STECF EWG 24-09 VMEs socio-economic impact assessment

Ralf Döring (EWG chair)

Overview

- Introduction
- Main conclusions of STECF from the report of EWG 24-09
- Role of observers in the EWG meeting
- Presentation of some results of the assessments
  - FDI analyses
  - Displace modelling exercise
- Ecosystem service discussion
- Outlook

Introduction

- Request to STECF to do additional assessments on the socio-economic impacts of the closures of the VMEs
- Meeting of the Expert Working group held virtually March 3rd-7th, with 18 experts and 7 observers (from SWWAC and NWWAC)
- Substantial preparatory work for the EWG including interviews with stakeholders (from the ACs), collection of information from reports (e.g. regional reports from Spain) or extra data analyses and model runs
- **Be aware that the EWG report is the basis for the STECF advice but not the STECF advice/conclusion!**
  - The EWG report is a summary of the available information plus some extra data analyses and DISPLACE model application.
  - The STECF opinion/advice is at the top of the EWG report and in the PLEN 25-01 report.

Main conclusions of STECF

- This is a step in the process of a better understanding of socio-economic impacts of such kind of management measures (report provides preliminary results)
- Stakeholder involvement is crucial as it brings additional information and helps identifying the impacts of closures at different spatial and fleet levels
- Some information from the stakeholder interviews could be verified by the data analyses (e.g. move from longlines to gillnets in parts of the spanish fleet)
- FDI data shows reduction in fishing effort in the polygons where VMEs are located – data is still not at the resolution level to only assess effort in closed areas
- DISPLACE model is the right tool to assess displacement effects of area closures but data input needs to be improved (see previous point).

Main conclusions of STECF

- First EWG where ecosystem services and their economic valuation was discussed – see this as an important step but more work is necessary regarding economic valuation
- STECF proposes a way forward to overcome some ot the data limitations – expects to discuss with MS and DG Mare on the way forward and probably another EWG in 2026

Stakeholder engagement

- Since PLEN 23-02 regular exchange with stakeholders from the SWWAC and NWWAC to be transparent on the process and where we are
- Asked for input from the stakeholders and received several documents from ACs or individual stakeholders
- Interviews conducted with 5 stakeholders (4 from fishers organisations, 1 NGO) – gave deeper insides into possible displacement effects and changes in fleet behaviour
- Some of the contents of the interviews could be verified by the data analyses
- Very valuable input from stakeholders during the EWG
- I believe that we could build trust in what we are doing, show what limitations we have (which was sometimes surprising for the stakeholders) and that it could be a model for future assessments

Role of observers in the EWG meeting

- Summaries of 5 interviews very valuable background documents to the EWG
- Observers during the meeting provided important additional information specifically on impacted fleet segments/gear types/targeted species
- Specific observer meeting during the EWG – another opportunity to receive valuable information for the experts (e.g. first time mentioning of the importance of preserving ecosystem services of VMEs to us from stakeholders)

Presentation of some results of the assessments - FDI

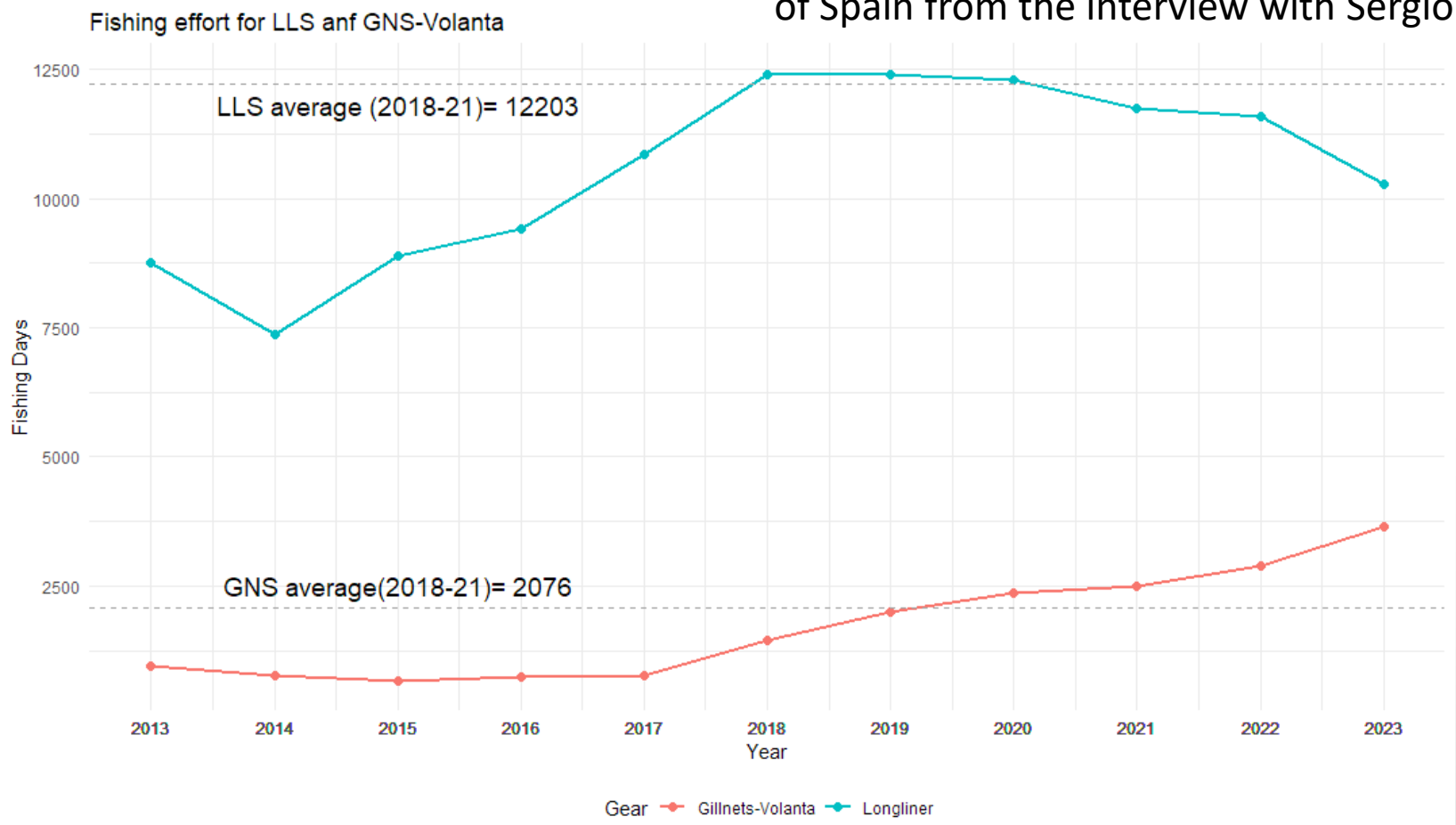
- FDI data analyses 2013-2023 with 2023 as the first year of the closures
- General trend of reduction in fishing effort in the polygons with VMEs 2023 to 2022

Table 4.1.2 Summary of trends in fishing patterns in terms of effort, landings and value, in polygons selected for closure to protect VMEs.

Metric	Pre and post closure (2022 V 2023)				Summary of time series (average 2013-2023 2023)				
	Year before closure 2022	Year after closure 2023	Percentage difference (2022 vs 2023)	Total difference (2022 vs 2023)	Average of time series (2013- 2023)	Standard deviation (2013-2023)	Maximum of time series (2013-2023)	Minimum of time series (2013-2023)	Percentage difference (average vs 2023)
Effort (fishing days)	2,059,139	1,725,035	-16%	334,104	1,515,360	422,431	2,203,325	964,237	14%
Landings (tonnes)	81,592	65,083	-20%	16,509	82,714	9,045	94,931	65,083	-21%
Landings value (€)	*272,800,213*	*242,180,216*	-11%	*30,619,997*	*241,033,799*	*15,672,387*	*272,800,213*	*220,174,060*	+<1%

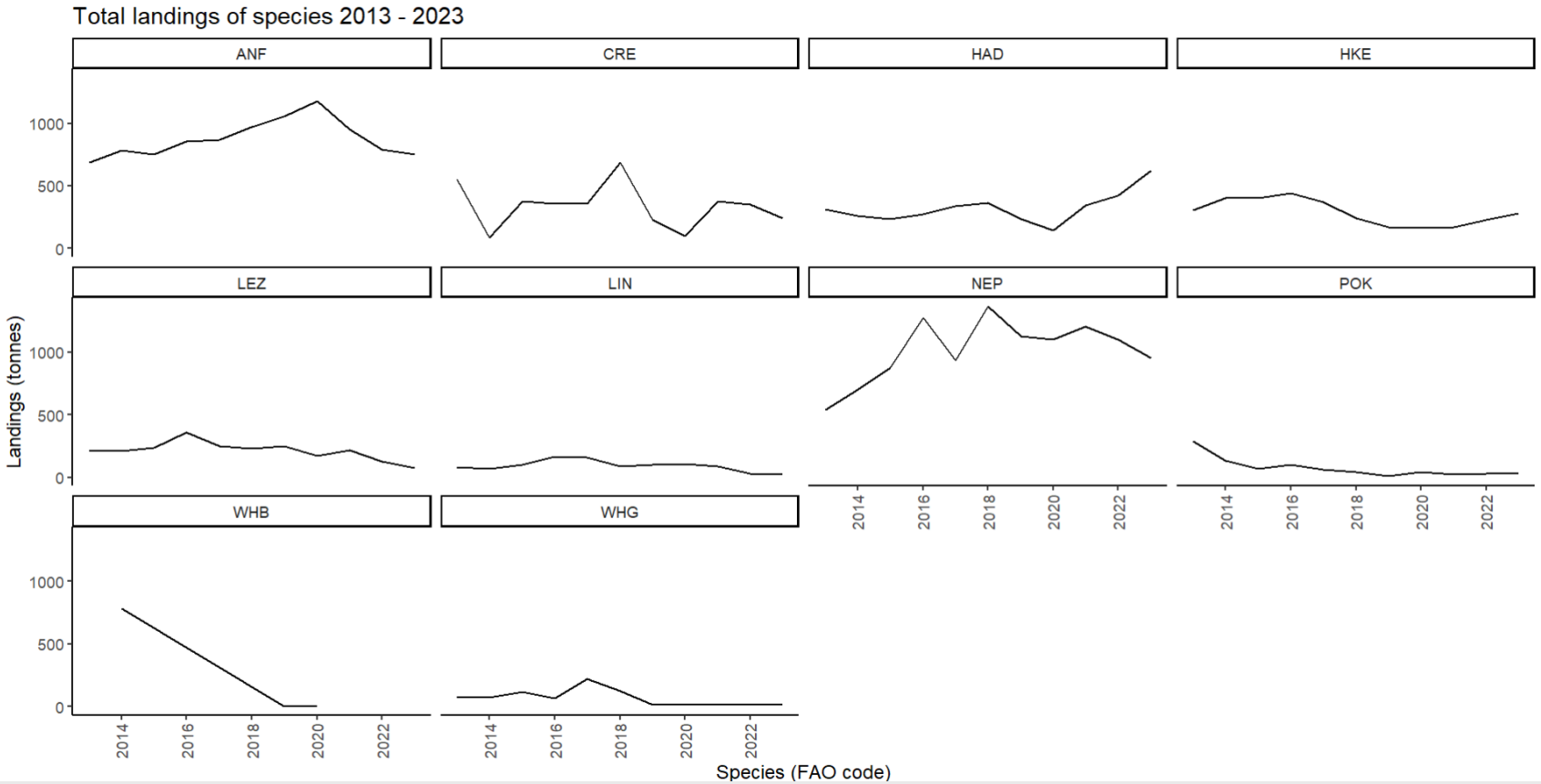
Presentation of some results of the assessments – FDI

Test of information on changes in SSF of Spain from the interview with Sergio Lopez



Presentation of some results of the assessments - FDI

Figure *4.2.1.3.1* Total Irish landings of main species from 2013 – 2023 in polygons selected for closure to protect VMEs



Presentation of some results of the assessments – DISPLACE model

- Overview on model results provided – e.g. problem to distinguish vessels fishing on deep-sea stocks from vessels fishing only on hake
- Discussion of the model assumptions to see where further work could improve the data availability etc.
- DISPLACE is the best model available and well-suited for this type of analyses
- However, an improvement in the available data regarding lower spatial resolution is necessary and the EWG proposes six steps to achieve this
  - *This would not only be relevant for the VME assessment but for all assessment of impacts of closures!*

Presentation of some results of the assessments – DISPLACE model

Short-term percentage change In ICES scenario indicators (all vessels)

All vessels	Days at sea (%)	Fuel Cost (%)	Landing volume (%)	Indiv. Gross Profit (%)
withoutboxes	-0.1	-0.4	-0.1	-4.9
baseline	0.0	0.0	0.0	0.0
C	0.3	0.2	-3.0	-7.8
D	-0.1	-0.6	1.5	-5.1
withoutboxes FRA	0.1	-1.2	7.5	7.2
baseline FRA	0.0	0.0	0.0	0.0
C FRA	1.1	1.3	-0.6	-3.3
D FRA	0.3	-0.7	4.3	6.1
withoutboxes ESP	-0.1	-0.1	0.7	1.7
baseline ESP	0.0	0.0	0.0	0.0
C ESP	0.5	-0.2	-4.5	-1.2
D ESP	-0.1	-1.0	1.4	0.3
withoutboxes PRT	-0.1	-0.7	-2.3	-9.6
baseline PRT	0.0	0.0	0.0	0.0
C PRT	0.1	0.9	-1.4	-11.3
D PRT	-0.1	0.5	1.4	-9.5

Source: ad hoc contract n. 24117, table 18.

Ecosystem services discussion

- Overview on ecosystem services of deep-sea ecosystems
- Discussion of ecosystem services in this systematic manner first time within STECF
- Discussion of legal background of closures and role of deep-sea ecosystems (e.g. climate regulation, seamounts, etc.)
- Application of the classification of the Millennium Ecosystem Assessment with four value categories: Provisioning, regulating, supporting and cultural services
- Limited discussion of monetary valuation of ecosystem services and its limits
- There are a few studies on economic values which show how people value those ecosystems

Outlook

- Discussed way forward to improve our possibilities for these type of analyses
- Main problem is the level of resolution of the available data, e.g. FDI data
- Propose an improvement for the data availability which needs to be discussed with Member States
- See stakeholder involvement also as essential for future assessments

Thank you very much!