**Summary of BIM gear trials on Nephrops fisheries conducted in 2022**

Full reports are uploaded separately. These trials were conducted on FIP member vessels.

**Summary of BIM report: Testing of modified rigging towards reduction of unwanted catches in the Nephrops fishery August 2022\***

Nephrops gear trials took place on a FIP member vessel in ICES area 7 a. Western Irish Sea in 2022 with the aim of restricting catches of gadoids below minimum conservation reference size (MCRS). The half quad rigs were modified by raising the horizontal ropes off the bottom with the aim of allowing small gadoids to escape the trawl. While Nephrops catch numbers increased in the modified test gear there was no reduction in MCRS whiting or haddock. However, there was an observed reduction in bycatch of ETP species, namely rays and skates, in the modified rigging. Trials continue in order gather more concrete data on alternate-haul gear and to minimise fluctuating environmental factors on trial results.

**Summary of BIM Report: April 2022 Preliminary assessment of the energy efficiency of a four-panel Nephrops trawl**

Another gear trial in 2022 took place in the Irish Sea on a FIP member vessel that was aimed at improving energy efficiency in the Nephrops fishery but also examined bycatch reduction. A new four-panel Nephrops trawl was developed with extended areas of enlarged mesh in the top sheet of the net which is thought to improve energy efficiency while also potentially reducing fish bycatch. Fishing a half quad configuration, the four-panel trawl, with additional SELTRA codend, resulted in an increased wing end spread and showed a 29% increase in Nephrops catch and a corresponding 29% reduction in fuel consumption per kg of Nephrops caught leading to more efficient energy usage. A decrease in unwanted fish catch was also recorded in the trial gear showing promising signs to use this new gear to reduce bycatch within the fishery. Continued testing on gear modification is planned for 2023 to further improve gear used in the Nephrops fishery.