Whiting under the landings obligation

Introduction

As a next step in the introduction of the landing obligation, whiting is due to be under a landings obligation in 2017. The high level group of the Scheveningen Group has requested to draft a paper on the (im)possibilities of whiting under the landings obligation.

Most member states expect whiting to be a choke species. Currently there are no clear solutions for the choke species problem and how to regulate fisheries when the situation of a choke species presents itself (e.g. closure of whole fisheries or not). This paper describes the status of the whiting stock in EU waters. Additionally the situation of whiting as choke species for the Dutch fleet is described.

Status of the stock and fisheries

The whiting stock of area IV and VIId is currently at a low biomass, with medium to low recruitment i.e. **poor condition.** There are some initial indications (preliminary results NL IBTS Q1 2016) that whiting recruitment in 2016 is higher than recent years, but still only near the average of the whole time series.

TACs have been decreasing. In 2016 the IV quota remained unchanged from 2015 at the lowest level since 2000. The VIIb-k quota increased slightly, though most of this is not taken in VIId.

Recruitment

60-80% of age 1 whiting and 40-60% of age 2 whiting are discarded. Hence, discard rate can be affected by the amount of undersize fish (i.e. large incoming year classes could mean increased discarding of undersized fish).

However, for whiting it seems **discard rate does not depend strongly on incoming recruitment** (Figure 1). Therefore, a strong 2016 year class should not automatically lead to higher discard rates.

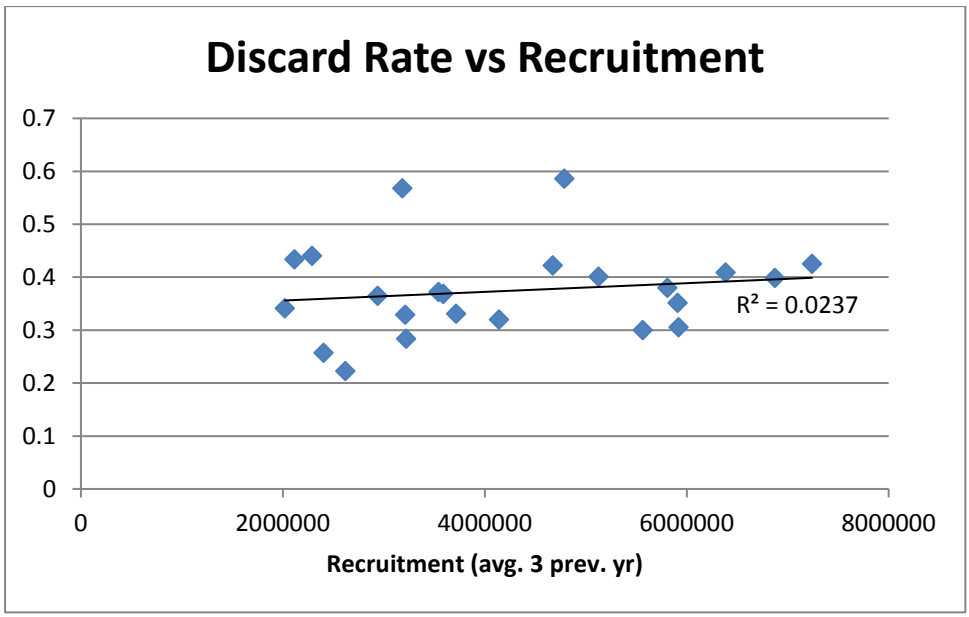

Figure 1: Relationship between recruitment (average of previous three years) and discard rate (Discards/Catch).

Quota of other species

2016 TACs for cod, haddock and plaice (three potential target species of fisheries discarding whiting) have all **increased** (15, 30, and 15%, respectively) while whiting quota has remained the same in the North Sea (and slightly increased in VIId). This could create an **imbalance in the mixed fisheries**, increasing the choke potential for whiting.

ICES mixed fisheries advice for 2016 (ICES 2015a) considered **whiting to be the most limiting stock in 2016** (first stock for quota to be used up). i.e. if decreasing the fishing mortality for whiting is a major objective, this could mean that the TAC for other species in the mixed fisheries may not be fully utilized (i.e. it would choke).

It is estimated (ICES, 2015a) that if fishing effort in 2016 matches that needed to land the cod TAC completely, then the whiting TAC would be overshot by around 10%. If effort remained the same in 2016 compared to 2015, then the whiting TAC could be overshot by more than 40%. However, the situation in 2017 may be different when a potential discard top-up is added to the whiting TAC.

Relative stability

Another reason for discarding is a lack of quota (e.g. when whiting is caught as bycatch in fisheries targeting other species such as cod or plaice).

France, Germany, Belgium and the Netherlands all have high discard rates (Figure 2). However, the UK (England + Scotland) holds most of the quota (for area IV) and therefore will receive a larger share of the top-up. In addition, Norway (zero discards) would get 4.5% of the IV top-up (roughly 3.5% of the stock top-up), further reducing the share of the top-up going to the discarding nations.

France has a large share of VIIb-k quota that may reduce this effect for them, but **whiting quota could be limiting** for Germany, Belgium and Netherlands.

These countries will have to improve selectivity to avoid whiting becoming a choke species (this may not be possible depending on what they are targeting), or come up with **alternative solutions (e.g. trades, flexibilities)**.

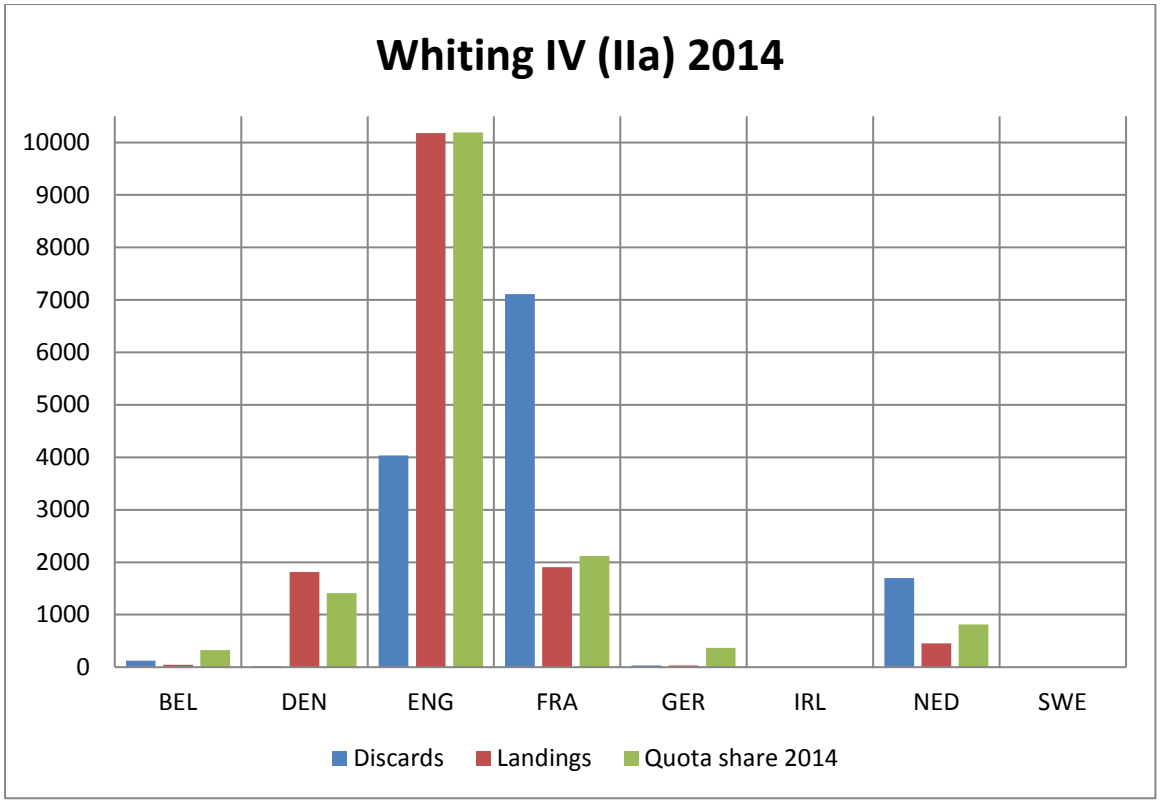

Figure 2: Discard and landings in area IV (Discards/Catch; ICES 2015b, and STECF 2015) and quota share in area IV and IIa of whiting per member state in 2014.

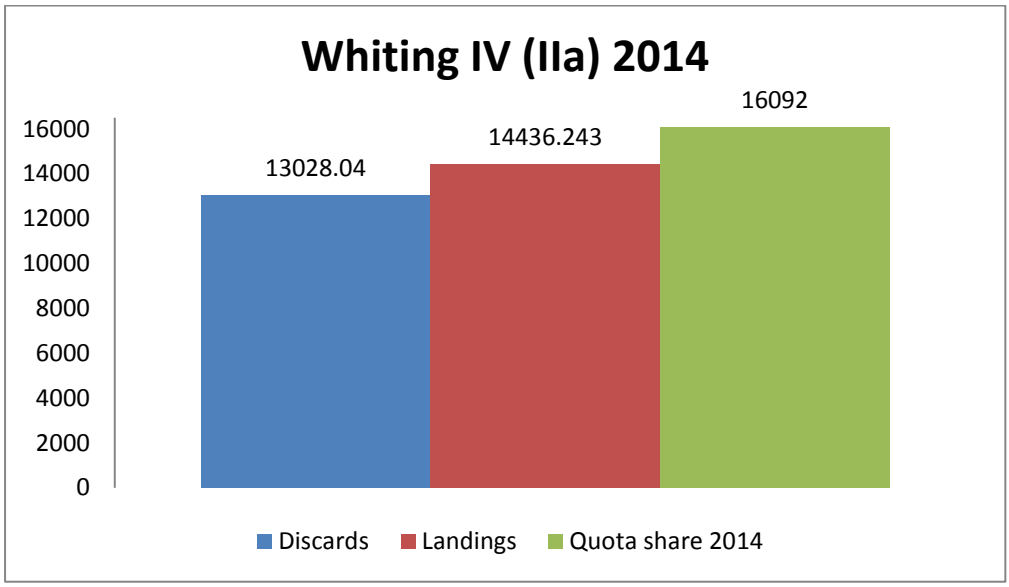

Figure 33: Total discards and landings in area IV (Discards/Catch; ICES 2015b, and STECF 2015) and TAC in area IV and IIa of whiting in 2014.

Would whiting be a choke species?

It is likely that whiting would be a choke species *if* a landings obligation would occur *in 2016*. Depending on the recruitment and development of the whiting stock and other target stocks, the situation in 2017 could be different. However, a significant shift in the relative stock status and TAC for whiting compared to target species is unlikely, and the

imbalance between discard rates and quota share will remain. **It is likely that whiting could be a choke species under a landings obligation in 2017.**

Current situation in the Netherlands

Assuming landings and discards follow the same monthly dynamic, Table 1 shows the landings and discards per month in the Dutch fleet in 2014. The 2014 NL quota share was set at 815 tonnes. Combining discards and landings per month and assuming that no significant selectivity changes happen in the Dutch fleet, the NL quota share would be exhausted between January and February. This means without a discard quota uplift.

Table 1: Landings and discards of whiting in the Dutch fleet in 2014 (source: STECF database and Dutch Enterprise Agency (RVO)).

(in tonnes)

	Whiting	Dutch fleet		
Month	*Landings per month*	*Discards per month*	*Total catch per month*	*Cumulative*
1	61	232	293	293
2	57	215	272	565
3	36	135	170	735
4	35	133	168	904
5	56	212	269	1173
6	33	125	159	1331
7	35	132	167	1499
8	22	84	106	1605
9	23	85	107	1712
10	36	135	171	1882
11	31	115	145	2028
12	26	98	124	2151
Total	451	1700	2151	

Table 2 shows the situation for the Dutch BT2 fleet. The BT2 has the greatest share of the whiting discards in area IV. Without a quota uplift this fleet segment would already overshoot its national quota share in the first month of the year.

Table 2: Landings and discards of whiting in the Dutch BT2 fleet (source: STECF database and Dutch Enterprise Agency (RVO)).

(in tonnes)

	Whiting	BT2		
Month	*Landings per month*	*Discards per month*	*Total catch per month*	*Cumulative*
1	58	253	310	310
2	52	230	282	592
3	18	80	99	691
4	9	38	47	738
5	7	33	40	778
6	3	12	15	792
7	2	8	9	802
8	2	8	9	811
9	2	9	11	822
10	4	19	23	845
11	7	33	40	886
12	13	55	67	953
Total	177	776	953	

Table 3 shows the situation for the Dutch TR1 fleet. The Dutch TR1 fleet is relatively selective due to the large meshes it operates and this results in low discard rates of whiting.

Table 3: Landings and discards of whiting in the Dutch TR1 fleet (source: STECF database and Dutch Enterprise Agency (RVO)).

(in tonnes)

	Whiting	TR1		
Month	*Landings per month*	*Discards per month*	*Total catch per month*	*Cumulative*
1	0	0.0	0	0
2	0	0.0	0	0
3	0	0.0	0	0
4	8	0.2	8	8
5	11	0.3	11	20
6	5	0.1	5	25
7	8	0.2	8	32
8	2	0.1	2	35
9	1	0.0	1	36
10	5	0.1	5	41
11	9	0.3	10	51
12	6	0.2	6	57
Total	55	1.6		

Table 4 shows the landings and discards per month for the TR2 fleet. Like the BT2 fleet, this fleet segment has a significant share of the whiting discards in area IV. Without a discards top-up this fleet would need to cease fishing operations in April.

Table 4: Landings and discards of whiting in the Dutch TR2 fleet (source: STECF database and Dutch Enterprise Agency (RVO)).

(in tonnes)

	Whiting	TR2		
Month	*Landings per month*	*Discards per month*	*Total catch per month*	*Cumulative*
1	6	28	34	34
2	1	3	4	38
3	19	84	103	141
4	13	59	73	214
5	52	230	282	496
6	30	132	161	657
7	28	125	153	810
8	9	41	51	861
9	7	31	38	899
10	28	125	153	1053
11	9	41	50	1103
12	5	23	28	1131
Total	208	923	1131	

Potential top-up or de minimis exemptions for whiting

Based on the ICES catch advice (ICES, 2015) of whiting in the North Sea basin no more than 25 000 tonnes of whiting should be caught in 2016. In accordance to its quota share under relative stability this would constitute around 1280 tonnes of whiting for the Netherlands for the North Sea basin. This is still far less than the sum of its landings and discards in 2014, therefore on the national level whiting is still a choke species for the Netherlands under a landing obligation in 2017.

Possible solutions

Firstly, selectivity (in terms of gear modifications and fishing area changes) will be explored. But since whiting is a widely distributed species, there will be limitations for the increase in selectivity.

In the Netherlands, the BT2 and TR2 fleet segments seem to have the highest risk of becoming choked by whiting under a landing obligation in 2017. In the Netherlands, whiting is distributed as a contingency quota on the individual vessel level. The quota share of fleet segments with lesser risks could be transferred to fleet segments with higher risks. This will require a thorough investigation on the individual vessel level.

On an international level, other member states with similar discarding rates will still have surplus quota when the ICES catch advice is set into a EU TAC. This is due to the unequal share of some member states under relative stability in the North Sea basin. Swapping of quota from member states with a whiting quota share surplus might seem a promising alternative solution. But that implies breaking down the relative stability key in the North Sea basin.

References

ICES. 2015a. Report of the Working Group on Mixed Fisheries Advice (WGMIXFISH-ADVICE), 25–29 May 2015, ICES HQ, Copenhagen, Denmark. ICES CM 2015/ACOM:21. 171 pp.
ICES. 2015b. Report of the Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK), 28 April–7 May, ICES HQ, Copenhagen, Denmark. ICES CM 2015/ACOM:13.
STECF https://datacollection.jrc.ec.europa.eu/dd/effort/tables

Annex

Calculation of monthly landings and discards

Total discards and landings for the Netherlands were obtained from the STECF database (Annex IIA, Reg area 3B2). Together with the monthly landings data of whiting in 2014 and 2013 obtained from the Dutch Enterprise Agency (RVO) the landings and discards per month were reconstructed.
First, the average landings per month were calculated based on the data of 2013 and 2014 form the Dutch Enterprise Agency. Secondly, total landings and discards for the Netherlands were extracted from the online STECF database (https://datacollection.jrc.ec.europa.eu/dd/effort/tables). Knowing the average percentage of landings per month, the total landings and discards are distributed over twelve months (assuming landings and discards are linked).