

**Question to be answered in writing no. 1755**

The processing of applications for the use of animals in experimental procedures is governed by the Regulation on the use of animals in experimental procedures and the Instructions concerning the Norwegian Food Safety Authority's administration under the Norwegian Regulation on Animal Experimentation.

The summary in the decision concerning permission to conduct the experiment describes the application as follows:

Noise from human activity at sea can disturb marine mammals. For whales, sound is essential for survival and reproduction. Knowledge of how whales hear will make it easier to understand the impact of noise from human activity on these mammals. There are anatomical models of the whale's hearing. The purpose of the experiment is to obtain knowledge about which noise sources may be detrimental, and to validate the anatomical models with the help of direct measurement of hearing in minke whales. Twelve whales will be caught in nets and handled for up to six hours in order to take blood tests and measure their hearing with the help of a subcutaneous electrode. If necessary, the whales will be sedated. The whales will be satellite-tagged in the dorsal fin before being released for monitoring of behaviour after the experiment.

Our assessment is as follows:

All animal experiments must be classified according to the expected degree of severity (Appendix B of the Regulation). The division comprises non-recovery in terminal experiments (which are carried out under general anaesthesia without the animals regaining consciousness), and mildly severe, moderately severe or severe experiments. The Regulation provides a number of examples of cases of mildly severe, moderately severe or severe experiments.

The severity of this experiment is set as moderate. Procedures on animals as a result of which the animals are likely to experience short-term moderate pain, suffering or distress, or long-lasting mild pain, suffering or distress, as well as procedures that are likely to cause moderate impairment of the well-being or general condition of the animals, are classified as moderately severe. There is nothing to indicate that this experiment should be regarded as severe. Examples of severe experiments are characterised by severe pain, suffering or death.

Our assessment of moderate severity is due to how the whales are to be held between two rafts while their hearing is tested. We assess the placement of subcutaneous electrodes, the testing of hearing and GPS tagging in the dorsal fin to be mildly severe.

We assess that the purpose of the experiment is well-described and justified, and that this justifies the burden on the animals.

We believe that the consequences for animal welfare in this experiment have been carefully assessed. The experience of FFI (the Norwegian Defence Research Establishment) indicates that if minke whales become stuck in fishing nets, etc., they are almost paralysed and lie completely still until they are released. They believe that this will also be the case in this situation. FFI will start by

examining what the whales hear, i.e. the risk of them being disturbed. There is no question of exposing them to loud noise, but of finding out the lowest noise that they can actually hear. Subcutaneous electrodes will be inserted in the whales in order to measure electrical signals emitted from sound. We believe that the results of the experiment will benefit both the minke whale and other whale species as we will learn more about how sound and noise pollution in the ocean can disturb these animals.

#### Our conclusion

We believe that the consequences for animal welfare have been assessed carefully, and that the experimental procedure and the decision to grant permission are professionally justified on an adequate basis. Knowledge of how human activity disturbs wild animals will always be to the benefit of the animals. We believe that is also the case here.