## PROCESS: Approval of North Sea advice June 19, 2015

Draft advice made available to ACOM members: June 12, 2015, 1656h (CPH time)

# **Participants**

Alain Biseau, Anne Cooper, Carl O'Brien, Carmen Fernandez, Ciaran Kelly, Cristina Morgado, David Miller, Eskild, Ghislain, Joanne Morgan, Larry Alade, Morten Vinther, Ruth Fernandez, Sigbjorn, Chris Zimmerman, Kelle Moreau, Max Cardinale

The following table is organized with some cells highlighted in grey. These comments are considered to be relatively straight forward and the changes have been proposed. In the webex these changes can be requested for discussion by any participant but will not be discussed unless specifically requested. This approach is intended to speed up the process not to stop discussion, so feel free to raise issues on the 'grey' items. We will check for each stock if all comments have been dealt with.

Comment and/or Issue raised (ACOM member)	Explanation and/or resolution
General	
ACOM leadership	
Stock status table	
ACOM leadership suggests not to use the words "target" or "limit" for any of	
the reference points (including those in management plans). The reason for	
this is the ongoing discussion in Europe on whether the reference points are to	
be considered as targets or limits. It is, therefore, preferred just to state	
whether the stock/F is below, at or above the reference point.	
The text in Stock status tables is being ammended, for the stocks where it is	
needed, to follow this. All changes to the stock status tables are being done	
with track changes and noted in the minutes below.	
with track changes and noted in the influtes below.	
BII-nsea	

Max / Sweden

Quality of the Assessment: "... The increased use of pulse trawls and other adaptations like fuel-saving wings will likely affect catchability and selectivity of North Sea brill. Though this effect has not yet been quantified, it will increase assessment uncertainty."

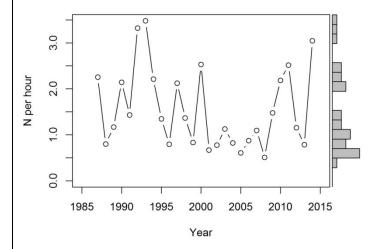
I doubt that catchability has decreased moving towards pulse trawls. However, If we doubt about the direction of the change in catchability in the last 5 years where we see a decline in CPUE, should we not apply the PA buffer? It seems to me a typical case where the PA buffer should be applied, also because it has never been applied although we do not have an estimate of F or/and FMSY.

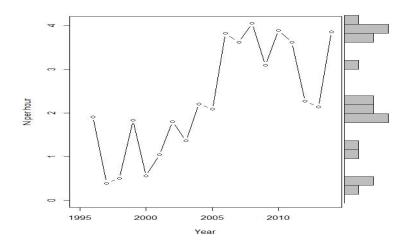
## Carmen:

I have checked with WGNSSK and Dutch experts if there is any documented information on the direction in which the catchability may change, but they don't think this information exists. Note that Nathalie is proposing to change the wording "will likely affect catchability" to "may affect catchability" (see her comment below)

The reason why the ADG considered a PA buffer was not needed for this stock is the same reason that has been used for dab, flounder and lemon sole, namely: "Brill is mainly a bycatch species in the North Sea demersal fisheries. In recent years large effort reduction took place in these fisheries of about 60% in beam-trawl and otter-trawl fisheries in the period 2000-2012 (STECF-14-03). A similar argument for not applying the PA buffer has been used in previous advice for these stocks. But it is, of course, ultimately an ACOM decision.

Two other pieces of information, which were not brought to the ADG this year but were in the advice sheet 2 years ago and are available in the WGNSSK 2015 report, are the survey indices (number per hour) of BTS-ISIS-Q3 (noisy but constant overall level; left panel below) and BITS-HAV-Q1&Q4 (noisy but overall increasing trend; right panel below).





The following text is from the WGNSSK 2015 report:

Because the landings in 2013-2014 were well below the ICES advice for those years (ICES advice for 2013-14 was 2.8 kt, landings about 2 kt), and the 6% drop in commercial lpue is accompanied by increasing survey abundances in 2014, brill in the Greater North Sea is not expected to be overexploited so the PA buffer was not

applied.

For ACOM decision. Keep what is in advice sheet, but will add additional information to supplement.

CARMEN: I have done this (included in brill advice sheet with track changes). Scott please check it and see what you think. The graphs should be improved (e.g. remove histogram on right-hand-side), the data are available in the WGNSSK 2015 report, so if you could produce better looking graphs that'd be great DONE

#### Carmen

Quality of the Assessment, last paragraph:

"The age-structured fishery-independent indices used in the trends-based assessment are of poor quality. A fishery-independent index covering the entire distribution area of the stock would improve the assessment. The commercial index used is derived from catch and effort data for the Dutch beam-trawl fleet. Since 2011, the use of pulse trawls by Dutch fishermen has increased sharply to 74 vessels and only six traditional beam trawlers are now left. The increased use of pulse trawls and other adaptations like fuel-saving wings will likely affect catchability and selectivity of North Sea brill. Though this effect has not yet been quantified, it will increase assessment uncertainty."

I suggest removing sentence in red (was taken from NS turbot, it's not applicable to brill).

## **Nathalie**

**Quality of the Assessment:** 

Proposed text amendments strikethrough and in bold text:

The age-structured fisheries independent indices used in the trends based assessment are of poor quality. A fisheries independent index covering the entire distribution area of the stock would improve the assessment. The commercial index used is derived from catch and effort data for the Dutch beam trawl fleet >221kW. Since 2011, the use of pulse trawls by Dutch fishermen has increased sharply to 74 vessels (of which 65 >221 kW) and only 8 traditional beam trawls are now left. The increased use of pulse trawls and other adaptations like fuel-saving wings will likely may affect catchability and selectivity of North Sea brill. Though this effect has not yet been quantified, it will increase assessment uncertainty.

⇒ in the Dutch fishery: SCOTT ADD **DONE** 

Carmen	Scott, could you do this? DONE
Table 6.3.2.2:	Scott, could you do this: DONE
In "Discard rate" line , insert "(average of 2012-2014)"	
Carmen	Scott, please, implement this. <b>DONE</b>
Table 6.3.2.5:	Social predoct implement that better
(1) 2016 advice line should be "Precautionary approach (decrease catches by	Concerning (1): check all other Category 3-6 stocks. The same mistake has occurred
6%)"	in several other of these stocks <b>DONE</b>
	In several other of these stocks bone
(2) Add a footnote to the value 2756 saying: "the advised catch takes into account	DONE
new discard information that became available in 2015"	DOTE
cod-347	
Canada:	Scott: can you check if this is possible? If possible, please implement it
Front page graphs	DONE
Minor – the fishing mortality plot is a little confusing since the Fmsy label is so	
close to the time series linecan the label be moved a bit?	
ACOM leadership	Terminology for reference points table:
Stock status table	F <sub>MS-upper</sub>
Fmgt line text should be: "At F <sub>upper</sub> " (instead of "At target"; note that F <sub>upper</sub> is	F <sub>MS-lower</sub>
part of the of the EU-Norway management strategy reference points noted in	SSB <sub>MS-upper</sub>
the Reference Points table for NS cod)	SSB <sub>MS-lower</sub>
SSBmgt line text suggestion: "Just below SSB <sub>upper</sub> " (instead of "Below upper	Text in stock status table
trigger"; note that SSB <sub>upper</sub> is part of the of the EU-Norway management	
strategy reference points noted in the Reference Points table for NS cod)	CARMEN (written after WebEx): Given the subsequent discussion in the WebEx
	under saithe, I understand now that my proposal for text for SSBmgt line was
	incorrect. Instead of "Just below SSB <sub>MS-upper</sub> ", we should say "Below SSB <sub>MS-upper</sub> "
	DONE (At F <sub>MS-upper</sub> , and Below SSB <sub>MS-upper</sub> )
ACOM leadership	Insert as 3 <sup>rd</sup> paragraph in "issues relevant for the advice" section:
The following feedback was received from the European Commission in	
January 2015: "ICES should provide advice in relation to adjustments in both	"The EU cod management plan (EC 1342/2008) has the same aims as the EU-
TAC and effort for each of the cod stocks under the long term plan (amended	Norway management strategy and additionally complements the TAC with an effort
Council Regulation (EC) No 1342/2008)."	regime. Following Article 12 of the plan, the maximum allowable effort for the
	relevant effort groups would be adjusted by the same percentage as the fishing
Until 2012, we had a sentence giving the corresponding % reduction in effort	mortality. The adjustment in F according to the EU cod management plan catch

ceilings in the North Sea cod advice sheet (in "Management plan" section, below catch options table); in the last 2 years we've had a sentence but without actually specifying the % reduction value. The ACOM leadership considers that an appropriate sentence should be included this year, to address this feedback from the European Commission.

**Suggestion:** insert the following sentences, either as the third paragraph in the "Quality of the assessment" section, as a footnote to the EU-Norway management strategy catch option in the catch options table, or in the Management plan box of the "Basis of the advice" table (Table 6.3.4.4):

"The EU cod management plan (EC 1342/2008) has the same aims as the EU-Norway management strategy and additionally complements the TAC with an effort regime. According to Article 12 of the plan, the maximum allowable effort for the relevant effort groups should be adjusted by the same percentage as the fishing mortality. The adjustment in F from 2015 to 2016 is a 15% reduction. No reduction in effort ceilings has been applied after 2012."

option from 2015 to 2016 is a 15% reduction." AGREED DONE

# <u>Carl</u>

## Quality of the assessment:

I have read the draft advice for NS cod and the review of SAM. Under point 2 of the review, it mentions the change in selection pattern which is too technical for our advice but does state '...

(e.g. some evidence that larger cod inhabit less accessible rocky areas); however, this remained largely speculative'. Should we be commenting on this in a general sense under quality; i.e. it is not possible to truly validate the domed selection even though it improves mode-fit? I would hate it for our advice and model to come back and 'bite us' next year if the changes this year are not subsequently confirmed in the future assessment.

Proposed text (to be added at the end of the 2<sup>nd</sup> paragraph of "Quality of the assessment" section):

The settings of the new model have been changed to allow a change in the exploitation pattern of the oldest ages; this also contributes to the change in the stock perception. AGREED DONE

## **Carmen**

# Quality of the assessment, third paragraph:

The basis for calculating  $B_{pa}$  now follows the ICES standard procedure (1.4× $B_{lim}$ ), leading to a smaller difference between  $B_{lim}$  and  $B_{pa}$  compared to the previous reference

**AGREED** 

**DONE** 

points.	
I suggest not referring to this as "ICES standard procedure" and replacing current	
sentence by: "Bpa has been calculated as 1.4xBlim."	
<u>Carmen</u>	AGREED
Reference points table, Technical basis for MSY Btrigger:	DONE
I suggest replacing the current "The default option of Bpa.(=1.4×Blim)" by "Bpa"	
Carmen	AGREED
Information from stakeholders:	DONE
We only have the figure, without any text at all. I think this is unclear (I checked with	
the ADG and there was an intention to include some text, but was forgotten in the	
hurry of things).	
<ul> <li>Suggestion for text:</li> <li>Comparison between the stock trends as recorded by the fishers' North Sea</li> </ul>	
stock survey (Napier 2014; Figure 6.3.4.4) and the IBTS survey data has shown,	
as in previous years, that the time-series are broadly in agreement in	
recording a stable overall stock abundance during 2001–2005, followed by a	
more recent strong increase. The latest fishers' survey reports continued	
strong increases in stock abundance in all areas apart from the south, in which	
an increase occurred until 2011 followed by a levelling off and in some areas a	
slight decline.	
cod-kat	
<u>Carmen</u>	AGREED DONE
Stock status table, management plan line:	
I think symbols should be ? instead of -, as we don't know where the stock is in	
relation to the ref points of the management plan (but we have ref points in	
the management plan)	
Carmen	SSB <sub>MS-upper</sub>
Reference points table, management plan line:	SSB <sub>MS-lower</sub>
I think instead of a single SSBmgt, it should show: SSBlower=6 400 t,	AGREED DONE
SSBupper=10 500 t (similar to how NS cod in presented and according to the	
contents of the plan EC 1342/2008)	Lead of the the 2nd and a second and a second and the second and t
ACOM leadership	Insert after the 2 <sup>nd</sup> paragraph under Issues relevant to the advice. AGREED DONE

The following feedback was received from the European Commission in January 2015: "ICES should provide advice in relation to adjustments in both TAC and effort for each of the cod stocks under the long term plan (amended Council Regulation (EC) No 1342/2008)."

For Kattegat cod, a sentence along these lines was included in the advice sheet in 2012 (in "Management plan" section). The last 2 years the advice for the stock was a simple SALY sheet and this information was not included. The ACOM leadership considers that an appropriate sentence should be included this year, to address this feedback from the European Commission.

**Suggestion:** insert the following sentences as the second paragraph in the "Quality of the assessment" section or in the Management plan box of the "Basis of the advice table" (Table 6.3.3.4):

"The EU cod management plan (EC 1342/2008) is based on setting TACs complemented with an effort regime. Given the lack of a short-term forecast for this stock, application of the plan would correspond to a 15% decrease in the TAC and a 15% reduction in the maximum allowable fishing effort for the relevant effort groups (Articles 9 and 12 of the management plan)."

#### dab-nsea

## Canada:

## Quality of the assessment

Did something change in 2012 to lead to this massive discarding? If not then I suggest that the uncertainty introduced by the raising of the discards is minor compared to the uncertainty of not including any discards. If high levels of discards are thought to have taken place prior to 2012 then this should probably be included as a source of uncertainty.

## Carmen:

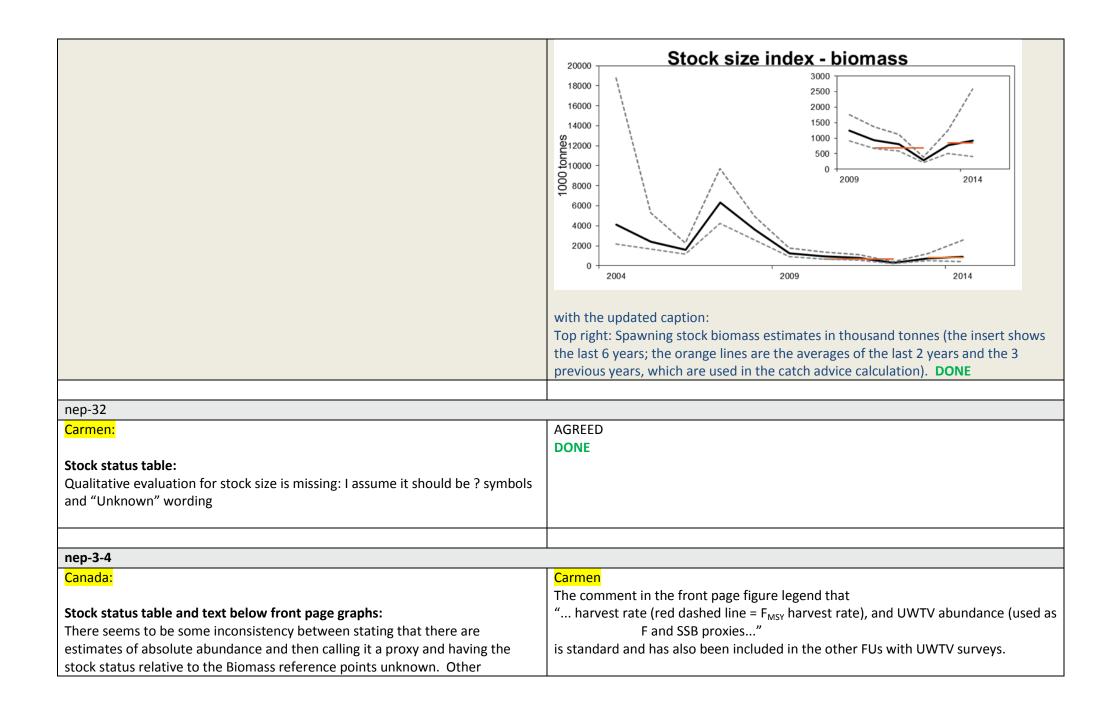
I do not think anything special occurred since 2012. In previous advice sheets for the stock we already indicated that discards were considered to be high / very high, but there was no sufficient information to calculate discard estimates. So previous advice for the stock referred only to landings and noted that total catch could not be quantified.

This year we had discard estimates for the first time (the 3 most recent years) and they could be used to provide catch advice for the stock.

This year in the data call issued by ICES, the last three years of discards data were requested, in order to be able to provide catch advice for all stocks. Together with

the discard data, the data call also asked for additional quality-control information such as number of trips, etc. Note that the advice method for the stock is based on the survey index and only the 3 last years of catch data. Thus, the lack of discard information in earlier years does not have a numerical impact on the present catch advice for this stock. ⇒ Joanne and Carmen work offline for a suitable sentence for quality of the assessment. CARMEN: Joanne and I have discussed this offline and we have reached the conclusion that no sentence is needed All stocks Front page graphs: "discards data only included since 20XX (the years included in the 2015 ICES data call)" in place of "Discards not available since XXXX". Quality of the assessment: Check for similar statement. In the 2015 ICES data call the last 3 years of discards data were requested (i.e. 2012-2014). So, since we haven't asked for more than the last 3 years of discards data, we should be careful with our texts, to avoid potentially giving the impression that we asked for data that were not received. After the WebEx, Carmen, Cristina, and Eskild clarified the sentence to: "discards data only included since 20XX." With no parenthetical mention of the ICES data call. DONE (BII-nsea, dab-nsea, Lem-nsea, tur-nsea, tur-kask, wit-nsea) Carmen Table 6.3.7.6 Scott, could you please check this with Cristina and see what her understanding is? I don't think we need to use the words "Commercial" in front of landings and This comment would affect MANY stocks. Please only implement if it is clear what discards. I assume this is only needed for the very few stocks where we we need to do on this. explicitly refer to recreational catches, but not needed otherwise. Scott Checked with Cristina and Commercial should only be used when we also, explicitly, refer to recreational catches. **DONE** fle-nsea

had-346a	
Carmen Stock status table Fpa,Flim row text should be "Below possible reference points" as these reference points are not defined for the stock	To be done DONE
lem-nsea	
Carmen ICES stock advice Sentence "All catch are assumed to be landed." should be removed; it's just a typo. Carmen Table 6.3.14.7 Column labels should refer to landings and discards, not wanted and unwanted catch. This stock is not under the landing obligation, so landings and discards is	Scott, please implement DONE  Scott, please implement DONE
the wording to be used.	
mix-nsea	
	Will be addressed in WCBBI – Scott, find out when they can release info <b>DONE</b>
mur-347d	
Max / Sweden  ICES stock advice:  Figure 6.3.51.1  There is a red line in the SSB figure, what it does represent? It is not indicated in the caption figure.	Carmen: These are two horizontal lines indicating the averages of the last 2 years and the 3 previous years. They are the index values used in the catch advice calculation and they are standard in Category 3 stocks plots. Because of the very wide confidence intervals for the initial year of SSB, these lines cannot be properly distinguished in the plot. Scott has worked to improve the graph in order to make it more readable. The following version has now been included in the advice sheet:



nephrops have these categories filled in.	The wording in the "MSY Btrigger" and "Bpa,Blim" rows of the Stock status table should be "Undefined", not "Unknown". "Undefined" is what we use to describe a situation where the reference point is not defined. ==> to be changed AGREED DONE  For this stock, MSY Btrigger is not defined. We had the following explanation in the advice sheet in previous years, but this was removed in the shorter format this year:  "MSY Btrigger is undefined. For other Nephrops stocks which have a longer time-series, the UWTV survey is used to define a proxy for MSY Btrigger, either at the low point in the time-series or the point at which the stock showed signs of stress. As the survey is relatively new and the survey design has only recently been settled, it would be inappropriate to determine MSY Btrigger at this point."  Suggested solution: Include the as technical basis for the MSY Btrigger line in the reference points table, Not defined:  "It is not possible to determine an appropriate MSY Btrigger at this time."
Canada Stock development over time Consider changing 'Estimates of absolute abundance, available for 2011 to 2014 from an underwater TV (UWTV) survey for the whole area are considered to be stable' to 'Stock size is considered to be stable'. This type of statement would also be consistent with the other nephrops advice sheets.	"It is not possible to determine an appropriate MSY Btrigger at this time because of the short survey series." AGREED DONE  Carmen
Canada Quality of the assessment Further on 'The absolute abundance estimate for this ground is therefore likely to be underestimated by the current methodology.' It either is or isn't an estimate of absolute abundance. See comment on FU7	Carmen It is in principle an absolute abundance estimate (as I tried to explain above), but it is considered that it may underestimate the total abundance on the ground because of some areas not covered by the survey.     □ Suggestion (also for FU7): replace current sentence by "The abundance for the total ground is likely to be higher than currently

	estimated." AGREED <b>DONE</b>
Carmen  Stock status table  Fpa, Flim line wording should be: "Below possible reference points"  SSBmgt line should be – symbol and wording "Not applicable"	Scott please implement DONE
Table 6.3.18.4: column 95% CI is empty. We're checking if these values are available	Scott Values are not available and column removed DONE
nep-6	
Carmen: New survey information indicates a decrease (i.e., lower advice). Incorporate now or reopen in autumn? Implications with mixed fisheries advice.	-leave it as announcement with more information to follow.
nep-7	
Canada: Quality of the assessment Same phrase as in FU3-4 'The absolute abundance estimate for this ground is therefore likely to be underestimated by the current methodology.' Perhaps a change to something like 'The absolute abundance estimate for the total ground is likely to be higher'.	Has been addressed under nep 3-4 (apply same solution to both cases) <b>DONE</b>
Carmen: Issues relevant for the advice "Over 99% of the landings are taken by Scottish vessels. Most vessels landings fishing Nephrops use a 80–99 mm mesh (TR2) although there is increasing use of meshes larger than 100 mm (TR1)."  Second sentence is unclear.	<ul> <li>Rephrase 2nd sentence as follows:</li> <li>"Most landings are from vessels fishing for Nephrops using a 80−99 mm mesh (TR2), although there is increasing use of meshes larger than 100 mm (TR1)."</li> <li>DONE</li> </ul>
nep-8	
Carmen: Stock status table	Scott please implement for nep-8 DONE and nep-9 DONE

Wording in Fmsy line should be "Above"	
Wording in Bpa, Blim line should be "Above possible reference points"	
Same comments for nep-9	
nep-9	
nep-oth	
ple-eche	
<u>Cristina</u>	Carmen
ICES stock advice:	Following Cristina's suggestion, the ICES stock advice section would read as follows:
At the moment, the section presents:	"ICES advises that when the MSY approach is applied, catches of the VIId plaice stock in
Catch advice for the VIId plaice stock	2016 should be no more than 17 250 tonnes. If this stock is not under the EU landing
<ol> <li>Corresponding catches of plaice in VIId (including also from NS and 7e</li> </ol>	obligation in 2016 and discard rates do not change from the average (2012-2014), this
stocks)	implies landings of the VIId plaice stock of no more than 11 096 tonnes.
3. Corresponding landings of plaice in VIId (if no EU landing obligation)	
or corresponding fariantles of planes in the (ii no 20 fariantle confection)	Assuming the same proportion of the Division VIIe and Subarea IV plaice stocks is taken in
The section does NOT present:	Division VIId as during 2003–2014, this will correspond to catches of plaice in Division VIId in
4. Corresponding landings of the VIId plaice stock (if no EU landing obligation)	2016 of no more than 19 883 tonnes. If this stock is not under the EU landing obligation in
The corresponding fariantes of the vita place stock (if no 20 fariants obligation)	2016 and discard rates do not change from the average (2012-2014), this implies landings of plaice in Division VIId of no more than 12 789 tonnes."
It could be clearer to present also 4.	plaice in Division viid of no more than 12 769 tornes.
The could be ciculate to present also 4.	⇒ For ACOM decision: move to new version. AGREED <b>DONE</b>
Carmen	TO NEON GESSION HOVE to HEW VEISION NO. 1225 DOIL
Front page graphs:	To be done DONE
Horizontal line for MSY Btrigger missing	
110112011411111111111111111111111111111	
Stock status table	
MSY Btrigger line should be filled with green ticks and text "Above trigger"	DONE
Table 6.3.32.2	
Rec(2015) missing from table	DONE
Catch options table (Table 6.3.32.3)	Carmen, for ACOM information:
<mark>Alain</mark>	There were many unclear technical aspects around this catch options table. Alex,

last column, delete 'TAC'	Alain, Scott and I have worked on it, and a clearer version has now been included in the advice sheet. The table still contains the same information as before, but it is now better organised and easier to understand.
Alain Reference points table - Reference points: suggest to round Blim and Bpa (18500 and 25800 t respectively).	Agreed. Inform WG that the rounded values are the proper reference points. <b>DONE</b>
Put the value for MSY-Btrigger, and 'Bpa' in the technical basis	DONE
Alain History of ICES advice, the agreed TAC, and ICES estimates of landings table - Table 6.3.32.7: last two rows: figures should be in kt	Thank you! To be done DONE
Carmen Table 6.3.32.8 Replace "Official landings" by "Landings" and the value should be 4320 t Replace "Commercial discards" by "Discards"	To be done <b>DONE</b>
ple-nsea	
Carmen Replace wording (3 times in the advice sheet) "EU management strategy (Council Regulation No. 676/2007)"	AGREED DONE
by "EU management plan (Council Regulation No. 676/2007)"  This is not an agreed EU-Norway management strategy, so we should continue to refer to it as "management plan".	
ACOM leadership Stock status table Fmgt text should be "Below" (instead of "Below target") SSBmgt text should be "Above" (instead of "Above target")	AGREED DONE
Alain	

# minor things:

- (1) The TAC value for 2015 in Table 6.3.31.7 is missing: 128.376
- (2) The TAC values for NS et SK in Table 6.3.31.9 do not match with the ones in the previous tables. Should be corrected (the ones in table 6.3.31.7 seem to be OK), or deleted.
- (1) Agree, to be inserted **DONE**
- (2) To be removed from Table 6.3.31.9 (they are not needed there, given that they are included in Table 6.3.31.7) **DONE (Deleted columns)**

#### sai-3a46

## Max / Sweden

## Stock and exploitation status:

Table 6.3.34.1

Why we have MSY Btrigger indicated as below trigger and then the same value indicated as at trigger? I suggest they should be both at trigger and the colour changed accordingly.

## Canada

Is the stock size really below the trigger?

#### Carmen

SSB(2015) is 199 270, whereas MSY Btrigger = Bpa = 200 000.

so nearly identical. ADG debated what to do, but ended up thinking that the most consistent with the ICES rules was to put a red cross instead of a green tick for MSY Btrigger and for the SSBmgt, and an orange circle instead of a green tick for Bpa

It is obviously not an ideal solution, but there does not seem to be an ideal solution for this extremely borderline case. My feeling is that the most consistent with the general ICES rules/guidelines is to keep the symbols used by the ADG but use as wording "below trigger" for both MSY Btrigger and SSBmgt lines

⇒ For ACOM decision: AGRFFD **DONE** 

# **ACOM** leadership

# Reference points table:

The EU-Norway management strategy for saithe is very similar to that for cod, i.e. there is an Fupper=0.3, Flower=0.1, SSBupper=200 000 (Bpa) and SSBlower = 106 000 (Blim).

⇒ Proposal:

Present EU-Norway management strategy for saithe in the same way as done for North Sea cod in the Reference points table

Rewrite reference points table EU-Norway Management strategy with same notation as for NS cod. AGREED **DONE** 

State of the stock : AGREED **DONE**Fmgt – red cross, "Above"
SSBmgt – red cross, below SSB<sub>MS-upper</sub>

## **Stock status table:**

Fmgt line: text should be "At F<sub>upper</sub>" (instead of "At limit")

SSBmgt line: text could be "Slightly below SSB <sub>upper</sub> " (but depends on decision on comment from Max and Joanne)	
Carmen Quality of the assessment, 2 <sup>nd</sup> paragraph: Sentence "Unaccounted removals are no longer estimated for 2006 onwards." seems incorrect for saithe and should be removed	Agree, To be done <b>DONE</b>
Quality of the assessment, 3rd paragraph:  Catches from older age classes in the surveys are not representative and commercial cpue indices are also used for tuning and are highly influential on assessment results. Therefore, the assessment is dependent on commercial cpue indices, which may not fully reflect changes in stock size for a schooling species like saithe.  change first "cpue" by "lpue" and remove second "cpue"	DONE
sol-eche	
sol-kask	
sol-nsea	
Carmen Replace wording (4 times in the advice sheet) "EU management strategy (Council Regulation No. 676/2007)" by "EU management plan (Council Regulation No. 676/2007)" as this is a purely EU management plan, so we continue referring to it as "plan"	AGREED DONE
ACOM leadership Stock status table Fmgt line text should be "Above" (instead of "Above target") SSBmgt line should be "Above" (instead of "At target")	AGREED DONE
Nathalie Nathalie	

#### Issues relevant for the advice

A substantial part of the text under this heading is more appropriate for the ecosystem or fisheries advice and not for the stock advice sheet. The text was added after the main discussions on the sheet were completed. The ADG did not review added the text but comments were made and there seemed to be consensus that the paragraph should reflect issues for stock advice only.

Proposal to change the text as follows (text marked bold is added):

Currently the mixed sole and plaice fishery is dominated by bottom trawls, with substantial bycatch of both commercial and non-commercial species and a physical impact on the seabed. Technical measures applicable to the mixed flatfish beam trawl fishery in the southern North Sea, affect both sole and plaice. The minimum mesh size of 80 mm generates high discards of plaice which have a larger minimum landing size than sole. The use of larger mesh sizes would reduce the catch of undersized plaice and sole, but would also result in loss of marketable sole in the short term (Cardinale and Hjelm, 2012). The introduction of the Omega (mesh size) meter in 2010 has led to a slight increase in the effective mesh size in the fishery.

The combination of days at sea regulations, low prices for plaice and the relatively stable TAC for sole have led to a fishing pattern in the more southern part of the North Sea, where sole has become relatively more abundant. This concentration of fishing effort in the southern North Sea has resulted in increased discarding of juvenile plaice that are mainly distributed in those areas. This process could be aggravated by the movement in recent years of juvenile plaice to deeper waters where they become more susceptible to the fishery.

The increased use of "SumWing" and electric "pulse trawls" will increasingly affect catchability and selectivity of North Sea sole. The introduction of innovative gears may lead to changes in how the ecosystem is impacted by the plaice and sole targeting fleet. Because of the lighter gear and lower towing speed, pulse vessels generate a lower swept-area per hour and reduced bycatch of benthic organisms. The new gears may change fishing patterns as well. ICES responded to a request by France on the use of pulse trawl (ICES, 2012a) and concluded that the introduction of electric pulse systems could significantly reduce fishing mortality of target and non-target species, including benthic organisms, assuming there is no corresponding increase in unaccounted (avoidance) mortality. However, not all relevant issues (such as delayed mortality and long term population effects) have been fully studied and ICES therefore considers that the available data are insufficient to recommend the large-scale use of electric pulse trawl in fisheries.

## Carmen:

Nathalie's proposal):

I agree. My recollection is that the ADG was intending to note just a few relevant issues here, but it ended up being a very lengthy text that the ADG had agreed to shorten by correspondence.

However, I remember that one of the issues the ADG agreed on was to indicate that the BT mixed fishery generates high discards of plaice below the MLS. So I think we should keep that part.

⇒ Suggestion for text: AGREED DONE

(the first paragraph is very similar to the one we have for sole-7d and I think ADG was intending to have this; the 2<sup>nd</sup> paragraph corresponds to

"Technical measures applicable to the mixed flatfish beam trawl fishery in the southern North Sea affect both sole and plaice. The minimum mesh size of 80 mm generates high discards of plaice which have a larger minimum landing size than sole. The use of larger mesh sizes would reduce the catch of undersized plaice and sole, but would also result in loss of marketable sole in the short term (Cardinale and Hjelm, 2012).

Since 2011, the use of pulse trawls by Dutch fishermen in the Dutch fishery has increased sharply to 74 vessels (of which 65 >221 kW) and only 8 traditional beam trawls are now left. The increased use of pulse trawls and other adaptations like fuel-saving wings will likely may affect catchability and selectivity of North Sea sole. Though this effect has not yet been quantified, it will increase assessment uncertainty."

Since 2011, the use of pulse trawls by Dutch fishermen has increased sharply to 74 vessels (of which 65 >221kW) and only 8 traditional beam trawls >300HP are now left. The increased use of pulse trawls and other adaptations like fuel-saving wings will increasingly affect catchability and selectivity of North Sea sole. The new gears may change fishing patterns as well.	
spr-kask	
Max / Sweden	Carmen
Table 6.3.48.2  Having the PA buffer on is a bit confusing as it gives the impression that it was applied this year as well. I suggest to either change to not applied or make it clar in the caption table that this advice is the same as in 2013 and that the PA buffer was only applied in 2013 and not in 2015.	Comment no longer applicable, after the rewrite of this advice sheet by the ADG
spr-nsea	
tur-kask	
tur-nsea	
Alain why not using the advice catches (actually landings) advised last year as the basis for the advice: 2406 *1 *.8 /(1-035)=1995t ?	Carmen  This was discussed by the ADG. My recollection of this is that the ADG considered that because a benchmark had occurred since the last advice (with the end result that the stock went from Category 2 to Category 3), it was more appropriate to start "anew" (i.e. taking the 2012-2014 landings as the starting reference) instead of taking the previous advice as the starting reference.  However, I also note that red mullet also went through a benchmark this year and the ADG took the previous advice as the starting reference.  Personally, I tend to support Alain's point of view. For most Category 3-6 stocks, our advice this year takes the provious advice as the starting point, and this is what the
	advice this year takes the previous advice as the starting point, and this is what the ADG did for most stocks. The ICES advice for this stock last year was for a 20% decrease (based on a Categ 2 assessment), and the trends-based assessment this

	year indicates a poor stock status. By referring our advice to the 2012-2014 landings (instead of to last year's advice) we end up giving a higher catch advice than last year (also because this year 3.5% discarding is accounted for, whereas last year all catch was assumed to be landed), which concerns me a bit.  However, ACOM needs to consider and decide about this. Use recent advice as basis (no explanation needed). AGREED. DONE, and correct values inserted for catch and landings advice in ICES stock advice section.
Alain ICES stock advice Remove the sentence 'All catches are assumed to be landed'.	Agree, to be done DONE
Carmen ICES stock advice Replace sentence "If this stock is not under the EU landing obligation in 2016 and discard rates do not change from 2014, this implies landings of no more than 2355 tonnes.", by "If discard rates do not change from 2014, this implies landings of no more than 2355 tonnes."	Agree, to be done DONE (checked for: dab, brill, flounder, lemon sole, turbots, witch)
as the stock is not scheduled to be under the LO in 2016 (so same sentence should be used as for dab, flounder, lemon sole)	
Nathalie Quality of the assessment Proposed text amendments strikethrough and in bold text:	Agree to the proposed changes DONE in the Dutch fishery
The age-structured fisheries independent indices used in the trends based assessment are of poor quality. A fisheries independent index covering the entire distribution area of the stock would improve the assessment. The commercial index used is derived from catch and effort data for the Dutch beam trawl fleet >221kW. Since 2011, the use of pulse trawls by Dutch fishermen has increased sharply to 74 vessels (of which 65 >221 kW) and only 8 traditional beam trawls are now left. The increased use of pulse trawls and other adaptations like fuel-saving wings will likely may affect catchability and	

selectivity of North Sea turbot. Though this effect has not yet been quantified, it will increase assessment uncertainty.	
Alain	
Table 6.3.54.8: commercial discards' should be 'Discards'	Agree, to be done <b>DONE</b>
Table 6.3.54.9: Delete 'commercial catch and' in the caption	
Table 6.3.54.10: Replace 'Total Catch' by 'Landings'	
Alain Landings values in different tables do not match: for instance, Table 6.3.54.7 gives 3008t (ICES estimate) and 2872t for 2013 and 2014. Thes values should have been used in the assessment, but the final table gives 2982t and 2834t respectively, while the official landings table gives 3084t for 2013	Carmen I have checked with experts. Table 6.3.54.10 has been ammended and now shows the official landings data (same series as shown in Table 6.3.54.7) as this is the longer data series we have for the stock (ICES estimates only available for the last 2 years and differ from official landings by only 2% and 1%).
Alain Table 6.3.54.7, ICES advice should be 'precautionary approach (decrease catches by 20%)  Max / Sweden History of advice, catch and management Table 6.3.54.7  It should be decrease catches of at least 20%.	Carmen  I agree. This type of error has occurred in several advice sheets for Category 3-6 stocks. Scott is checking all these sheets and correcting where necessary DONE
whg-47d	
Alain  Stock status table  For whiting in North Sea, instead of the yellow marks for Bpa,Blim, I suggest we go for "? ??" and text="above Blim"	Carmen  There is Blim but no Bpa for this stock. The reason for the ADG choice was the following statement in the "State of the stock table template" document:
	"If there is no Bpa, and SSB is above Blim: a) insert a yellow symbol, $^{oldownote{O}}$ , if

	SSB/Blim<1.5; b) insert a green symbol, , if SSB/Blim>1.5"
	However, I personally agree with Alain. I have no recollection of ever having using this idea for any of the stocks with Blim but no Bpa I have seen in WebExes (and I think the use of 1.5 factor could confuse people). In the cases I have dealt with, the stocks were handled as suggested by Alain, and this is also what we have done in the ADGCS (at least for sea bass, the example I remember).
	⇒ For ACOM decision
	Question marks (Above B <sub>lim</sub> ) – guidance document should also be corrected.  AGREED <b>DONE</b>
ACOM leadership	AGREED DONE
Stock status table	
The Fmgt text should be "Above" (instead of "Above target")	
whg-kask	
wit-nsea	
Max / Sweden	Carmen:
	Explaining this was forgotten.
Catch options	
There is no mention on why the PA buffer was not applied.	Suggestion: add the following sentence at the end of the first paragraph of the "Catch options" section. AGREED DONE
	"The precautionary buffer was applied in 2013 (for the 2014 advice) because of uncertainty on the exploitation status; therefore, no additional precautionary buffer was applied this year."
Canada	Carmen:
Stock development over time	Yes, you understood the message correctly. AGREED DONE
Stock development over time	- · · · · · · · · · · · · · · · · · · ·
'Abundance index from IBTS Q1 survey shows a declining trend since 2000 and	
'Abundance index from IBTS Q1 survey shows a declining trend since 2000 and	
•	⇒ Suggestion: rephrase as follows:  "The abundance index from the IBTS Q1 survey shows a declining trend

perhaps 'Abundance index from IBTS Q1 survey shows a declining trend from	
2000-2013, but abundance is much higher in 2014-2015'	