

TG Noise- overview

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TG Noise

- Recap: why TG Noise was needed
- Results of EU level cooperation
- Progress in monitoring, assessment and management
- Further work- main issues

Underwater noise

- Initial concern
 - Sonar related strandings
 - Hearing damage
- Taken up in MSFD in 2008
 - Defined as pollutant
- Present main concerns
 - Impulsive noise of piling, seismic, sonar, explosions
 - Ambient noise, mainly by commercial shipping
 - For ecosystem/populations, subtle responses (masking, behavioural change) most relevant (low level/long ranges/large areas affected)



Why was TG Noise needed

- One of identified emerging threats; 2010 Commission Decision: for energy, measurement of noise should have priority
- Two indicators defined, addressing main concerns, based on TG11 advice:
 - short duration: low and mid-frequency impulsive noise
 - Seismic surveys, piling, sonars, explosions
 - long lasting: low frequency continuous noise
 - Commercial shipping
- No existing noise monitoring at that time; clarification/guidance needed
- To support MS and provide guidance → expert group formed (TG Noise) under MSCG/MD
- Participants from governments, research institutes, private sector, NGO's
- Co-chaired by UK and NL

Status of noise monitoring in EU

- TG Noise provided guidance for monitoring of underwater noise in EU
 - Initial guidance 2013, final guidance 2014 as JRC publication
 - Input from initiatives like BIAS, monitoring on windfarms
 - EC questionnaire confirmed that EU MS adopted Monitoring Guidance
 - US NOAA (Ocean Noise Strategy) monitoring to be consistent with EU
- Since 2014, significant progress implementation of monitoring
 - Combined HELCOM / OSPAR Impulsive Noise Registry operational at ICES
 - BIAS project for monitoring (continuous) noise in Baltic completed
 - New concrete initiatives:
 - QuietMed
 - JOMOPANS
 - JONAS
 - See TG Noise paper (2017) 'Management and monitoring of underwater noise in European Seas- Overview of main European-funded projects and other relevant initiatives' made for WG GES / MSCG

Conclusions on noise monitoring

- At this stage, it is clear that:
 - Current monitoring /registration programmes can and will deliver relevant information on underwater sound levels
 - Joint Monitoring Programmes for underwater sound are realistic, effective and provide information for Member States that cannot be obtained by individual monitoring campaigns
- Noise monitoring has started as JMP's from onset
 - Result of EU, RSC cooperation
- Limitations
 - First data 2014 (continuous noise), 2015 (impulsive noise)
 - Pressure monitoring only
 - TG Noise advised monitoring of existing indicators to be priority

Progress on assessing impact

- Number of MS have set up monitoring for underwater noise
 - will provide information on actual sound levels, trends, and relative contribution of anthropogenic noise
- Pressure indicators; knowledge on relation pressure/state/impact needed to set targets/thresholds
- Impulsive noise:
 - displacement, some knowledge on local/short term effects available, but population effects mostly unclear
 - not sufficient for larger scale/longer term assessments in this MSFD cycle
- Ambient noise
 - slow progress; little known on pressure/impact relation
 - probably insufficient for next MSFD cycle for most MS

TG Noise work 2016-2017

TG Noise organized thematic workshop on development of impact indicators in 2016

- Main goal: establish a common understanding to what extent the current indicators on underwater noise can be used to assess the impacts of anthropogenic noise, whether additional indicators are useful and main orientations for such indicators
- 55 participants of science community, government, NGO's, RSC's and other regional agreements
- Workshop was successful, on most topics it was possible to identify a common understanding on potential use of present indicators, and directions for further development

Way forward to define further Indicators for Underwater Noise

Thematic Workshop – Final Report , October, 2016

TG Noise work programme

- 2017: TG Noise expanded to > 50 members, representation of (almost) all MSCG members/observers (experts and policy makers)
- Short term: EU TG Noise as expert group will make next steps
 - CIS WP 2016-2019, Commission Decision of 2017
 - to assist Member States and RSC in the implementation of operational monitoring
 - to develop advice to Member State on future assessment and target-setting
 - to develop work on environmental impacts of noise and noise pressure indicators.
 - to organise a workshop on impacts
 - to ensure regional coherence (and complementarity)
 - Combined meeting TG Noise/workshop November 2017 (Spain) to further explore and use the existing (and new) data of monitoring programmes
 - Gap in continuation of (essential) support contract for TG Noise; now solved
 - Mainly make use of present core group / network of experts

Establishing thresholds /Union level cooperation

- For longer term:
 - TG Noise to develop advice on threshold setting
 - Commission Decision requires cooperation at Union level
 - Consensus of 2016 workshop, that assessments may be done at (sub)regional level, larger scale assessment and target setting is not feasible
 - Find out the roles of TG Noise and of RSC groups
 - If work on proposing thresholds taken up by TG Noise character of group would change (now 'independent' expert group)

Different roles

TG Noise members	Short term (2018-...) actions for development of consistent methodology	Medium term actions, providing examples of thresholds	Longer term actions, setting thresholds
Experts	Lead	Lead	Support
Policy	Little role	Stakeholder	Lead

Main messages/dilemma's threshold settings

- Member States have set up/ are setting up JOINT monitoring programmes for underwater noise → pressure data will become available at large scales, in many regions
- Substantial knowledge gaps remain that are problem for setting targets / thresholds at short term
- TG Noise able to bring this further for short term (EU level cooperation)
- For longer term (e.g. post-2018), will need to explore to what extent EU-level (concrete threshold proposals?) works best and what would be for e.g. RSC's