



ICES advice for 2009

North western waters

Presented at: North Western RAC, Madrid, 3-4 July 2008

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(vice-chair of ICES Advisory Committee)





Sustainable exploitation is the key to
fisheries management



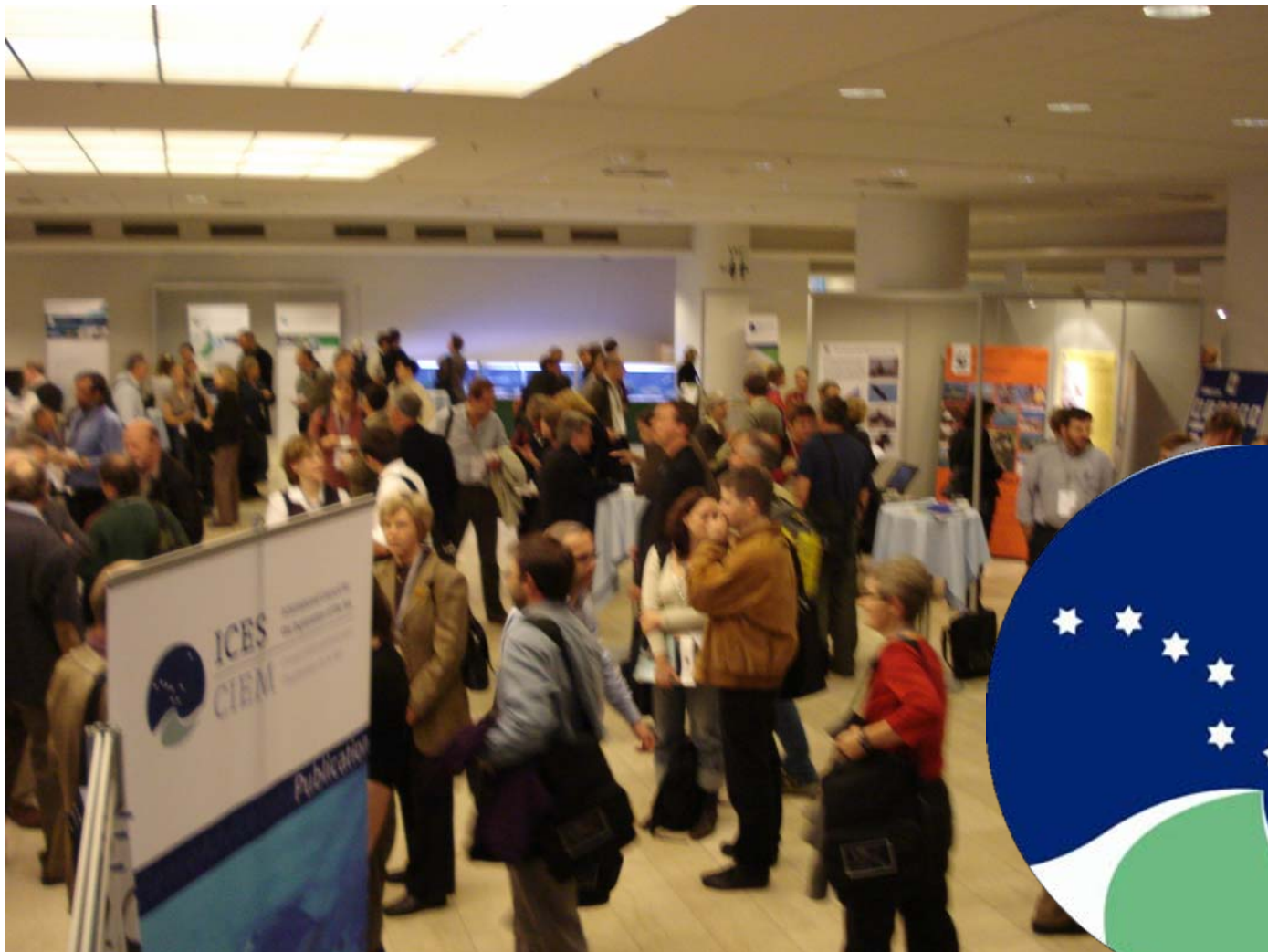


You are looking for relevant
information on sustainable exploitation



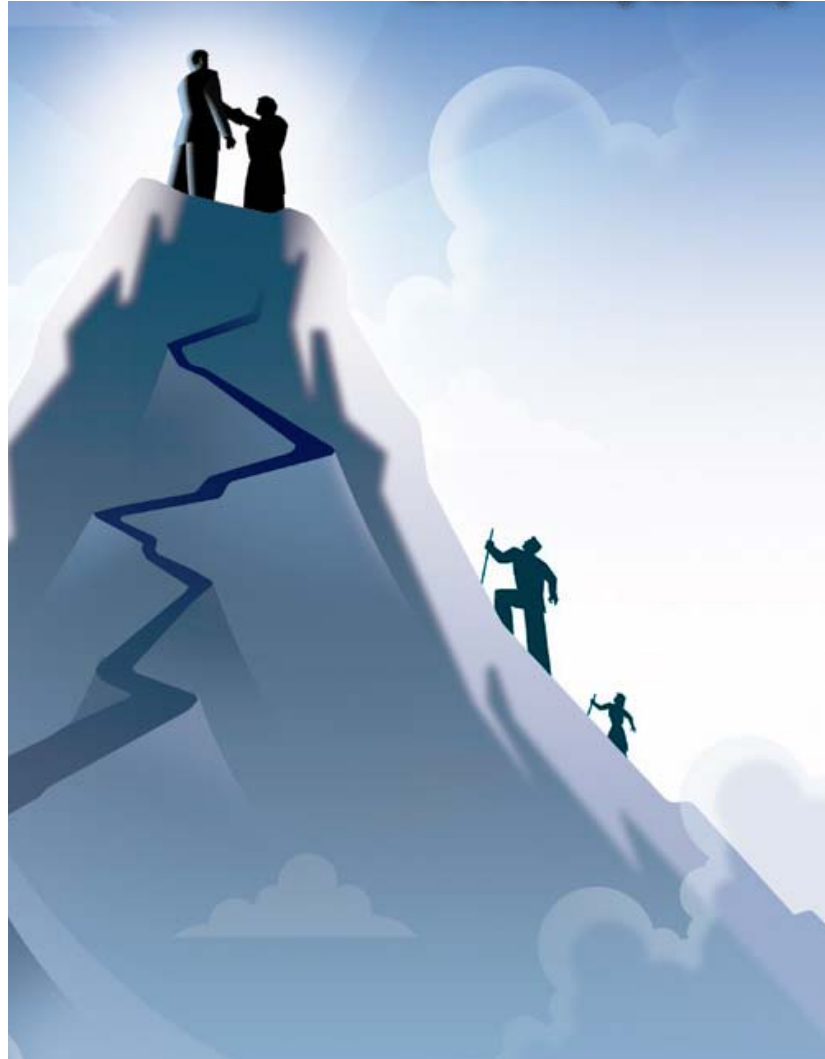


ICES has released new information on the status of ecosystems and fish





You want to be **on top**
of the new information





Review the basis and the content of the new information



How?



Big picture?



My stock?

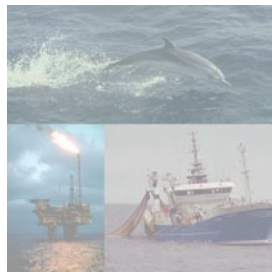
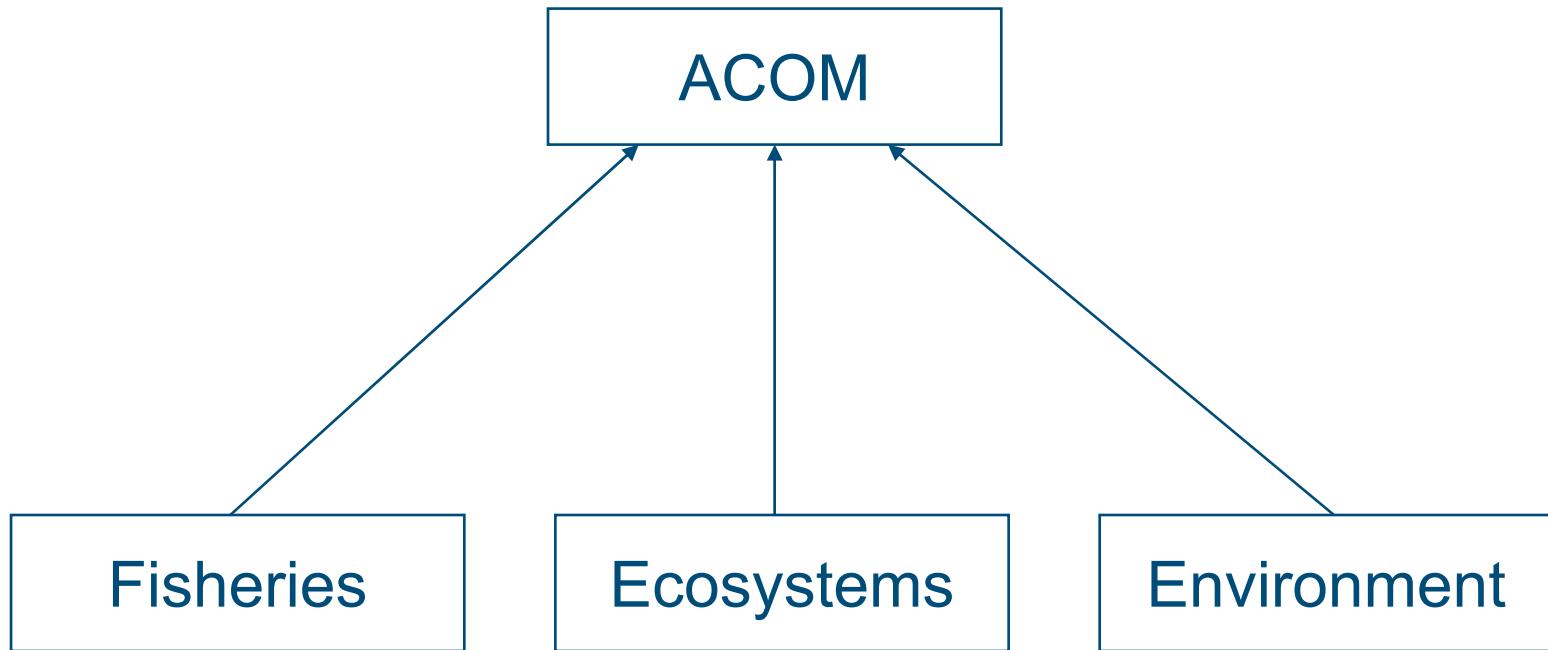


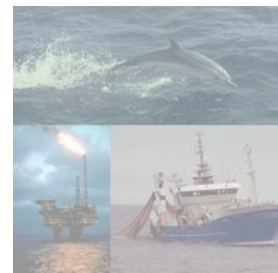
1. How did we do it?





Changed to one integrated advice







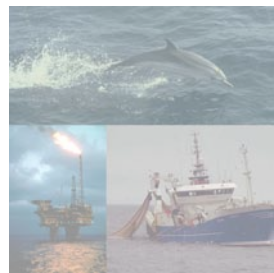
“No new advice”

ple-echw	Plaice in Division VIIe (Western Channel)
sol-echw	Sole in Division VIIe (Western Channel)
spr-ech	Sprat in Divisions VIId,e
cod-iris	Cod in Division VIIa (Irish Sea)
had-iris	Haddock in Division VIIa (Irish Sea)
her-nirs	Irish Sea herring (Division VIIa)
nep-7a	Nephrops in Division VIIa North of 53°N (Management Area)
ple-iris	Plaice in Division VIIa (Irish Sea)
sol-iris	Sole in Division VIIa (Irish Sea)
whg-iris	Whiting in Division VIIa (Irish Sea)
cod-7e-k	Cod in Divisions VIIe-k
her-irls	Celtic Sea and Division VIIj herring
nep-7fgh	Nephrops in Divisions VIIfgh excl. 31E1 32E1-2 + VIIa, Southern
ple-celt	Celtic Sea plaice (Divisions VIIf and g)
sol-celt	Sole in Divisions VIIf and g (Celtic Sea)
ang-7bab	Anglerfish (Budegassa & Piscatorius) in Divisions VIIb-k a
had-7b-k	Haddock in Divisions VIIb-k
ple-7h-k	Plaice in the Southwest of Ireland (Areas VIIh and VIIk)
sol-7h-k	Sole in the Southwest of Ireland (Areas VIIh i k)





Still to come: data workshops





Still to come: fisheries & ecosystem focus

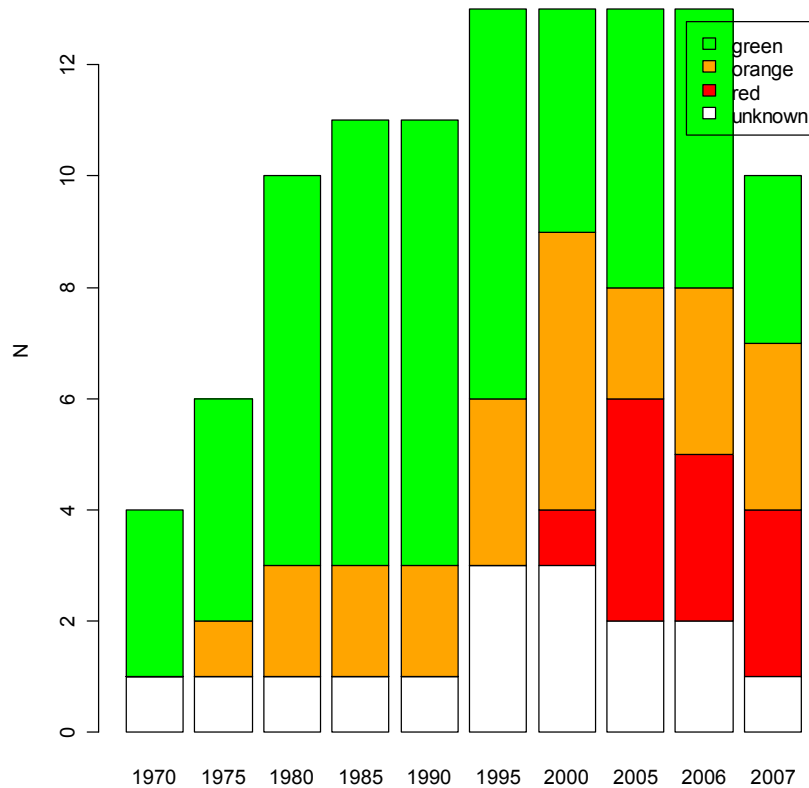


2. The big picture?

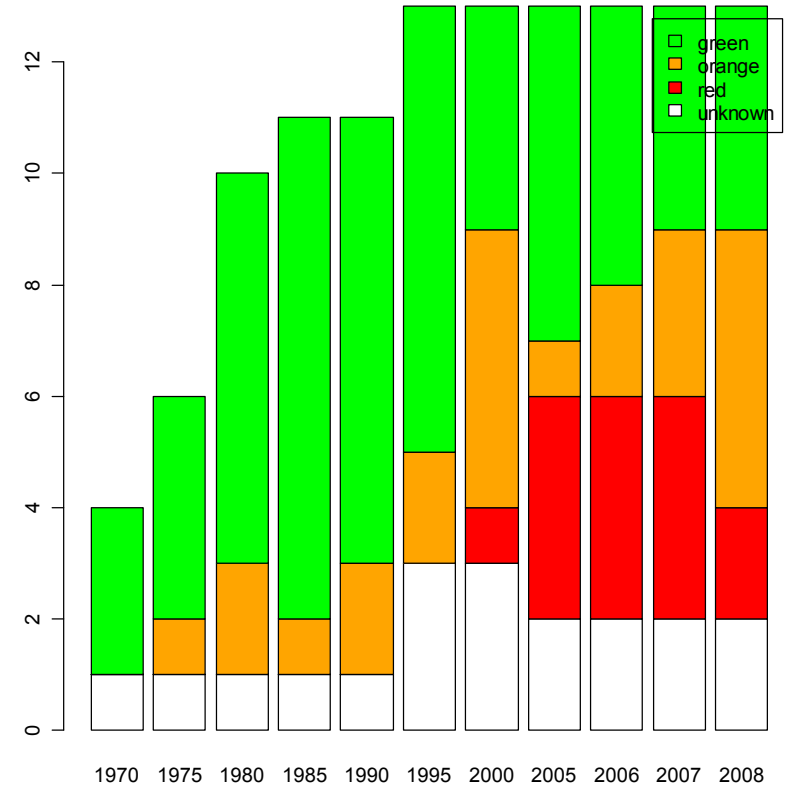




Stock status largely similar to last year



2007



2008

Number of stocks in Celtic Seas and West of Scotland relative to biomass reference points





Nephrops advice: stocks appear stable



Sharks and Rays advice: reason for concern

Species	Area	State of stock	Advice
Common skate	VI	Depleted	<i>No target fisheries</i>
	VII	Depleted	<i>No target fisheries</i>
Thornback ray	VIa	Stable/increasing	<i>Status quo catch</i>
	VIIa,f,g		
Spotted ray	VIa	Stable/increasing	<i>Status quo catch</i>
	VIIa,f,g		
Cuckoo ray	VIa	Stable/increasing	<i>Status quo catch</i>
	VII	Uncertain	<i>No advice</i>
Blonde ray	VIa, VIIa and VIIf	Uncertain	<i>No advice</i>
Undulate ray	VIIj and VIIde	Uncertain (but with cause for concern)	<i>No target fisheries</i>
Smalleyed ray	VIIIf	Stable/increasing	<i>Status quo catch</i>
Sandy ray	VI	Uncertain	<i>No advice</i>
	VIIb,c,h-k	Stable/increasing	<i>No advice</i>
Shagreen ray	VII	Uncertain	<i>No advice</i>
White skate	VII	Severely depleted	<i>No fisheries</i>
Lesser-spotted dogfish	VIa and VII	Stable/increasing	<i>Status quo catch</i>
Greater-spotted dogfish	VII	Locally stable and increasing in VIIa	<i>Status quo catch</i>
Smooth hounds	VII	Stable/Increasing	<i>Status quo catch</i>
Angel shark	VII	Severely depleted	<i>No fisheries</i>



3. What happened
to my stock?





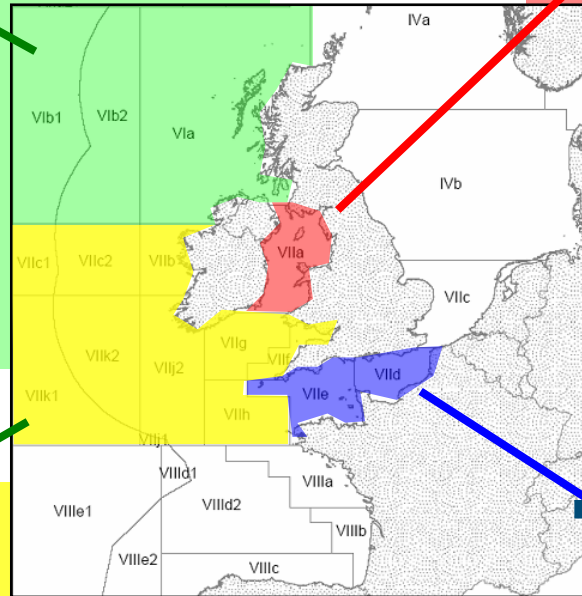
Stocks overview

■ WG 1- West of Scotland

- Cod
- Haddock
- Anglerfish (*)
- Nephrops
- Saithe
- Megrim (*)
- Whiting (*)

■ WG4 - Stocks in Irish Sea

- Cod
- Haddock
- Plaice
- Nephrops
- Sole
- Whiting (*)



■ WG2 - Southwest

- Cod (VIIe-k)
- Haddock (VIIb-k) (*)
- Anglerfish (VIIb-k, VIIIab) (*)
- Plaice (Celtic Sea, VIIlh-k (*), VIIbc (*))
- Northern hake
- Nephrops
- Sole (Celtic Sea, VIIh-k (*), VIIbc (*))
- Whiting (VIIe-k) (*)
- Megrim (VIIc-k, VIIIabd) (*)

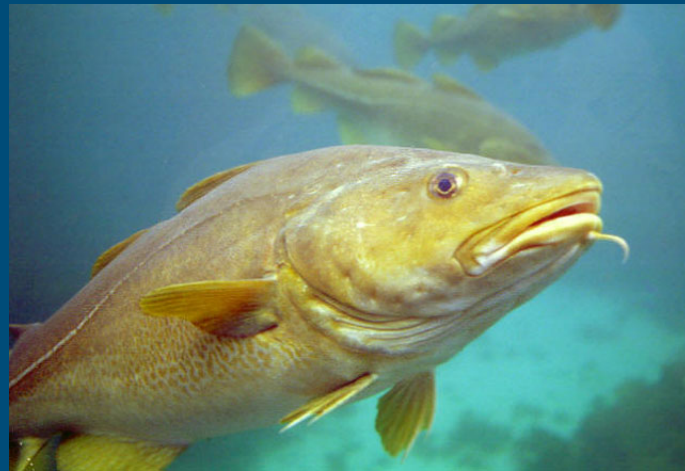
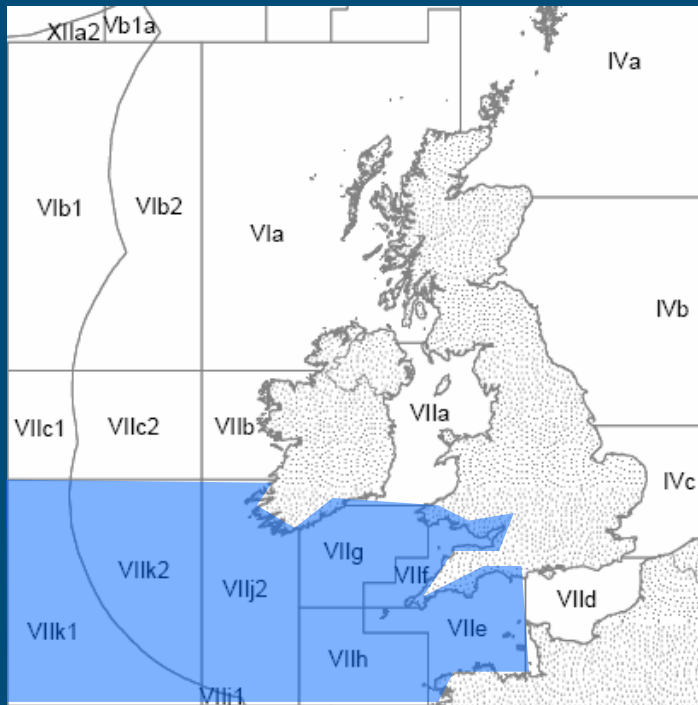
■ WG3 –Channel

- Plaice in VIIId (*)
- Plaice in VIIe (*)
- Sole in VIId
- Sole in VIIe
- Cod in IV, VIIId and Skagerrak

(* No new advice in 2008)



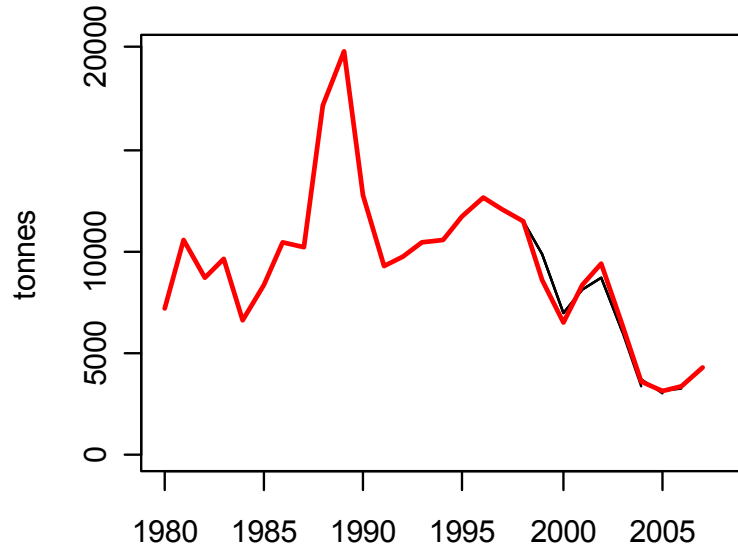
Cod VIIe-k



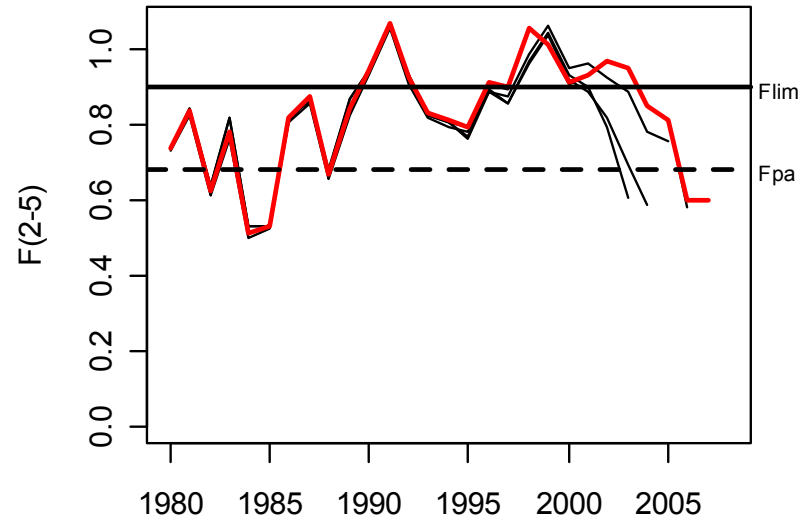


Cod in Divisions VIIe-k: trends

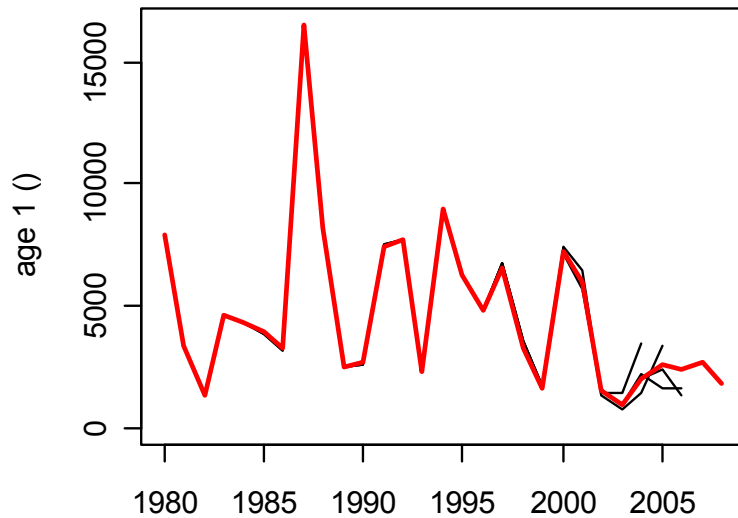
Landings



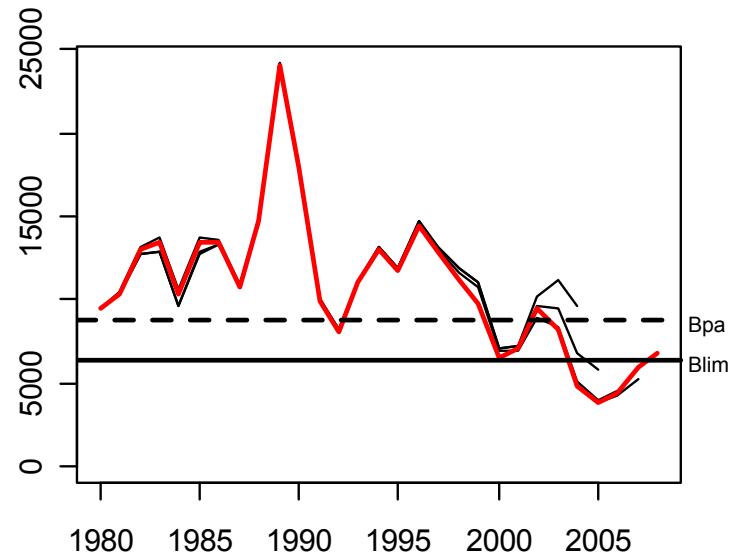
Fishing mortality



Recruitment



SSB





Cod Vlle-k: advice

■ Advice last year

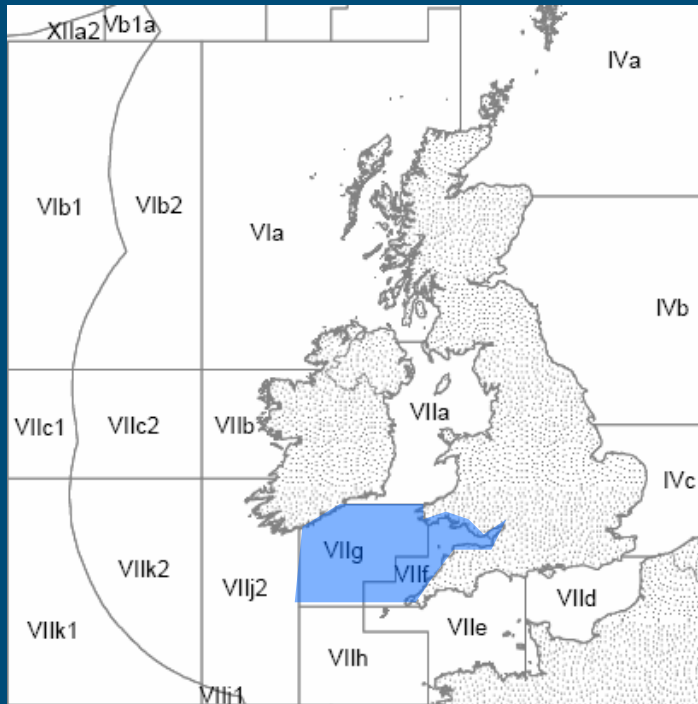
- Low R, lowest observed SSB: zero catch
- zero catch \rightarrow SSB $\sim B_{pa}$ in 2009

■ New advice

- 50% reduction in fishing mortality.
 - This F corresponds to high long-term yield and low risk of stock depletion.
- Landings of 2600 t
- SSB is expected to reach B_{pa} in 2010.



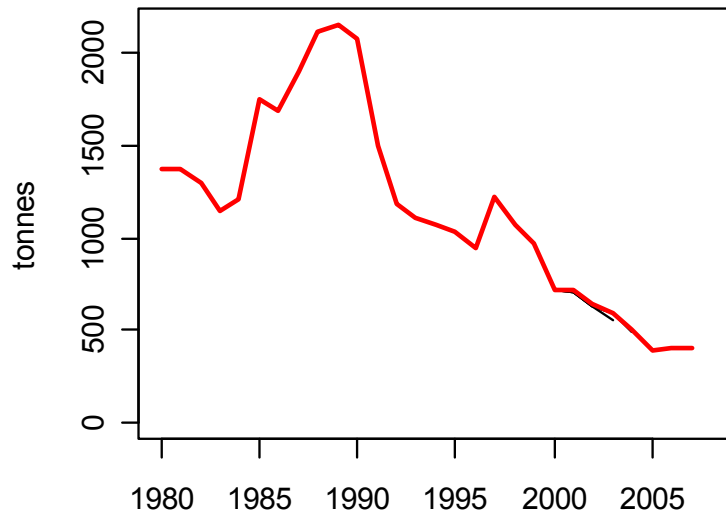
Celtic Sea Plaice (VIIfg)



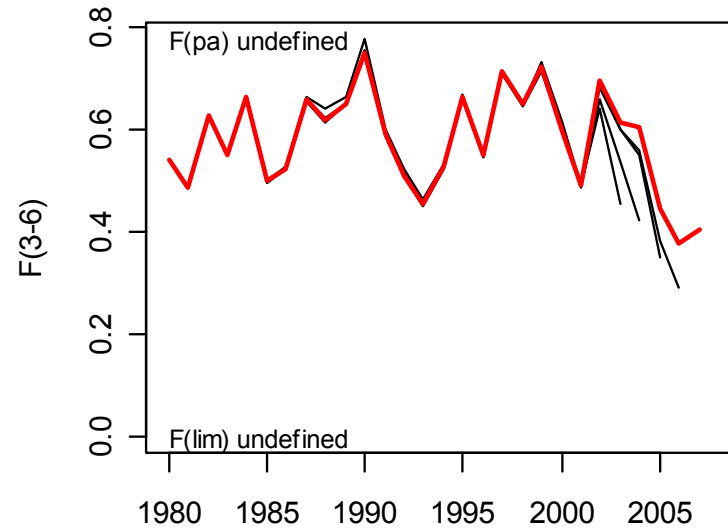


Celtic Sea PlaiCe: trends

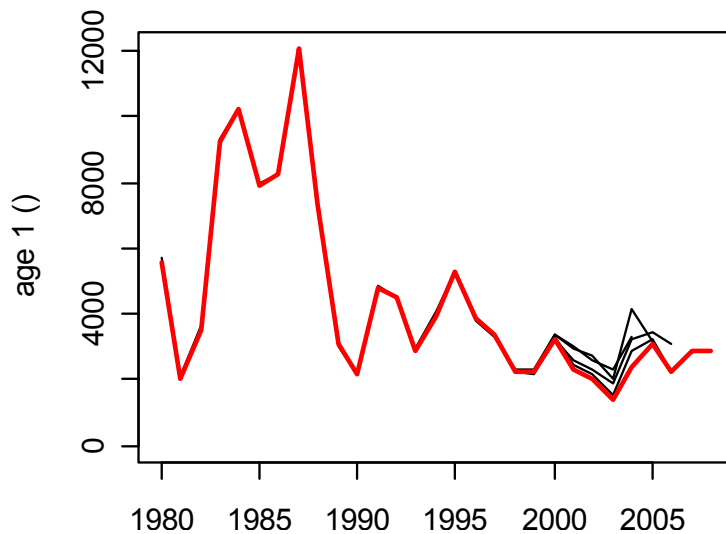
Landings



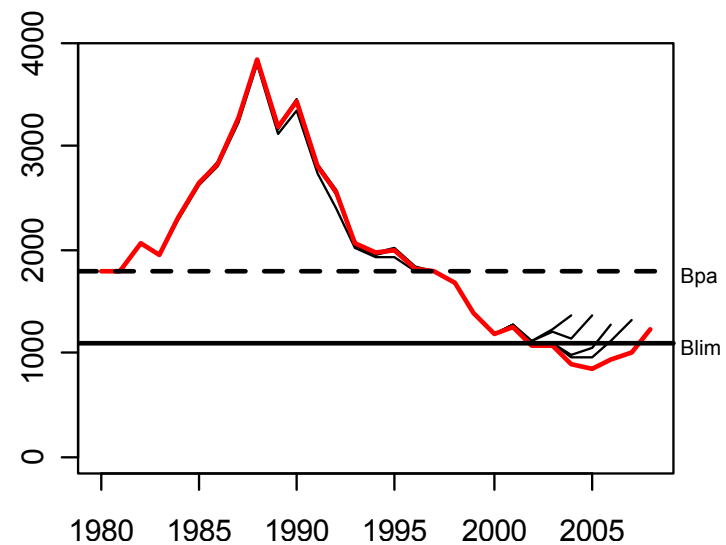
Fishing mortality



Recruitment



SSB





Celtic Sea Plaice VIIfg: advice

■ Last year

- 60% reduction in F to increase SSB to B_{pa} in 2009.
- landings ≤ 240 t in 2008
- consideration: otherwise recovery plan

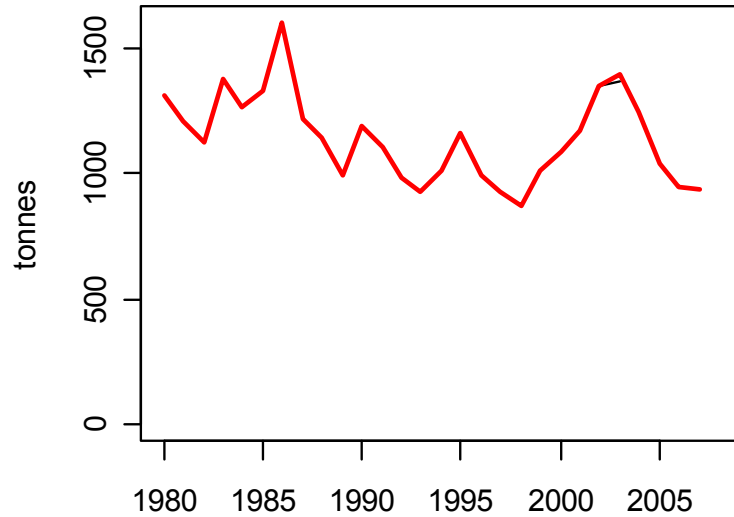
■ This year

- 75% reduction in F needed to increase SSB to around B_{pa} in 2010.
- Corresponds to landings of less than **170 t** in 2009.

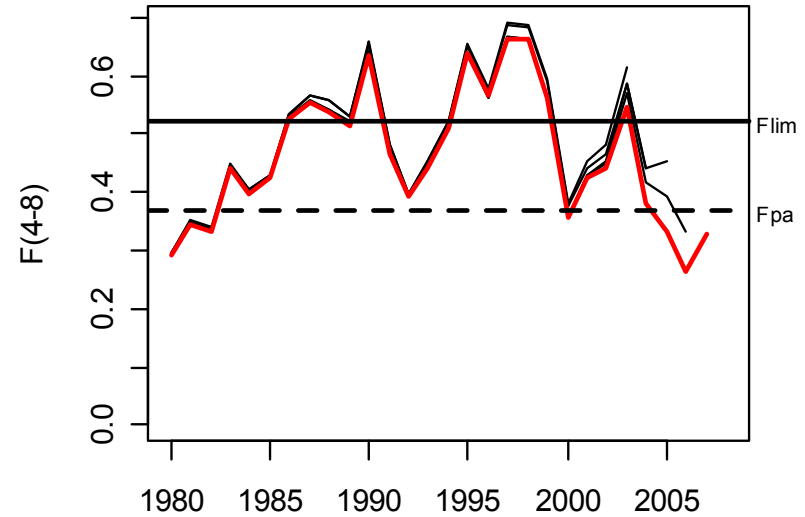


Celtic Sea Sole: trends

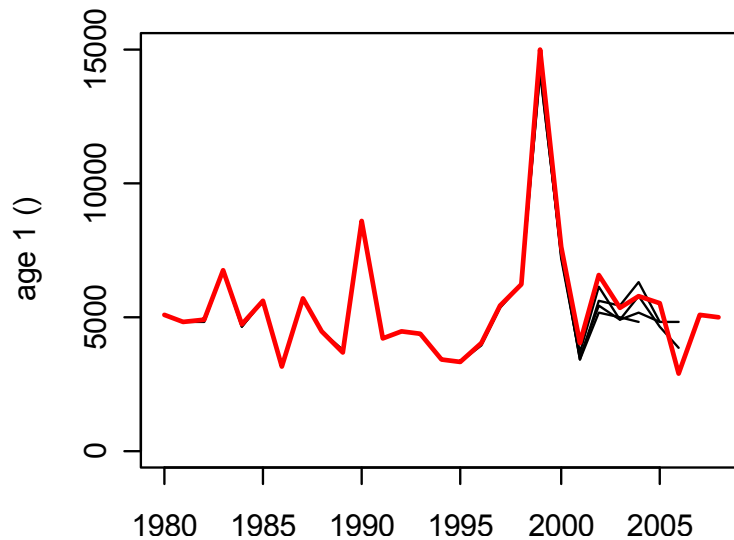
Landings



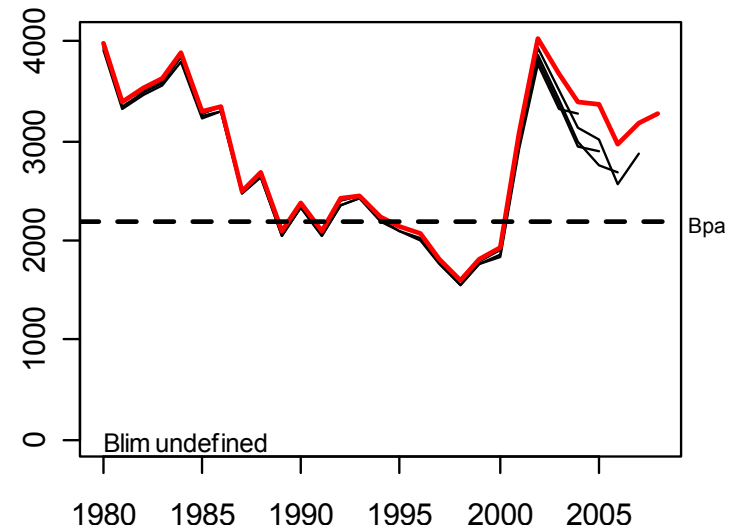
Fishing mortality



Recruitment



SSB





Celtic Sea Sole: advice

■ Last year

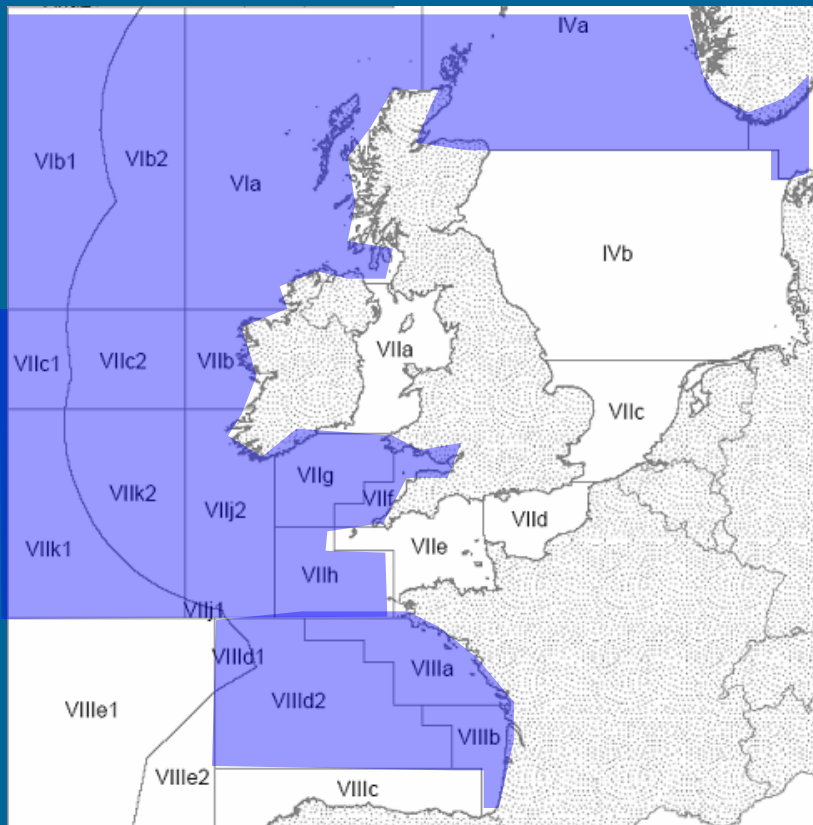
- Fish at F_{pa} , expected to keep stock above B_{pa}
- Landings $\leq 1\ 000$ t.

■ This year

- Stock that is above B_{pa}
- Fishing mortality below F_{pa}
- No long-term gain in yield to increase F .
- ICES recommends status quo F : landings no more than 940 t.



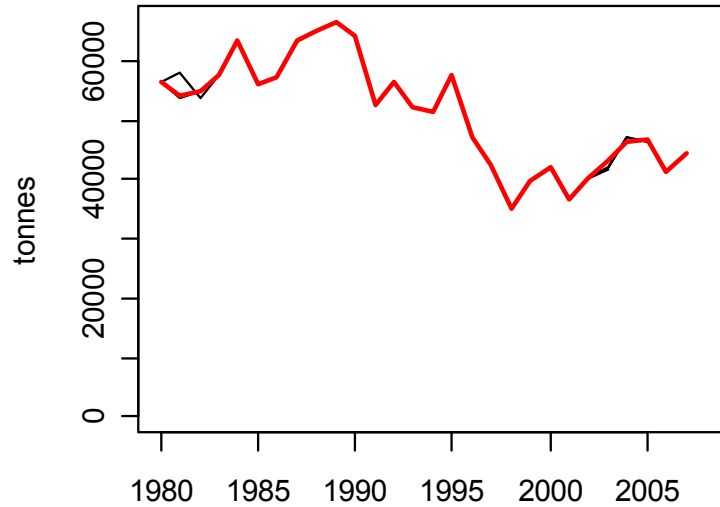
Northern hake (IIIa, IV, VI, VII, VIIIabd)



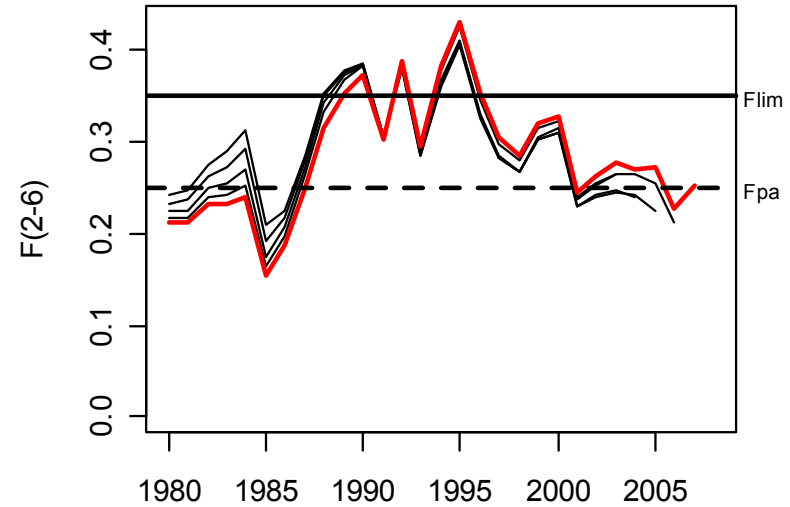


Northern hake: trends

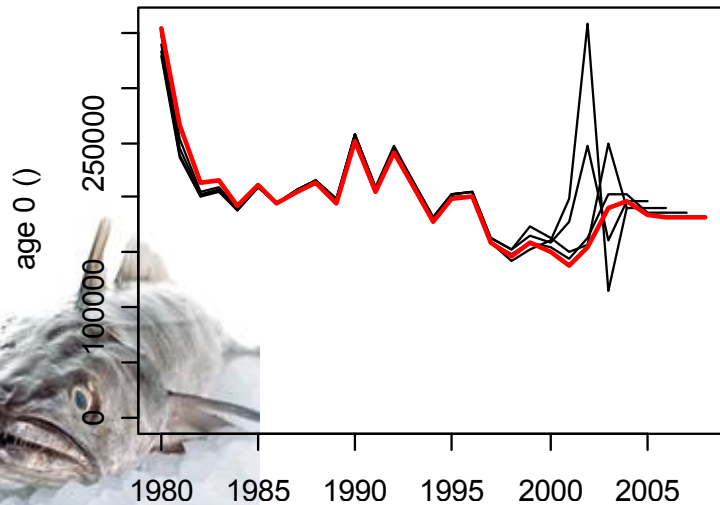
Landings



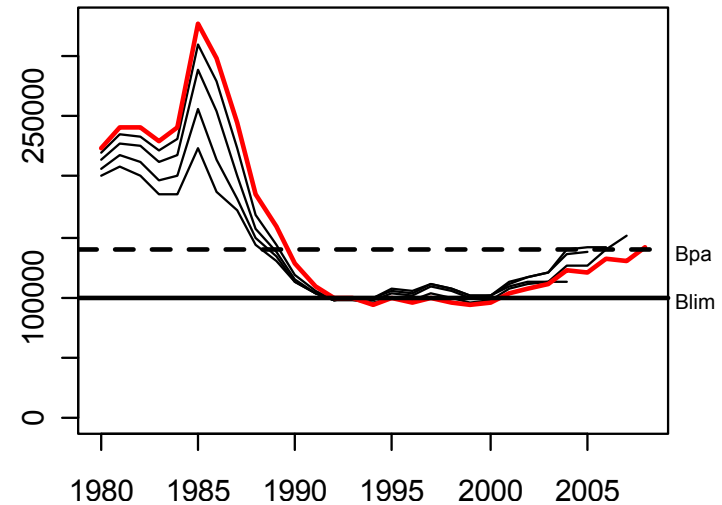
Fishing mortality



Recruitment



SSB





Northern hake: advice

■ Last year

- According to recovery plan: target $F=0.25 \rightarrow 54,000$ t
- TAC change: 3%

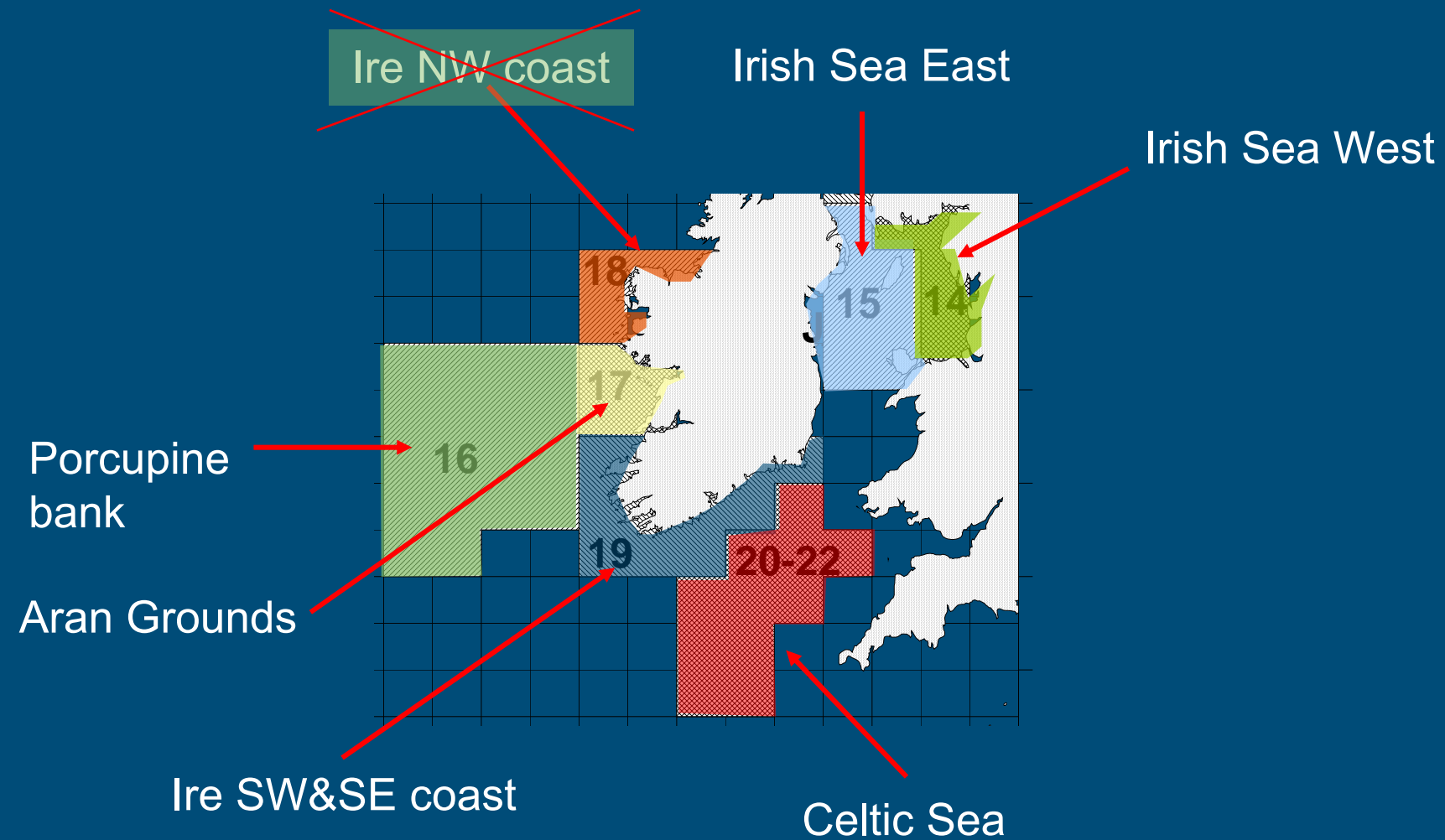
■ This year

- F_{pa} = maximum fishing mortality recovery plan
- Landings for 2009 should not exceed 51 500 t.



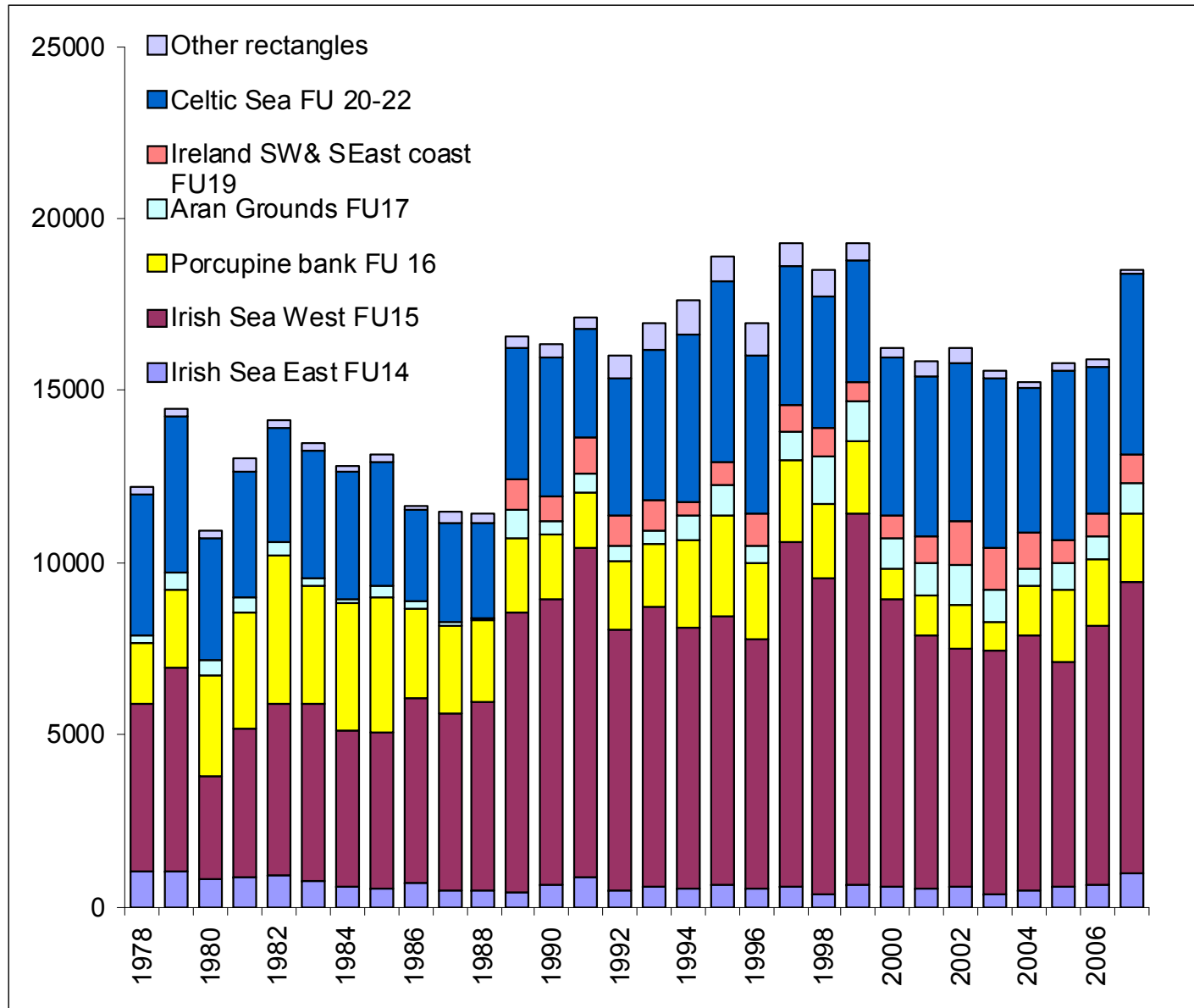


Nephrops in Subarea VII





Nephrops in VII: landings



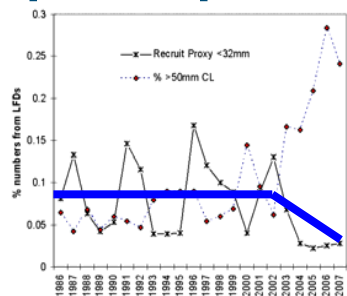


Nephrops in VII: approaches

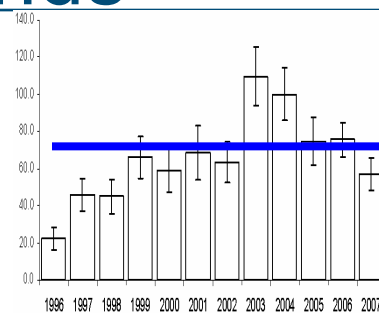
FU	Name	Area	UWTV	LPUE	Mean size	Sex ratio	Other
14	Irish sea East	VIIa		X	X	X	
15	Irish Sea West	VIIa	X	X	X	X	X
16	Porcupine Bank	VIIb,c,j,k		X	X	X	X
17	Aran Grounds	VIIb	X	X	X	X	
19	Ireland SW and SE coast	VIIa,g,j		X	X		
20-22	Celtic Sea	VIIg,j		X	X		



Nephrops in VII: trends

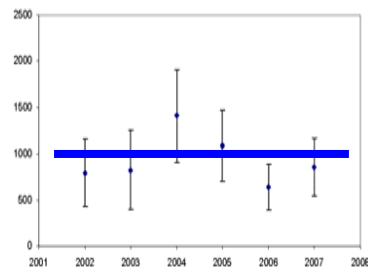
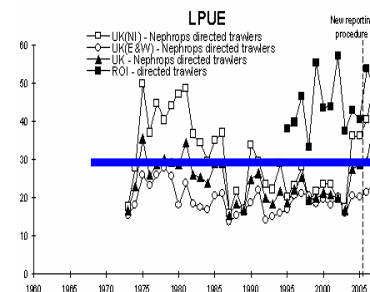


Porcupine
bank

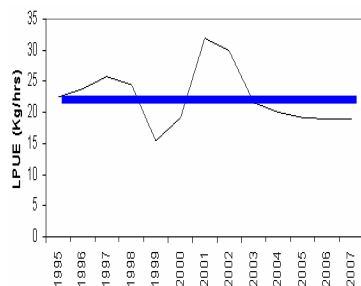


Irish Sea East

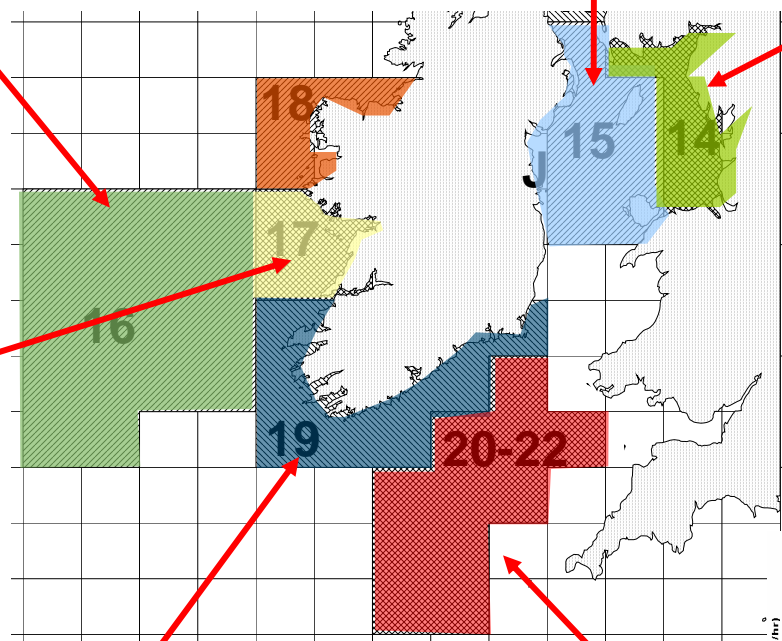
Irish Sea West



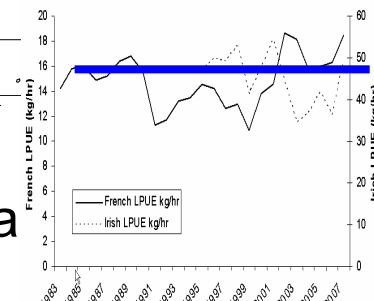
Aran Grounds



Ire SW&SE coast



Celtic Sea





Nephrops: advice

■ Advice in 2006

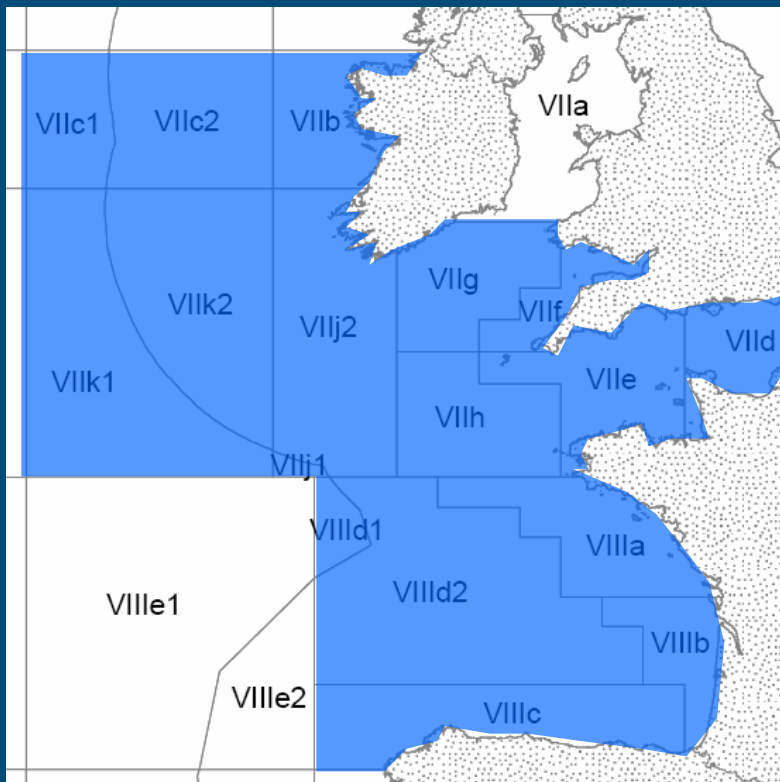
- Total landings relative stable
- constrain fisheries to recent levels of effort at Functional Unit

■ This year

- Porcupine
 - Apparent low recruitment
 - Recent expansion of the fishery ~ increased exploitation.
 - Reduce exploitation rate: restrict catches to no more than 1000t (catch level before the expansion of the fishery (2000–2003)).
- Other areas
 - Current fishery appears sustainable
 - Constrain to recent average effort and landings (2007)



Anglerfish in VIIb-k and VIIIabd



“No new advice”



Lophius budegassa (black bellied angler)



Lophius piscatorius (angler)

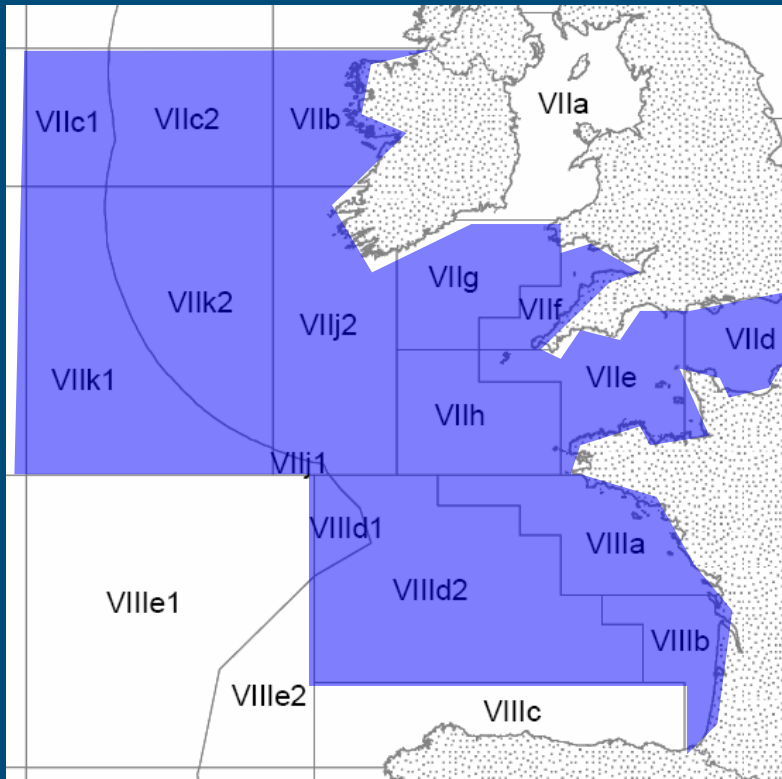


Anglerfish in VIIb-k and VIIa,b,d

- Landings and survey information do not change stock perception
- Same advice as in 2007:
 - *“...indicators point to the stocks being stable.*
 - *ICES recommends that the landings [..] should not exceed the average landings of 2004–2006.*
 - *~ 33 000 tonnes.”*



Megrim in Divisions VIIb-k and VIIIabd



L. whiffiagonis (megrim)

“No new advice”

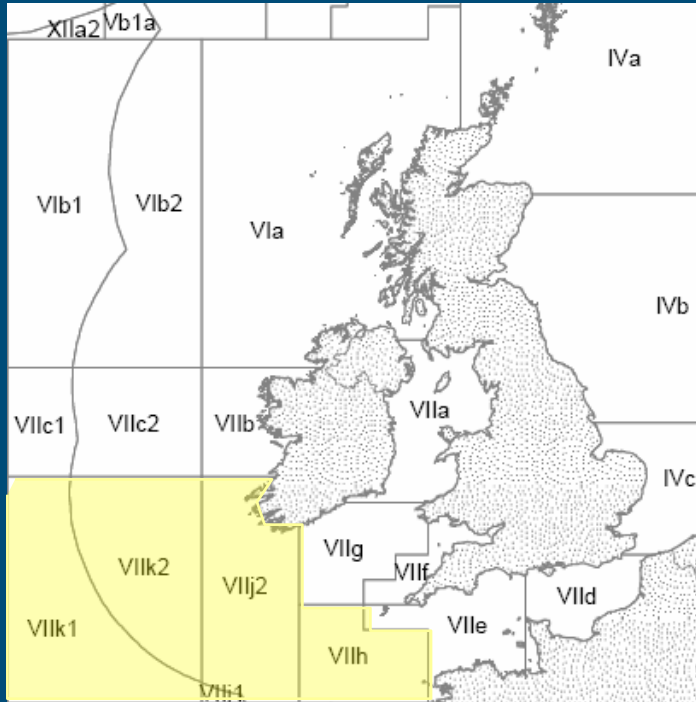


Megrim in VII and VIII

- New survey data do not change stock perception
- Advice same as in 2007
 - “.. *survey indicators and commercial data series point to the stock being stable.*
 - ...*Landings of L. whiffiagonis in 2009 should not exceed the average landings of 2004–2006.*
 - ...*~ 13 000 tonnes.*”



Plaice Southwest of Ireland (VIIh-k)



“No new advice”

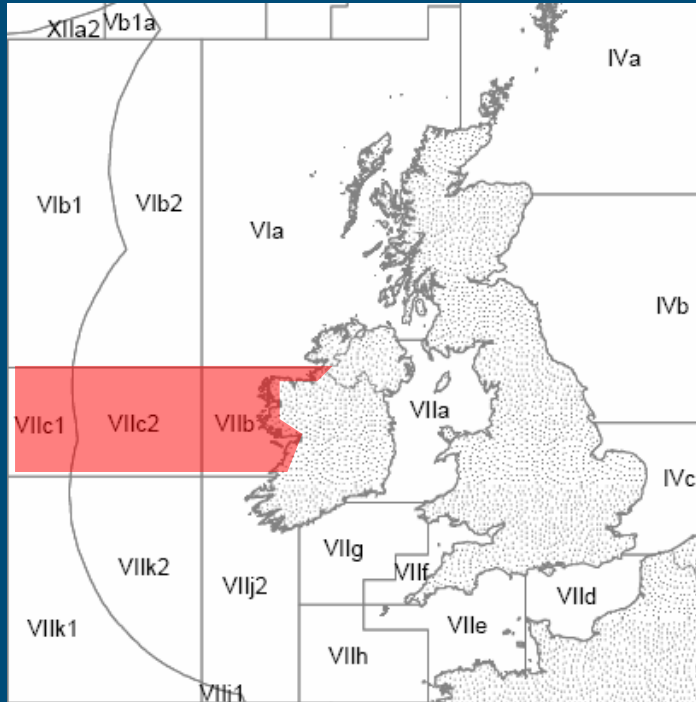


Plaice in VIIh-k: advice

- New data do not change stock perception
- Advice is the same as in 2007
 - *“Catches should be no more than the recent average (2004–2006) of around 177 t, in order to avoid an expansion of the fishery until there is more information to facilitate an adequate assessment”.*



Plaice West of Ireland (VIIbc)



“No new advice”

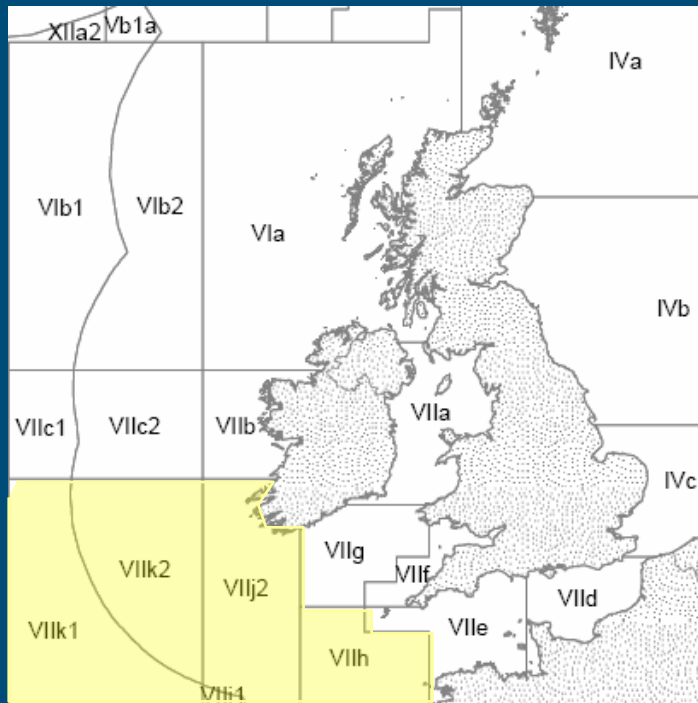


Plaice in VIIbc: advice

- New data do not change stock perception
- Same advice as in 2007
 - “Catches should be no more than the recent average (2004–2006) of around **40 t**, in order to avoid an expansion of the fishery until there is more information to facilitate an adequate assessment”.



Sole Southwest of Ireland (VIIh-k)



“No new advice”

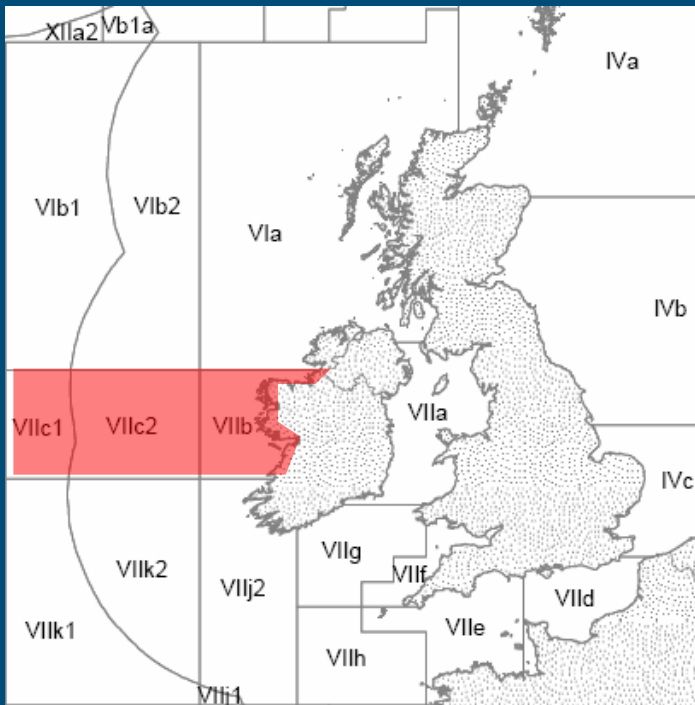


Sole in VIIh-k

- New data do not change stock perception
- Advice same as in 2007
 - *“Catches should be no more than the recent average (2004–2006) of around 300 t*
 - *avoid an expansion of the fishery until there is more information to facilitate an adequate assessment”.*



Sole West of Ireland (VIIbc)



“No new advice”

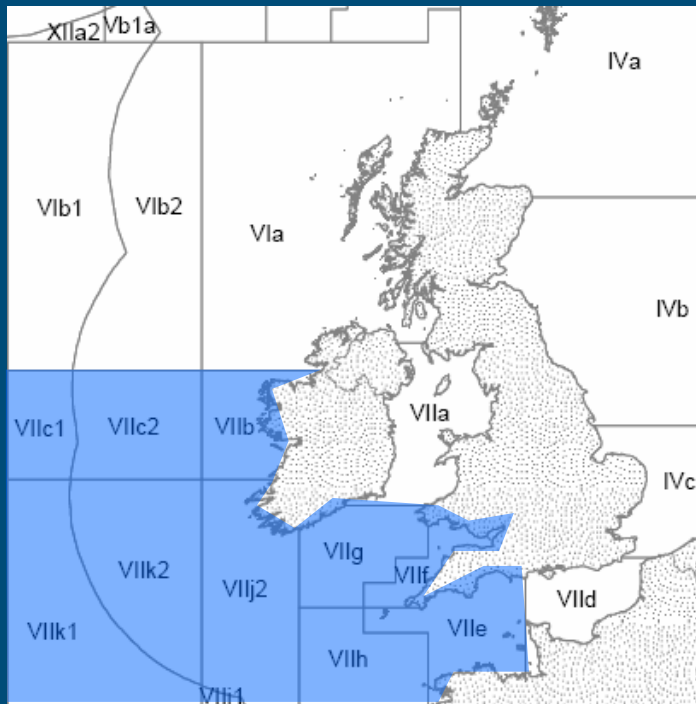


Sole VIIb,c: advice

- New landings data do not change stock perception
- Advice same as in 2007:
 - “Catches should be no more than the recent average (2004–2006) of around 50 t
 - Avoid an expansion of the fishery until there is more information to facilitate an adequate assessment.”



Haddock VIIb-k



“No new advice”

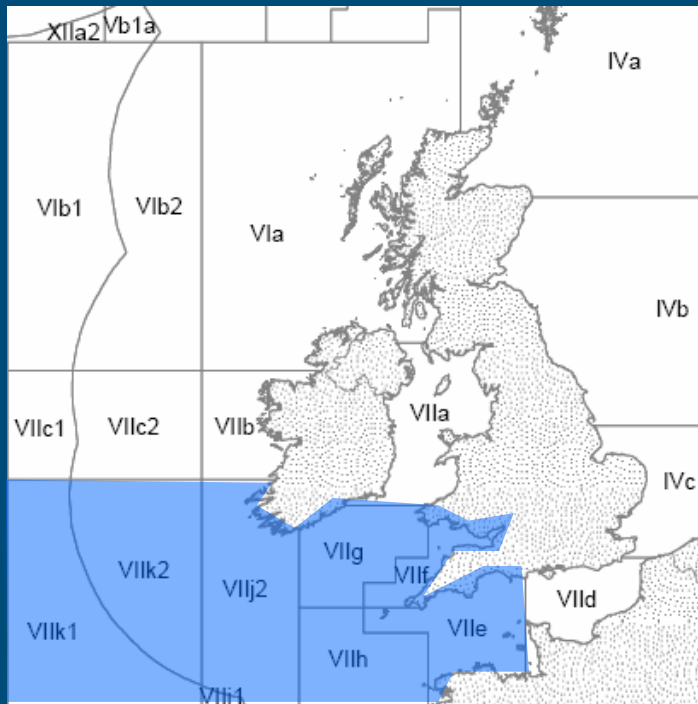


Haddock VIIb-k

- Updated exploratory assessment does not change stock perception
- Same advice as in 2007
 - *“Future catches and SSB will be highly dependent on the strength of incoming year classes and their discard mortality.*
 - *No strong recruitment has been observed since 2002 and estimated recruitment for 2006 is the lowest since 1997.*
 - *In this context the stock should be managed by ensuring that **fishing effort is not allowed to increase.**”*



Whiting VIIe-k



“No new advice”



Whiting Vlle-k: advice

- New exploratory assessment does not change stock perception
- Advice same as in 2007
 - *“The current estimates of fishing mortality and SSB are uncertain, but SSB shows a decreasing trend while recruitment is low.*
 - *...fishing mortality should be reduced.*
 - *ICES cannot quantify the required reduction in fishing mortality.”*



Whiting Vlle-k: consideration

- surveys do indicate that the 2007 year class may be strong.
- Management measures should be introduced in the Celtic Sea to reduce discarding
- Maximize the contribution to future yield and SSB.

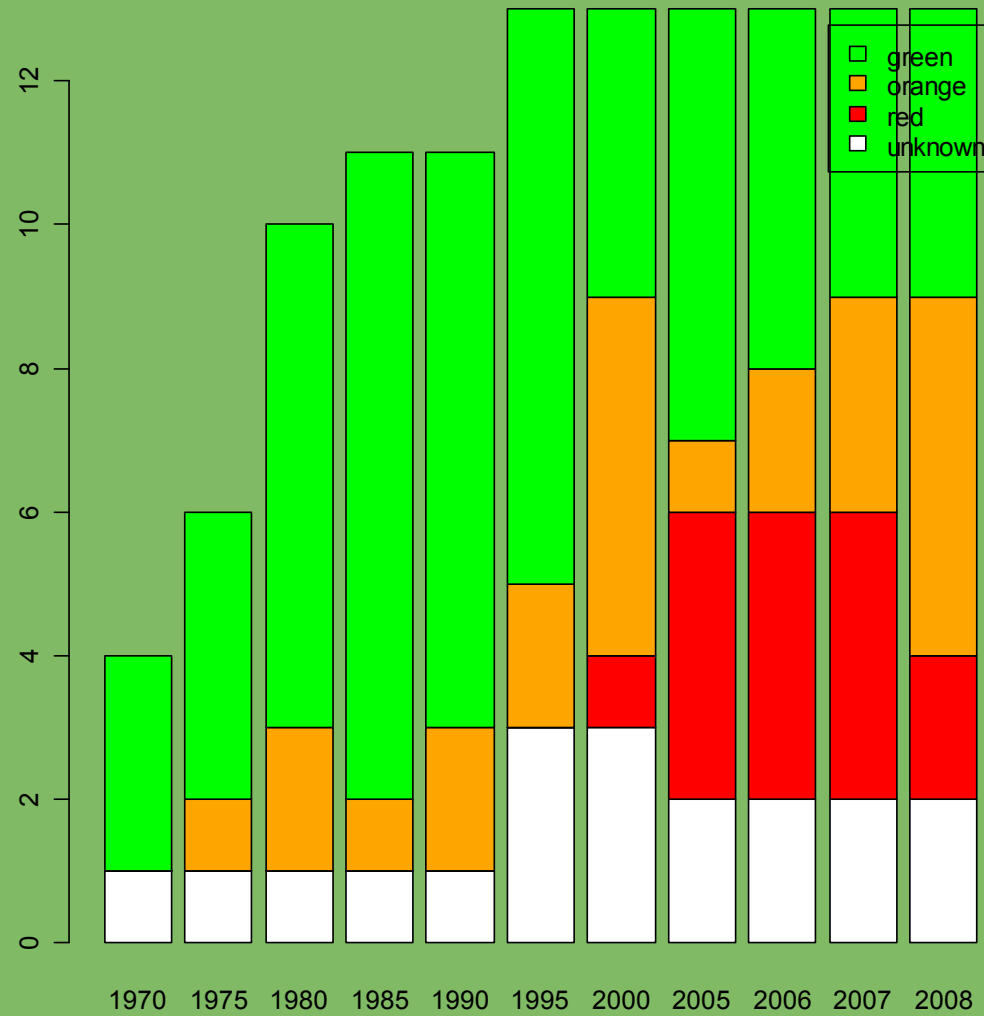


Back to the big picture?





Stock status: similar to last year





New advice on nephrops and Sharks and Rays



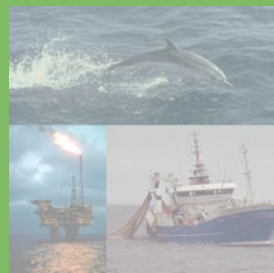


We are changing the advisory process





Still to come: data workshops & integration





ICES and RACs: manage the process of change

