ICES advice

Réunion du Conseil Consultatif des eaux Occidentales australes-CC-SUD

11 July 2024

Joanne Morgan

ICES ACOM vice-chair
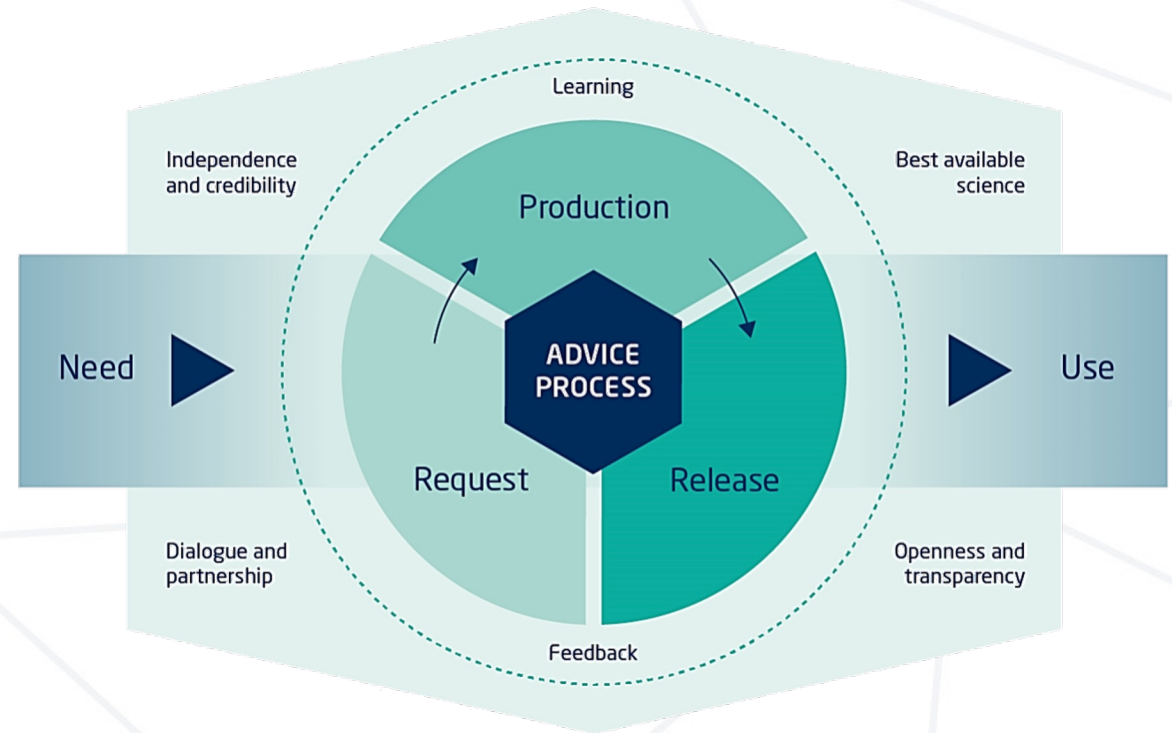
ICES
CIEM

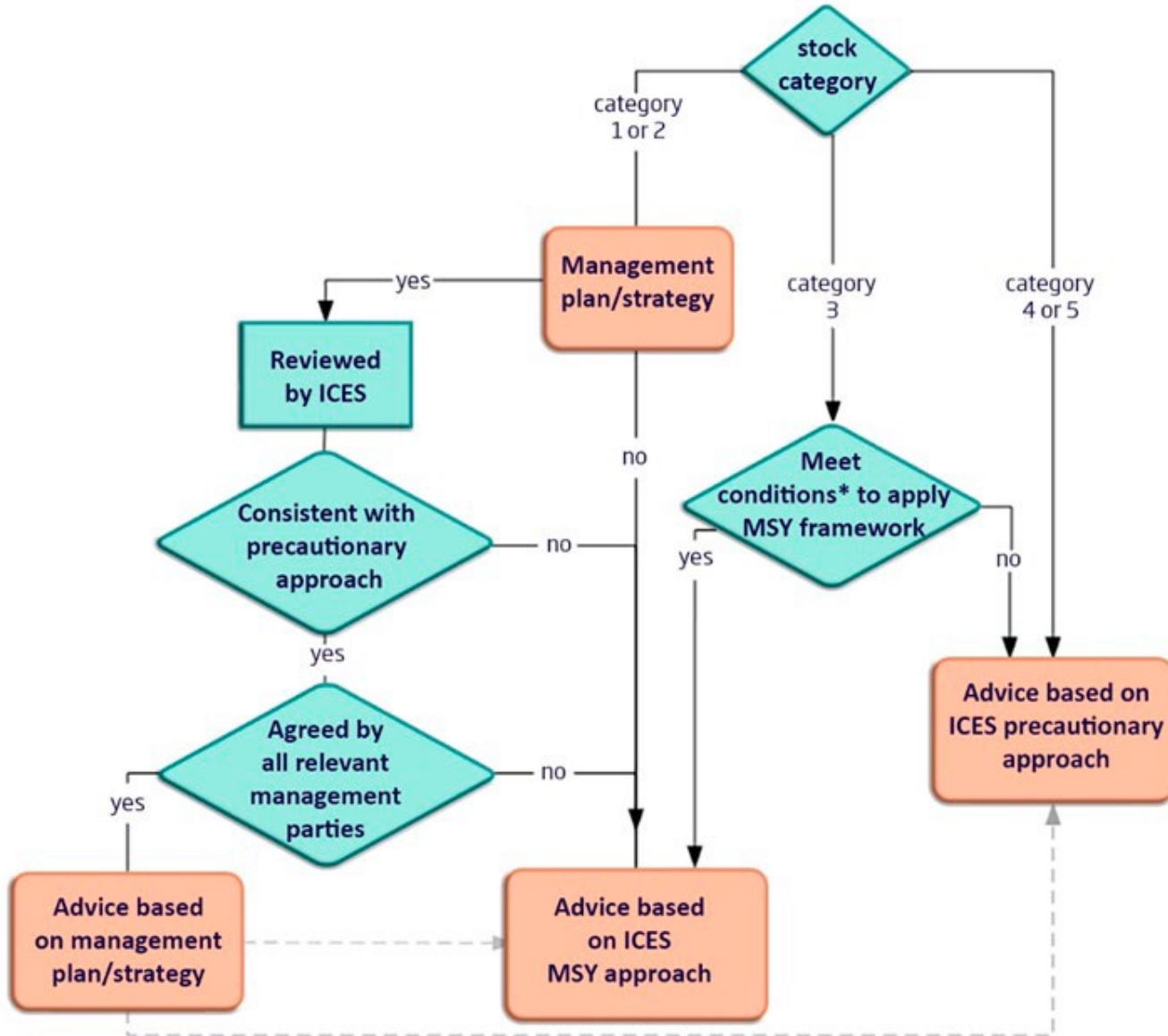Science for sustainable seas

Governed by
10 principles of advice

1. Document openly
2. Formulate request iteratively
3. Clarify objectives & risks
4. Deliver timely knowledge
5. Use best available science
6. Apply FAIR data principles
7. Undergo peer review
8. Delvelop clear & consistent advice
9. Agree by consensus
10. Explain without advocacy

Release
Request
Production
ADVICE PRINCIPLES

Advice Process

Need
Independence and credibility
Dialogue and partnership
Learning
Production
ADVICE PROCESS
Request
Release
Feedback
Best available science
Openness and transparency
Use

No other fisheries body has these specifically stated

https://doi.org/10.17895/ices.advice.7648

Basis of advice

- Advice is based on clients requests and is consistent with their policy objectives and frameworks. e.g. EU MAP
- Must be evaluated to be precautionary
- Type of assessment based on data available

ICES MSY approach for category 1 & 2 stocks

Below B_{lim} –
rebuild above B_{lim} in the short term (end of the projection year)
or
Zero catch based on Precautionary considerations
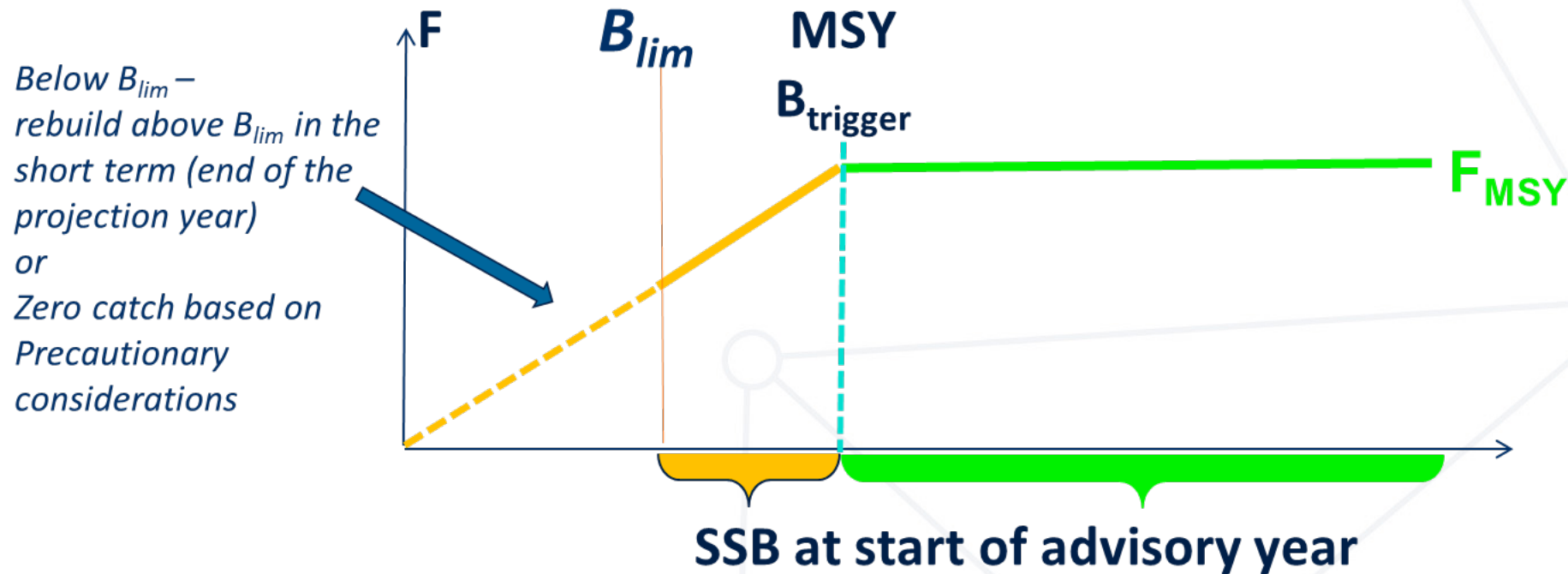
For more details, see ' Advice on fishing opportunities 2023'

Non-fisheries conservation considerations

- Based on feedback from stakeholders 'conservation status advice' changed to 'non-fisheries conservation considerations'
  - "ICES has not identified any conservation aspects other than those related to the commercial fisheries"

Mixed catch of stocks of the same species

- New Guidelines

- In some cases, ICES advice is for reproductively isolated populations that mix spatially for part of the year and are caught in the same fisheries during that time. Hence, these fisheries impact multiple stocks of the same species at the same time.

Mixed catch of stocks of the same species

- Advice should be consistent with ICES advisory framework

- Advice should be precautionary for all stocks in the fishery; that is, advice for a stock below B_{lim} should be for zero catch where there is no F that will recover the stock to above B_{lim} with > 50% probability in the year after the year for which the advice applies

- Information on the existence of a concurrent fishery on stocks should be included in the headline advice

- Information on concurrent fisheries should be included in the advised catch levels in the headline advice to the extent possible.

Where to find the advice

- https://ices-library.figshare.com/

- AdviceXplorer

  - https://ices-taf.shinyapps.io/online-single-stock-advice/

Golfe de Gascogne et Eaux de la Péninsule Ibérique
Plie - plaice
Lieu jaune - pollack
Merlan -whiting

Golfe de Gascogne
Baudroies – white anglerfish
Cardines - megrims
Langoustines -nephrops
Merlu -hake
Sole -sole
Bar - sea bass

Eaux de la Péninsule Ibérique
Baudroies – black bellied and white anglerfish
Cardines - megrims
Langoustines -neprhops
Merlu - hake
Sole - sole
Anchois - anchovy
Bar –sea bass
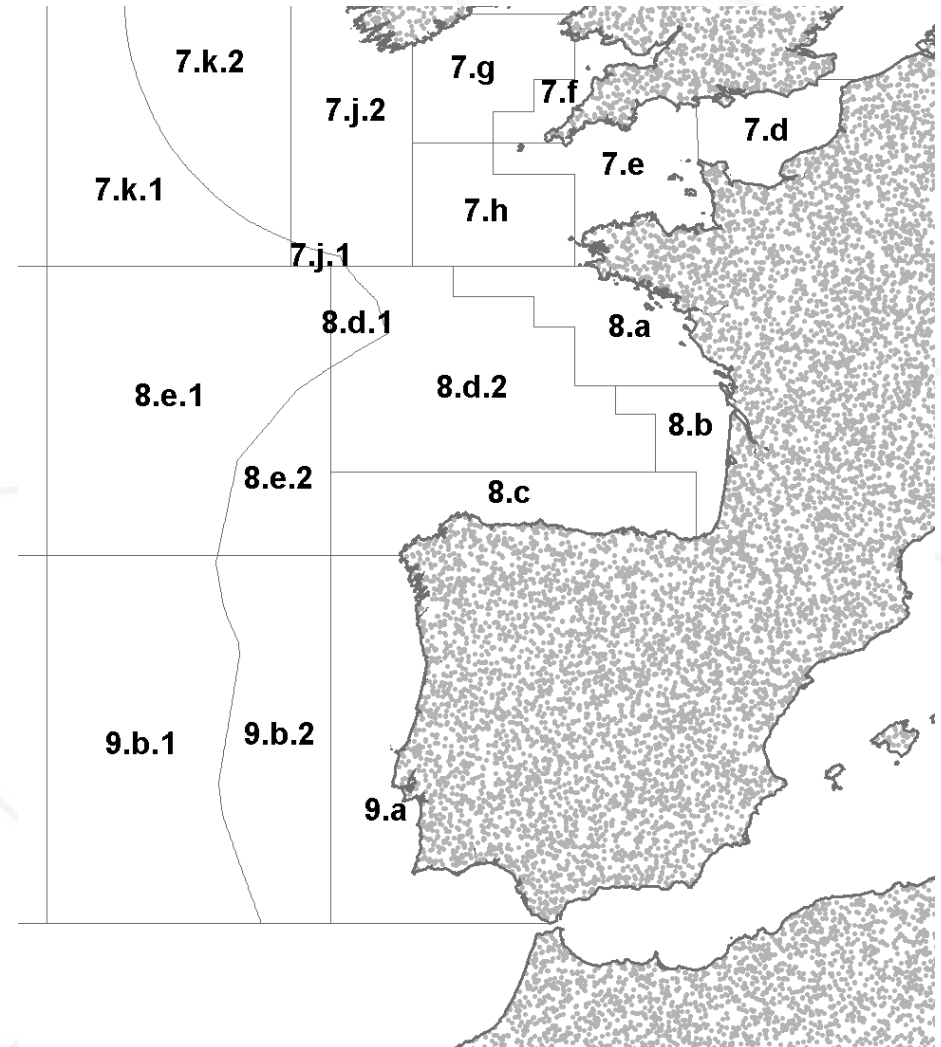
Golfe de Gascogne et Eaux de la Péninsule Ibérique

No new advice this year

Advice for 2024 and 2025, PA: Landings $\leq$ 124 t -20%
Can not quantify corresponding catches

Landings

ple.27.89a_2023_18016_202355170725
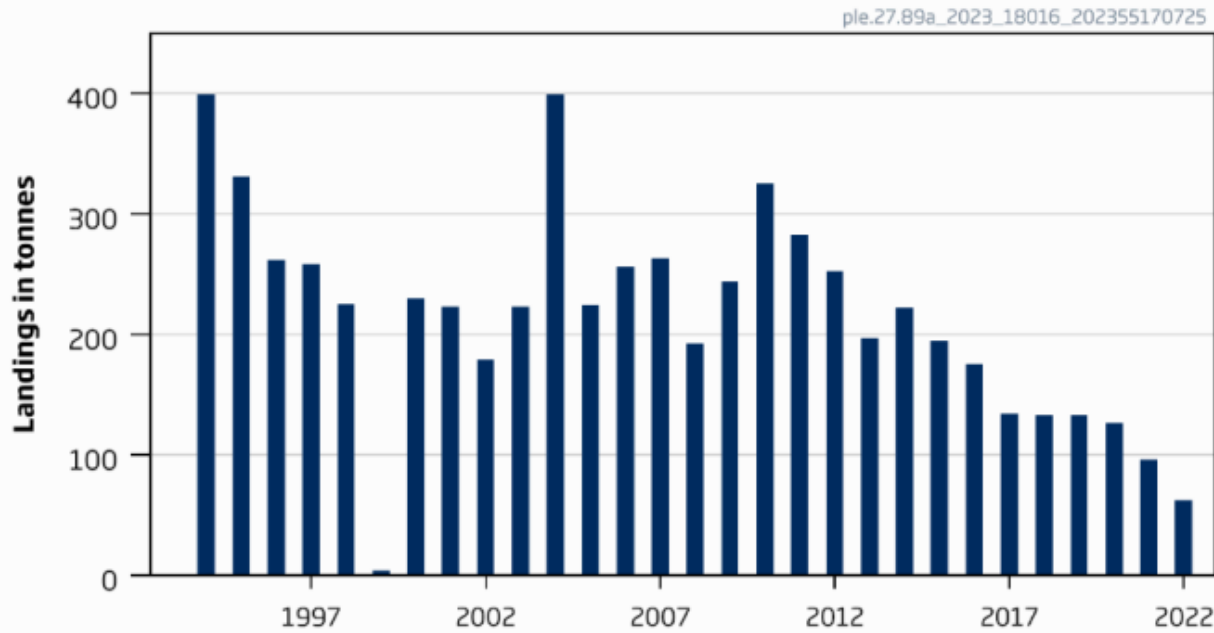
- Category 6
- Discards likely >5% but uncertain – landings advice
- PA buffer applied (last applied 2019)
- Stock definition uncertain
- Landings 2022 62 t

Advice for 2024 and 2025, MSY: commercial catch $\leq$ 872 t -4%

Can not quantify total catches – lack recreational catch

Landings
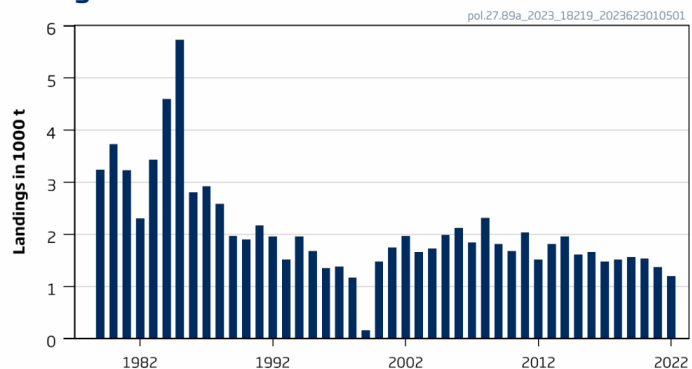
Stock size indicator
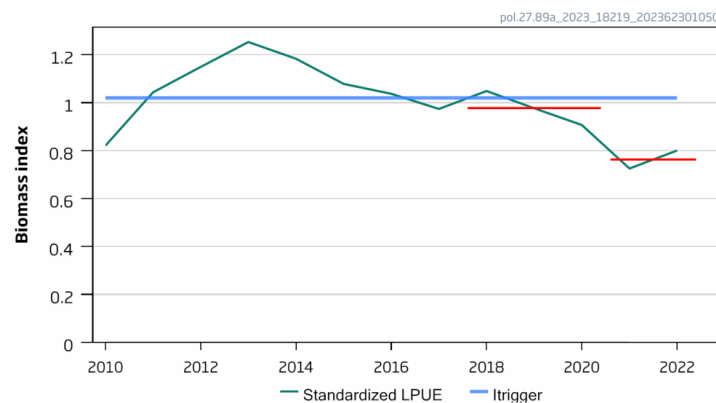
Fishing pressure indicator
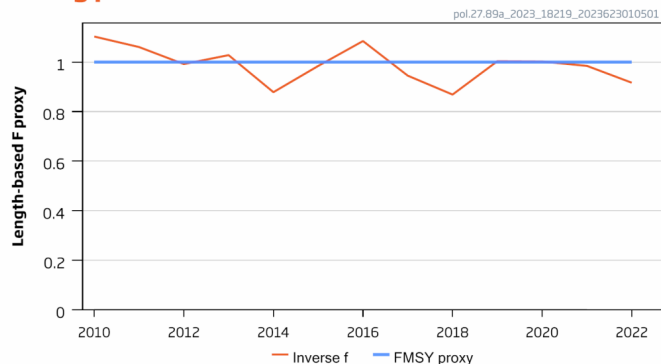
- Benchmark 2023
- DLS – rfb
- Index – LPUE French gillnet
- Recreational catches not quantified
- Stock size indicator lower in last 2 years, below Itrigger
- Advice released 2023

Catch (2022) : 1199 t (does not include recreational catch)

Table 1   Pollack in Subarea 8 and Division 9.a. The basis for the catch scenarios.

|	
Cy (average catch of last three years 2020, 2021, 2022)	1369 tonnes
Stock biomass trend	
Index A (2021, 2022)	0.76
Index B (2018, 2019, 2020)	0.98
r: Index ratio (A/B)	0.78
Fishing pressure proxy	
Mean catch length ($L_{mean} = L_{2022}$)	50.6 cm
MSY proxy length ($L_{F=M}$)	46.4 cm
f: multiplier for relative mean length in catches ($L_{mean}/L_{F=M}$)	1.09
Biomass safeguard	
Last index value (I_{2022})	0.80
Index trigger value ($I_{trigger} = I_{loss} \times 1.4$)	1.02
b: multiplier for index relative to trigger min$\{I_{2022}/I_{trigger}, 1\}$	0.79
Precautionary multiplier to maintain biomass above B_{lim} with 95% probability	
m: multiplier (generic multiplier based on life history)	0.95
RFB calculation: $Cy+1 = Cy \times r \times f \times b \times m$	872 tonnes
Stability clause (+20%/−30% compared to C_y, only applied if b ≥ 1)	Not applied
Catch advice for 2024 and 2025	872 tonnes
Discard rate	Negligible
% advice change^	−36%

rfb applied to average catch (2020-2022): Difference in recent catch vs advice and first application of rule. Advice 36% less than recent catch
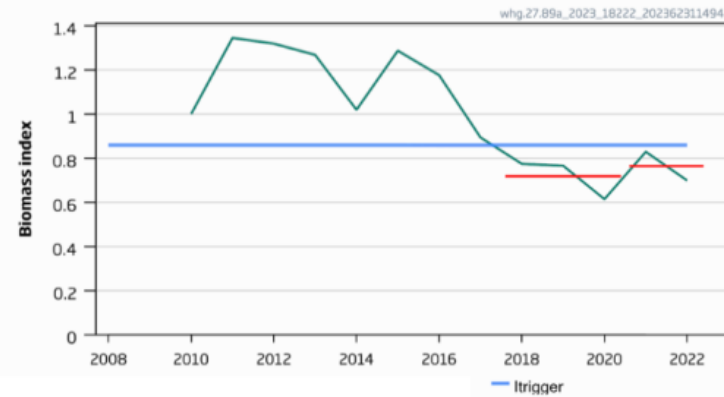
$Cy+1 = Cy \times r \times f \times b \times m$

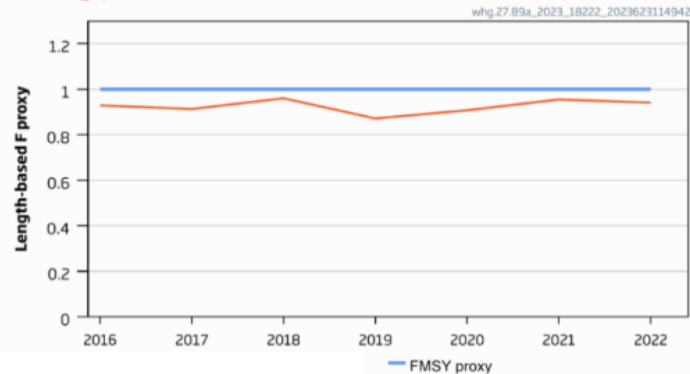**Advice for 2024 and 2025, MSY:** Catch $\leq$ 1347 t -41%

Catches
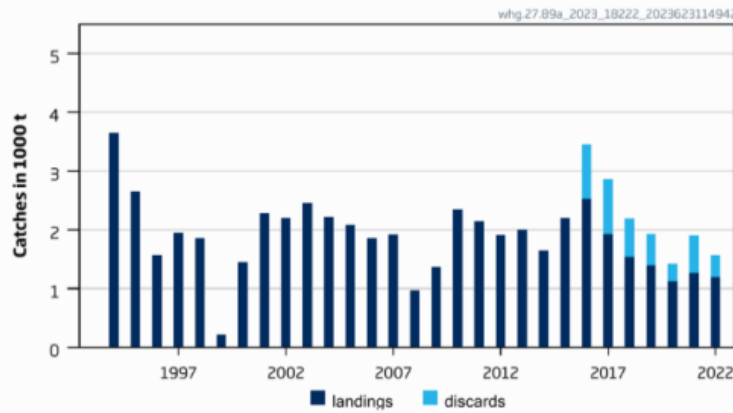
Stock size indicator

Fishing pressure indicator

- Benchmark 2023
- DLS – rfb
- Index – LPUE French bottom trawl
- Fishing pressure below FMSY proxy
- Stock size indicator slightly higher last 2 years but below trigger
- So stability clause not applied

Catch (2022) : 1567 t (24% discards)

Cy (average catch of last three years 2020, 2021, 2022)	1630 tonnes
Stock biomass trend	
Index A (2021, 2022)	0.76
Index B (2018, 2019, 2020)	0.72
r: Index ratio (A/B)	1.06
Fishing pressure proxy	
Mean catch length ($L_{mean} = L_{2022}$)	340 mm
MSY proxy length ($L_{F=M}$)	320 mm
f: multiplier for relative mean length in catches ($L_{mean}/L_{F=M\ 2022}$)	1.06
Biomass safeguard	
Last index value (I_{2022})	0.70
Index trigger value ($I_{trigger} = I_{loss} \times 1.4$)	0.86
b: multiplier for index relative to trigger min$\{I_{2022}/I_{trigger}, 1\}$	0.81
Precautionary multiplier to maintain biomass above B_{lim} with 95% probability	
m: multiplier (generic multiplier based on life history)	0.90
rfb calculation: $Cy+1 = Cy \times r \times f \times b \times m$	1347 tonnes
Stability clause (+20%/−30% compared to A_y, only applied if b ≥ 1)	Not applied
Catch advice for 2024 and 2025 ($A_y \times$ stability clause)	1347 tonnes
Discard rate (average 2016-2022)	0.28
Projected landings corresponding to advice**	970 tonnes
% advice change^	−41%

rfb applied to average catch (2020-2022): Difference in recent catch vs advice and first application of rule. Advice 17% less than recent catch
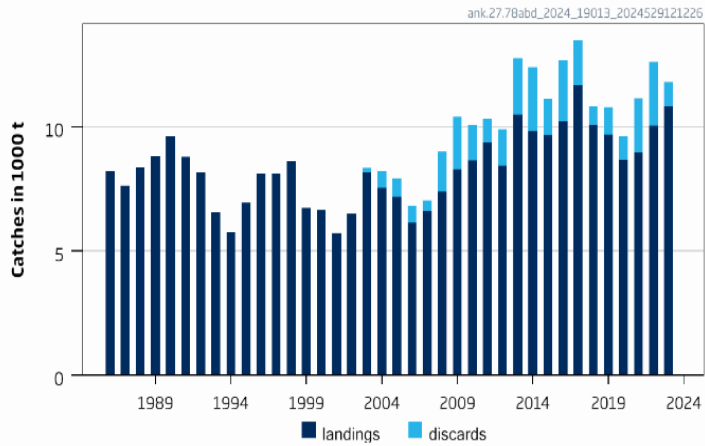
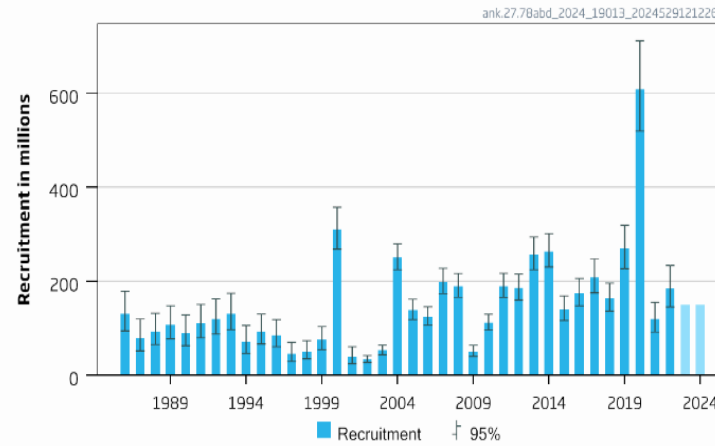$$Cy+1 = Cy \times r \times f \times b \times m$$

Golfe de Gascogne

Advice for 2025, MSY: Catch ≤ 25 317 t advice -1%
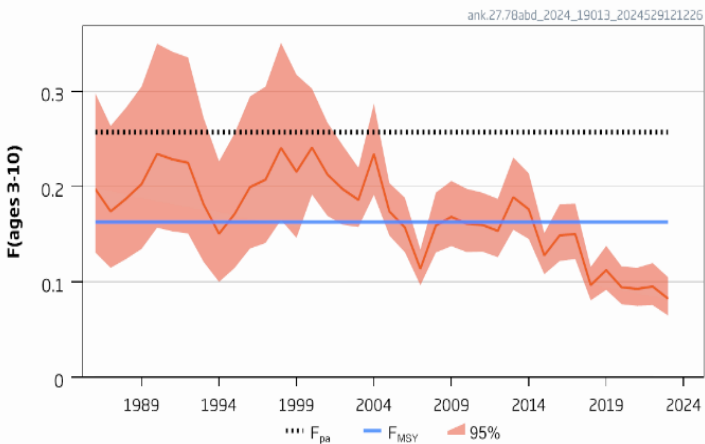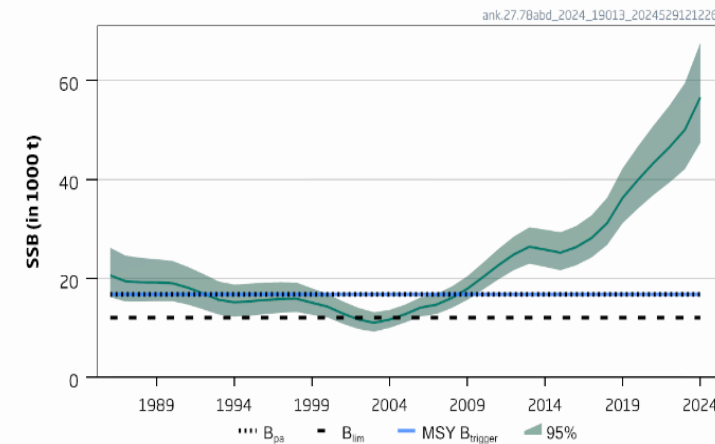
- F below F_{MSY}
- SSB above MSY Btrigger
- Two species not separated in landing statistics
- TAC combined with white anglerfish
- Exploitable biomass leveling off because of lower recruitment compared to 2020

Catch (2023) : 11 790t (8 % discards)

F(2024) = 0.0902 (average F 2021-2023)

SSB(2025) = 65 236t > $MSY_{Btrigger}$ (16 776t) F_{MSY}= 0.163

Length based age structured stock synthesis

Basis	Total catch (2025)	Projected landings (2025)	Projected discards (2025)	$F_{ages\ 3-10}$ Total (2025)	$F_{ages\ 3-10}$ Projected landings (2025)	$F_{ages\ 3-10}$ Projected discards (2025)	SSB (2026)	% SSB change*	% advice change**
ICES advice basis									
MSY approach = F_{MSY}	25317	21173	4144	0.163	0.154	0.009	67235	3.1	−1.02
Other options									
F = MAP^^ $F_{MSY\ lower}$	17806	14895	2911	0.112	0.106	0.0062	70753	8.5	−30
F = MAP^^ $F_{MSY\ upper}$	36670	30656	6014	0.24	0.23	0.0135	61942	−5.1	43
F = 0	0	0	0	0	0	0	79138	21	−100
F_{pa}	38260	31983	6277	0.26	0.24	0.014	61203	−6.2	50
$SSB_{2026} = B_{lim}$	149928	124539	25389	1.88	1.78	0.104	12073	−81	486
$SSB_{2026} = B_{pa}$ = MSY $B_{trigger}$	138213	114936	23277	1.55	1.47	0.086	16776	−74	440
$SSB_{2026} = SSB_{2025}$	29597	24749	4848	0.193	0.183	0.011	65236	0	15.7
F = F_{2024}	14486	12119	2367	0.09	0.085	0.005	72312	10.8	−43
Catch advice (2025) = catch advice (2024)***	25579	21392	4187	0.165	0.156	0.009	67113	2.9	0

Advice for 2025, MSY: Catch $\leq$ 34 983 t advice -1.46%

ICES CIEM

Catches

Recruitment (age 0)

F

SSB

- F below F_{MSY}
- SSB above MSY Btrigger
- TAC combined with white anglerfish
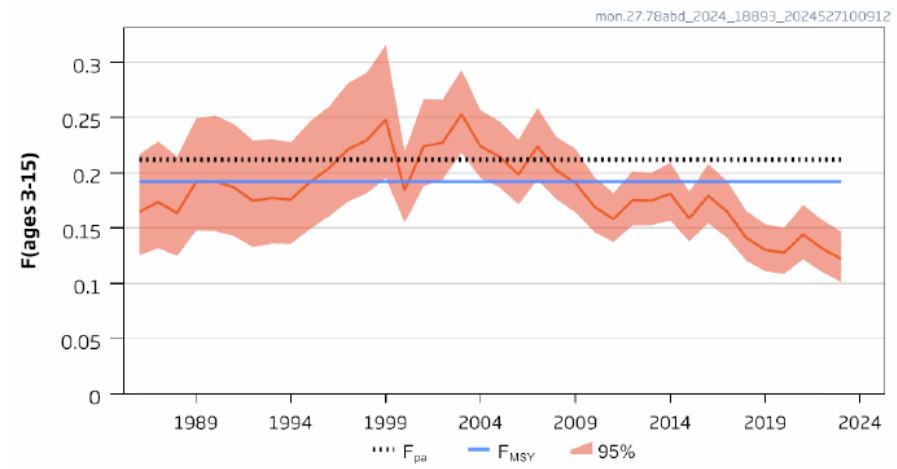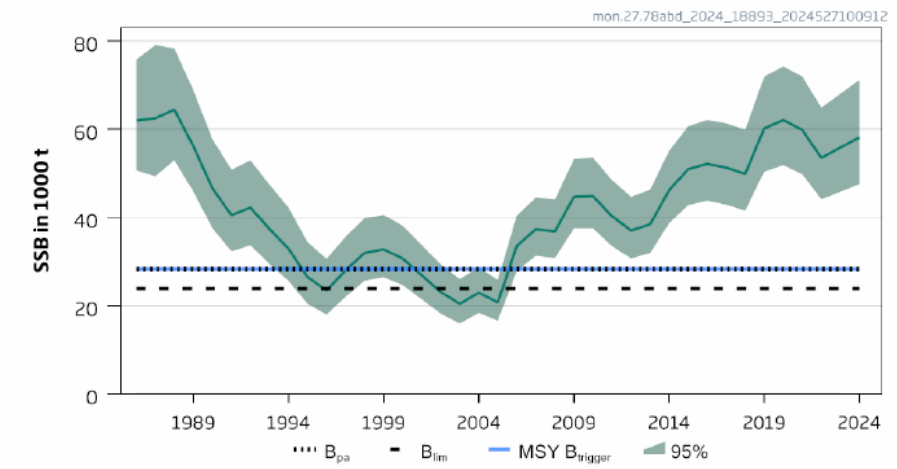- Small downward revision in SSB compared to last year (retrospective)
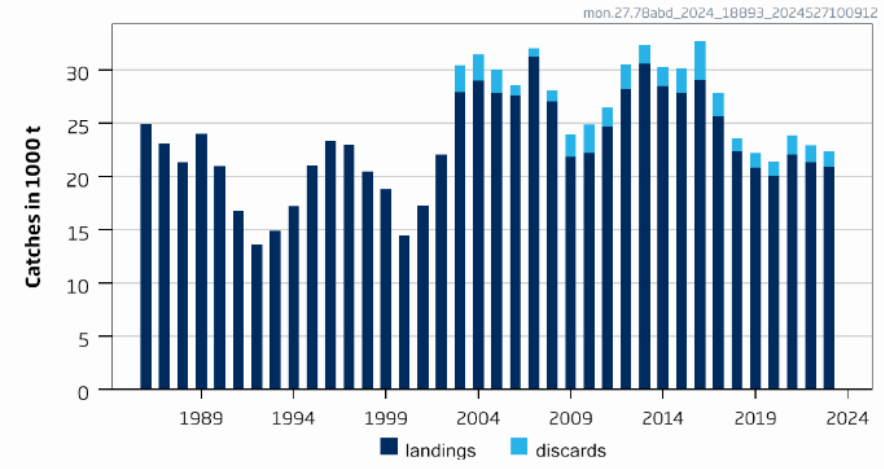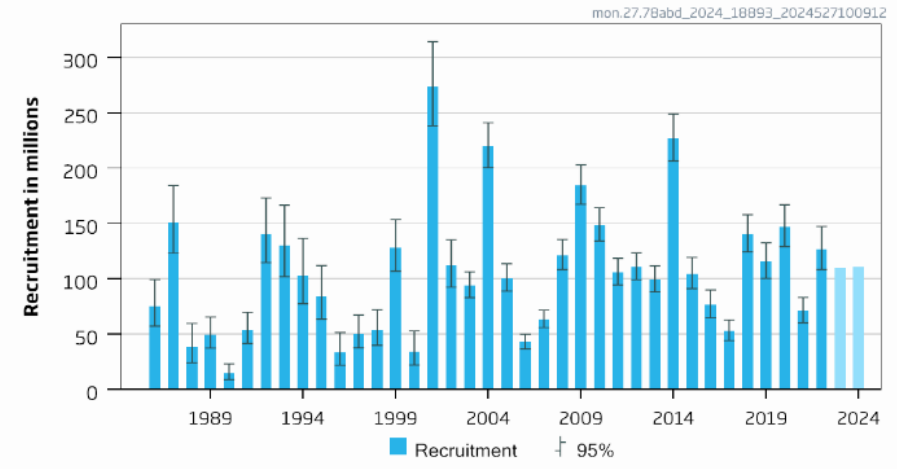
Catch (2023) : 22 322t (6 % discards)

F(2024) = 0.133 (average F 2021-2023)

SSB(2025) = 62 907 t > $MSY_{Btrigger}$ (28 275 t) F_{MSY}= 0.192

change in TAC is not computed because the TAC is for both species of anglerfish.

Basis	Total catch (2025)	Projected landings (2025)	Projected discards (2025)	$F_{ages\ 3-15}$ Total (2025)	$F_{ages\ 3-15}$ Projected landings (2025)	$F_{ages\ 3-15}$ Projected discards (2025)	SSB (2026)	% SSB change *	% advice change^
ICES advice basis									
MSY approach = F_{MSY}	34983	30634	4348	0.192	0.190	0.00163	56926	−9.5	−1.46
Other scenarios									
F = MAP^^ $F_{MSY\ lower}$	24617	21561	3056	0.131	0.130	0.00111	60635	−3.6	−31
F = MAP^^ $F_{MSY\ upper}$	38241	33486	4755	0.212	0.21	0.00180	55761	−11.4	7.7
F = 0	0	0	0	0	0	0	69443	10.4	−100
F_{pa}	38241	33486	4755	0.212	0.21	0.00180	55761	−11.4	7.7
SSB_{2026} = B_{lim}	127983	111747	16236	1.034	1.03	0.0088	23868	−62	260
SSB_{2026} = B_{pa} = MSY $B_{trigger}$	115419	100843	14575	0.870	0.86	0.0074	28275	−55	225
SSB_{2026} = SSB_{2025}	18270	16003	2267	0.095	0.095	0.00081	62907	0	−49
F = F_{2024}	24908	21816	3093	0.133	0.132	0.00113	60531	−3.8	−30
Catch advice 2025 = Catch advice2024	35502	31089	4413	0.195	0.194	0.00166	56740	−9.8	0

Length based age structured stock synthesis

Advice for 2025, MSY: Catch $\leq$ 21 114t advice -9.3%
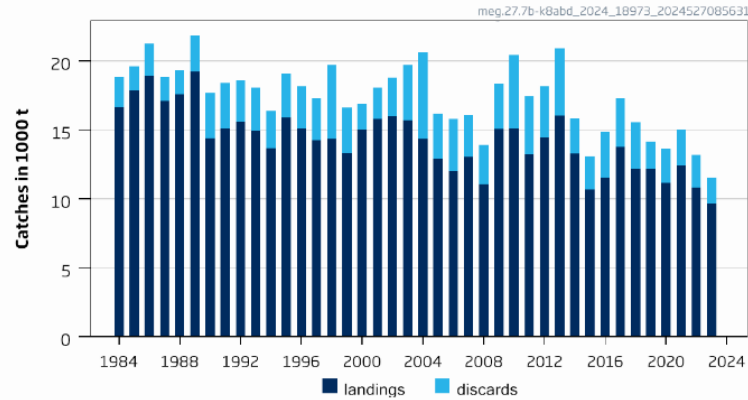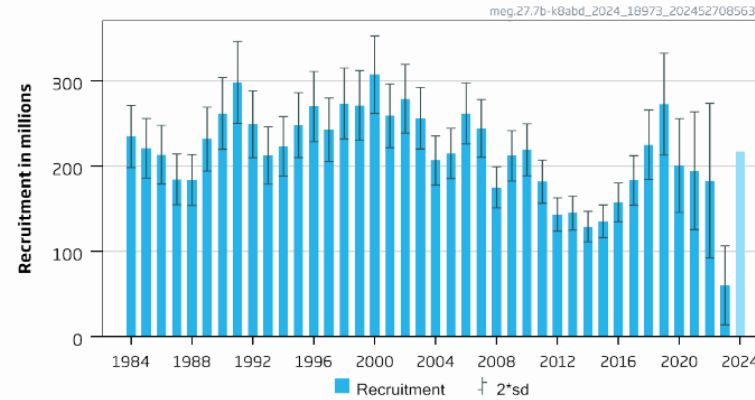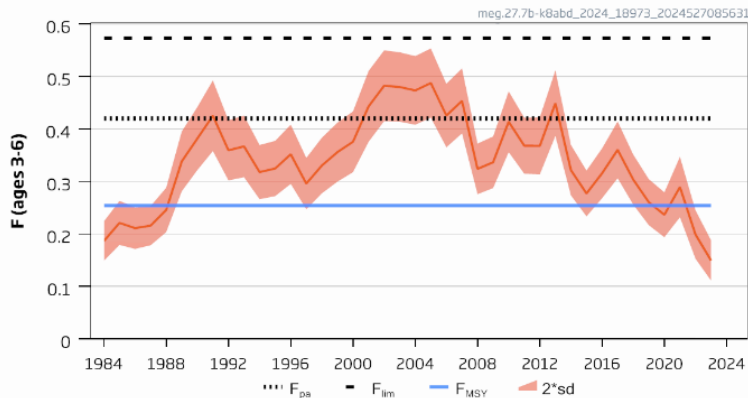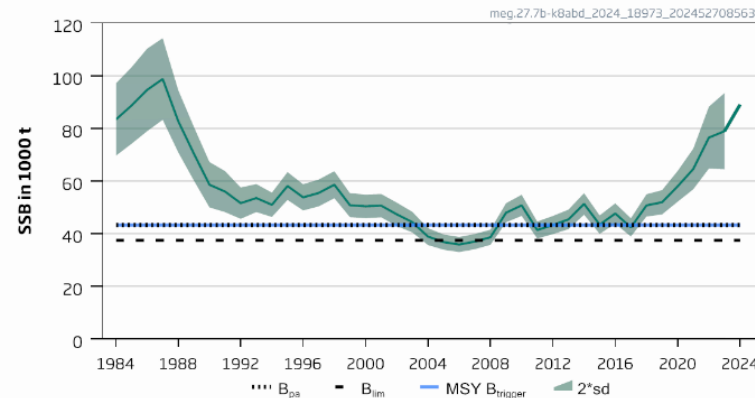

- F below F_{MSY}
- SSB above MSY Btrigger
- TAC combined with four spot megrim
- Two species not separated in landing statistics
- Some downward revision of SSB and recruitment (retrospective)

Catch (2023) : 11 541t (16 % discards)

F(2024) = 0.21 (average F 2021-2023)

SSB(2025) = 83 883t > MSY$_{Btrigger}$ (40 444t)   F$_{MSY}$= 0.233

Basis	Total catch (2025)	Projected landings (2025)	Projected discards (2025)	F$_{ages 3-6}$ Total (2025)	F$_{ages 3-6}$ Projected landings (2025)	F$_{ages 1-2}$ Projected discards (2025)	SSB (2026)	% SSB change*	% advice change^
ICES advice basis									
MSY approach: F$_{MSY}$	21144	18132	3012	0.25	0.2	0.02	73492	−12.4	−9.3
Other scenarios									
EU MAP^^ = F$_{MSY}$	21144	18132	3012	0.25	0.2	0.02	73492	−12.4	−9.3
F = MAP^^ F$_{MSY lower}$	13317	11439	1878	0.149	0.12	0.012	81567	−2.8	−43
F = MAP^^ F$_{MSY upper}$	32522	27811	4711	0.42	0.34	0.034	61856	−26	40
F = 0	0	0	0	0	0	0	95403	13.7	−100
F$_{pa}$	32522	27811	4711	0.42	0.34	0.034	61856	−26	40
F$_{lim}$	41115	35071	6044	0.57	0.46	0.047	53168	−37	76
SSB (2026) = B$_{lim}$	56950	48286	8665	0.94	0.76	0.077	37491	−55	144
SSB (2026) = B$_{pa}$	51061	43402	7660	0.79	0.64	0.065	43259	−48	119
SSB (2026) = MSY B$_{trigger}$	51061	43402	7660	0.79	0.64	0.065	43259	−48	119
SSB(2026)=SSB(2025)	11079	9521	1558	0.122	0.172	0.017	83883	0	−52
F = F$_{2024}$	18349	15745	2604	0.21	0.099	0.01	76370	−9.0	−21
Catch advice (2025) = Catch advice (2024)	23303	19974	3329	0.28	0.23	0.023	71275	−15.0	0

A4A Statistical catch at age

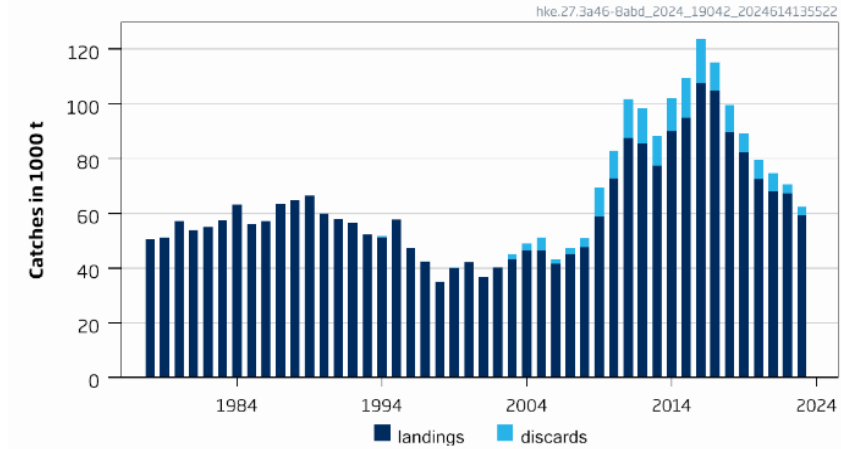**Advice for 2023, 2024 and 2025 : PA:** catch ≤ 867t
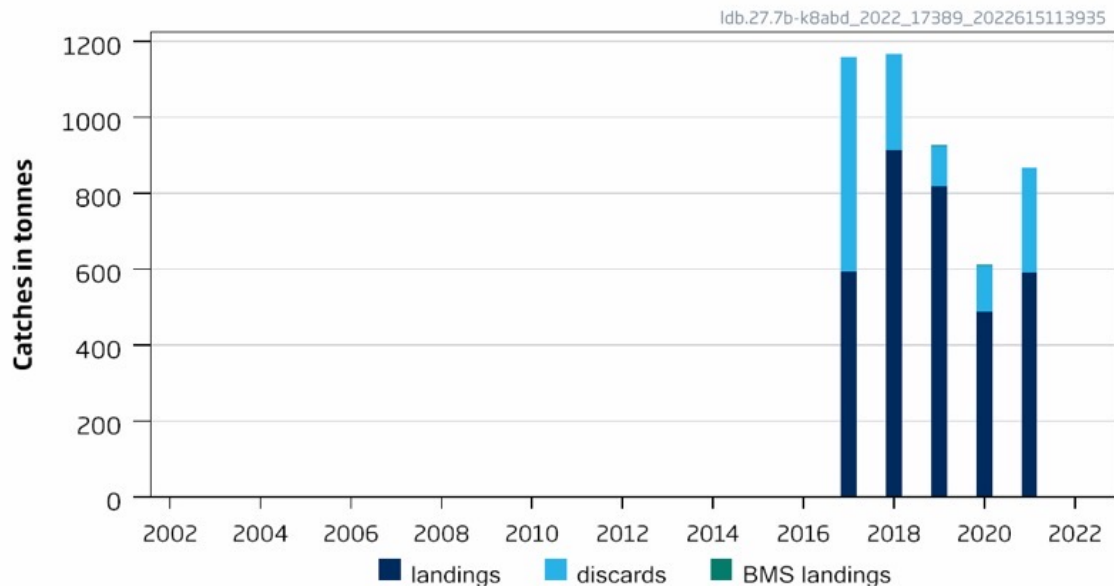
- Can not assess status
- Sampling impacted by covid: could not estimate complete catch 2020 and 2021
- Partial catch estimate for 2021 is 866 t -32% discards
- Two species not separated in landing statistics
- TAC combined with megrim
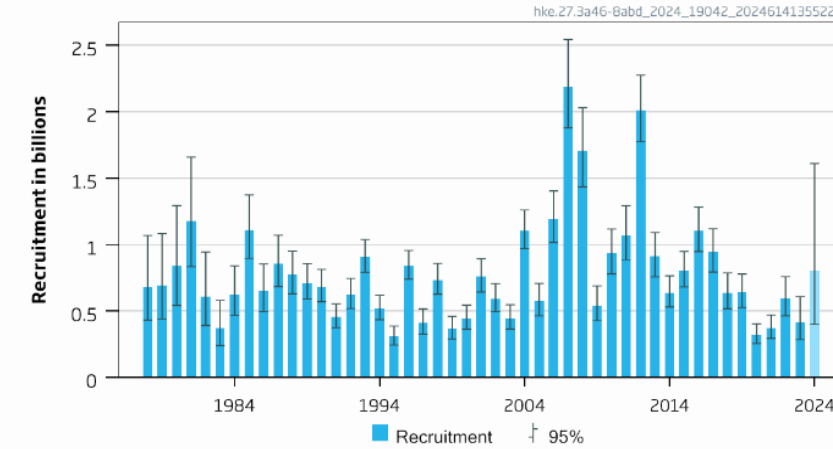
Advice released 2022 not updated

Advice for 2025: MSY: Catch $\leq$ 52 466t advice -28%

Catches

Recruitment (age 0)

F
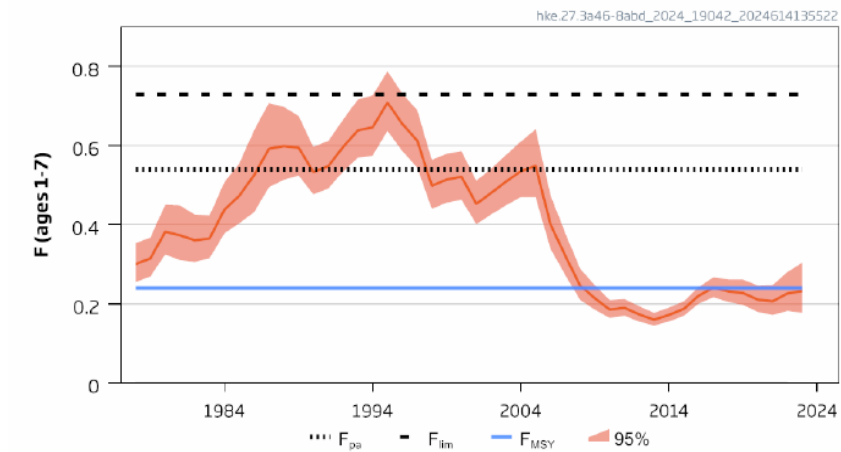
Female-only SSB
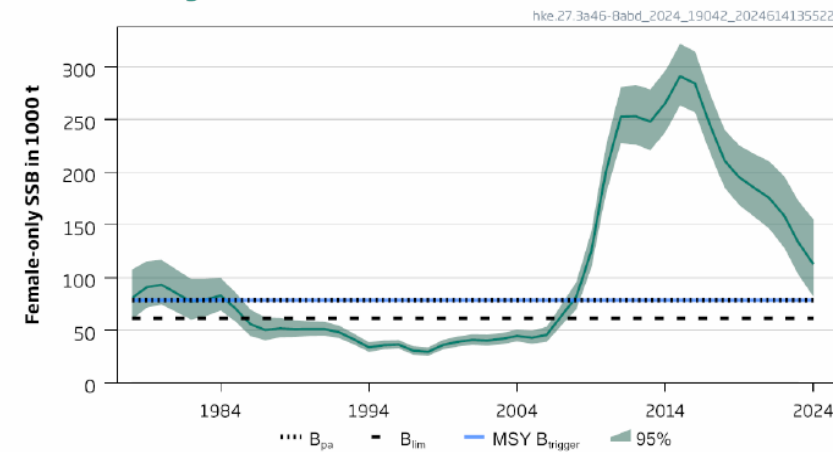
- F below F_{MSY}
- SSB (female only) above MSY $B_{trigger}$
- Stock size declining, some revision of stock size, recruitment lower than assumed
- TAC area does not match stock area

Catch (2023) : 61 391 t (5 % discards)

F(2024) = 0.22 Average F $_{2021-2023}$

SSB (2025)= 103 963t > MSY$_{Btrigger}$ (78 405t)   F$_{MSY}$= 0.24

Length based and sex disaggregated stock synthesis

Basis	Total catch (2025)	Projected landings (2025)	Projected discards (2025)	$F_{ages\ 1-7}$ total (2025)	$F_{ages\ 1-7}$ projected landings (2025)	$F_{ages\ 1-7}$ projected discards (2025)	SSB (2026)	% SSB change *	% Advice change **
ICES advice basis									
MSY approach = F$_{MSY}$	52466	48036	4430	0.24	0.22	0.021	98340 ***	−5.4	−28
Other scenarios									
EU MAP^: F$_{MSY}$	52466	48036	4430	0.24	0.22	0.021	98340	−5.4	−28
F = MAP^:F$_{MSY\ lower}$	33563	30810	2753	0.147	0.135	0.0121	110343	6.1	−54
F = MAP^:F$_{MSY\ upper}$	74366	67851	6515	0.37	0.34	0.032	84652	−18.6	2.1
F = 0	0	0	0	0	0	0	132023	27	−100
F = F$_{pa}$	98611	89566	9045	0.54	0.49	0.049	69816	−33	35
F = F$_{lim}$	121825	110069	11757	0.73	0.66	0.071	55987	−46	67
SSB (2026) = B$_{lim}$	112382	101769	10614	0.65	0.59	0.061	61563	−41	54
SSB (2026) = B$_{pa}$	84504	76963	7541	0.44	0.4	0.039	78405	−25	16.0
SSB (2026) = MSY B$_{trigger}$	84504	76963	7541	0.44	0.4	0.039	78405	−25	16.0
SSB (2026) = SSB(2025)	43579	39950	3629	0.196	0.18	0.0164	103963	0	−40
F = F$_{2024}$	48572	44496	4076	0.22	0.2	0.0187	100800	−3.0	−33
Catch (2025) = TAC (2024)	72839	66475	6364	0.36	0.33	0.031	85598	−17.7	0

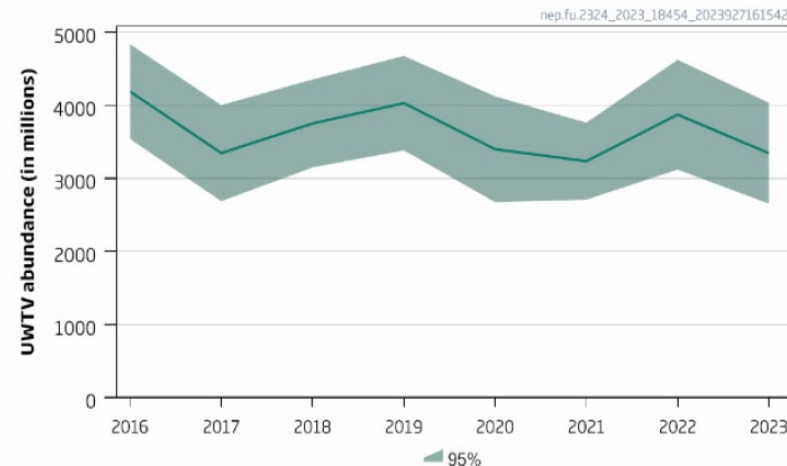**Advice 2024: MAP ≤ 5786 -14.1%**

Catches
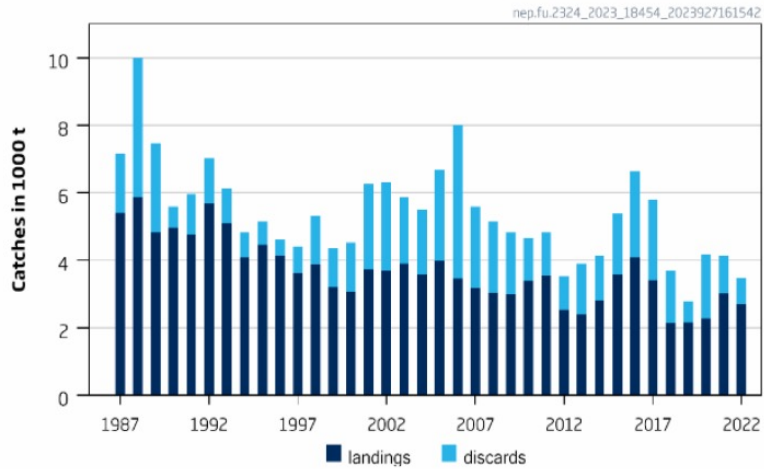
Fishing pressure
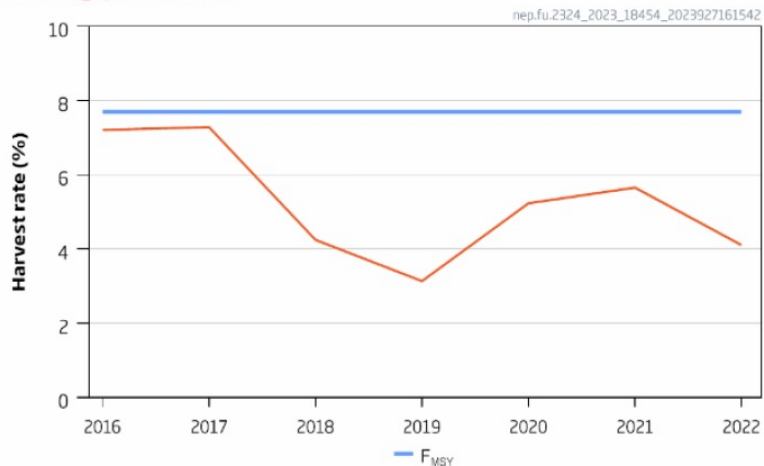
Stock size
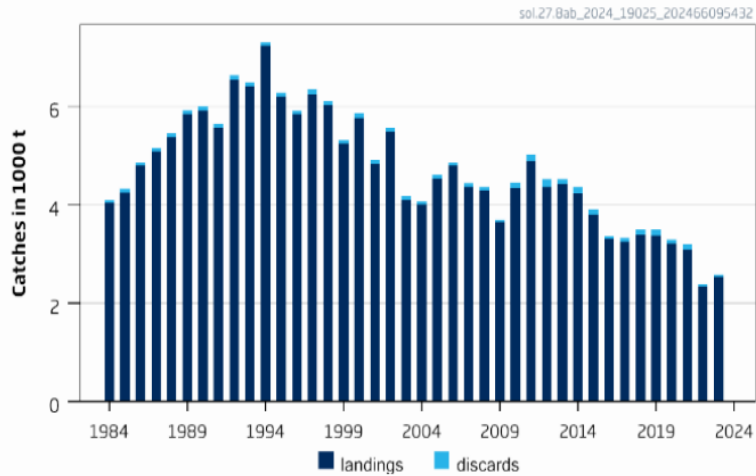
- Advice for 2025 **will be released October**
- F below FMSY proxy
- No biomass reference point
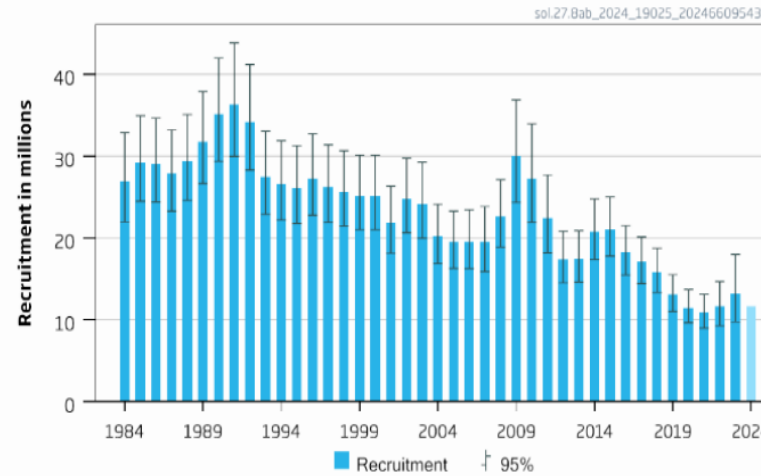- Decrease in stock size
- UWTV survey

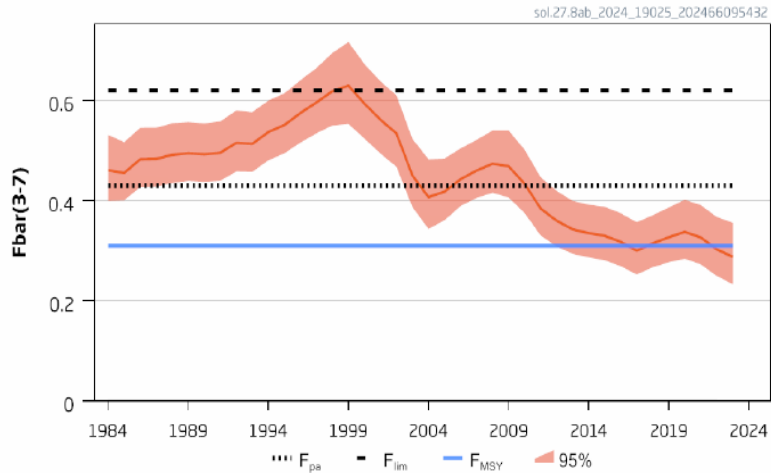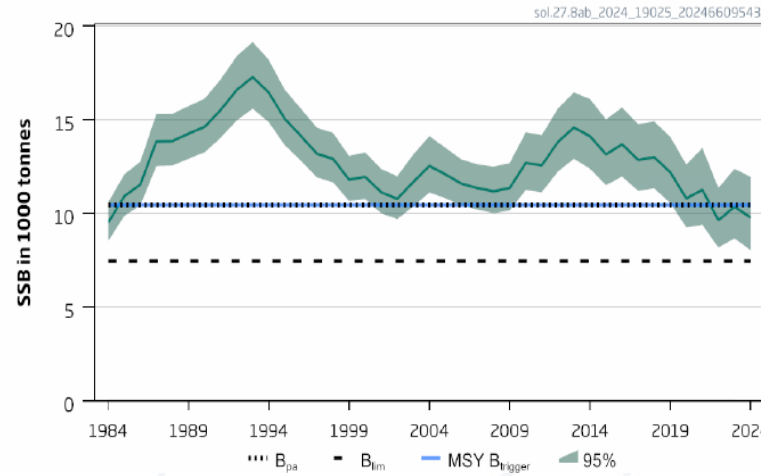**Advice for 2025: EU MAP:** Catch 1716-2510 t   0 to +18% upper

ICES CIEM

- F below F_{MSY}
- SSB below MSY Btrigger
- Benchmarked 2024
- New method SAM
- SSB closer to MSYbtrigger

Catch (2023) : 2 646 (<1 % discards)
F(2024) = 0.29 Selection pattern 2021 to 2023, scaled to the F of 2023
**SSB (2025)= 9 688 t < MSY$_{Btrigger}$ (10 460)   F$_{MSY}$= 0.31**

28

SAM

Basis	Total catch (2025)	Projected landings (2025)	Projected discards (2025)	F$_{ages 3-7}$ total (2025)	SSB (2026)	% SSB change #	% TAC change ##	% advice change ^^^	Probability SSB < B$_{lim}$ in 2026*
ICES advice basis									
EU MAP ^: F = F$_{MSY}$ × SSB$_{2025}$/MSYB$_{trigger}$	2510	2476	34	0.29	9527	−1.66	0.8	0.84	0.01
EU MAP ^: F = F$_{MSY lower}$ × SSB$_{2025}$/MSYB$_{trigger}$	1716	1694	22	0.19	10426	7.6	−31	18.0^^	0
Other scenarios									
MSY approach = F$_{MSY}$	2646	2611	35	0.31	9441	−2.6	6.3	6.3	0.02
F$_{MSY lower}$	1800	1776	24	0.2	10312	6.4	−28	−28	0
F$_{MSY upper}$	3137	3094	43	0.38	8918	−8.0	26	26	0.05
F = 0	0	0	0	0	12069	25	−100	−100	0
FPA	3482	3433	49	0.43	8567	−11.6	40	40	0.09
SSB$_{2026}$ = B$_{lim}$	4547	4486	61	0.61	7470	−23	83	83	0.5
SSB$_{2026}$ = B$_{pa}$ = MSYB$_{trigger}$	1624	1605	19	0.18	10460	8.0	−35	−35	0
SSB$_{2026}$ = SSB$_{2025}$	2430	2399	31	0.28	9688	0	−2.4	−2.4	0
F = F$_{2024}$	2497	2466	31	0.29	9556	−1.36	0.32	0.32	0
Landings 2024 = landings from TAC of 2489 tonnes	2523	2489	34	0.29	9555	−1.37	1.37	1.37	0.01
Total catch equal to TAC$_{2024}$	2489	2456	33	0.29	9589	−1.02	0	0	0.01
Probability of (SSB$_{2026}$<B$_{lim}$)=5%	3137	3094	43	0.38	8918	−8.0	26	26	0.05

Advice for 2025: EU MAP: total removals 2241-2631 t ~ -0.4%

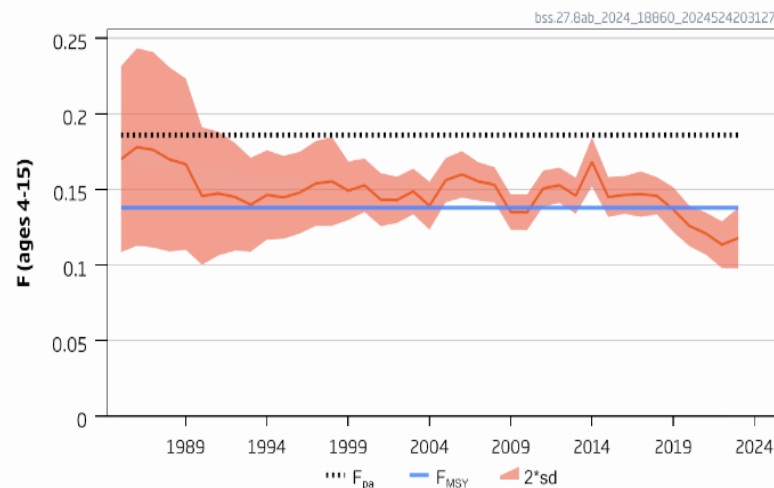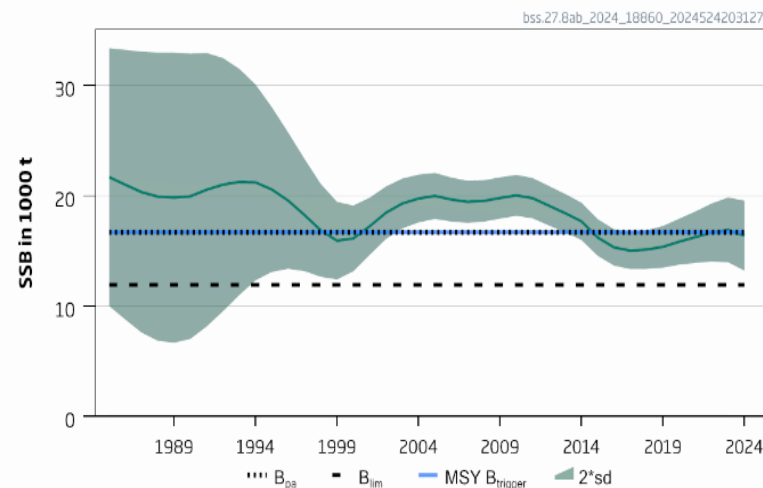ICES CIEM
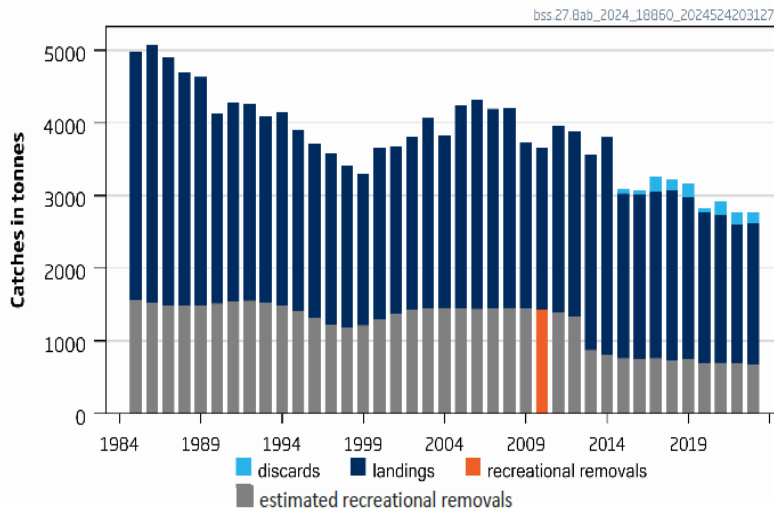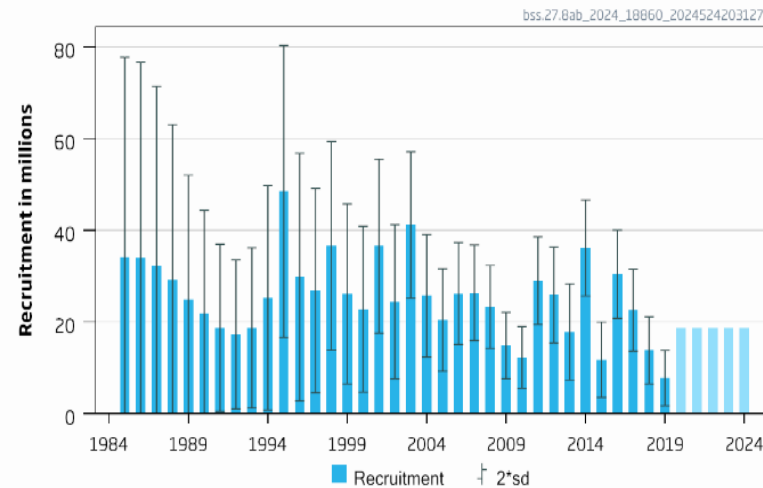
- F below F_{MSY}
- SSB below MSY Btrigger
- Stock identity uncertain
- Limited data on recreational removals
- Advice for commercial + recreational
- Forecast assumes one fish bag limit (2 previously)
- Benchmark ongoing

Catch (2023) : 2 773 (5 % discards commercial)
F(2024) = 0.117 Average F 2021-2023 plus Frec (0.023)
SSB (2025)= 15 426t < $MSY_{Btrigger}$ (16 688 t) F_{MSY}= 0.138

Basis	Total removals (2025)#	Commercial landings* (2025)	Recreational removals* (2025)	Commercial discards (2025)	$F_{ages\ 4-15}$ total (2025)	$F_{ages\ 4-15}$ commercial landings* (2025)	$F_{ages\ 4-15}$ recreational removals* (2025)	SSB (2026)	% SSB change ##	% advice change ###
ICES advice basis										
EU MAP^ : $F_{MSY} \times SSB_{2025}/MSY\ B_{trigger}$	2631	2041	463	128	0.128	0.105	0.023	14525	−5.8	−0.42
F = MAP^: $F_{MSY\ lower} \times SSB_{2025}/MSY\ B_{trigger}$	2241	1669	467	104	0.108	0.085	0.023	14827	−3.9	−0.36
Other scenarios										
MSY approach : F_{MSY}	2833	2233	461	140	0.138	0.115	0.023	14368	−6.9	7.2
F = 0	0	0	0	0	0	0.000	0.000	16581	7.5	−100
F = F_{pa}	3736	3093	450	193	0.186	0.163	0.023	13672	−11.4	41
$SSB_{2026} = B_{lim}$	6029	5275	424	330	0.320	0.300	0.023	11920	−23	128
$SSB_{2026} = B_{pa}$^^										
$SSB_{2026} = MSY\ B_{trigger}$^^										
$SSB_{2026} = SSB_{2025}$	1470	936	476	58	0.07	0.047	0.023	15426	0	−44
F = F_{2023}	2431	1847	469	115	0.117	0.094	0.023	14679	−4.8	−8.0
Total removals advice (2025) = total removals advice (2024)	2642	2051	463	128	0.128	0.105	0.023	14516	−5.9	0

No TAC in this area –technical measures
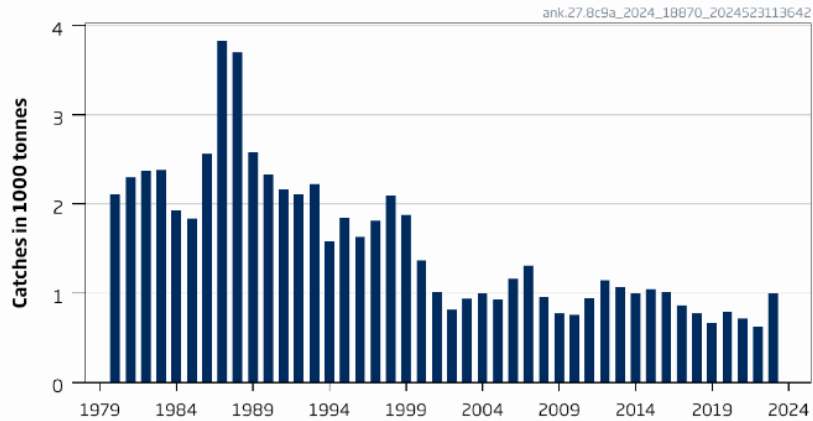Age and length based stock synthesis including recreational catches

Eaux de la Péninsule Ibérique

Advice for 2025: MSY: Catch $\leq$ 2486 t advice +17.8%

ICES
CIEM

Catches

Relative Fishing Pressure

Relative Biomass

- F below F_{MSY}
- Biomass above MSY Btrigger
- Only fishery dependent data in assessment
- Increased biomass
- Two species not separated in landing statistics
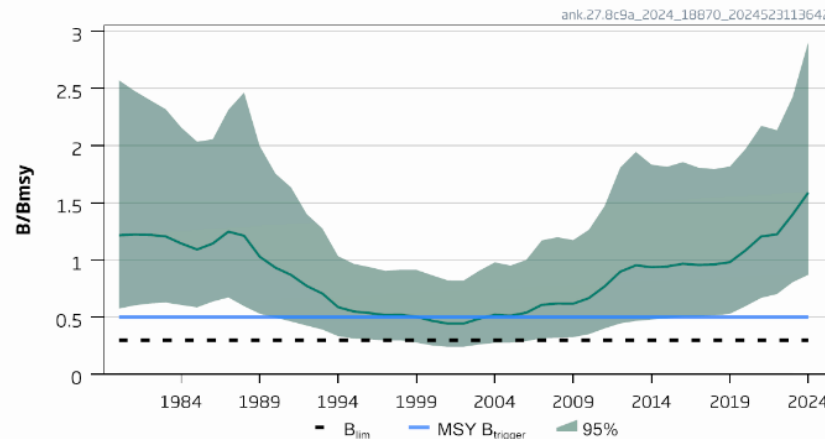- TAC combined with white anglerfish

Catch (2023) : 997t (negligible discards)

F(2024)/FMSY = 0.39 Fsq

Biomass (2025)/BMSY= 1.60 >MSY$_{Btrigger}$ 0.5

Basis	Total catch (2025)	Fishing mortality F_{2025}/F_{MSY}	Stock size B_{2026}/B_{MSY}	% biomass change^	% advice change^^
ICES advice basis					
MSY approach (35th percentile of predicted catch distribution under F = F$_{MSY}$)	2486	0.89	1.50	−6.2	17.8
Other scenarios					
F = F$_{msy}$	2770	1	1.49	−6.9	31
F = F$_{2023}$ = F$_{sq}$	1121	0.39	1.60	0	−47
F = 0	0	0	1.68	5.0	−100

SPiCT

Benchmark planned 2024/2025

Advice for 2025: EU MAP: Catch 2098 – 3863 t advice ~+16%

Catches — Catches in 1000 tonnes (1980–2024)

Recruitment (age 0) — Recruitment in millions (1980–2024); ■ Recruitment † 95%

F — F (length 30-130cm) (1980–2024); ···· F_{pa} — F_{MSY} — 95%

SSB — SSB in 1000 t (1980–2024); ···· B_{pa} — B_{lim} — MSY $B_{trigger}$ — 95%
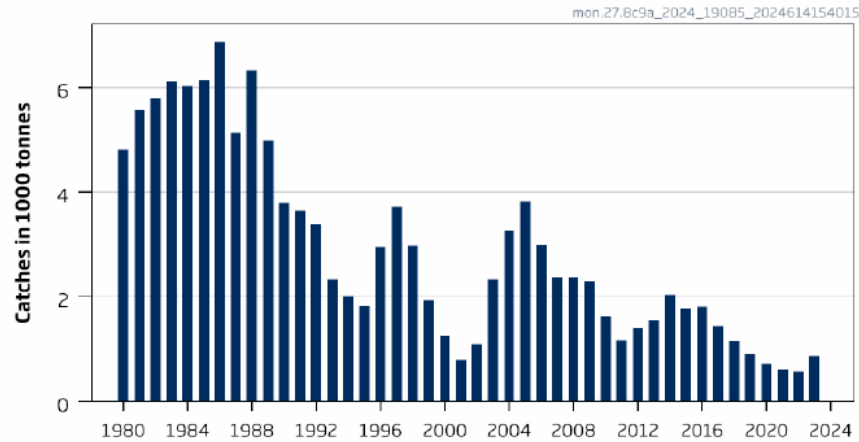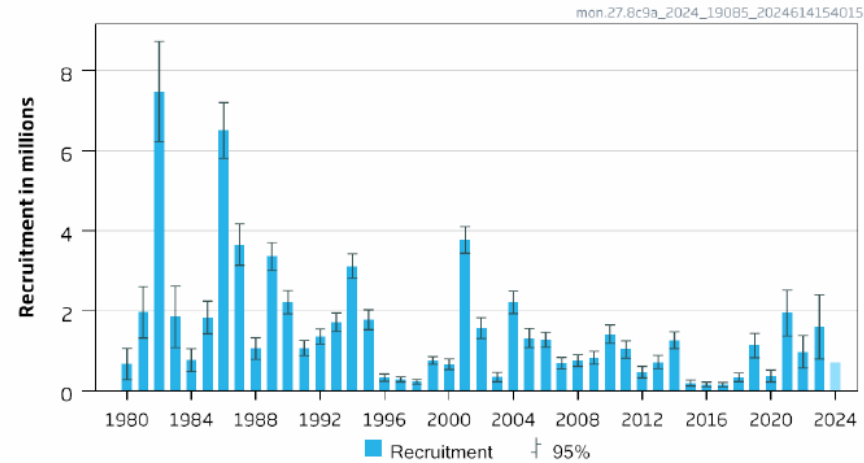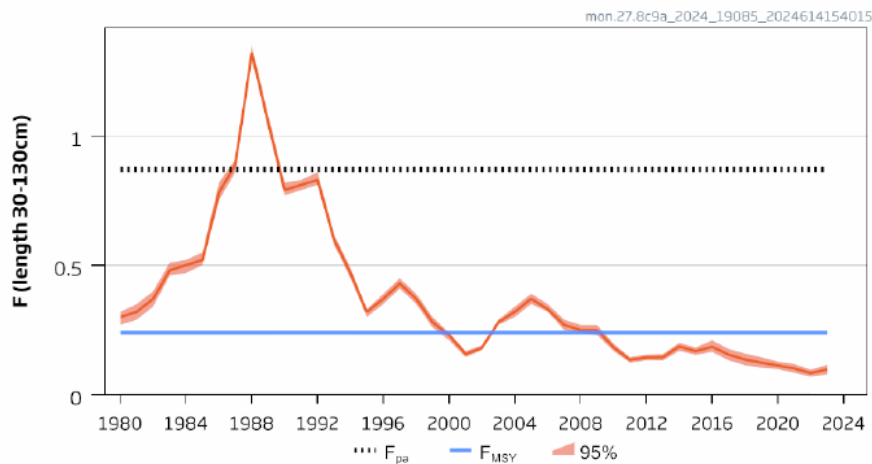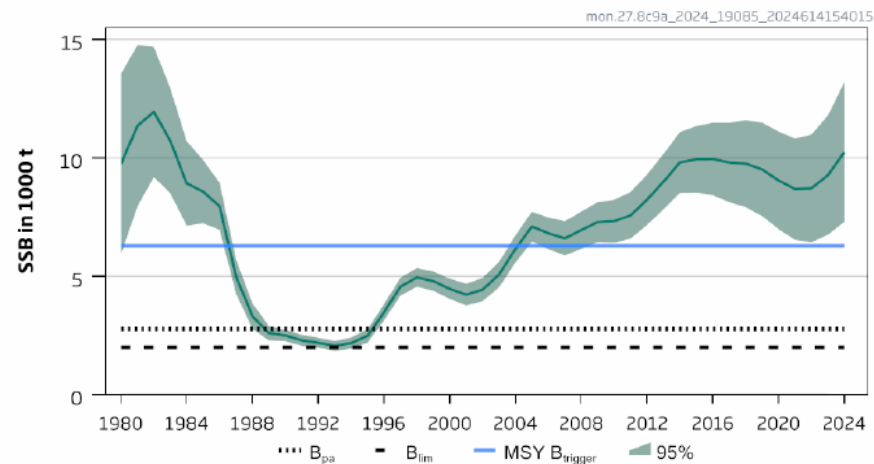
- F below F_{MSY}
- SSB above MSY Btrigger
- Advice higher – upward revision of recruitment (retrospective)
- SSB overestimated (retrospective) – no index for older fish

Catch (2023) : 867 t (negligible discards)
F(2024)=0.094 (Average 2021-2023)
SSB(2025)= 11 685 t >MSY$_{Btrigger}$ (6283 t) F$_{MSY}$ =0.24

Basis	Total catch (2025)	F$_{30-130\ cm}$ total (2025)	SSB (2026)	% SSB change**	% advice change^
ICES advice basis					
EU MAP*: F$_{MSY}$	2946	0.24	11639	−0.39	16.0
F = MAP* F$_{MSY\ lower}$	2098	0.164	12467	6.7	16.2
F = MAP* F$_{MSY\ upper}$	3863	0.33	10743	−8.1	15.9
Other options					
F = 0	0	0	14503	24	−100
F$_{pa}$	7803	0.87	6837	−41	207
SSB (2026) = B$_{lim}$	12322	2.8	1993	-83	385
SSB (2026) = B$_{pa}$	11668	2.2	2769	−76	360
SSB (2026) = MSY $_{Btrigger}$	8350	0.98	6283	−46	229
SSB$_{2026}$ = SSB$_{2025}$	2900	0.24	11685	0	14.2
F = F$_{2024}$	1245	0.094	13296	13.8	−51
Catch advice (2025) = Catch advice 2024	2539	0.20	12036	3.0	0

Length based stock synthesis
Benchmark planned 2024/2025

- Two species not separated in landing statistics
- TAC combined with black-bellied anglerfish

Advice for 2025: EU MAP: Catch 1161 – 2595 t advice ~+35%

Catches
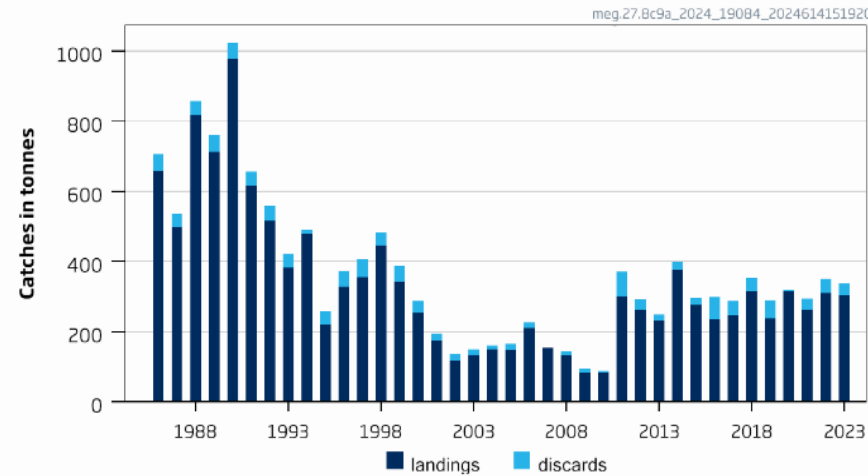
Recruitment (age 1)

F
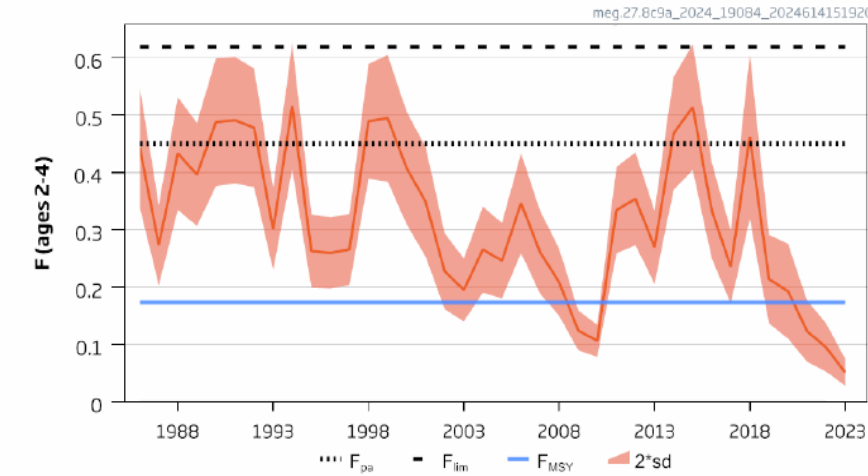
SSB
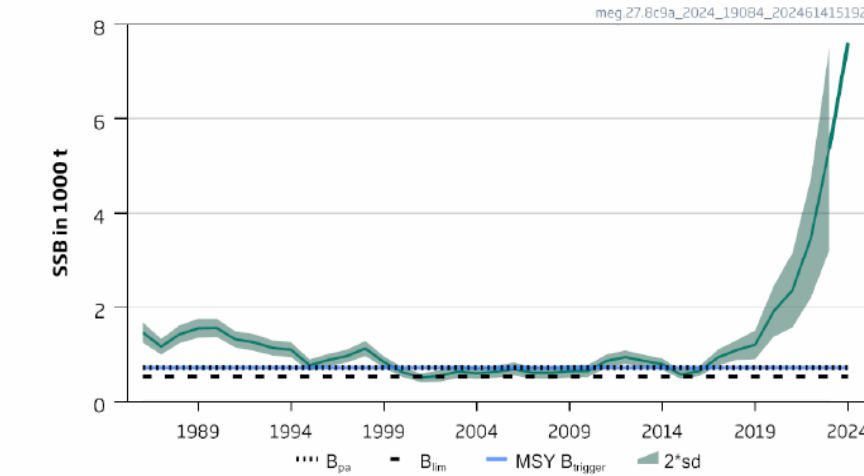
- F below F_{MSY}
- SSB above MSY Btrigger
- Two species not separated in landing statistics
- TAC combined with four spot megrim
- Increase advice: upward revision ages 1-4 (retrospective)

Catch (2023) : 338 t (10% discards)

F(2024)=0.09 (Average 2021-2023)

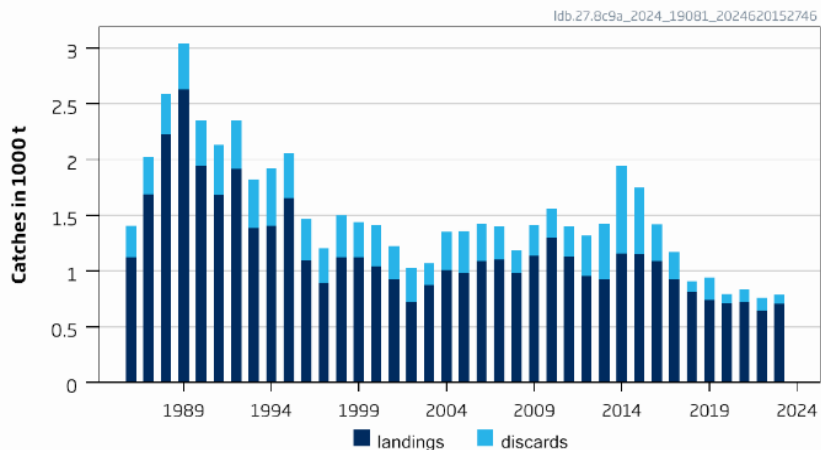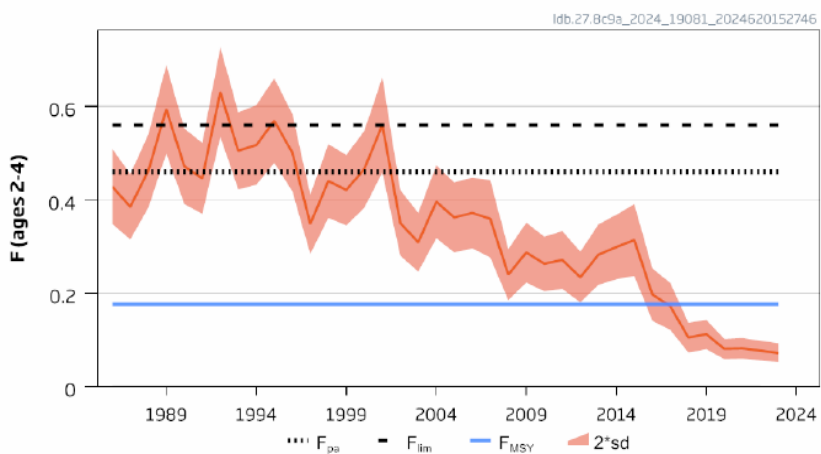**SSB(2025)= 8 625t >MSY$_{Btrigger}$ (725 t) F$_{MSY}$ =0.173**

Basis	Total catch (2025)	Projected landings (2025)	Projected discards# (2025)	F$_{ages\,2-4}$ Total (2025)	F$_{ages\,2-4}$ Projected landings (2025)	F$_{ages\,1-2}$ Projected discards (2025)	SSB (2026)	% SSB change*	% advice change^^
ICES advice basis									
EU MAP^: F$_{MSY}$	1721	1667	54	0.173	0.143	0.054	7788	−9.7	35
F = MAP^ F$_{MSY\,lower}$	1161	1125	36	0.112	0.092	0.035	8463	−1.88	35
F = MAP^ F$_{MSY\,upper}$	2595	2512	84	0.280	0.230	0.088	6739	−22	36
Other scenarios									
F = 0	0	0	0	0.000	0.000	0.000	9867	14.4	−100
F$_{pa}$	3745	3620	125	0.450	0.370	0.141	5369	−38	195
F$_{lim}$	4650	4491	159	0.620	0.510	0.194	4299	−50	266
SSB (2026) = B$_{pa}$	7825	7506	319	2.080	1.720	0.650	725	−92	516
SSB (2026) = B$_{lim}$	8020	7686	333	2.360	1.950	0.740	532	−94	531
SSB (2026) = MSY B$_{trigger}$	7825	7506	319	2.080	1.720	0.650	725	−92	516
SSB$_{2026}$ = SSB$_{2025}$	1027	995	32	0.098	0.081	0.031	8625	0	−19.2
F = F$_{2024}$	946	917	29	0.09	0.074	0.028	8722	1.12	−26
Catch advice (2025) = Catch advice (2024)	1271	1231	40	0.124	0.102	0.039	8330	−3.4	0

A4A age based assessment
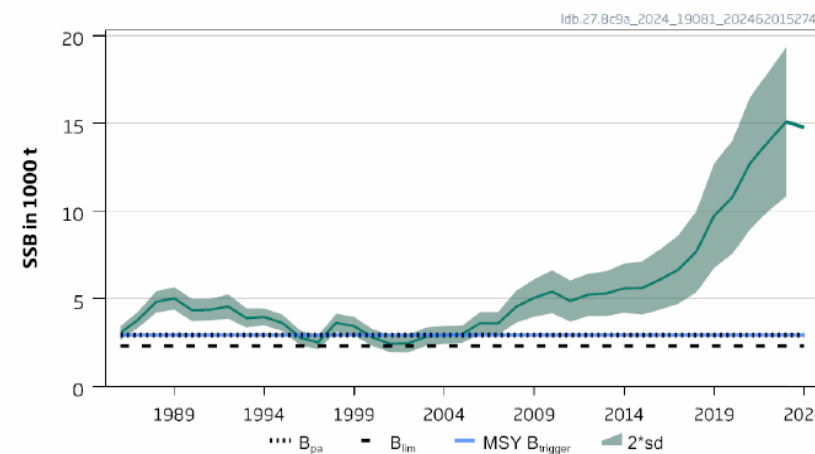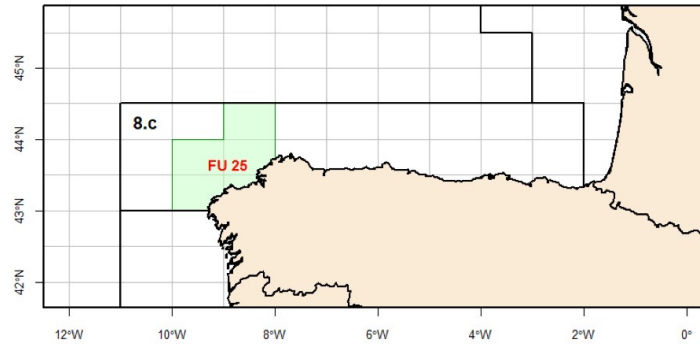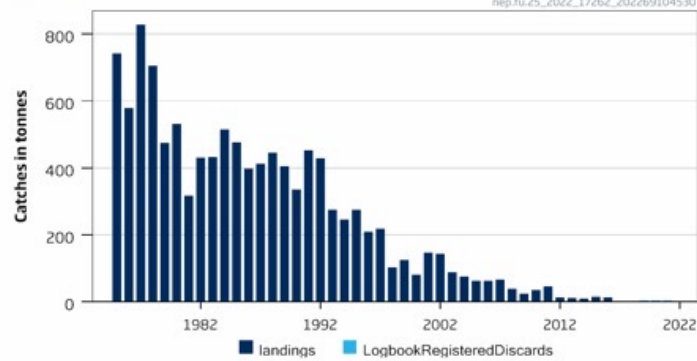
Advice for 2025: EU MAP: Catch 1903– 4098 t advice ~+16%
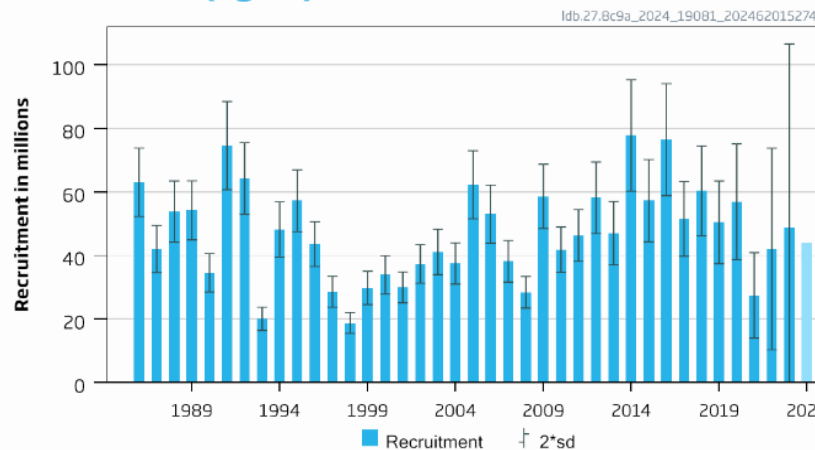
- F below F_{MSY}
- SSB above MSY Btrigger
- Increase ages 0-3
- Two species not separated in landing statistics
- TAC combined with megrim

Catch (2023) : 786 t (10% discards)
F(2024)=0.077 (Average 2021-2023)
SSB(2025)= 14 707 t >MSY$_{Btrigger}$ (2932 t) F$_{MSY}$ =0.176

Basis	Total catch (2025)	Projected landings (2025)	Projected discards# (2025)	F$_{ages\,2-4}$ Total (2025)	F$_{ages\,2-4}$ Projected landings (2025)	F$_{ages\,1-2}$ Projected discards (2025)	SSB (2026)	% SSB change*	% advice change^^
ICES advice basis									
EU MAP^: F$_{MSY}$	2727	2486	241	0.176	0.109	0.047	13098	−10.9	16.0
F = MAP^ F$_{MSY\ lower}$	1903	1737	167	0.119	0.074	0.032	13977	−5.0	16.0
F = MAP^ F$_{MSY\ upper}$	4098	3729	369	0.280	0.173	0.075	11641	−21	15.9
Other scenarios									
F = 0	0	0	0	0.000	0.000	0.000	16018	8.9	−100
F$_{pa}$	6121	5554	567	0.460	0.280	0.123	9508	−35	160
F$_{lim}$	7059	6395	664	0.560	0.350	0.149	8527	−42	200
SSB (2026) = B$_{pa}$ = MSY B$_{trigger}$	12596	11244	1351	1.560	0.970	0.420	2932	−80	436
SSB (2026) = B$_{lim}$	13240	11784	1456	1.790	1.110	0.480	2321	−84	463
SSB$_{2026}$ = SSB$_{2025}$	1221	1115	106	0.074	0.046	0.02	14707	0	−48
F = F$_{2024}$	1262	1152	110	0.077	0.048	0.021	14663	−0.29	−46
Catch advice (2025) = Catch advice (2024)	2351	2144	207	0.150	0.093	0.040	13499	−8.2	0

A4A age based assessment

Advice for 2023, 2024, 2025: MSY: Catch= 0 t No change

- Advice released 2022 no update
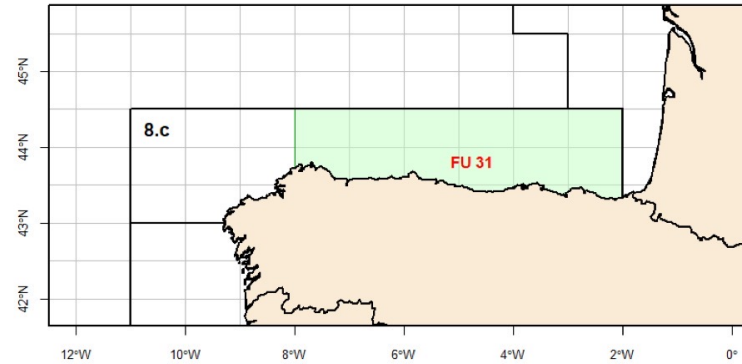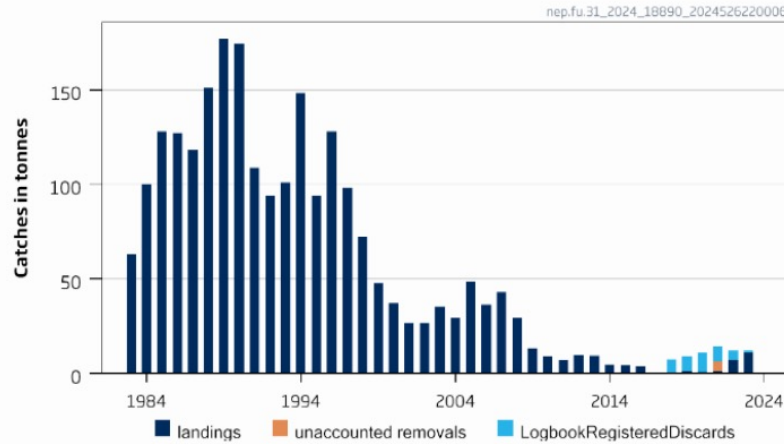
Fishing pressure below F_{MSY}
Spawning stock below B_{lim}
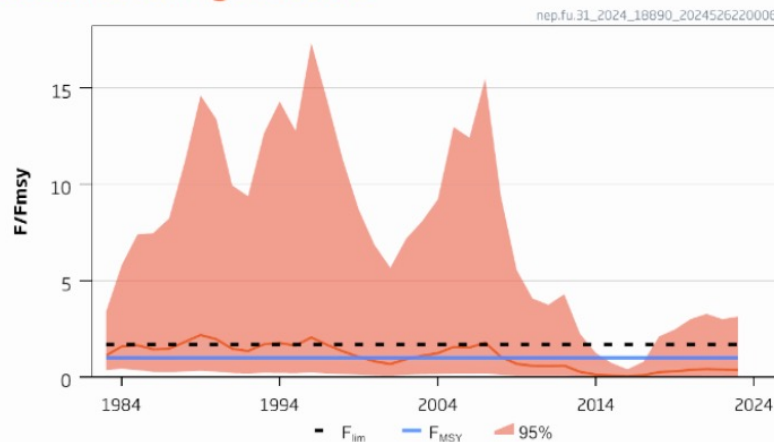No catch scenario that will rebuild the stock above B_{lim} by 2025

**Advice for 2025: MSY:** Catch $\leq$ 29 t advice +134%

ICES CIEM

Catches

Relative Fishing Pressure
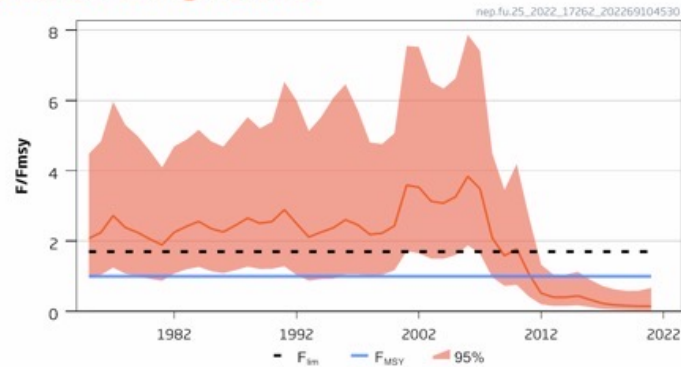
Relative Biomass

- Fishing pressure below F_{MSY}
- Biomass above MSY Btrigger
- Index of stock size used in model updated – now covers whole stock area
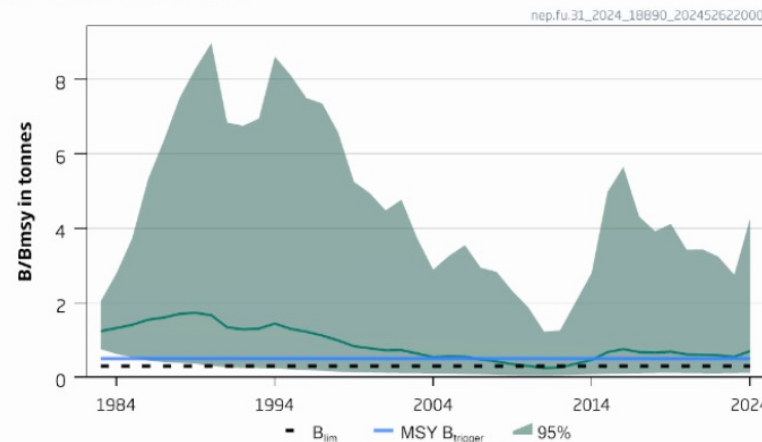
Catch (2023) : 12.1 t (10% discards 1.3 t)
F(2024)/FMSY = 0.38 Fsq
Biomass (2025)/BMSY= 0.75 < MSY$_{Btrigger}$ 0.5

Basis	Total catch (2025)	Fishing pressure F_{2025}/F_{MSY}	Biomass B_{2026}/B_{MSY}	% Biomass change^	% TAC change^^^	% advice change^^	Probability $B < B_{lim}$
ICES advice basis							
MSY approach: 35th percentile of predicted catch distribution under F = F$_{MSY}$	29.0	0.73	0.78	4.0	134	134	0.157
Other scenarios							
F = F$_{2023}$ = F$_{sq}$	15.3	0.38	0.81	8.0	23	23	0.144
F = F$_{MSY}$	39.3	1.00	0.77	2.7	217	217	0.167
F = 0	0.0	0.00	0.83	10.7	−100	−100	0.130

SPiCT

Advice for 2023, 2024 and 2025: MSY: Catch= 0 t no change
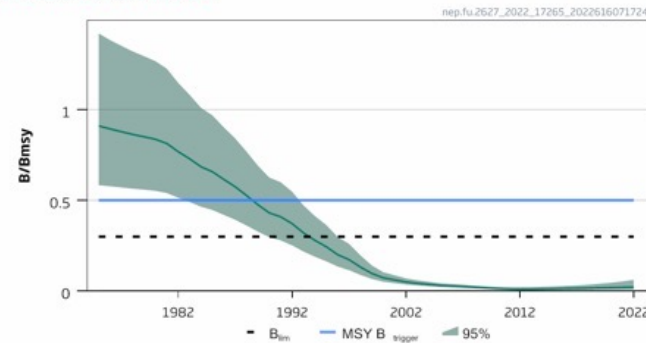
- Fishing pressure below F_{MSY}
- Spawning stock below B_{lim}
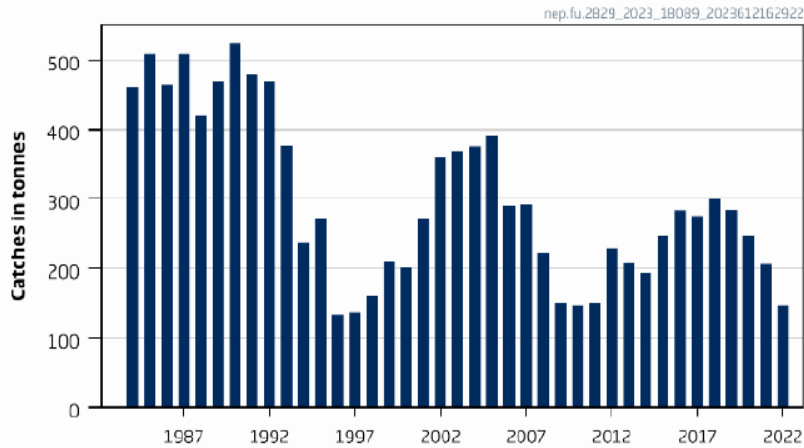- No catch scenario that will rebuild the stock above B_{lim} by 2025
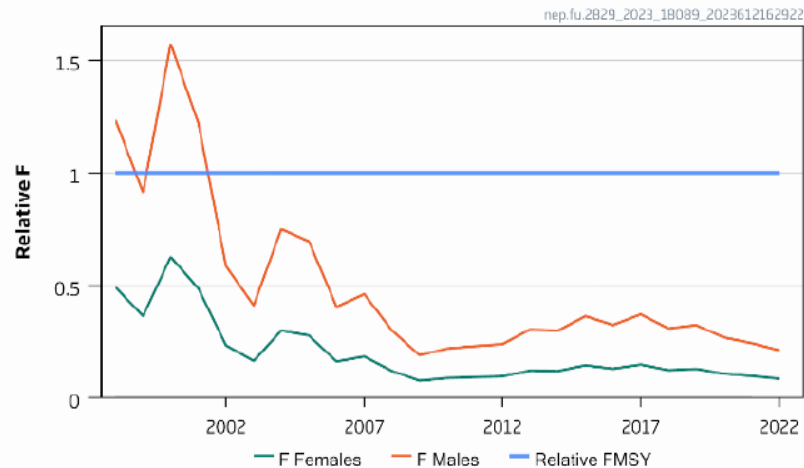
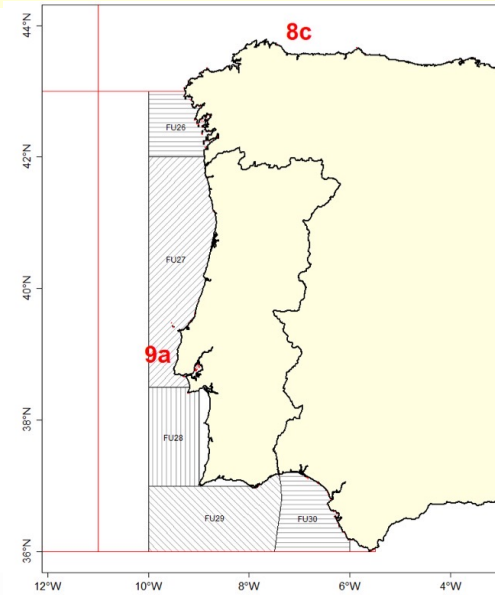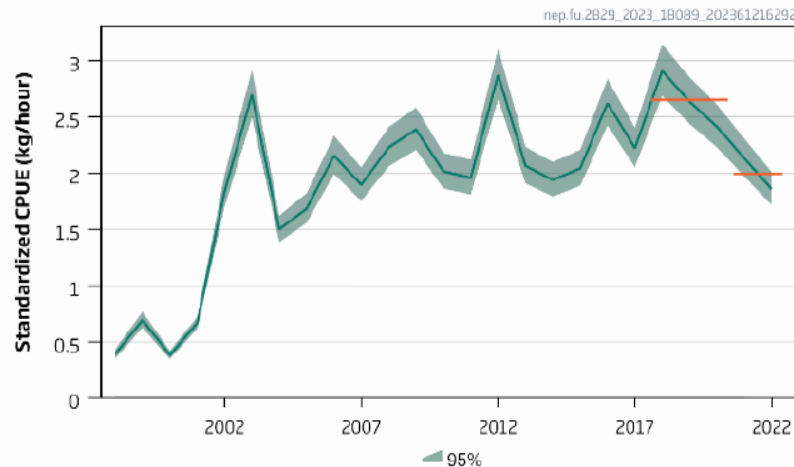Advice released 2022 no update
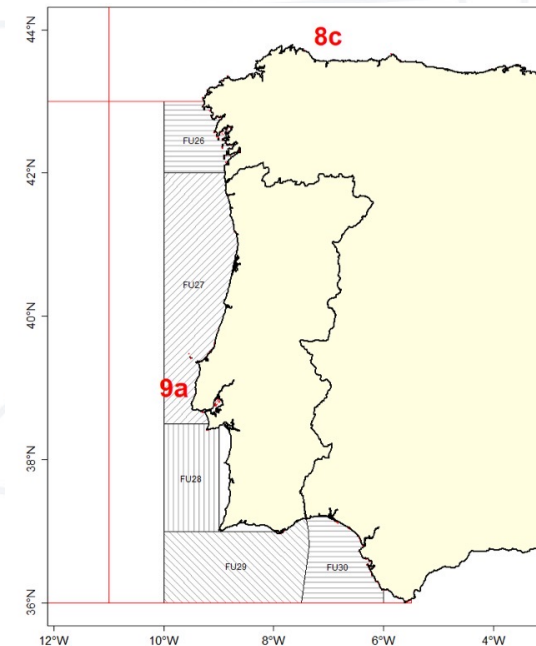
Advice for 2024 and 2025: PA: Catch$\leq$ 213 t -20%

- Fishing pressure below F_{MSY}
- No biomass ref pt
- Advice lower: decline in biomass trend – uncertainty cap applied

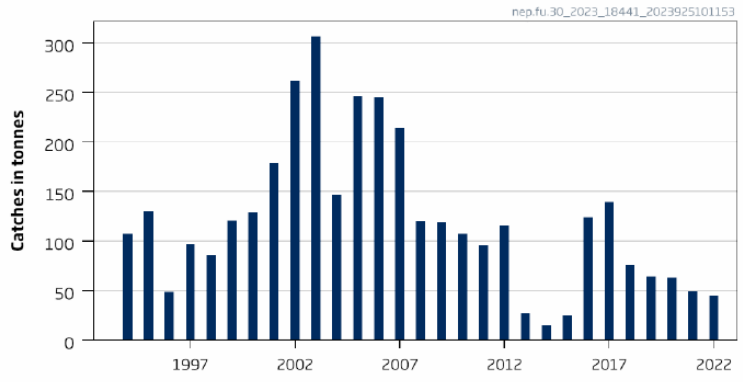- Advice released 2023

Catch (2022) : 148 t (negligible discards)

Index A (2021–2022)		1.99 kg h^{-1}
Index B (2018–2020)		2.65 kg h^{-1}
Index ratio (A/B)		0.75
Uncertainty cap	Applied	0.80
Advised catch for 2022 and 2023 (issued in 2021)		266 tonnes
Discard rate		Negligible
Precautionary buffer	Not applied	-
Catch advice for 2024 and 2025 **		213 tonnes
% Advice change***		−20%

Category 3: 2 over 3

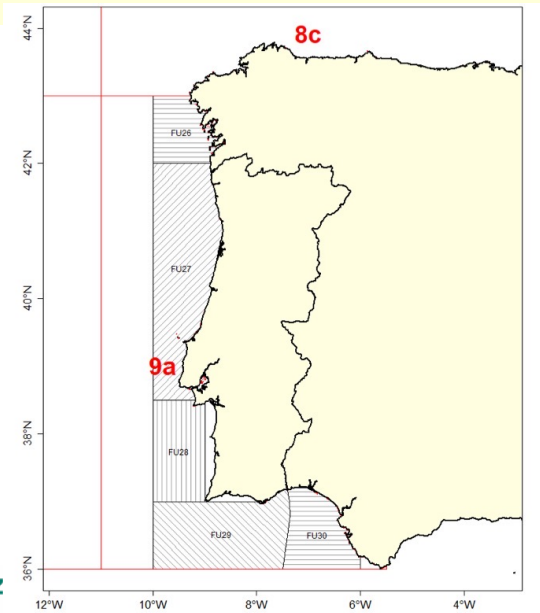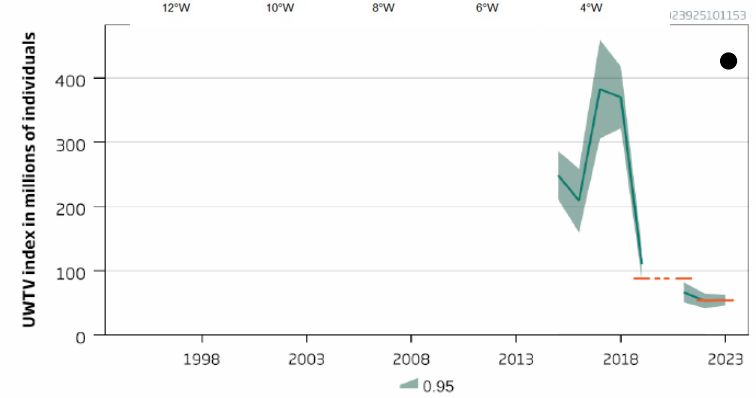## Advice for 2024: PA: Catch<u><</u> 26 t -20%

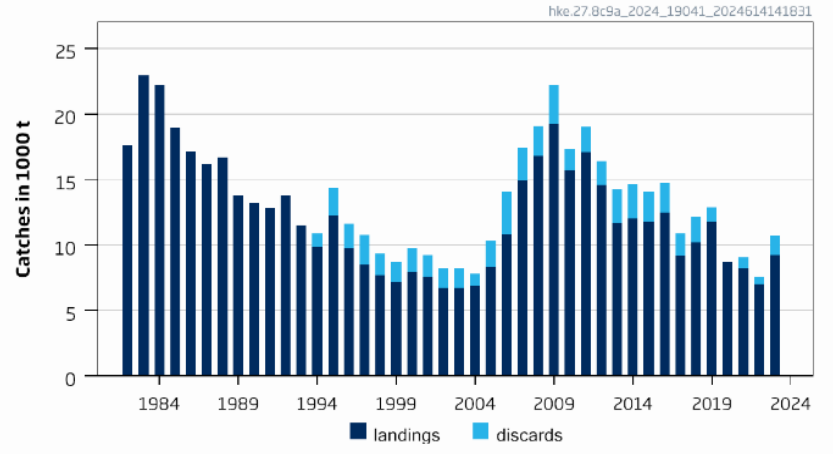**Catches**

Fishing pressure
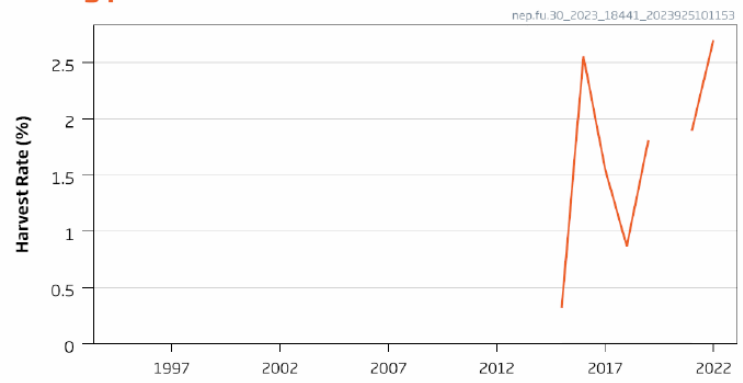
Stock siz

- No reference points
- Fishing pressure variable
- Stock size declining
- PA buffer and uncertainty cap applied
- Catch 2022 44 t
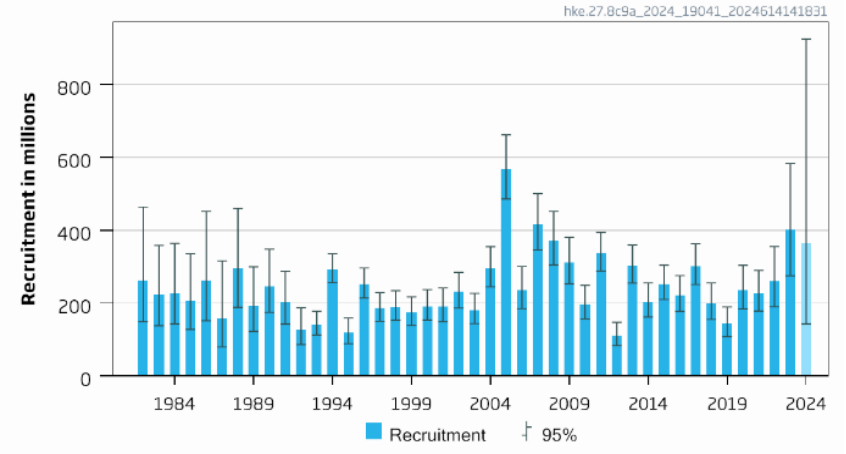- Advice release for 2025 - October

Advice for 2025: EU MAP: Catch 10 659 – 20 404 t advice ~ +17%

- SSB females only
- F below F_{MSY}
- SSB above MSY Btrigger
- Increase in stock size and recruitment
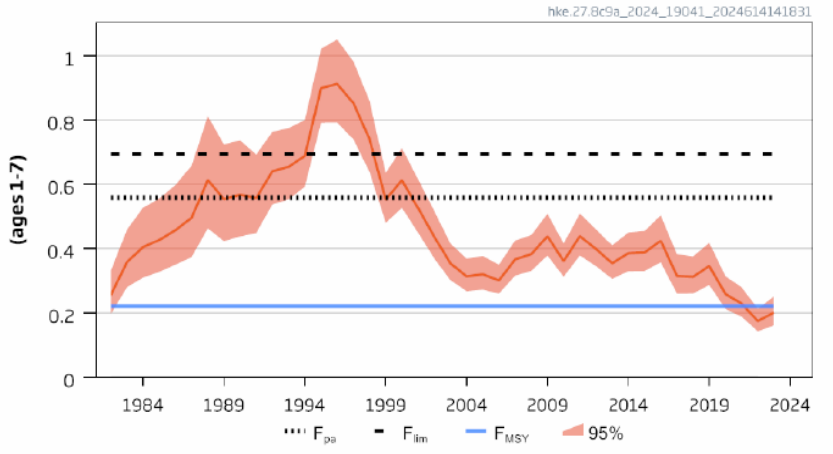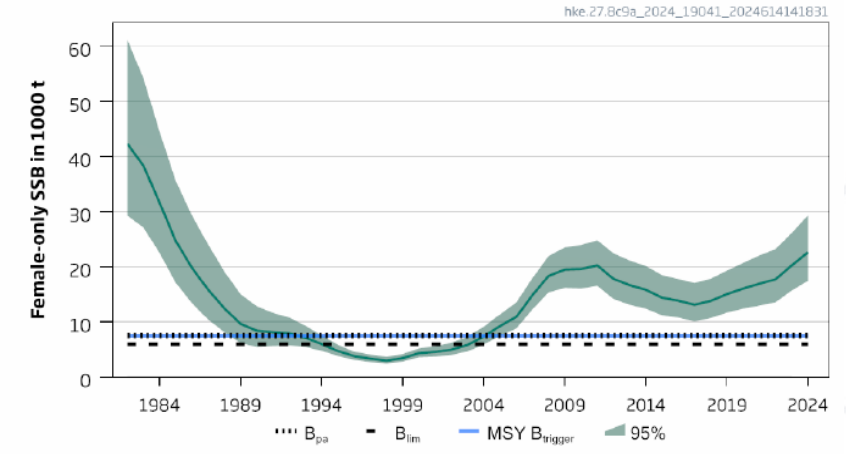
Catch (2023) : 10 725 t (14% discards)
F(2024)=0.20 (Average 2021-2023)
**SSB(2024)= 26 940 t >MSY$_{Btrigger}$ (7556 t) F$_{MSY}$ =0.221**

Basis	Total catch (2025)	Projected landings (2025)	Projected discards (2025)	F$_{ages\ 1-7}$ total (2025)	F$_{ages\ 1-7}$ projected landings (2025)	F$_{ages\ 1-7}$ projected discards (2025)	SSB (2026)	% SSB change*	% TAC change^	% advice change^^
ICES advice basis										
EU MAP F = F$_{MSY}$^^^	15105	14017	1088	0.221	0.20	0.0160	31680	17.6	−13.4	16.9
EU MAP F = F$_{MSY}$ lower	10659	9904	755	0.151	0.140	0.0110	34126	27	−39	16.9
EU MAP F = F$_{MSY}$ upper	20404	18903	1501	0.311	0.29	0.023	28798	6.9	17.0	17.0
Other scenarios										
F = 0	0	0	0	0	0	0	40084	49	−100	-100
F = F$_{lim}$	38558	35473	3085	0.694	0.64	0.056	19249	−29	121	198
F = F$_{pa}$	32839	30286	2553	0.558	0.52	0.043	22197	−17.6	88	154
SSB (2026) = B$_{lim}$	66526	60037	6489	1.83	1.65	0.178	6011	−78	281	415
SSB (2026) = B$_{pa}$	62947	57014	5933	1.60	1.45	0.151	7556	−72	261	387
SSB (2026) = MSY B$_{trigger}$	62947	57014	5933	1.60	1.45	0.151	7556	−72	261	387
SSB (2026) = SSB (2025)	23858	22077	1781	0.37	0.35	0.028	26940	0	37	85
F = F$_{2024}$	13903	12906	997	0.20	0.188	0.0140	32338	20	−20	7.6
Catch advice (2025)= TAC$_{2024}$	17445	16177	1268	0.26	0.24	0.0190	30402	12.9	0	35

Length based and sex disaggregated stock synthesis

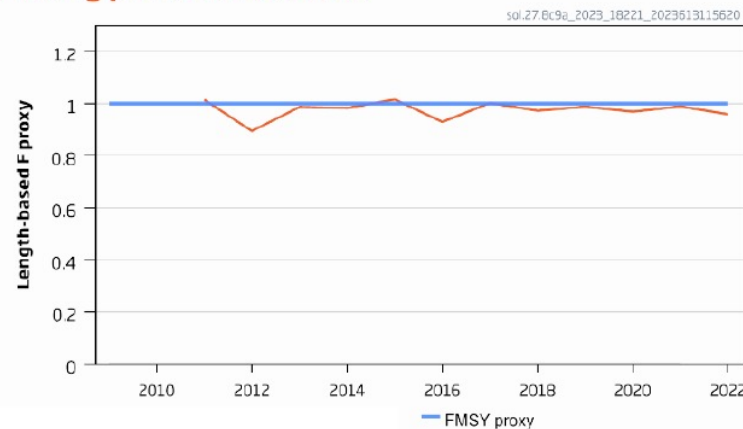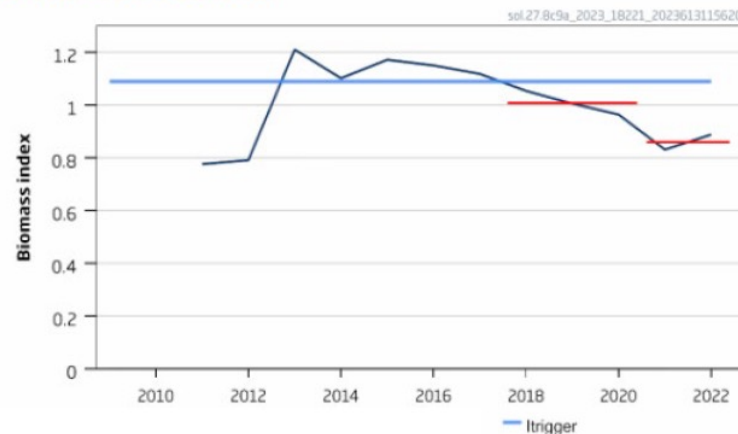**Advice for 2024 and 2025: MSY:** Catch $\leq$ 209 t -35%

Catches
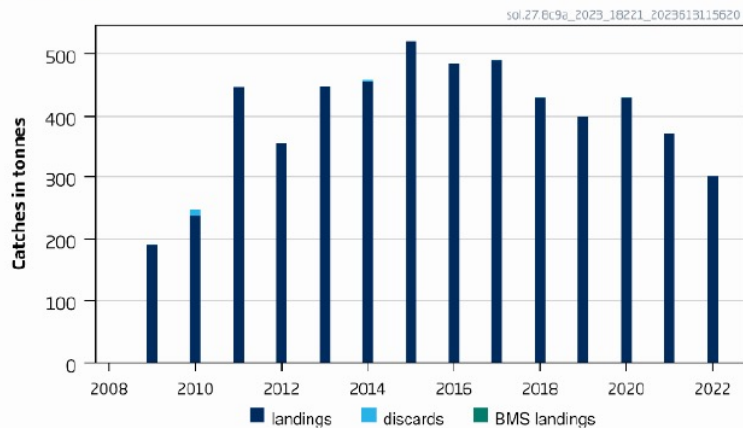
Fishing pressure indicator

Stock size indicator

- F just below F_{MSY}
- Stock size decreased and below Itrigger
- Decrease in advice: lower stock size and below trigger so further reduction
- All sole species under single TAC
- Advice released 2023

Catch (2022) : 301 t (negligible discards)

rfb rule

Previous catch advice Ay (2022, 2023)		320 tonnes
Stock biomass trend		
Index A (2021, 2022)		0.86
Index B (2018, 2019, 2020)		1.01
r: Index ratio (A/B)		0.85
Fishing pressure proxy		
Mean catch length (L_{mean} = L_{2022})		34.5 cm
MSY proxy length ($L_{F = M}$)		33.1 cm
f: multiplier for relative mean length in catches ($L_{mean}/L_{F = M\ 2022}$)		1.04
Biomass safeguard		
Last index value (I_{2022})		0.89
Index trigger value ($I_{trigger}$ = I_{loss} × 1.4)		1.09
b: multiplier for index relative to trigger min{$I_{2022}/I_{trigger}$, 1}		0.82
Precautionary multiplier to maintain biomass above B_{lim} with 95% probability		
m: multiplier (generic multiplier based on life history)		0.90
RFB calculation: A_{y+1} = A_y × r × f × b × m		209 tonnes
Stability clause (+20%/−30% compared to A_y, only applied if b ≥ 1)	Not applied	
Discard rate		Negligible
Catch advice for 2024 and 2025 (A_y × stability clause)		209 tonnes
Projected landings corresponding to advice**		209 tonnes
% advice change^		−35%

$$Ay+1 = Ay \times r \times f \times b \times m$$

Advice for 2024 and 2025: PA: Catch $\leq$ 382 t no change
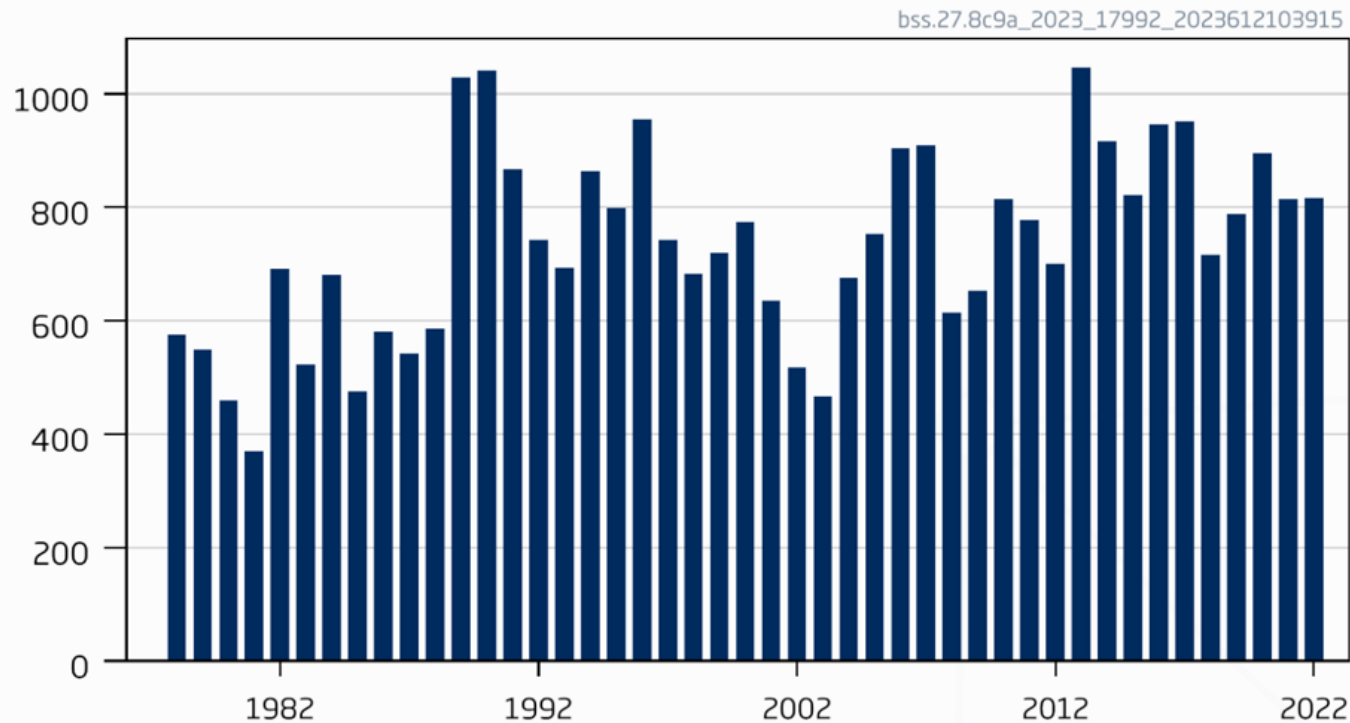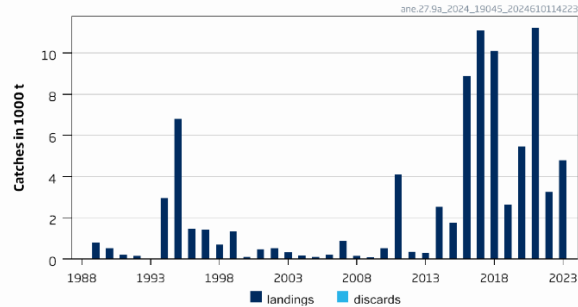

- Category 5
- Recreational catch substantial but unquantified
- PA buffer not applied
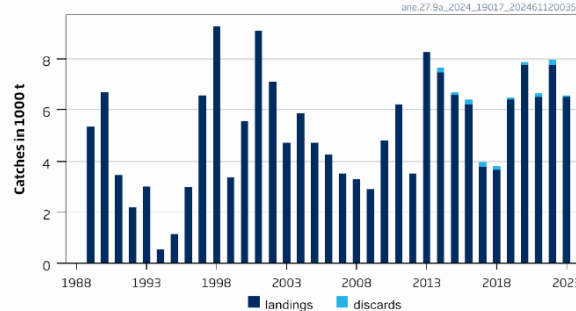- Advice released 2023

Advice for 1 July 2024 – 30 June 2025: MSY:
Western component $\leq$ 8 480 -54% Southern $\leq$ 969 -56%

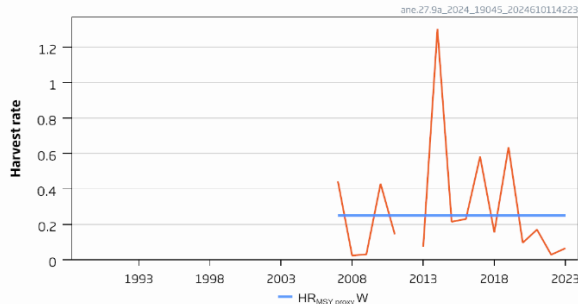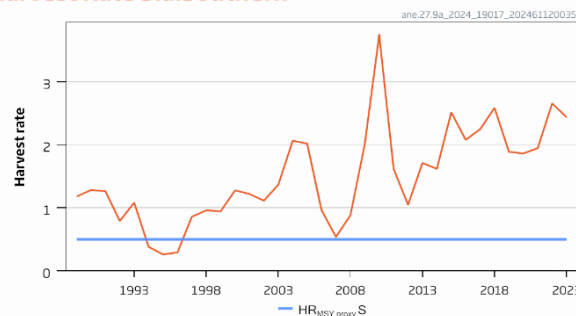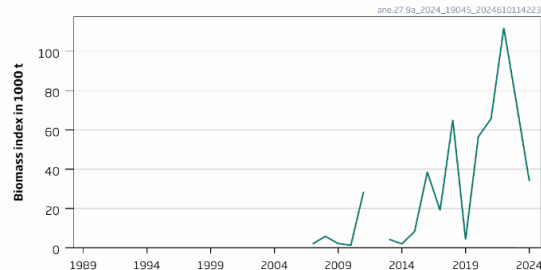

Catches 9.a.Western

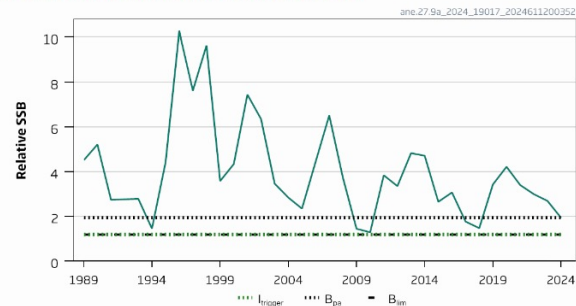Catches 9.a.Southern

Harvest Rate 9.a.Western

Harvest Rate 9.a.Southern

Stock Size Indicator 9.a.Western

Stock Size Indicator 9.a.Southern

- Western: F below proxy, no stock size ref pts
- Southern: F above proxy, stock size above Blim and Bpa
- Stock status index has declined in both areas
- Management should be at component level

Catch (2023) : Western 4 631 t (negligible discards)
: Southern 7 470t (3% discards)

$Ay+1 = I_{2023} \times HR_{MSY\ proxy}$

Western component chr rule

Table 1a. Anchovy in Division 9.a. **Western component**. The basis for the catch scenarios.

Biomass index	
I: most recent biomass index (I_{2024})	33 919 tonnes
MSY proxy harvest rate	
$HR_{MSY\ proxy}$: MSY proxy harvest rate (derived through an MSE)	0.25
chr calculation**	
Discard rate	Negligible
Catch advice A_{y+1} for 01 July 2024–30 June 2025	8 480 tonnes
% advice change***	-54 %

Southern component chr rule

Table 1b Anchovy in Division 9.a. **Southern component**. The basis for the catch scenarios.

| Biomass index	
I: most recent biomass index (I_{2024})	1 938 tonnes
MSY proxy harvest rate	
$HR_{MSY\ proxy}$: MSY proxy harvest rate (derived through an MSE)	0.50
Biomass safeguard	
Index trigger value ($I_{trigger}$)	1 194 tonnes
b: index relative to trigger value, $\min\{I_{2024}/I_{trigger}, 1\}$	1
chr calculation: $A_{y+1} = I_{2024} \times HR_{MSY\ proxy} \times b$	969 tonnes
Discard rate	Negligible
Catch advice A_{y+1} for 01 July 2024–30 June 2025	969 tonnes
% advice change**	−56%

Thank you for your attention!

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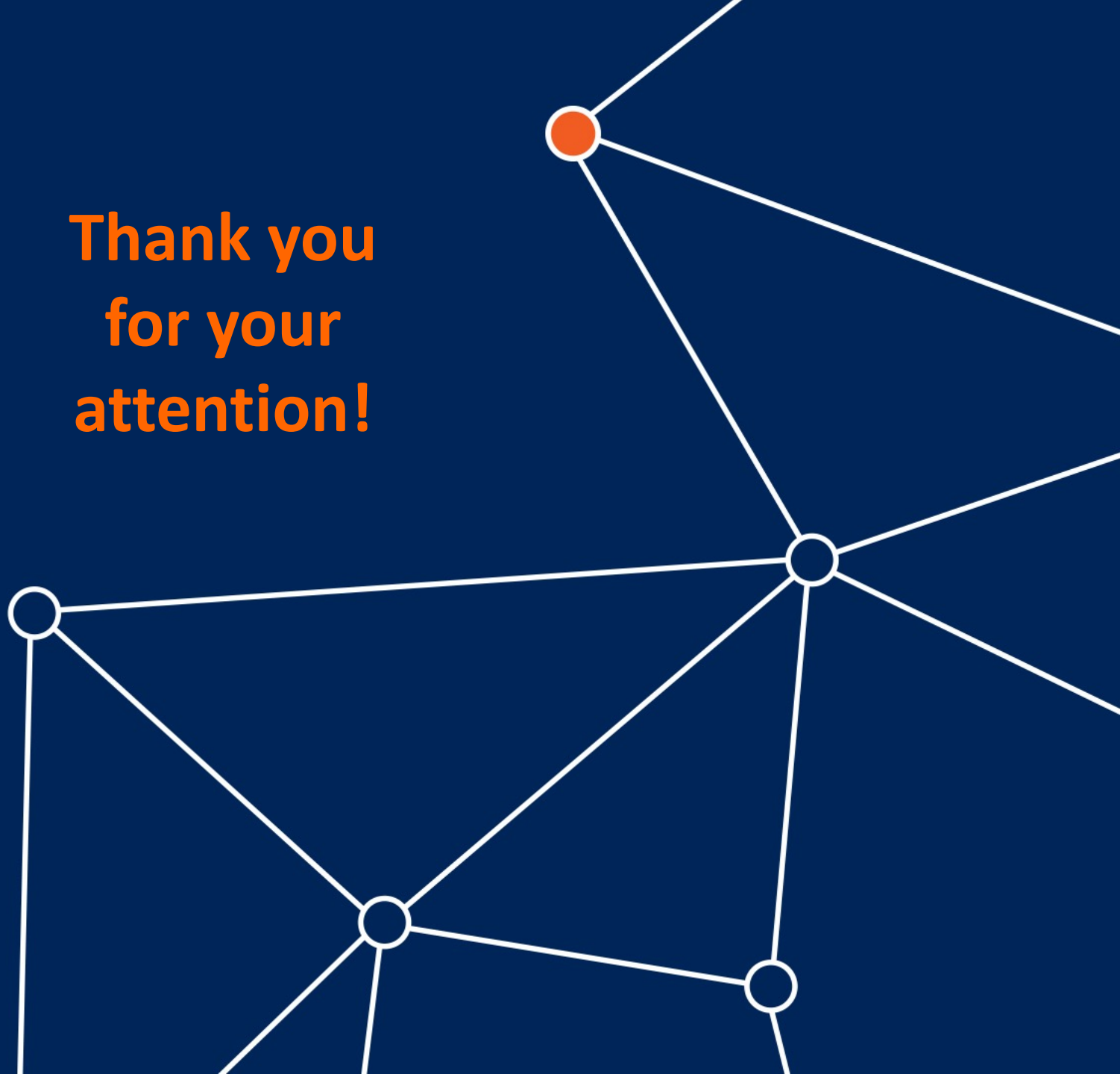
Workshops

- WKREBUILD2 – develop framework and evaluation guidelines for rebuilding plans

- WKNEWREF – hands on – estimate reference points suggested by WKREF2 and identify strengths and weaknesses

- WKSTIMP – implementation of stakeholder engagement strategy (Met in May)

- WKAFPA -workshop on accounting for fishers and other stakeholders' perceptions of the dynamics of fish stocks in ICES advice (WKAFPA).