low.

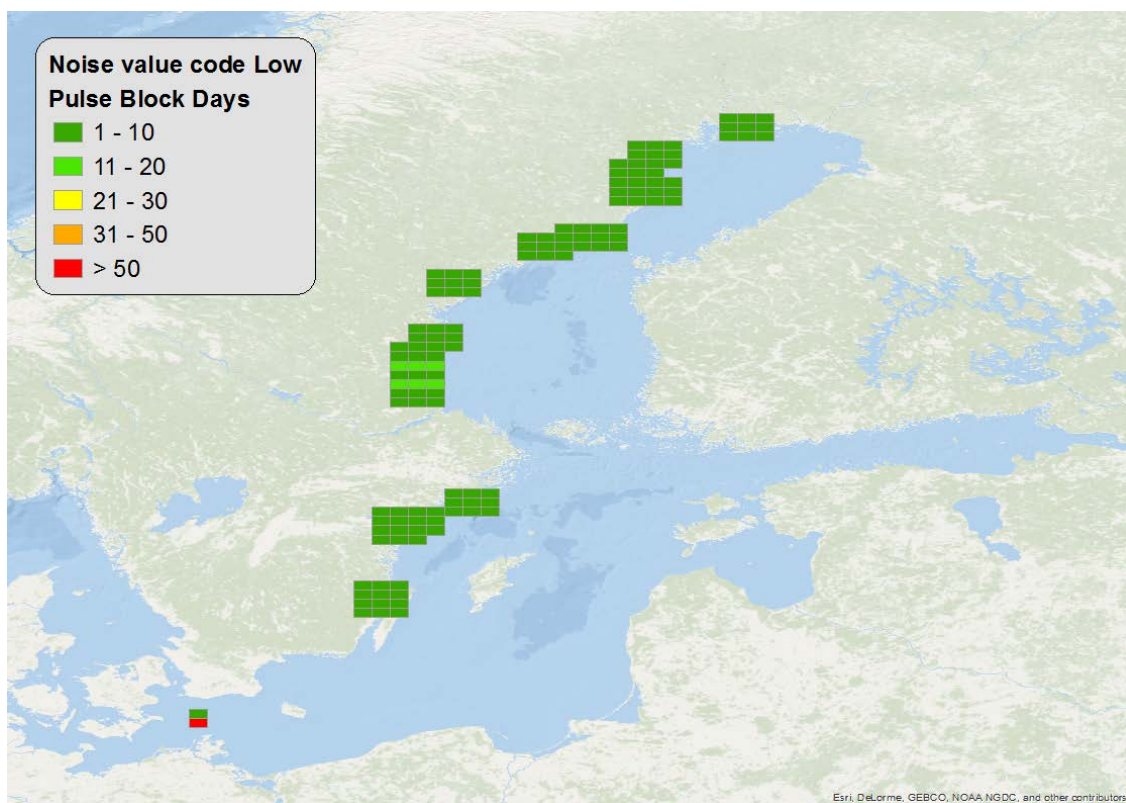


Figure 2 - Pulse block days with sound intensity category low. Data for 2015 have been reported in Swedish waters. In German waters only data for 2013 were available.

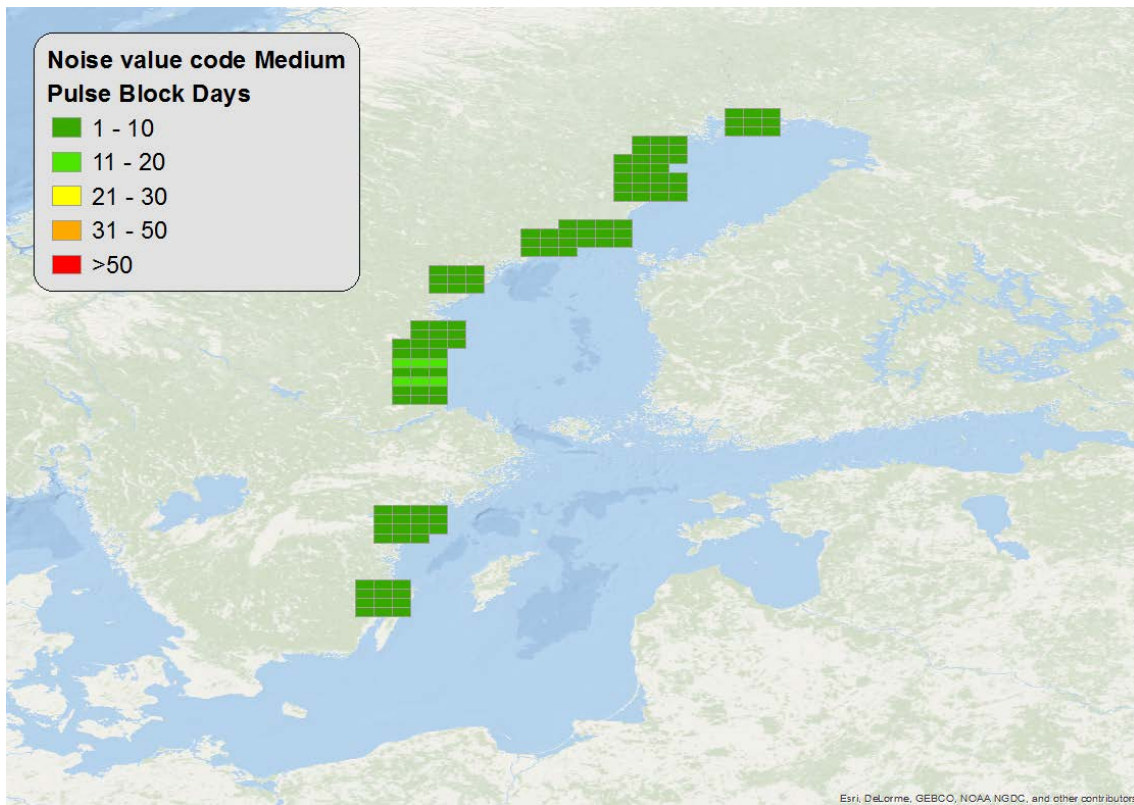


Figure 3 - Pulse block days in 2015 with sound intensity category medium.

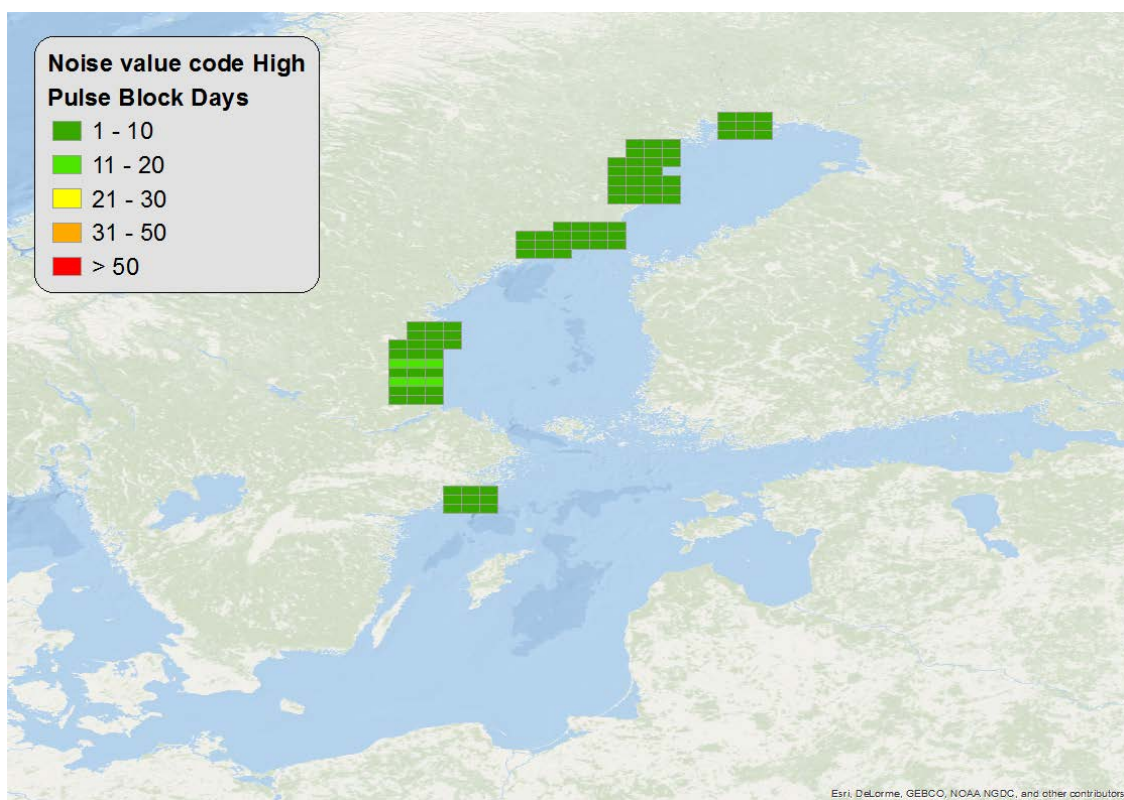


Figure 4 - Pulse block days in 2015 with sound intensity category high.

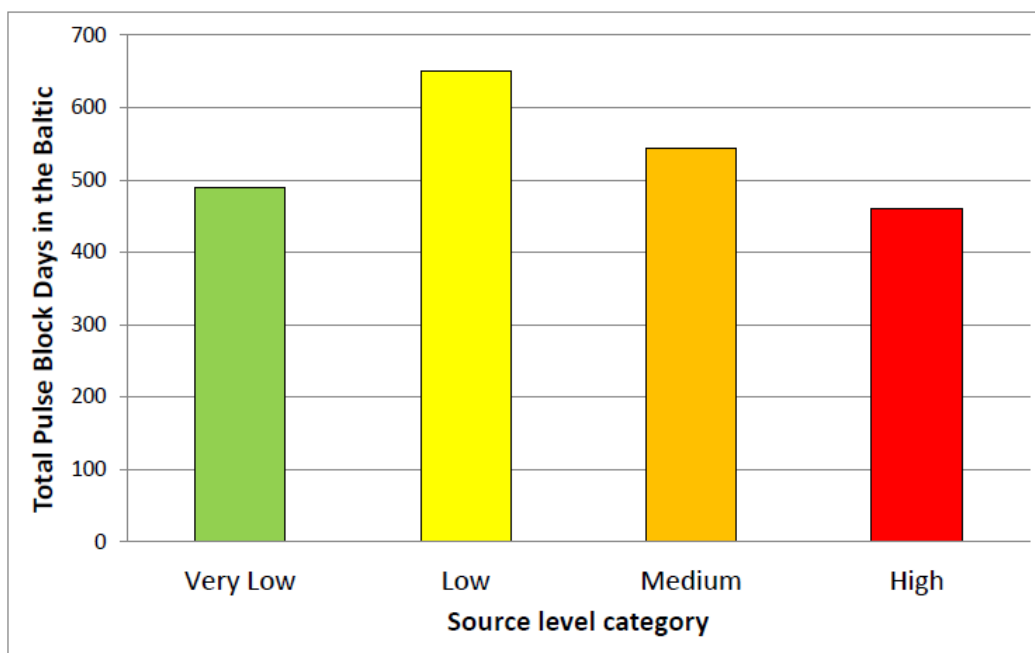


Figure 5 - Total PBD reported in the Baltic Sea per sound intensity category for the years 2013 and 2015 according to the guidance given by TG-Noise (Dekeling et al., 2014).