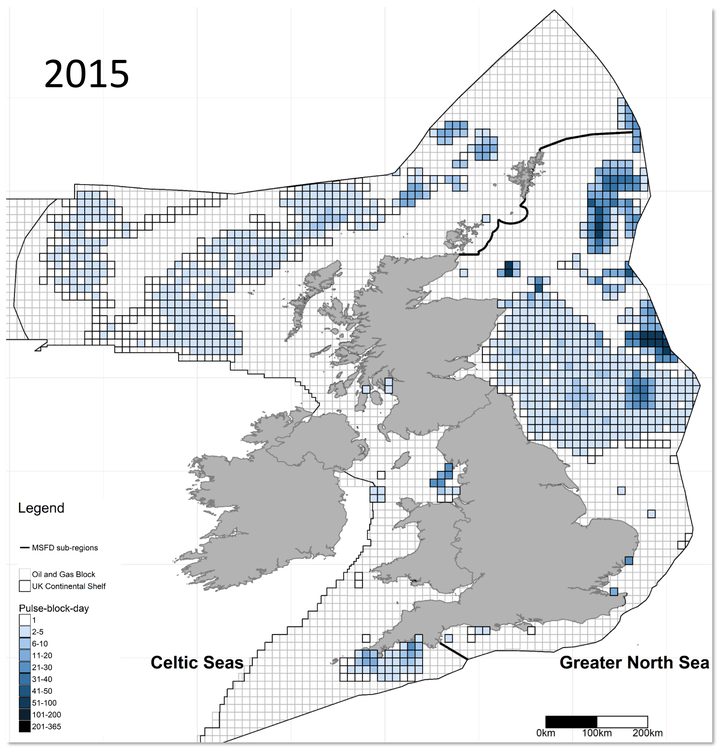
Impulsive Noise Pressure in UK Marine Waters: A Four Year Time Series 2015 - 2018

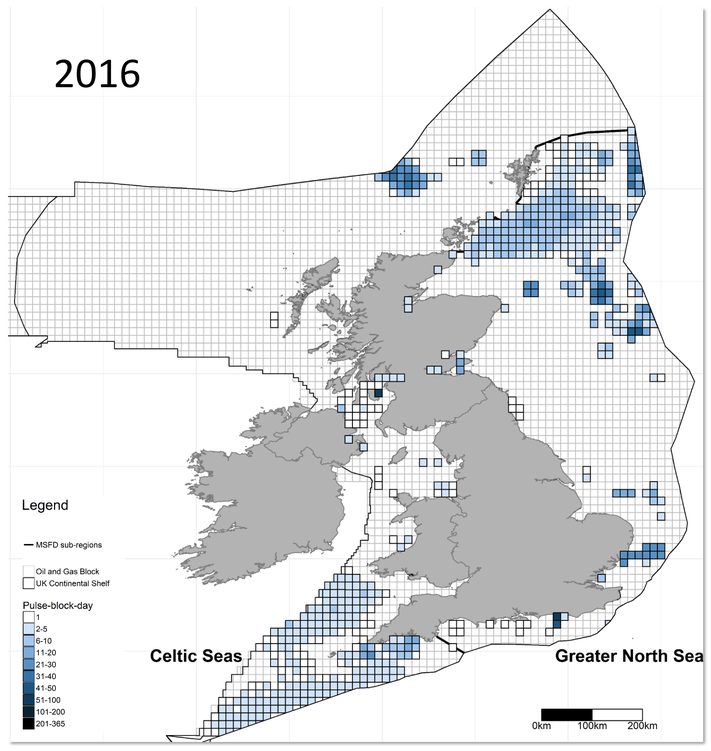
JNCC developed the UK Marine Noise Registry; an online portal for data entry, collating man made low – mid frequency impulsive noise data since 2015.


Source: https://upload.wikimedia.org/wikipedia/commons/thumb/7/70/USS_Arkansas_(CGN-41)_shock_trials.jpg/750px-USS_Arkansas_(CGN-41)_shock_trials.jpg

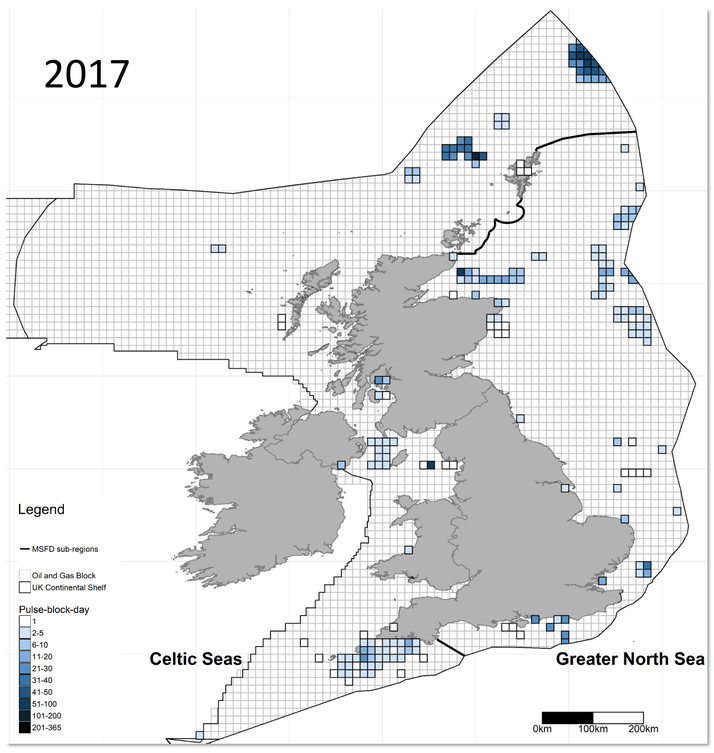
2015



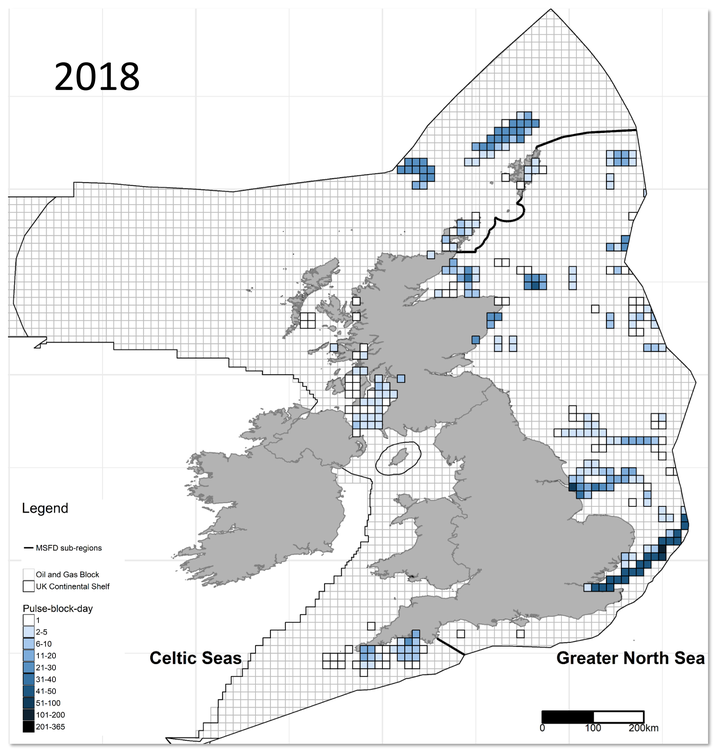
2016



2017

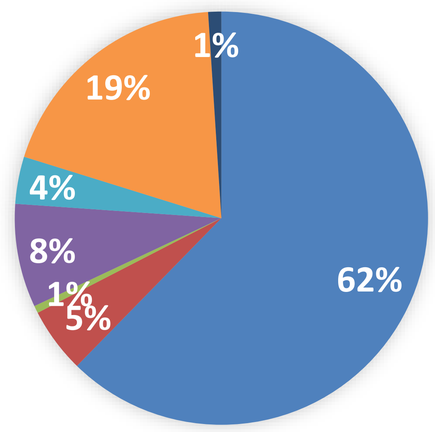


2018

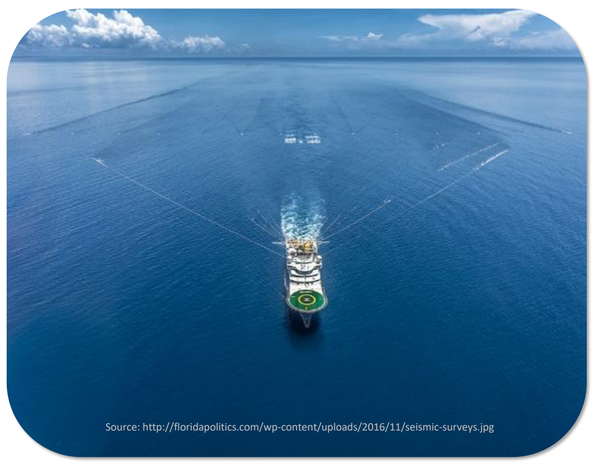


Maps show **pulse block days**, a coarse unit representing the number of days a UK oil and gas licensing block experienced impulsive within the year.

Percentage share of total pulse block days over the 4 years for each activity type recorded within the MNR:



	2015	2016	2017	2018
Highest number of days that noise activity was experienced in a single block	99	62	101	144
Percentage of blocks that experienced noise activity (n = 4407)	24%	14%	5%	7%
Percentage of blocks (with noise) that experienced less than 5 days of noise activity	80%	61%	51%	55%


Source: http://floridapolitics.com/wp-content/uploads/2016/11/seismic-surveys.jpg

Conclusions and Ongoing Work

- Improved reporting year on year has lead to a better understanding of impulsive noise pressure on UK seas.
- Seismic surveys contribute the highest number of days of impulsive noise.
- There are still data gaps e.g. acoustic deterrent devices used at fish farms; establishing data collection routes for missing data is ongoing.
- UK noise registry data has been used in both national and international indicators of underwater noise pressure.
- Ongoing work at regional level to develop an indicator of the effects of impulsive noise on marine species.

JNCC
Joint Nature Conservation Committee

Follow JNCC on: **www.facebook.com/JNCCUK/** or **https://twitter.com/JNCC_UK**

Tetrienne Box, Sónia Mendes, Jane Hawkridge, Roweena Patel, Charlotte Findlay, Paul Gilbertson, Ulric Wilson, Matt Debont, Mark Tasker. Contact **tetrienne.box@jncc.gov.uk**