## Noise emissions from shipping

**Source: BONUS SHEBA project** 



## Sources of ship generated noise

- Water flow
- Thrusters
- Engine
- Auxiliary engines & equipment
- Propellers





Much like atmospheric pollution, underwater noise pollution has both natural and human induced sources, disperses to wide areas and can have harmful impact on humans and the environment.





## Potential impacts of under water noise on marine animals

Significant knowledge gaps still exist in studies of underwater noise. More research is needed to mitigate the potential harmful impacts of noise emissions.





- Behavioural changes
- Communication problems
- Hearing loss
- Increased stress
- Mating & breeding problems



