# MARE 2014/27

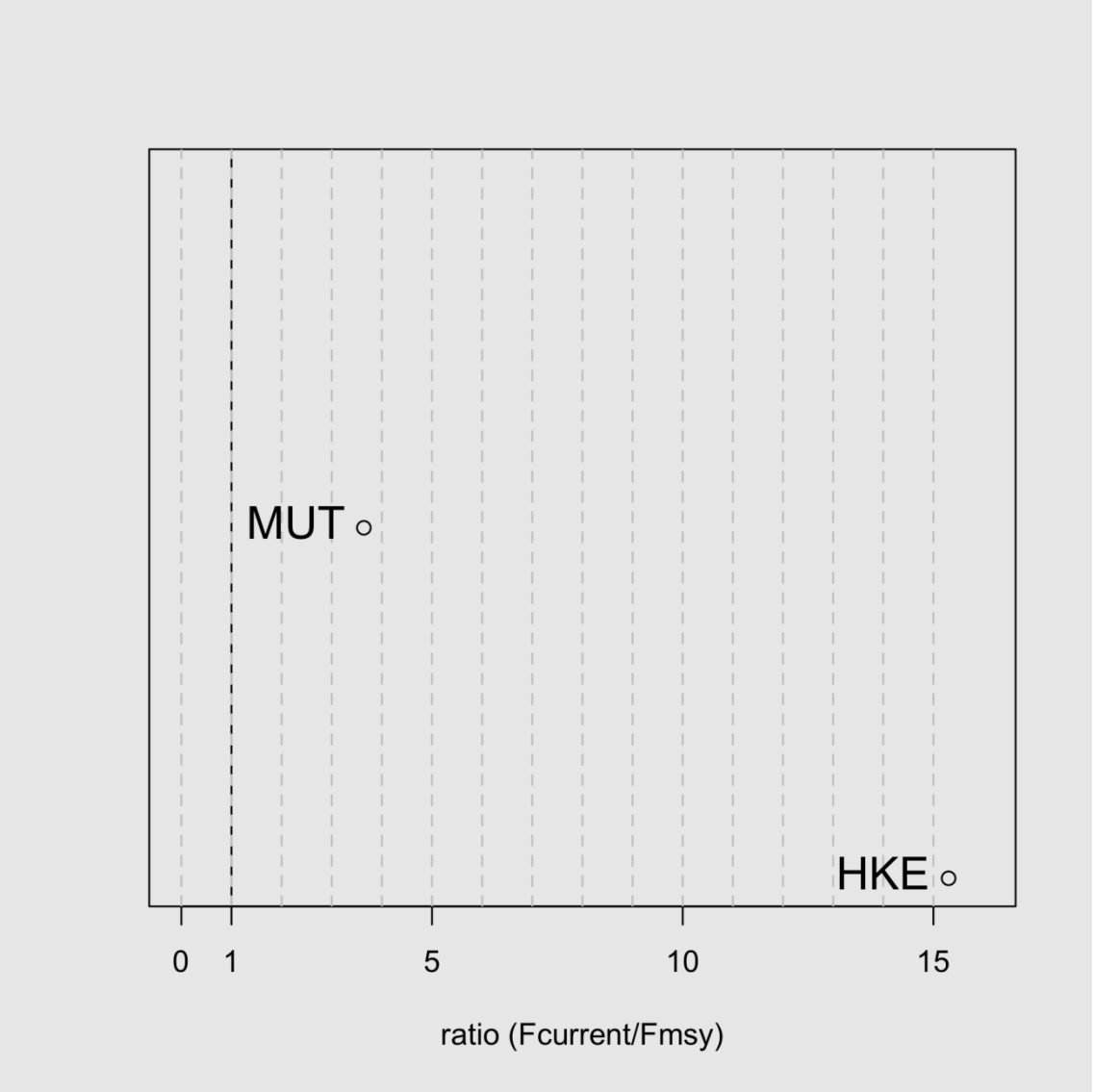
## GSA07 – demersals


Main demersal stocks: HKE (Merluccius merluccius); MUT (Mullus barbatus)

Main fleets: OTB (Bottom otter trawl) (France and Spain); GNS (Gillnet) (France); LLS (longline) (Spain)

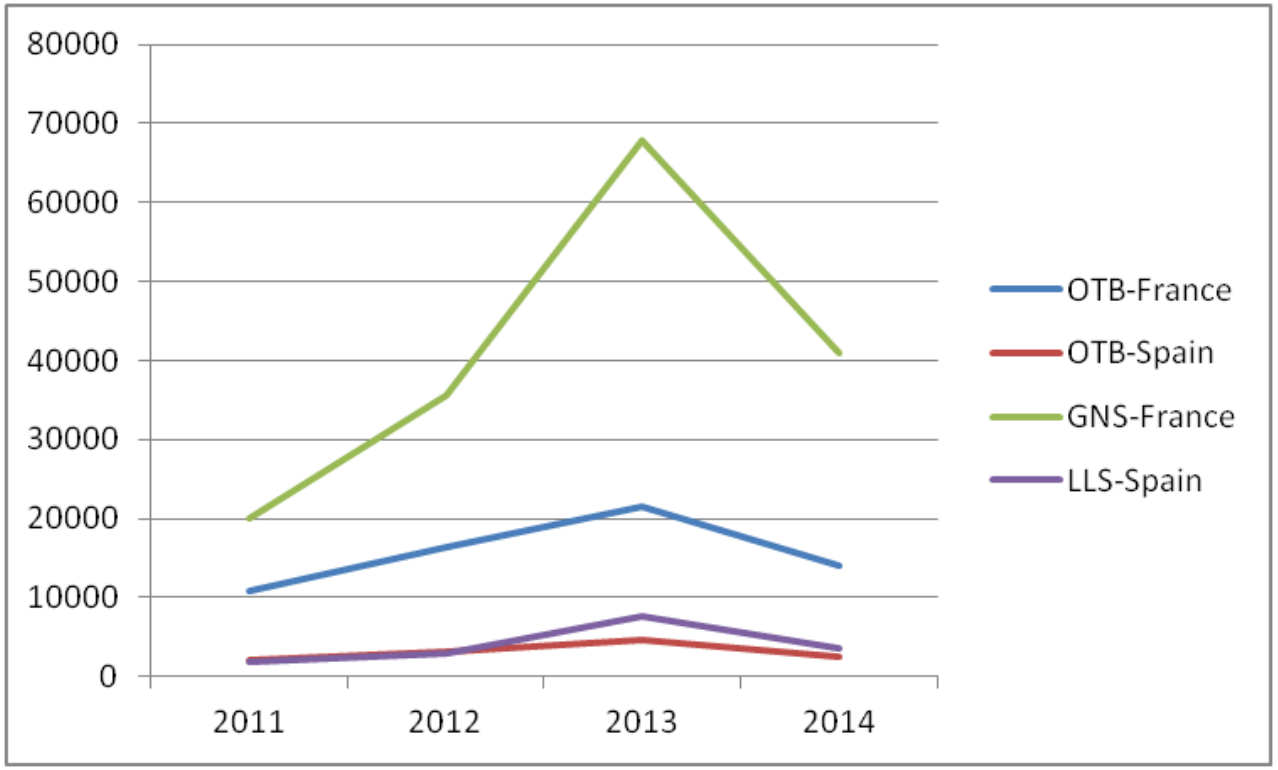
*Data source: STECF SGMED EWG 14-12; EWG 15-11; DCF 2015*

# State of exploitation (ratio Fcurr/Fmsy)

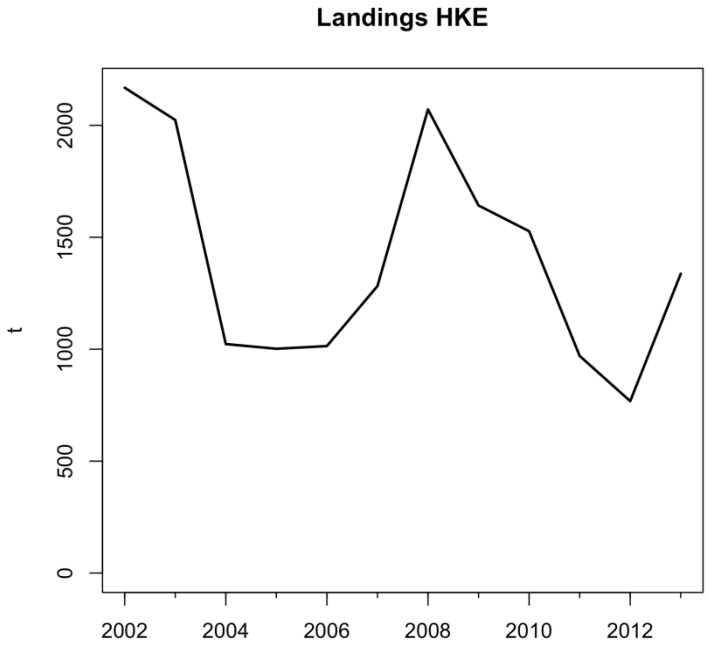


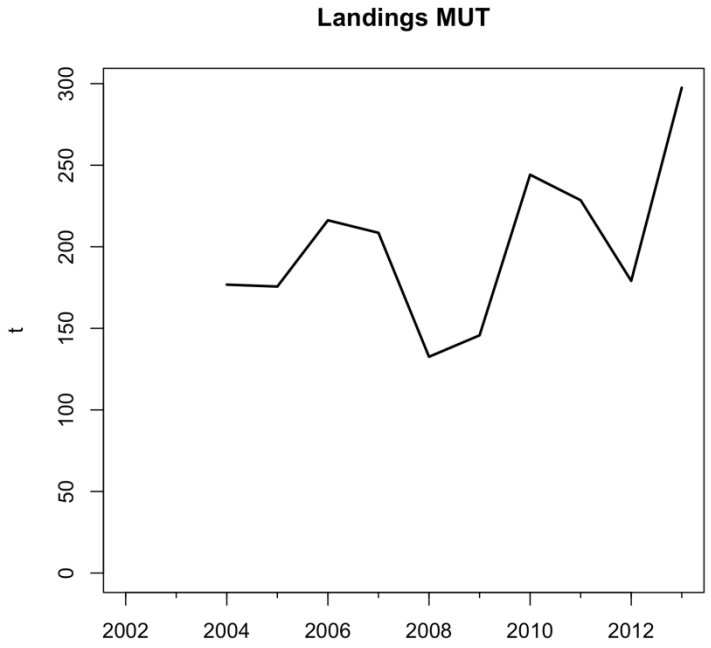
# GS06 - demersal

**Fishing effort (Nb trips by fleet)**

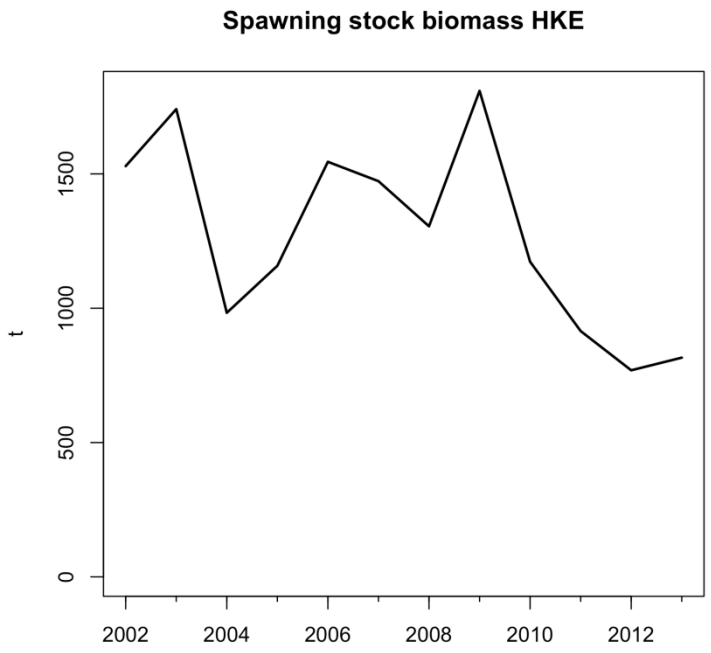


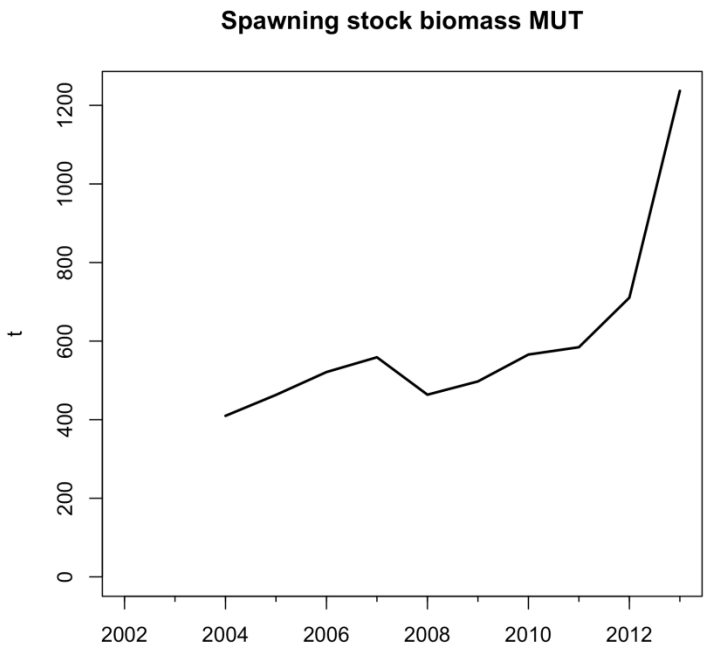
# Historical series of landings



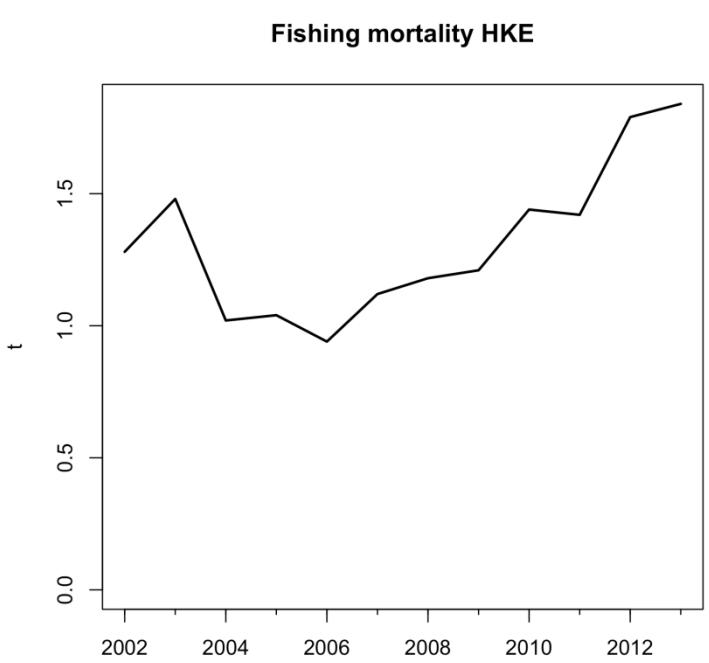



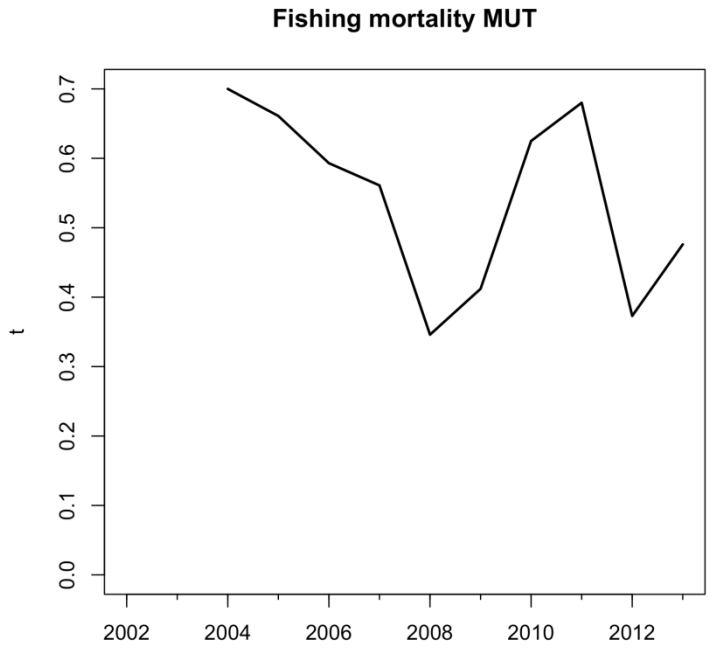
# Historical series of SSB



# Fishing mortality

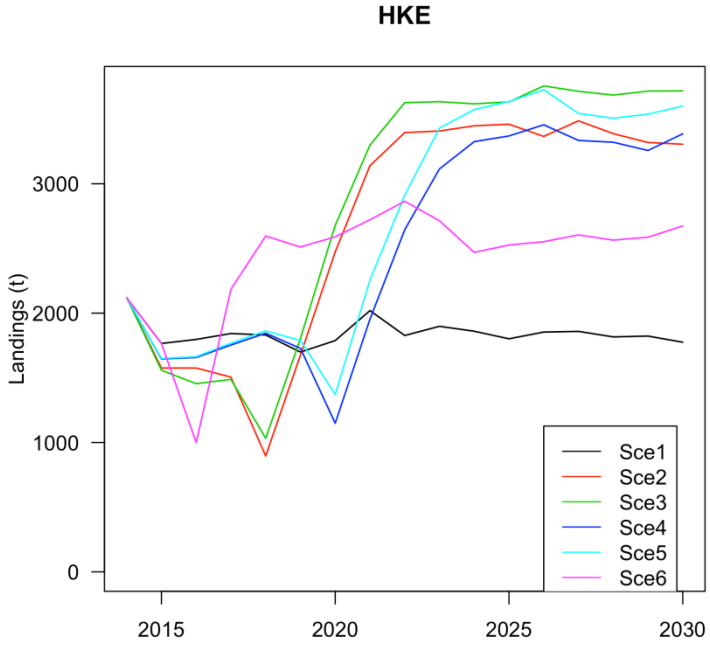


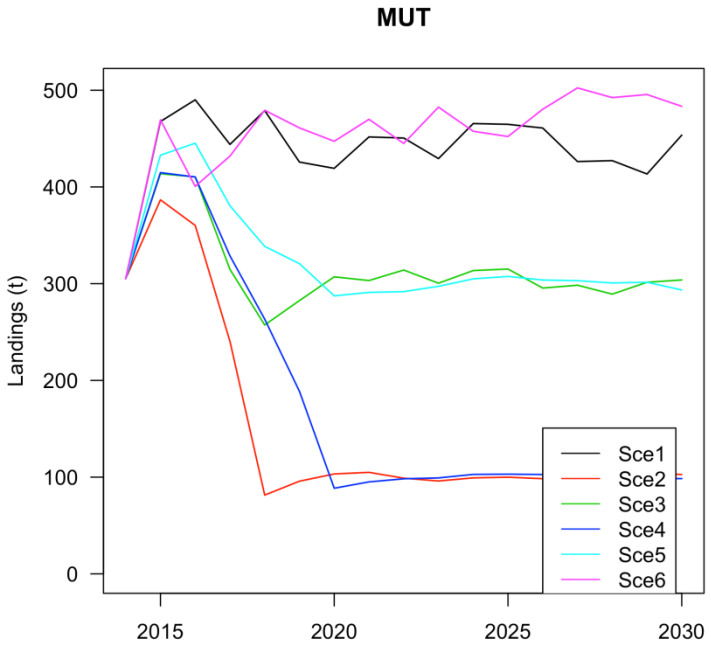



# Simulation scenarios

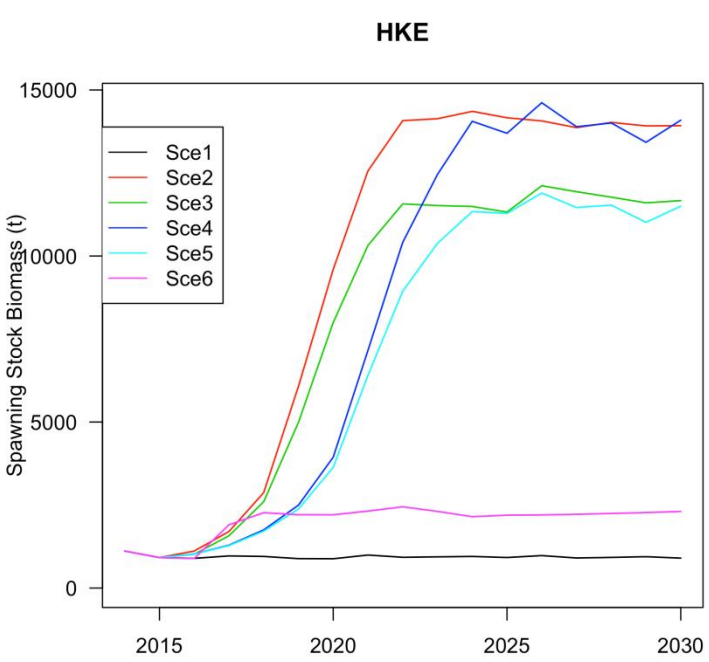
| **Case Study** | **demersals in GSA 7** |
|---|---|
| **Scenario 1** | Status quo to 2020 |
| **Scenario 2** | Linear reduction towards upper Fmsy of the most heavily exploited species in 2018 applied on both activity and capacity. Application to capacity can be differentiated by fleet. |
| **Scenario 3** | Linear reduction towards a weighted average Fmsy for a mix of species (using value of landings as weighting factor) in 2018 applied on both activity and capacity. Application to capacity can be differentiated by fleet. |
| **Scenario 4** | Adaptive reduction towards upper Fmsy of the most heavily exploited species in 2020 applied on both activity and capacity. Application to capacity can be differentiated by fleet. |
| **Scenario 5** | Adaptive reduction towards a weighted average Fmsy for a mix of species (using value of landings for weighting) in 2020 applied on both activity and capacity. Application to capacity can be differentiated by fleet |
| **Scenario 6** | Improving selectivity accounting for the survivability issue (in case of gear selectivity). |

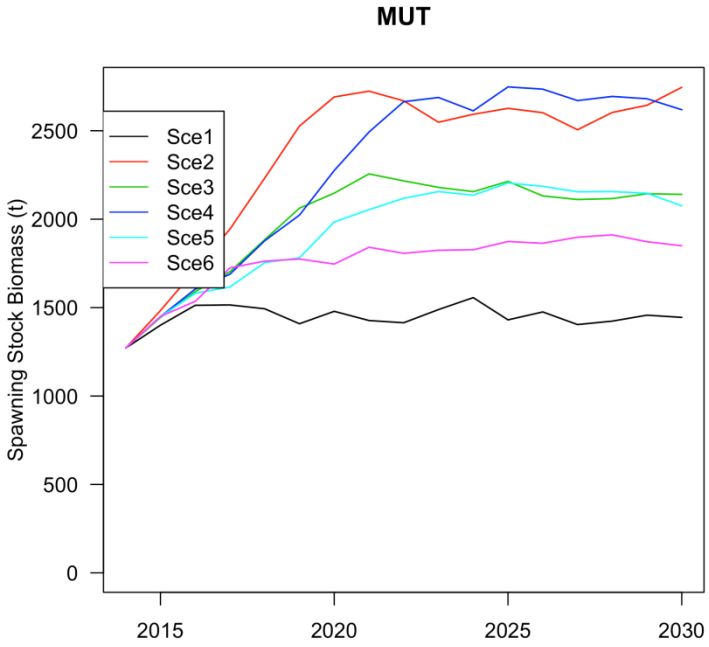
# Forecast Landings



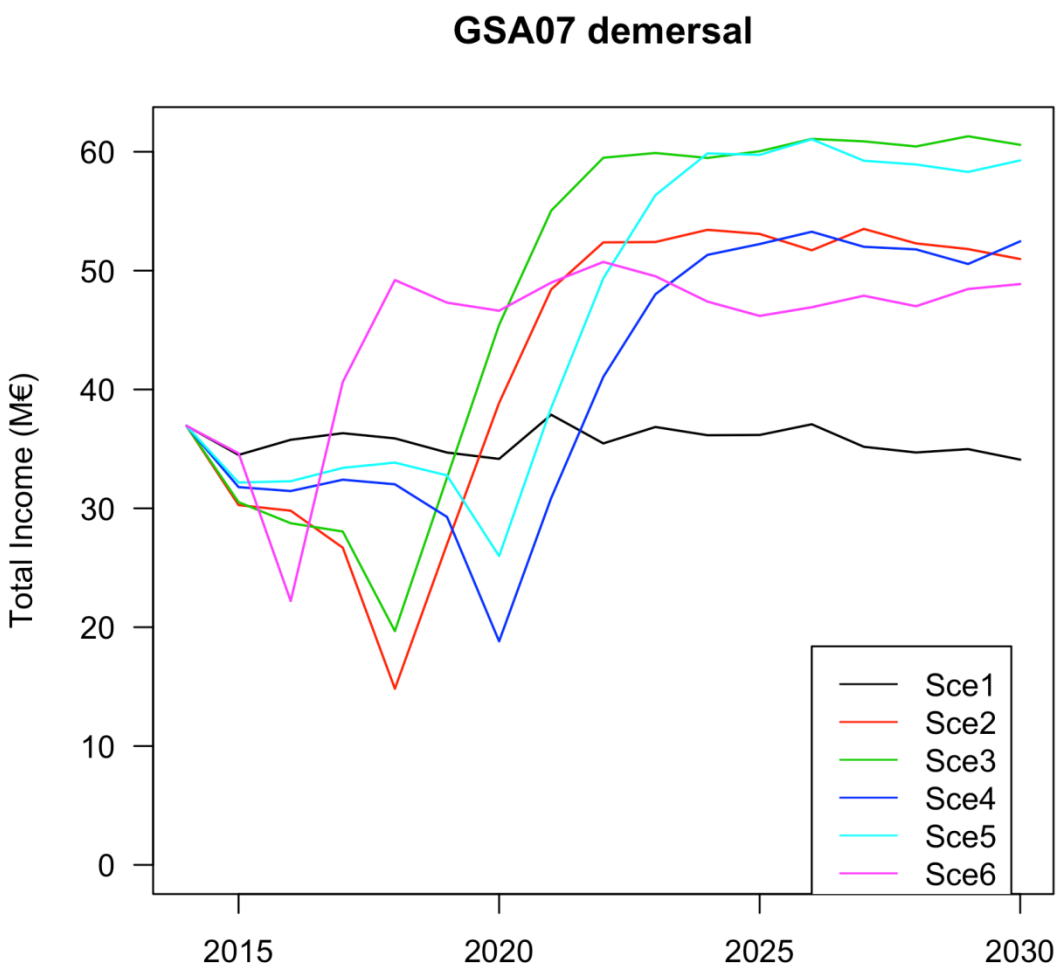



# Forecast SSB

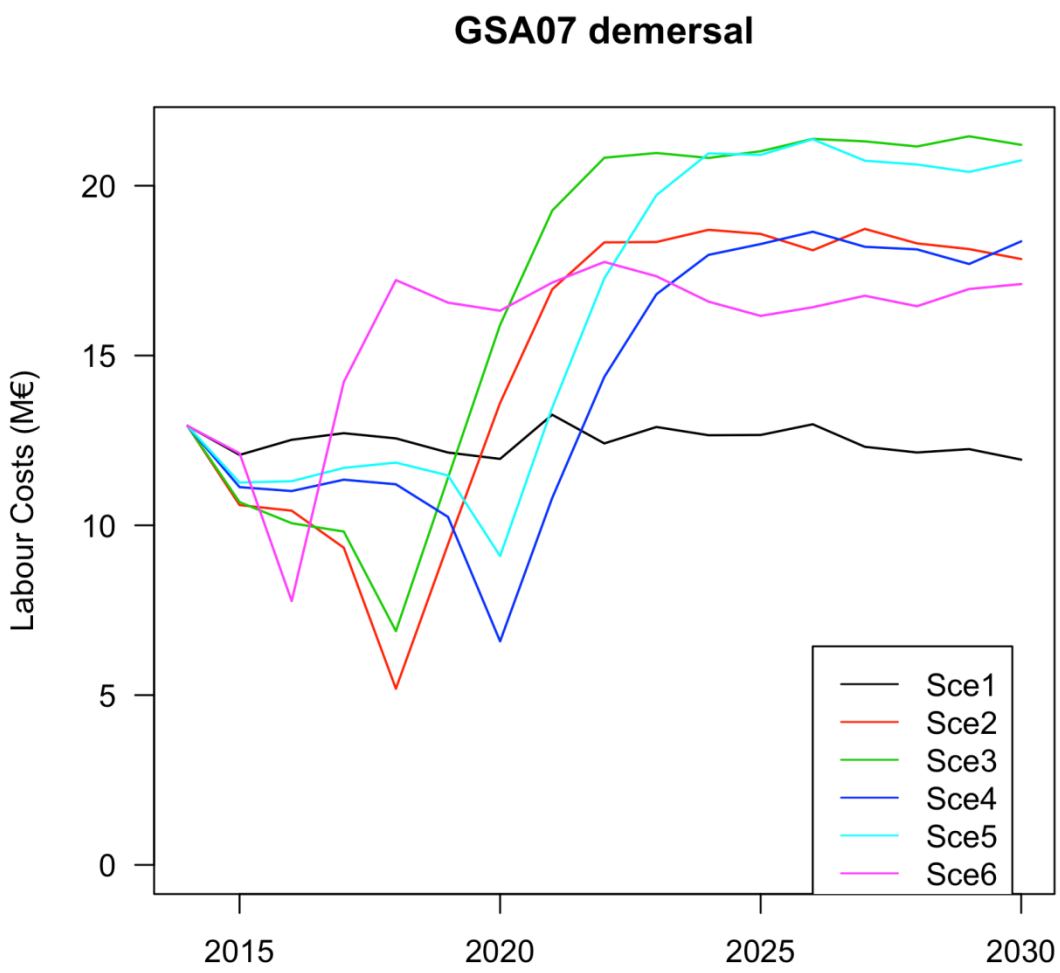


# Forecast Income



# Forecast Labour costs (salaries)



# Summary of results (2021)

| Scenarios 2021 | Labour costs | Revenues | Employment | HKE.catch | MUT.catch | HKE.SSB | MUT.SSB |
|---|---|---|---|---|---|---|---|
| Scenario 1 | 13 | 2474 | 1293 | 2020 | 452 | 994 | 1427 |
| Scenario 2 | 17 | 3233 | 123 | 3140 | 105 | 12564 | 2724 |
| Scenario 3 | 19 | 3107 | 163 | 3299 | 303 | 10320 | 2256 |
| Scenario 4 | 11 | 2053 | 123 | 1954 | 95 | 7160 | 2493 |
| Scenario 5 | 11 | 2523 | 163 | 2256 | 291 | 6409 | 2054 |
| Scenario 6 | 17 | 3202 | 1293 | 2722 | 470 | 2319 | 1841 |

- Under status quo conditions, SSB of HKE would be kept at historically low levels, with a high probability of stock falling below the reference value;

- In addition, under status quo conditions, overall income would remain at a low level and net profits would continue to be negative.

# Summary of results (2021)

- Considering the traffic lights table, reducing the present high fishing mortality rates by 2018 (Scenarios 2 and 3) would allow increasing catches and revenues, wages, as well as SSB, at the price of a significant loss of employment and fishing units;

- Delaying the reduction of fishing mortality to 2020 would result in worse values of these indicators than at present (Scenarios 4 and 5), except for SSB that would be kept at a high level;

- Scenario 6 allows to obtain moderate increases in all indicators, allowing to keep employment and vessels, at the price of not complying with $F_{msy}$ targets.