

Outline of a discard plan for the Baltic Sea

SECTION I

Introduction

Background

In May 2013 the Council and European Parliament reached political agreement on the Reform of the Common Fisheries Policy (CFP) outlining the specific time frame for the introduction of the discard plan for different fisheries as well as provisions for possible exemptions and the general framework for regional cooperation.

The Baltic Sea EU Member States, the EU Commission, the Baltic Sea Advisory Council (BS AC) and other relevant stakeholders have been involved in the formulation of the discard plan in the BALTFISH Forum and BALTFISH High Level Group (HLG) as well as in technical meetings. In November 2012, the HLG endorsed a set of recommendations for a discard plan (time schedule, choke species problems, control measures etc.), which was sent to the Commission, the BS AC and Member States.

An additional BALTFISH technical meeting was held in Copenhagen 13 June 2013 in order to prepare a final set of regional positions for a discard plan for the Baltic Sea with subsequent discussions of the document at the 27-28 August 2013 meeting in Riga, at the 3 December 2013 meeting in Stockholm and at the 29 - 30 April 2014 meeting in Riga. In several meetings the BALTFISH Forum stakeholders have continuously been informed about the progress of the discard plan drafting. The draft of 4 February 2014 was also sent out for consultation amongst BALTFISH Forum stakeholders in early February 2014.

On this basis, BALTFISH recommends that a discard plan for commercial fisheries in the Baltic Sea should be based on the elements outlined below in Section II of the document. The Articles mentioned in the following text refer to the Regulation (EU) No 1380/2013 of the European Parliament and of the Council on the Common Fisheries Policy (Basic Regulation) unless otherwise stated.

Area of application

Cooperation within BALTFISH covers fisheries management issues in the following geographical areas of the EU-waters in the Baltic Sea: ICES zones IIIb,

IIIc, and IIIId. The discard plan therefore shall apply in these areas for fisheries and species subject to landing obligation.

Overview of the elements of the discard plan

According to the Basic Regulation it is mandatory that a discard plan includes the five elements mentioned below which can be adopted by the Commission as a delegated act. The five elements are:

- 1) Species to be included in the discard plan
- 2) Species to be exempted from the landing obligation
- 3) De minimis exemptions
- 4) Provisions on documentation of catches and monitoring
- 5) Where appropriate, the fixing of minimum conservation reference size.

In this document besides inclusion of the mandatory elements of the plan to be adopted as a delegated act, BALTFISH has outlined additional information and description of relevant aspect of the CFP in order to provide a comprehensive overview of instruments available for the management of the fisheries, in particular with respect to the new requirements and in correlation to other provisions necessary with implementation of the discard plan. In this context, information on the quota flexibility provisions, gear selectivity, fishing effort, fishing opportunities, technical measures and evaluation of the plan will form the Section III of this document.

SECTION II

Elements of the discard plan

1. Species to be included in the discard plan from 2015 and at a later stage

According to the Basic Regulation Article 15(1)(a) small pelagic fisheries, fisheries for industrial purposes and salmon will be subject to a landing obligation as of 1 January 2015. Furthermore, according to Article 15(1)(b) from 1 January 2015 at the latest for species which define the fisheries and from 1 January 2017 at the latest for all other species subject to catch limits, a landing obligation shall be introduced.

For the Baltic Sea, small pelagic fisheries is defined as fishery targeting **herring** and **sprat**, therefore these two species shall be included in the discard plan as well as **salmon**. In addition, any other catches in these fisheries should be encompassed by the landing obligation, if they are covered by a quota.

BALTFISH recommends that the discard plan will also cover **cod** from 1 January 2015 as cod is a targeted species which define a fishery.

BALTFISH has originally suggested also inclusion of plaice in the plan as of 1 January 2015. In the meantime, new information has been made available demonstrating a number of challenges for achieving a successful implementation of the discard plan with respect to plaice. The problems can to a certain extent be associated with the following:

In biological terms, **plaice** is considered as a data limited stock meaning that biological reference values are not associated with the stock and without Blim or Flim reference points, the stock cannot be considered "within safe biological limits" which is a prerequisite for applying the inter species flexibility according to Article 15(8). In this context and combined with provisions laid down in the Basic Regulation, certain limitation has become obvious for fully utilizing other available instruments (inter species flexibility, year to year flexibility and *de minimis*) to alleviate choke species problems for certain Member States.

Both Baltic Sea plaice stocks (PLE Subdivision 21-23 and PLE Subdivision 24-32) are scheduled for benchmark assessment by ICES in 2015 and a data compilation workshop is planned by ICES for autumn 2014. Presently, there is limited, and across Member States, diverse discard level data on plaice. Currently, such data are not included in the assessment and therefore ICES provides advice on landings only. Missing information on discard will prevent ICES from recommending possible quota uplift in 2015. Quota uplift is depending on information on discards.

If plaice is included in the landing obligation already in 2015 the *de minimis* can only be allocated at a level corresponding to the current TAC (3,409 tons), which is calculated on landings only. Some Member States will probably need to use the *de minimis* solution to handle their discards.

On that background, BALTFISH recommends to postpone the inclusion of plaice **[until 1 January 2017]** as the results from the benchmark assessment of the stock most likely will allow for inclusion of the discards as well as the establishment of biological reference points. In 2014 ICES will ask Member States to provide detailed discard data in order to develop more solid advice in the future.

At an earlier stage BALTFISH has discussed to include **sea trout** in the discard plan as of 1 January 2015. The rationale behind that thinking was that the sea trout fishery in many respects is very similar to the salmon fishery as well as such inclusion could lead to minimizing of misreporting.

However, when dealing with the question of exemptions with respect to sea trout it has become clear that the quality of the information related to survivability differs significantly between Member States, and the inclusion of too many areal exemptions could result in watering down the benefit of including sea trout in the first phase. However, BALTFISH is still of the opinion that sea trout should be included in a discard plan not later than **[1 January 2017]** despite it is not mandatory. Therefore, Member States are encouraged to collect and to coordinate information for ICES evaluation which can substantiate possible exemptions with a view to including sea trout in the discard ban no later than in **[2017]**.

The question of including other non-quota species such as flounder, turbot and brill in the landing obligation will be further discussed in light of scientific advice concerning survivability – presently not available. To this end, STECF notes in its review of available information on survival of discarded fish in the Baltic Sea that the results are highly variable between studies as well as within individual studies. The review concludes that at present it is not possible to provide a reliable list specifying the survival rate of discards by species and by fishing gear (STECF Plenary Report, July

A short description of the fisheries and stock situation for the species concerned in relation to the discard plan is presented in Annex 1 of the document. For more detailed information on the status of particular fisheries and the biological situation for the stocks, BALTFISH refers to the annual advice provided by ICES and STECF.

Table 1: Elements of the discard plan - Species to be included in the discard plan as of 1 January 2015 and at a later stage as appropriate

Species defining the fisheries	ICES areas and notes	Date of inclusion in the plan
Herring HER Clupea harengus	ICES Subdivision 22-24 ICES Subdivision 25-27, 28.2, 29 and 32 ICES Subdivision 28.1 ICES Subdivision 30-31	1 January 2015
Sprat SPR Sprattus sprattus	ICES Subdivision 22-32	1 January 2015
Salmon SAL Salmo salar	ICES Subdivision 22-31 ICES Subdivision 32	1 January 2015
Cod COD Gadus morhua	ICES Subdivision 22-24 ICES Subdivision 25-32 BALTFISH recommends that the discard plan will cover cod from 1 January 2015 as cod is a targeted species which define a fishery.	1 January 2015
Plaice PLE Pleuronectes platessa	ICES Subdivision 22-32 BALTFISH agrees that the choke species challenges with regard to plaice should be further addressed before 1 January 2017.	1 January [2017]
Sea trout TRS Salmo trutta	ICES Subdivision 22-32 BALTFISH recognizes that inclusion of sea trout is optional. However it is determined to include sea trout in the discard plan no later than [2017] taking into account that the Article 15(3) in the Basic Regulation 1380/2013 allows	1 January [2017]

	Member States to include non-mandatory species in the landing obligation in addition to the ones listed in Article 15 (1).	
--	----------------------------------------------------------------------------------------------------------------------------	--

2. Exemptions for certain types of fisheries

It should be possible to exempt fish caught by certain passive gears from the discard plan when taking into account the characteristics of the gear, fishing practices, impact on ecosystems and scientific evidence of survivability of the discarded fish. Exemptions should be substantiated in terms of scientific evidence in order to qualify for an exemption.

BALTFISH finds that the fisheries listed in Table 2 can qualify for exemptions based on the description given and further supported by information provided in Annex 2 and 3 of the document.

In general, at the time of preparation of the discard plan there is limited data available on fish survival in different fisheries. The above proposed exemptions are based on the best available knowledge at this stage, and BALTFISH would therefore like to emphasize that the suggested derogations are to be viewed as exemptions to be used during a transitional period in accordance with Article 15(6) of the Basic Regulation until solid scientific data is available. When further scientific evidence is provided, changes (e.g. including or excluding species/gears) can be made to the proposed exemption measures below. In addition, further work is needed on less harmful gears and handling of fish for its survivability that may have implications for the possibilities to exempt further species and gears in the future.

Justification for exemption for salmon fishery

Data for salmon trap-net fisheries are mainly available from Sweden and Finland. The direct mortality in the fishery with modern type combination traps has been shown to be negligible in several studies. It has further been shown that mortality after release is low to moderate (from 7.5 % to 11 %) and the spawning migration of salmon released from combination traps is not significantly affected. The direct mortality in large fyke nets has also been shown to be negligible but the mortality after release and other effects from catch and release in these gears have not been investigated. In the few studies available on push-up traps (trap-nets), there was little or no mortality associated during the actual catch and emptying process, but some injuries are common. It is likely that the initial part of the catch process, i.e. the entrapment, induces only limited stress for the fish and the higher stress and the physical damage in these surveys are probably arisen mostly during the emptying and release phase. Given the available data BALTFISH would recommend to introduce exemptions for trap-nets (FPO), creels/pots (FPO), fyke-nets (FYK) and pound nets (FPN) in salmon fisheries.

Justification for exemption for sea trout fishery

BALTFISH has contemplated to include sea trout in the landing obligation as of 1 January 2015, but due to lack of sufficient documentation on survivability across the Member States the inclusion is feasible only for [2017]. In the meantime, it is anticipated that exemptions similar to the ones to be applied for salmon will be suggested for sea trout, too. Therefore, Member States are encouraged to

collect before 2016 as much information as possible to justify possible exemptions for sea trout.

Data for sea trout trap-net fisheries are mainly available from Sweden and Finland. The direct mortality in the fishery with modern type combination traps for salmon has been shown to be negligible in several studies (see the text above on exemption for trap-nets when fishing for salmon). Given the available data on salmon and based on the assumption that sea trout exhibit the same survival rates as salmon when released from trap-nets (see the text above on exemption for trap-nets when fishing for salmon) BALTFISH would suggest to introduce exemptions for Trap-nets (FPO), creels/pots (FPO), fyke-nets (FYK) and pound nets (FPN) in sea trout fisheries. Exemptions of any additional gear should be matter of further studies prior to [2017].

Justification for exemption for the cod pot fishery

Data for pot fisheries are available from Sweden. There are no scientific studies made on the survivability of cod in pots and traps including both the catch and release phase. However, there is information that survivability is high in the pots during the catch phase and for a long period of time soaked in the pots after actual entrapment date. The information suggests that all caught cod in pots are in good shape. Given the available data BALTFISH recommends to introduce exemptions for creels/pots (FPO) in cod fisheries.

With a view to obtaining more solid scientific evidence on survival of cod caught in stationary gears, the Danish Research Institute, DTU Aqua, is in the process of seeking funding for research project in this field.

Table 2: Elements of the discard plan - exemptions for certain fisheries

Species	Gear type
Salmon SAL Salmo salar	Trap-nets (FPO), creels/pots (FPO), fyke-nets (FYK), pound nets (FPN) <u>Subdivision 22-31 and Subdivision 32</u>
Sea trout TRS Salmo trutta	Trap-nets (FPO), creels/pots (FPO), fyke-nets (FYK), pound nets (FPN) <u>[will only apply from 1 January 2017]</u> <u>Subdivision 22-32</u>
Cod COD Gadus morhua	Creels/pots(FPO) <u>Subdivision 22-24 and Subdivision 25-32</u>

3. De minimis rule

The point of departure for dealing with the concept of de minimis is that this provision as a general rule should be used only as a last resort when other possibilities (e.g. quota swaps, year-to-year flexibility, inter-species flexibility) are exhausted or cannot be applied.

Article 15(5c) of the Basic Regulation provides for a de minimis exemption of up to 5% of total annual catches subject to the discard ban in situations where selectivity is difficult to increase or where disproportionate costs of handling of unwanted catches is inevitable.

In the Baltic sea, seal-damaged fish is a well-known problem, and counting seal-damaged fish against the quotas would pose problems for several fisheries. In addition, it seems that the problem has significantly increased in recent years. Therefore, it cannot fall under "force majeure" and in this context it should be an option not to include seal damaged fish in the discard ban at all and instead regard such fish as natural seal depredation falling outside the scope of a discard ban. It could be considered to include in the Omnibus Regulation the stipulation that seal damaged fish is to be counted under natural fishing mortality. However, catches of seal damaged fish should be recorded with a view to obtaining data to estimate the scope of the problem in the Baltic Sea and for stock assessment purposes. In addition, some seal damaged fish could be contaminated/contain parasites and should therefore be kept separately in the catch which is very difficult in small scale coastal fisheries.

Initially, BALTFISH had a working suggestion recommending that a general de minimis rule for seal damaged fish in the amount of 5 % could be applied to allow discard of seal-damaged fish on the condition that all such catches should still be fully recorded. Reports indicate that salmon and cod in particular are affected by seal damages. The extent of seal damage in the cod fishery is unknown although it is reported as significant in the gillnet fisheries in certain areas. However, catches of flatfish (flounder, plaice and turbot) is also increasingly been affected.

There is a need for evaluating – and possibly quantifying – scientifically the amount of seal damage in different fisheries. In addition, other issues need to be further explored, in particular to what extent the rules in Regulation (EC) No 1069/2009¹ on animal by-products might be applicable and the implications of these rules for the different fisheries. Briefly, according to this regulation when catches are on board, fish below minimum landing size should be kept separately as they are meant for non- human consumption and seal damaged fish may be stored with that part of the catches.

Currently, BALTFISH recommends not applying the de minimis rule for seal-damaged fish in order to avoid too severe problems for the fishermen within a new fisheries management regime. Such fish should be regarded as natural seal depredation falling outside the scope of a discard plan. Though, BALTFISH will continuously evaluate needs for incorporating the option of use of the de minimis provision for the Baltic Sea fisheries.

Alternatively, if exclusion of seal damaged fish from the scope of the plan is legally not possible BALTFISH recommends that the de minimis rule is to be applied to fish damaged by seal – despite the provision in terms of selectivity cannot be associated with the inability to adjust selectivity in fishing gear which

¹ Regulation (EC) No 1069/2009 of the European Parliament and of the Council of 21 October 2009 laying down health rules as regards animal by-products and derived products not intended for human consumption and repealing Regulation (EC) No 1774/2002 (Animal by-products Regulation).

seals attack regardless of selectivity in the gears used. With respect to disproportionate cost, handling of damaged fish will in general be associated with additional cost in small scale fishery. At this stage it is not possible to estimate extra cost in this respect, but the extra burden is acknowledged.

For the time being no other suggestions to apply de minimis in the Baltic Sea than for seal damaged fish has been brought forward.

Possible elements of the discard plan

As it seems that salmon and cod are the two fisheries most severely affected by seal predation/damage, BALTFISH will in the first place narrow the application of the de minimis provision down to salmon and cod and recommends to apply 5 % de minimis for each of these species. The two fisheries are in many respects different, not least with respect to the establishment of quotas where cod is expressed in weight and salmon in numbers meaning it would be difficult to establish an appropriate sharing of the 5 % de minimis between the two species.

Catches of fish damaged by seals shall not be counted against the quota as long as the 5 % de minimis limit is not exceeded. For salmon and cod the de minimis is defined to cover the fisheries in the following subdivisions where each Member State will be allowed to use up to 5 % of its quotas for the two species respectively in:

- In Subdivision 22-31 for salmon
- In Subdivision 32 for salmon
- In Subdivision 22-24 for cod
- In Subdivision 25-32 for cod

Damaged fish caught within the limits of de minimis must be recorded, but not necessarily brought ashore. Salmon and cod damaged by seals shall not be counted against a Member State quota as long as the 5 % de minimis limit is not exceeded for the two species respectively.

The application of the de minimis provision will be continuously followed and evaluated with a view to adjusting or expanding the use of this provision, if need be.

BALTFISH agrees that the calculations methods for the use of de minimis rule for cod (conversion of numbers into weight) should be further addressed.

4. Provisions on documentation and monitoring

According to article 15(13) of the Basic Regulation Member States shall ensure detailed and accurate documentation of all fishing trips and to allocate adequate capacity and means for control.

BALTFISH has agreed that the obligation to land all catches shall be controlled by the use of the existing – and where justified – new control instruments, and that further work is needed to elaborate or adjust the current documentation and control scheme for the Baltic Sea fisheries. BALTFISH have further agreed that means for documentation and reporting shall be simple, transparent, and cost-effective and opportunities to reduce administrative burdens shall be

utilized as far as possible. A level playing field in the Baltic Sea shall be maintained and control measures shall be tailored on the basis of risk management. Due to time constraints and the uncertainties regarding the general framework set through applicable EU Regulations, further dedicated work on control and documentation is foreseen by BALTFISH.

The advantage of documentation, control and enforcement measures shall be based on the best available knowledge and be developed in cooperation with the industry and other stakeholders, in particular the BS AC. This will ensure a high degree of understanding, involvement and responsibility by all parties and is of utmost importance for a successful implementation of the landing obligation. In this context possibilities for the introduction of measures for a bottom-up approach shall be reviewed in particular.

To make the best use of on-going work among the Baltic Sea Member States, BALTFISH have concluded that in particular a comprehensive risk analysis for the Baltic Sea fisheries should be elaborated taking into account the new provisions of the CFP and possible new fishing patterns and/or behaviour of the fishers. This could be done in close cooperation with the European Fisheries Control Agency, EFCA. Further work is also needed in order to analyse how the fisheries may/will evolve during the new requirement to land all catches and to evaluate how the catch documentation and control should be designed in order to meet the new requirements of the landing obligation. This work will proceed in BALTFISH in parallel with the general introduction of the landing obligation.

5. Minimum conservation reference size (MCRS) for cod [and salmon]

The discard rate of cod in the Baltic Sea is estimated by ICES to be in the order of 10% by weight in later years with a small increase in 2012 in the eastern Baltic. By far the majority of the discarded cod are below minimum landing size. The survival of discarded cod is very low and in the assessment all discarded cod are assumed dead except in pot fishery.

STECF concludes that it is likely that a reduction of the minimum landing size will have a positive impact on the economic performance of the fisheries while at the same time not cause an increased mortality for cod (STECF Plenary Report, July 2013). Furthermore, it was concluded at the LOT1 technical meeting that based on information on catch compositions with respect to size of the cod caught, at present the most efficient and speedy way to minimize discard of cod would be to lower the current minimum landing size from 38 cm to 35 cm.

A BALTFISH common position on the minimum landing size, MLS, was agreed in October 2013 in relation to BALTFISH common proposal on TAC and quota in the Baltic Sea for 2014:

“As a part of the regime and technical measures for implementation of a discard ban in the Baltic Sea, Member States of BALTFISH agree to an urgent need for inclusion of respective proposal in the relevant EU Regulation to introduce the minimum conservation reference size (MCRS) and set this for cod in the Baltic Sea as soon as possible at 35 cm in order

to optimize the utilization of unavoidable landings of cod that were previously discarded. The introduction of MCRS will be supplemented with further work in BALTFISH on identifying possible ways towards a more selective fishery in order to further minimize catches of small size cod in the Baltic Sea. Such selective measures shall be based on sound scientific advice and – if deemed appropriate - introduced at the same time as the introduction of the discard ban.”

As a follow up to the joint statement concerning salmon from the BALTFISH Common Proposal on TAC and Quota in the Baltic Sea for 2014 and in the October 2013 Council (Doc. 15739/13 + ADD 1) BALTFISH has in the light of the declaration below contemplated to include additional provisions also for the salmon fisheries:

"Member States concerned will consider possibilities for targeted fisheries management measures covering sea and inland waters and control efforts that support the recovery of weak salmon stocks. Member States concerned will consider such measures when preparing for the adoption of the 2015 salmon TAC for the Main Basin and Gulf of Bothnia.”.

BALTFISH is aware that only minimum conservation reference size for salmon can be changed in a delegated act whilst other technical measures fall outside the scope of a specific discard plan (Article 15.6 of the Basic Regulation).

[Within this context and in accordance with the above statement BALTFISH considers that a list of measures for more selective fishery to reduce catches of undersized salmon and to support the recovery of weak salmon stocks should be promptly considered by BALTFISH and further assessed scientifically (ICES/STECF), including inter alia:

- **A reduction of the salmon long line fishing season with the aim of reducing catch of undersized salmon.**
- **A possible reduction of the MCRS for salmon, as STECF has noted that a reduction of the MCRS would be an efficient way of reducing unwanted catches (current MLS for salmon is 60 cm in subdivision 22- 30 and 32 and 50 cm in subdivision 31.)**
- **Setting of a minimum distance between the point and the shaft of the hooks of at least 19 mm on the drifting lines and anchored lines when fishing for salmon and sea trout.**
- **Other possible management measures in targeted salmon and sea trout fisheries.]**

Elements of the discard plan

BALTFISH recommends that a minimum conservation reference size in the order of 35 cm should be established for cod in the discard plan. In this respect BALTFISH urges for a prompt solution of the cod size reduction prior to 1 January 2015 – if appropriate alternatively in the Omnibus regulation.

[There is a need for more scientific evidence for a possible change and introduction of a common minimum conservation reference size for salmon in ICES Subdivisions 22-32.]

SECTION III

Additional background information in correlation to the discard plan

The following chapters cover provisions and information which fall outside the scope of the discard plan provisions to be implemented through a delegated act and therefore primarily serves as background information explaining additional measures included in the CFP as well as reflections which could encourage providing additional information for further management initiatives in a regionalized context.

6. Year-to-year flexibility and inter-species flexibility

Member States should be able to apply the inter-species flexibility (9%) and the year-to-year flexibility (10%) according to Article 15(8) and 15(9) of the Basic Regulation as a supplement to voluntary quota swaps between Member States in order to accommodate possible landing obligation and choke species problems. Further measures to alleviate specific choke species problems can be discussed as part of the evaluation process (see Point 11 of the document) based on solid documentation of the fishery.

Inter-species flexibility must be administered as part of the national quota management. **[BALTFISH intends to develop guidelines for the practical application of this provision to ensure a level playing field for all operators fishing in the Baltic Sea]**. In order to assess the functioning of the inter-species flexibility mechanism, this provision should be subject to evaluation after one year to allow for possible amendments if deemed necessary.

A STECF working group is dealing with the implementation of the discard plan (inter alia the inter-species flexibility rules). Conclusions from this work should be taken into consideration when evaluating the function of the flexibility mechanism by BALTFISH.

7. Gear selectivity

Improved selectivity of fishing gears is a primary and important tool to avoid discards and unwanted catches. Member States underline their continued focus on identifying ways towards a more selective fishery in the Baltic Sea Region.

In this regard, the EU Commission on 4 September 2013 organized a technical meeting to present findings in terms of technical solutions to minimize discards

in the Baltic cod fisheries based on the project LOT1². The meeting did not result in conclusive recommendations on measures. For gears currently in use, it was concluded that further technical development and tests with new gear is essential for achieving better selectivity in the cod fisheries. In addition, the introduction of the discard plan in itself is seen as a driving force for developing more selective gears. In light of the LOT1 workshop and recalling Article 14 of the Basic Regulation (concerning pilot projects), BALTFISH will continue to discuss how solutions and work on selective gears should be enhanced in the Baltic Sea, and thus undertake work on identifying possible ways towards a more selective fishery in order to further minimize catches of small size fish in the Baltic Sea whilst at the same time securing an economically viable fishery.

While a continued focus on development of more selective gears shall be maintained, it could also be further discussed how a business from previously discarded fish is advanced, e.g. by supporting research into the use of landings of all caught fish or on other appropriate measures.

8. Fishing effort

STECF (2012) has concluded that current measures in place in the Baltic Sea appears to be sufficient to control total outtake and fishing mortality in the Baltic Sea, thus not requiring simultaneous limitation of effort.

On this basis BALTFISH agrees that the days at sea scheme should be abolished as soon as possible. The preferred solution would be removing this obstacle in the discard plan, but as it falls outside the scope for a delegated act, BALTFISH would encourage the proposed amendment to be reflected in the proposal of the Omnibus regulation or in another relevant legislative act as soon as possible.

9. Fixing of fishing opportunities

When all catches subject to the landing obligation are landed and counted against quotas, the TAC-levels should in line with Article 16(2) of the Basic Regulation be adjusted based on scientific advice from ICES, who provides catch advice on all commercial fish stocks, including assessment and evaluation of catches of possible choke species. The catch advice will take into consideration that discarding of certain fish stocks will no longer be allowed. The fixing of the TAC-levels shall be in line with the objectives of the CFP where the maximum sustainable yield **exploitation rate**, MSY, should be achieved by 2015 where possible and for all outstanding regulated stocks, on a progressive, incremental basis at the latest by 2020.

In case of choke species problems which cannot be accommodated by the available instruments of the landing obligation or year to year flexibility or inter species flexibility further measures to alleviate such problems in fishing

² Lot1 - Collaboration between the scientific community and the fishing sector to minimize discards in Baltic cod fisheries MARE/2010/11".

opportunities could be considered as part of the evaluation process (see Point 11 of the document).

10. Technical measures

A number of technical measures currently in place will be conflicting or create obstacles for complying with the provisions established for the implementation of a discard plan. BALTFISH appreciates the effort made by the Commission by submitting the Omnibus regulation proposal to remove the most obvious technical obstacles allowing for a smooth implementation of the discard plan.

However, there is a need for a more comprehensive regulation on technical measures. BALTFISH welcomes the Commission's initiative for having published its initiative to call for a public hearing on a new technical measures framework in the context of the new CFP. BALTFISH is looking forward to receiving a Commission's proposal as soon as possible as new measures will allow for further simplifications and a smoother implementation of discard plan.

11. Evaluation of the discard plan

The discard plan constitutes a new regime in European fisheries management. In terms of fishing practices the introduction of the landing obligation constitutes an incremental process which most likely will demonstrate needs for adjustments within a relatively short period of time.

Consequently, it seems appropriate to evaluate the functioning of the discard plan after one or no later than two years depending on the urgency for amendments and adjustment of the plan in place. Elements to be evaluated could include the following:

- 1) Species and gear specific exemptions
- 2) Effects of relevant measures concerning salmon and sea trout
- 3) Functioning of the de minimis rule for seal damaged fish
- 4) Assessment and evaluation of catches of possible choke species
- 5) Effect of the reduction of minimum conservation reference size for cod
- 6) Possible development of more selective fishing gears
- 7) Progress on control options and assessment of compliance with the discard plan
- 8) Impact of the discard ban on fishing behavior as well as the economic costs/benefits for the fishermen.

BALTFISH agrees that it is important that as much information as possible is collected concerning the different elements allowing for swift responses and adjustments to ensure appropriate implementation of the measures.

Annex 1. Stocks and fisheries in the Baltic Sea

Sprat

ICES sub division 22- 32

Sprat is short lived clupeoid species with large inter-annual fluctuation in biomass, mainly driven by recruitment variability and strongly influenced by the observed levels of fishing effort. Sprat in the Baltic Sea is longer lived species compared to the North Sea sprat stock. Most of the Baltic sprat catch is taken by pelagic trawlers using small-meshed nets. Discards from this fishery are negligible. In general, sprat is widely used for fish meal and fish oil production with a smaller proportion used for human consumption. However, the part used for the human consumption is much higher in the Baltic Sea compared to other areas. Main fishing nations are Poland, Sweden and Denmark, also Latvia and Estonia.

Herring

ICES provides advice for several separate management areas for herring in the Baltic Sea.

ICES Subdivision 22-24:

In the western part of the Baltic Sea herring fishery is mainly a targeted fishery by purse seiners, trawlers, and gillnetters for human consumption and as by catch in small mesh fisheries for sprat when fishing for industrial purposes. Discards are negligible. The stock consists of many local spawning populations. There is a risk that the adult stock size is too small to produce a sufficient amount of offspring to maintain the stock and therefore fishing pressure is still above optimal MSY for 2014. The main fishing nations are Sweden, Denmark and Germany.

ICES Subdivision 25-27, 28.2, 29 and 32

In the central part of the Baltic Sea the pelagic herring fishery is mixed with sprat fishery and discards are negligible. The adult stock size is large enough and fishing pressure is low enough to ensure an optimal use in the long term. Last ICES advice was 40 % TAC increase. Main fishing nations are Sweden, Poland and Finland, also Estonia.

ICES Subdivision 30-31

In the Bothnian Sea herring is mainly a targeted trawl fishery, but small trap nets and gillnet fisheries also occur. The adult stock is large enough and fishing pressure low enough to ensure optimal use in the long term. Main fishing nations are Finland and Sweden.

ICES Subdivision 28.1 – Gulf of Riga

The stock in this area is small but productive – perhaps due to the absence of predators such as cod. Herring is the dominant species in this area. There is some mixing between this and the central Baltic Sea herring stock. Trawls and trapnets are used in this area and all a catches area for human consumption. Discard is negligible and fishing pressure is low enough to ensure good production. Main fishing nations are Estonia and Latvia.

Cod

A cod management plan is in place for the cod stocks in the Baltic Sea and covers both the western and the eastern stock.

ICES Subdivision 22-24

Cod in the western part of the Baltic Sea is mainly caught in trawls and gillnets, usually in mixed demersal fishery with a by catch of flatfish (plaice, dab, flounder, and turbot). There are few discards in these fisheries. An important part of the total catch is taken in recreational fisheries. The recruitment in the western part of the Baltic Sea has been decreasing over the past 3 years and fishing mortality is decreasing slightly, but still

above the value stipulated in the management plan. The MSY level is set at 0.26 and the current mortality is 0.7. Adult stock size is large enough to ensure an optimal use in the long term, but fishing pressure is above optimal and higher than aimed by fisheries managers. The main fishing nations are Denmark and Germany.

ICES Subdivision 25-32

Cod in the eastern part of the Baltic Sea is mainly caught by trawls and gillnets. There is little unwanted by catch which is discarded. Adult stock size is large enough and fishing pressure is low enough to ensure an optimal use in the long term. However, the fishing pressure is higher than aimed at by fisheries managers. The eastern stock of the Baltic Sea is increasing and fishing mortality is a little above 0.30 almost corresponds to the one set in the management plan. MSY is set at 0.46. The TAC increased in 2014 by 2 % compared to 2013. The main fishing nations are Denmark, Poland and Sweden.

Salmon

ICES Subdivision 22-31

Baltic Sea and the Gulf of Bothnia. The most productive Baltic salmon rivers are in the Gulf of Bothnia. With some exemptions, the rivers in the northern Baltic Sea are more likely to have higher production of offspring (smolt) than the southern rivers, where wild salmon stocks are in poor condition. The species is important to commercial and recreational fisheries. Salmon is harvested by offshore fisheries with longlines, in coastal fisheries using nets, and in rivers with recreational gears. Main fishing nations are Sweden, Finland, Denmark and Poland. In previous years management of the stock has been under harsh criticism in terms of misreporting and insufficient control. It seems these shortcomings are already being addressed.

ICES Subdivision 32

In the Gulf of Finland there are some wild river stocks, but the vast majority of salmon in the area is released from hatcheries. The production of smolt is variable for wild, mixed and hatchery stocks in this area. The species is important to commercial and recreational fishery. Salmon is harvested by coastal fisheries using trap nets and in rivers with recreational gears. Main fishing nations are Finland and Estonia.

Sea trout

ICES Subdivision 22-32

The sea trout fishery is important to both the commercial and the recreational fisheries. Most stocks are targeted in the coastal zones and in rivers. Sea trout is also taken as a by catch in salmon, whitefish, pikeperch and perch fisheries. Many Baltic Sea sea trout stocks are supported by hatcheries and the status of the wild stocks is variable with many depleted. The main fishing nations are Poland, Finland and Sweden.

Plaice

ICES Subdivision 22-32

The advice given for plaice in the western part of the Baltic Sea is combined with the advice for Kattegat. In the western part of the Baltic Sea plaice is mainly caught in trawl and gillnets fisheries. A substantial discard occurs, mostly during the closed seasons. The adult stock size is unknown, but probably increasing. Fishing pressure has decreased and is now probably low enough to ensure an optimal use in the long term. With respect to the western part of the Baltic Sea plaice is caught throughout the year mainly by trawlers with greater catches in winter and spring. Discard is substantial. The adult stock is unknown, but probably increasing. There is no information on the fishing pressure. Main fishing nations are Denmark and Germany.

Additional information on fisheries and status of the stocks is available in annual report from ICES: www.ices@dk

Annex 2. Justification for exemption in the salmon fishery

Fisheries and discards

Data on survivability in salmon fisheries are mainly available from Sweden and Finland. These data are obtained from salmon catches taken primarily in trap-nets (push-up) by the commercial fishery in the Gulf of Bothnia, Archipelago Sea and Gulf of Finland. The proportion of the catch in trap-nets has gradually increased and in 2012 around 45 % of the total nominal catches in the Baltic Sea were in trap-nets. This trap-net share has increased since 2013 when Finland and Sweden prohibited their salmon longline fisheries.

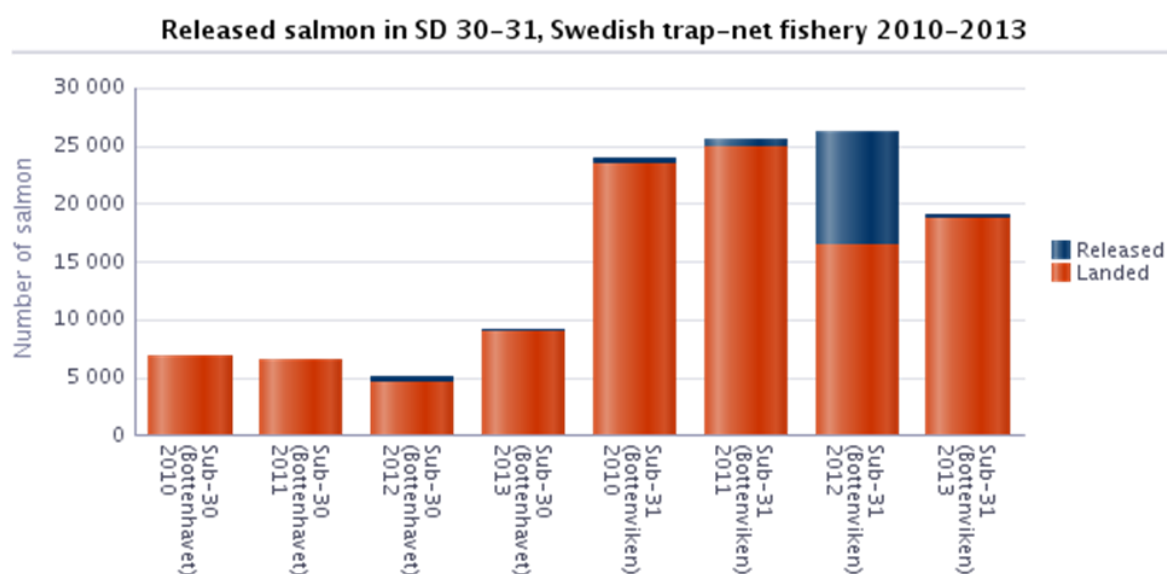
The trapnet fishery targeting salmon in Sweden and Finland takes place during the summer months when adult salmon are on their spawning migration. Young salmon are not present in the waters and are therefore not caught with trap-nets. The salmon that are caught are mainly mature individuals of large size, and above the Minimum Landing Size of 60 cm in Subdivision 22-30 and 32. In Subdivision 31 the MLS is 50 cm which allow for utilisation of smaller sized male salmon (grilse) with low value in the reproduction. Therefore discards from these waters due to the MLS are small.

Trapnets are emptied every day or in case of poor weather as soon as conditions allow. The modern trapnets (push-up and combination traps) are designed not to mesh the fish and to keep seals out as far as possible. Fish are always underwater until the trap-net is emptied and they are hence designed for maintaining fish alive and in good condition.

As fishing for other species after salmon quota exhausting continues using the same gear types, this resulted in a by catch of salmon (in 2012 app. 40% of total salmon catch; see fig. 1).

Figure 1: Landings and discard (number of salmon in 2010-2013) in ICES Subdivisions 30 and 31 based on logbook data for coastal trapnet fishery in Sweden.

(Note: The majority of discard in 2012 was due to continued fishing for other species after the national quota of salmon was exhausted.)



In Finland the national quota was also exhausted in 2012, but very late in the fishing season on 3.8.2012. Therefore most of the fishermen ended their fishing activity and withdrew their trap-nets from the water. Hence there were no significant discards of salmon in Finland after the closure either in 2012 or 2013. In 2012 the total amount of discarded salmon in the Finnish fisheries amounted to 22 tons of which 21 tons were due to seal damage. Before 2012 salmon fisheries in Finland have not been closed (with the exception of closures in the mid 1990´s) as the quota has not been exhausted and discards due to a closure have thereby not taken place.

Survivability in coastal trap net fishery

In 2013 75 % of the Swedish salmon landings were from push-up traps, 20 % from combination traps and 5 % from other types of traps and fyke nets. In Finland the numbers for 2012 were similar and 43 % of the salmon landings came from push-up traps, 28 % from combination traps and 29 % from other types of traps and fyke nets. Salmon traps, combination traps, whitefish traps and large fyke nets are of older design and exist today essentially in the Baltic Sea only.

These older type of gears were in the 1980´s increasingly exposed to seal damage with large visible and invisible catch losses (Fjälling, 2005). A more "seal resistant" fixed gear, the push-up trap, was therefore developed in Sweden in the early 2000 (Lunneryd et al. 2003). This gear is now the most frequently used when fishing for salmon, sea trout and whitefish along the Swedish Baltic Sea coast (Hemmingsson et al., 2008; Hemmingsson and Lunneryd, 2007). Also in Finland the gear stands for the largest share of the salmon catch.

A specific technical solution on the push-up trap is that the fish house with the trapped catch inside is lifted above the water surface before emptying the gear. This is done by means of a compressor which fills the submerged pontoons with air. The catch is during the process lying on a hard surface until the fishing vessel is in position to empty the gear. The procedure takes around one to a few minutes, but may induce physiological stress for the fish. In the few studies performed on push-up traps, there was little or no mortality associated during the actual emptying process, but injuries (bleeding, scale loss and eye injuries) are common (Blomqvist et al., 2013; Hasselborg and Karlsson, 2002; Ikonen and Pakarinen, 2006; Jonsson et al., 2008). It is likely that the initial part of the catch process, i.e. the entrapment, induces only limited stress for the fish. The higher stress and the physical damage in these surveys are probably arisen mostly during the emptying and release phase.

One study on salmon traps by Hasselborg and Karlsson (2002) has observed 14 % direct mortality of salmon in old type gear. Modern type combination traps are designed so that the catch becomes trapped, but has relatively plenty of space and can move freely. The direct mortality was shown to be negligible in several studies (Hasselborg and Karlsson, 2002; Siira et al., 2006). Siira et al. (2006) further showed that mortality also after release was low to moderate (7.5 % -11 %) and the spawning migration of salmon released from combination traps was not significantly affected. The direct mortality in large fyke nets has also been shown to be negligible (Hasselborg and Karlsson, 2002; Ikonen and Pakarinen, 2006). Mortality after release and other effects from catch and release in these gears have not been investigated.

Scientific data on survival rates of released salmon from Swedish push-up traps is limited but the direct mortality has been estimated in one study by Blomqvist et al. (2013) to be around 10 %. It cannot, however, be ruled out that salmon migration tendency and reproductive ability in the long term is adversely affected (Blomqvist et al., 2013). However, there are opportunities for the development of a better selective and less harmful push-up trap to prevent catching and negative impact on wild salmon. Sweden has therefore initiated a scientific research project to modify the existing push-up trap in the Swedish salmon fishery in order to increase the survivability of released

salmon. The project contains two work packages (WP) which will be finished in 2014. The first WP will test a new selection device or grid which will be installed in the fish house inside the push-up trap. The device will allow large adult fish (mainly migratory spawning salmon and sea trout) to pass straight through the gear without being trapped. In the second WP soft surface material will be fitted on all sharp and hard surfaces in the fish house which the fish come into contact with when trapped inside the gear. The WP will also develop a relief plane/table which will release the pressure on the gear and fish when the catch is large. The aim is to be able to implement the project results as soon as possible and preferably for the fishing season 2015 when the landing obligation is applicable.

Description on exemption

For salmon, it is important to have the possibility for exemptions to the landing obligation in the coastal trapnet fishery. Releasing salmon caught in trapnets is an important management option when it comes to protecting weak wild salmon populations. The same gears are used also for catching other species along the coast, and an exemption to the landing obligation of salmon after the salmon national quota has been exhausted (i.e. avoiding incidental catch) is therefore important. There has further been an increase in the proportion of wild salmon in catches, relative to reared salmon, which reflects the increased wild smolt production. Therefore a selective fishery of finclipped (=stocked) salmon requires the possibility to release from trap-nets wild salmon with an intact adipose fin. This management measure is an important element in the further development of sustainability in the salmon fishery.

The fishery for exemptions is defined as follows:

- Gears used: Trap nets (FPO), creels/pots (FPO), fyke-nets (FYK) and pound nets (FPN)
- Vessel lengths: All
- Main species targeted: salmon

References used for justification:

- Blomqvist, C., Fjälling, A., Lunneryd, S.-G., 2013. Factors influencing catch/landing mediated injuries to fish in pontoon set traps for salmonids (Manuscript). 12pp.
- Fjälling, A., 2005. The estimation of hidden seal-inflicted losses in the Baltic Sea set-trap salmon fisheries. ICES Journal of Marine Science 62, 1630-1635.
- Hasselborg, T., Karlsson, L., 2002. Studier av skador på lax och öring fångad med fasta redskap vid Norrlandskusten 2000-2002. Rapport till Fiskeriverket. Fiskeriverket, p. 13. In Swedish.
- Hemmingsson, M., Fjälling, A., Lunneryd, S.-G., 2008. The pontoon trap: Description and function of a seal-safe trap-net. Fisheries Research 93, 357–359.
- Hemmingsson, M., Lunneryd, S.-G., 2007. Pushup-fällor i Sverige. Introduktionen av ett nytt sälsäkert fiskeredskap. Finfo. Fiskeriverket informerar 8. In Swedish.
- Ikonen, E., Pakarinen, T., 2006. Finsk rapport på skador på fisk i push upp fällor sommaren 2006 i Bottenviken. RKTL, p. 3. Unpublished. In Swedish.
- Jonsson, S., Johansson, T., Brännström, G., 2008. Observation och dokumentation av skador på lax fångad i Push- Upfälla i Byskeälvens fredningsområde 20080531-20080611. Opublicerad rapport. 15pp. In Swedish.
- Lunneryd, S.G., Fjälling, A., Westerberg, H., 2003. A large-mesh salmon trap: a way of mitigating seal impact on a coastal fishery. ICES Journal of Marine Science: Journal du Conseil 60, 1194-1199.

BALTFISH Forum,
Draft paper of 22 April 2014

Siira, A., Suuronen, P., Ikonen, E., Erkinaro, J., 2006. Survival of Atlantic salmon captured in and released from a commercial trap-net: Potential for selective harvesting of stocked salmon. *Fisheries Research* 80, 280-294.

Annex 3 - Justification for exemptions in cod fishery

Fisheries and discards

The management of the fishery for cod (*Gadus morhua*) in the Baltic Sea is split into two management areas, the cod fishery in Subdivisions 25–32 (eastern Baltic Sea) and the cod fishery in 22-24 (western Baltic Sea). Cod in these two areas is taken primarily by trawlers and gillnetters. Vessels using passive gears accounted for 63% of the total number of days at sea in the Baltic Sea 2012 and over three quarters of the total days were recorded by vessels under 10 m. The total cod catch in the eastern Baltic Sea in 2012 was 57 800 tonnes, where 88 % are landings and the rest discarded and around 16 % of the total landings where by passive vessels (mainly gillnetters and long liners). In the western Baltic Sea, the total catch (trawl and gillnet) in 2012 was 20 100 tonnes. The passive gear fishery (mainly gillnetters) accounted for 35 % of this catch.

Survivability in coastal pot fishery

Data on survivability in cod fishery is only available from Swedish coastal fishery. The pot fishery in Sweden is performed by only a few small vessels (around 5 vessels). The proportion of cod in pots fishery in comparison to total Swedish landings of cod is on average (2008-2013) 0.06% per year. The pots used in the Swedish fishery are highly selective. A selection panel with 45 mm mesh size is used which means that main part of cod caught is over 38 cm. The fish is mostly alive when the pots are collected and emptied. There are no scientific studies made on the survivability of cod in pots and traps including both the catch and release phase. However, there is information that survivability is high in the pots during the catch phase and for a long period of time soaked in the pots after catch (Table 2). The information suggests that all caught cod was in good shape unless two occasions. To fully understand cod survivability in pot fishing and on a longer time scale including the release phase, there is a need for further studies.

Table 2. Cod survivability (2009-2011) in pots during occasions when the string of pots has been deployed for a longer period of time.

Soak time (days)	Number pots	No cod in catch	Dead fish
21	51	623	
22	41	347	
23	35	238	
24	32	236	
27	3	104	
28	24	231	*
30	14	55	
32	16	53	
33	8	193	
34	16	103	
35	16	76	
36	16	93	
41	16	96	
43	16	52	
46	8	107	
47	8	56	

*Dead cod in two pots, one with a by-caught grey seal.

Description of exemption

For cod, it is important to have the possibility for exemption from the landing obligation in the small scale coastal pot fishery, where cod often is not the main

target species. There is a high probability to release alive undersized individuals or also cod of MCRS in closed season period or in conditions where cod allocation is exhausted by individual quota holders.

The fishery for exemptions is defined as follows:

- Gears used: creels/pots (FPO)
- Vessel lengths: All
- Main species targeted: Cod

Annex 4 - Justification for exemption in sea trout fishery

Fisheries and discards

Data for survivability in sea trout fisheries are mainly available from Sweden and Finland. Of the Finnish commercial sea trout catch approx. 50 % is taken with trap-nets, mainly with push-ups or modern type combination traps along the coasts. Corresponding figures for the Swedish sea-trout fisheries in Subdivision 30 and 31 in 2012-2013 were 94 % from push-up traps and combination traps with a mean level of catch of 6 tons per year.

Sea trout are mainly taken as a by-catch in the salmon and other coastal fisheries. The trapnet fishery targeting salmon in Sweden and Finland takes place during the summer months when adult salmon are on their spawning migration.

In 2012 the total amount of discarded sea trout in the Finnish fisheries amounted to 4 tons of which 3.5 tons were due to seal damage. The rest were either due to undersized sea trout or other reasons

Survivability in coastal trap net fishery

In 2012 and 2013 86 % of the Swedish sea trout landings were from push-up traps, 8 % from combination traps and 6 % from other types of traps and fyke nets. In Finland the numbers for 2012 were 48 % of the sea trout landings came from push-up traps, 39 % from combination traps and 12 % from other types of traps and fyke nets. The design and features of the traps are presented in the text in Annex 2 of the document on salmon as well as the survival rates of released salmon.

It can be assumed that sea trout exhibit the same survival rates as salmon when released from trap-nets (see text in Annex 2 of the document on exemption for trap-nets when fishing for salmon).

Trap-nets are emptied every day or in case of poor weather as soon as conditions allow. The modern trap-nets (push-up and combination traps) are designed not to mesh the fish and to keep seals out as far as possible. Fish are always underwater until the trap-net is emptied and they are hence designed for maintaining fish alive and in good condition.

Description of exemptions

For sea trout, it is important to have the possibility for exemptions to the landing obligation in the coastal trap-net fishery. Releasing sea trout caught in trap-nets is an important management option when it comes to protecting weak wild sea trout populations. Developing a selective fishery of finclipped (=stocked) sea trout requires the possibility to release from trap-nets wild sea trout with an intact adipose fin. This management measure is an important element in the further development of sustainability in the sea trout fishery.

The fishery for exemption is defined as follows:

- Gears used: Trap nets (FPO), creels/pots (FPO), fyke-nets (FYK) and pound nets (FPN)
- Vessel lengths: All
- Main species targeted: sea trout