

# NWWAC Working Group 1

West of Scotland

Madrid, 7 March 2018



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CONSEIL CONSULTATIF POUR  
LES EAUX OCCIDENTALES  
SEPTENTRIONALES

**NORTH WESTERN  
WATERS**  
ADVISORY COUNCIL

CONSEJO CONSULTIVO PARA  
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# 1. Action points

1. Update on a genetic project to determine the population structure of cod and whiting
2. Updates from the MIACO meeting:
  - Foodweb: Seal and hake predation on gadoids
  - More stable TAC for haddock fisheries
3. Revisit Cod management plan

## **2. Feedback from previous advice**

# Choke Mitigation Tool West of Scotland



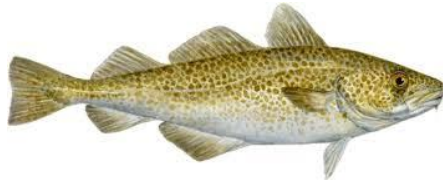
Saithe 6



Megrim 6



Anglerfish 6



Cod 6.a & 6.b



*Nephrops* 6



Tusk 5, 6 & 7



Haddock 6.a & 6.b



Blue Ling 6 & 7

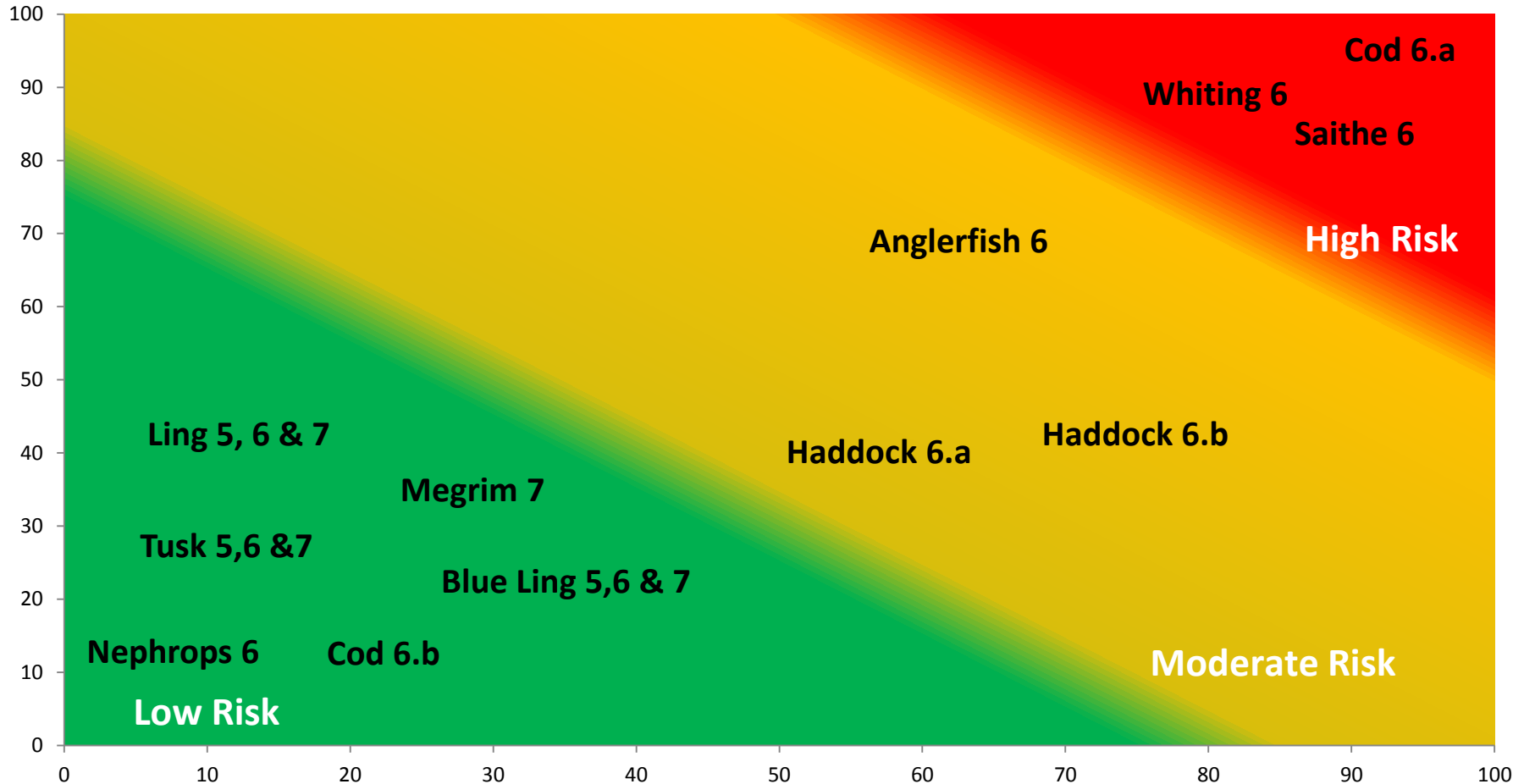


Ling 6 & 7



Whiting 6

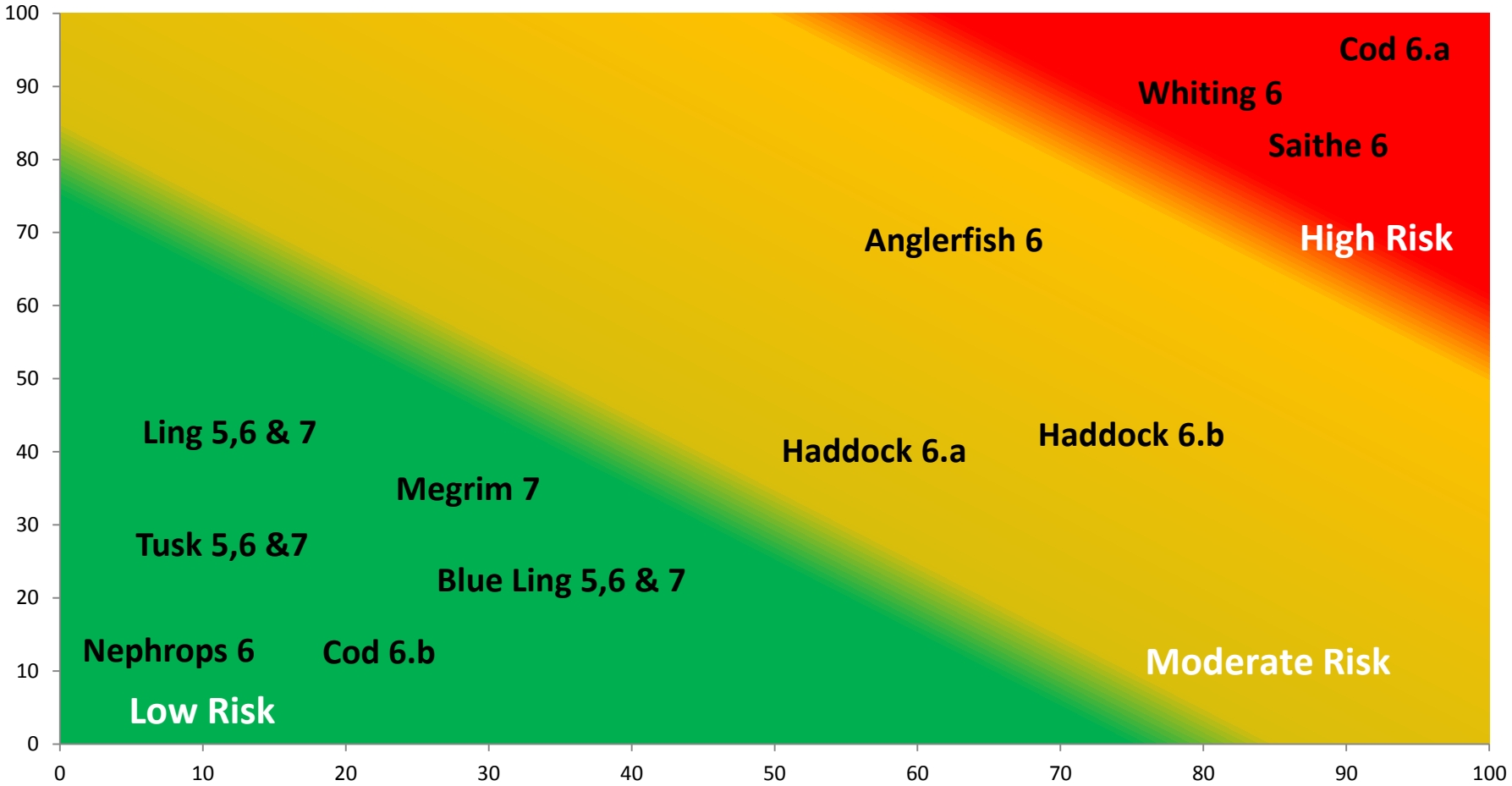
# West of Scotland – by stock



# West of Scotland – by Member State

	ANG	BLI	COD 6.a	COD 6.b	HAD 6.a	HAD 6.b	LEZ	LIN	NEP	POK	WHG	USK
BE	N	N	N	N	N	N	N	?	N	N	N	?
DE	N	N	N	N	N	N	N	N	N	N	N	N
FR	N	N	Y	N	N	N	N	N	N	Y	N	N
ES	N	N	?	N	Y	N	N	N	N	Y	Y	?
IE	Y	?	Y	N	Y	Y	?	?	N	N	Y	N
NL	N	N	?	N	Y	N	N	N	N	Y	Y	?
UK	Y	N	Y	N	Y	Y	N	N	N	Y	Y	N

# West of Scotland – 2015 vs 2016



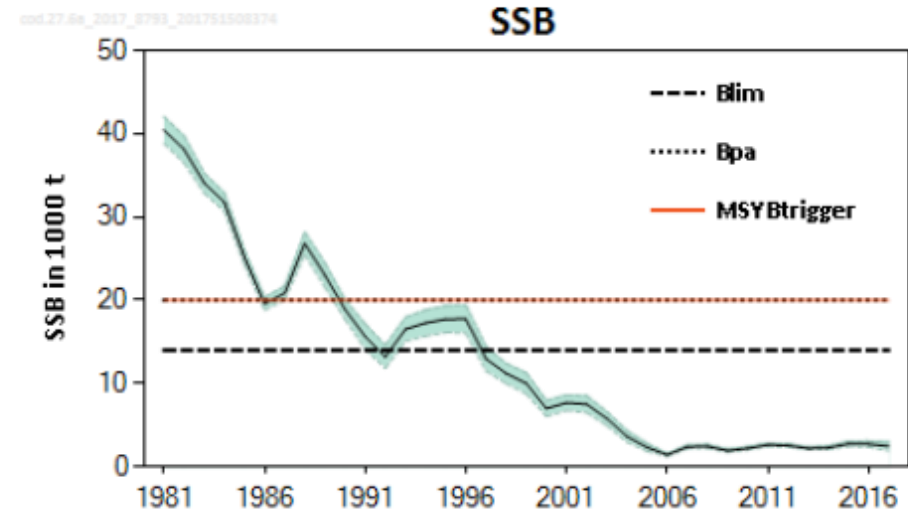
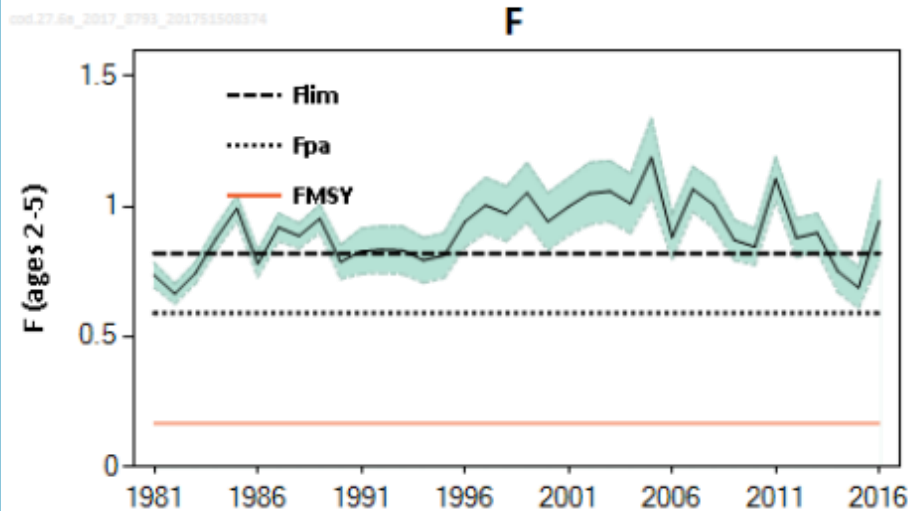
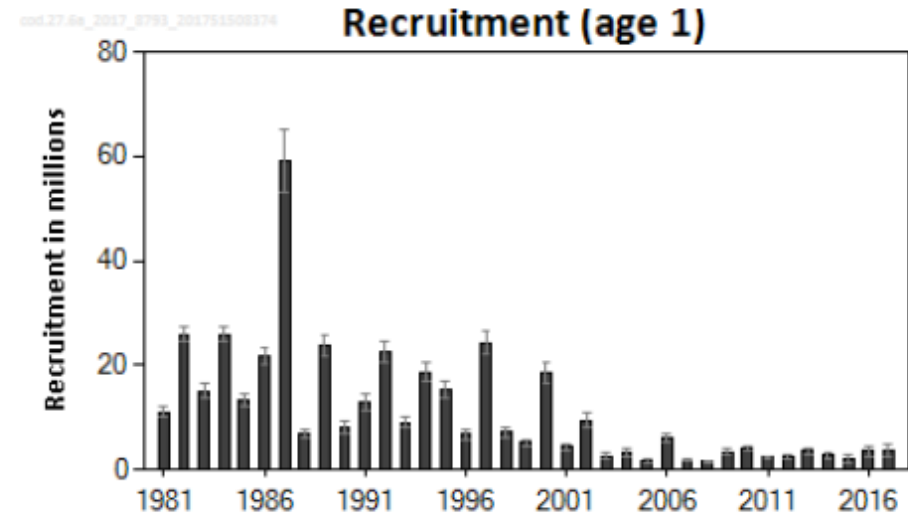
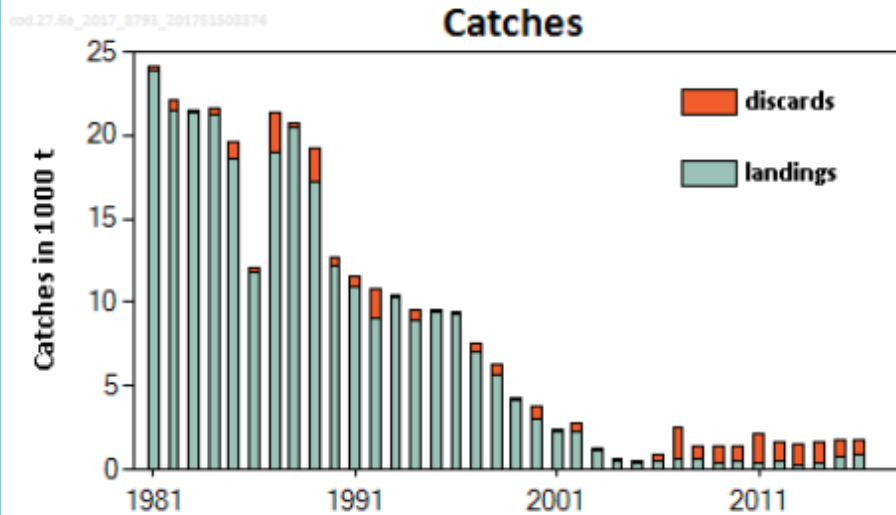
# 3. Solutions to the choke problem for cod 6.a

## Conclusions from the Choke Mitigation Tool

- Stock is highly depleted, ICES advised zero catch for the last number of years resulting in a zero TAC with a by-catch provision
- Zero TAC has not controlled fishing mortality, resulting in catches that are well in excess of Fmsy catch advice
- Under the LO the by-catch provision is not compatible
- Selectivity and avoidance measures will not resolve the problem
- Quota flexibilities and exemptions also provide very limited benefits
- High risk of choking multiple fisheries early in the year with significant economic impacts for several MSs



# 3. Solutions to the choke problem for cod 6.a



# 3. Solutions to the choke problem for cod 6.a

**Table 2** Cod in Division 6.a. The basis for the catch options.

Variable	Value	Notes	Source
F ages 2–5 (2017)	0.79	$F_{sq} = F_{Average}$ (2014–2016)	ICES (2017)
SSB (2018)	2 835 tonnes	Fishing at $F=0.79$	ICES (2017)
Rage1 (2017)	3 614 thousand	Assessment model estimate.	ICES (2017)
Rage1 (2018)	2 610 thousand	$GM_{2007-2016}$	ICES (2017)
Catch (2017)	1 627 tonnes	Fishing at $F=0.79$	ICES (2017)
Landings (2017)	535 tonnes	Average discard pattern (2014–2016)	ICES (2017)
Discards (2017)	1 092 tonnes	Average discard pattern (2014–2016)	ICES (2017)

**Table 3** Cod in Division 6.a. Annual catch options. All weights are in tonnes. No information on % change in TAC can be shown as the TAC is zero.

Basis	Total catch (2018)	Landings (2018)	Discards (2018)	$F_{total}$ (2018)	$F_{landings}$ (2018)	$F_{discards}$ (2018)	SSB (2019)	% SSB change *
ICES advice basis								
MSY approach: $F=0$	0	0	0	0	0	0	5324	88
Other options								
$F = F_{MSY}$	498	166	332	0.17	0.076	0.094	4654	64
$F_{pa}$	1464	478	986	0.59	0.27	0.32	3365	18.7
$F_{lim}$	1866	602	1264	0.82	0.37	0.45	2831	-0.151
$F = F_{2017}$	1826	590	1236	0.79	0.36	0.43	2886	1.77
$SSB(2019)=B_{lim}^{**}$								
$SSB(2019)=B_{pa=MSY} B_{trigger}^{**}$								

\* SSB 2019 relative to SSB 2018.

\*\* The  $B_{lim}$ ,  $B_{pa}$ , and MSY  $B_{trigger}$  options were left blank because  $B_{lim}$ ,  $B_{pa}$ , and MSY  $B_{trigger}$  cannot be achieved in 2019, even with zero advice.



# 5. Summary of Action Points

Thank you



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