



DRAFT EFCA RECOMMENDATIONS TO SUPPORT THE IMPLEMENTATION OF THE LANDING OBLIGATION

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DRAFT EFCA RECOMMENDATIONS TO SUPPORT THE IMPLEMENTATION OF THE LANDING OBLIGATION

1. Establishing Context

The reform of the Common Fisheries Policy (CFP) currently going through the adoption phase includes (Article 15) the obligation to land all catches subject to catch limits and the obligation to ensure the availability of a detailed and accurate documentation of all fishing trips. Whilst the detail of the provisions is certainly going to create compliance challenges, for the purposes of this discussion paper the focus will be on monitoring and ensuring compliance with the underlying obligation to land all catches.

In accordance with its role in supporting the implementation of new CFP requirements as referred to in its Multi-Annual Work Programme, EFCA has the ambition of assisting Member States and the European Commission to develop simple and cost efficient methods for monitoring and ensuring compliance with the obligation to land all catches. Awaiting the future specific discard plans, the current CFP already includes some provisions for monitoring the landing obligation.

Distinction should be made between policy and control. Whilst on the one hand, EFCA has no mandate on fisheries policy, it is well within the Agency's mandate to make technical recommendations in the context of assistance to Member States regarding the range of compliance tools which could be employed to help meet the Member States' obligations vis-à-vis both Article 15 of the reformed CFP and existing provisions.

This paper is intended to summarise EFCA vision through a phased approach to facilitate the commencement of work in the enforcement of the landing obligation through:

- Accurate recording of discards: a practical and simple approach regarding measures to implement the control of landing obligation as from 2015, based on the preparation of a toolbox for inspectors indicating where discards are expected in a determined fishery following a regional risk analysis based, inter alia, in fishing gears, area and catch composition. This can be initiated in 2014 by controlling the compliance of the legislation in force requiring the recording of discards in the logbook, compiling and analysing inspection data.
- A general analysis of discards: different causes, possible mitigation measures, risk analysis strategy and enforcement and control measures adapted to each of the cases. It should permit the development of mid-term measures, with recommended steps to permit the implementation of more sophisticated tools to detect non-compliance with the landing obligations, such as the establishment of "reference

fleets”, systems for catch composition analysis and ideas for the use of other tools such as observers and Remote Electronic Monitoring (REM)¹.

- **Contribution to specific discard plans:** Contributing as appropriate to the specific discard plans provided for in the new CFP regulation, with suggested recommendations and measures to be considered when drafting the specific discard plans, in order to facilitate its controllability.

2. Current legal provisions

Article 15 of the new CFP regulation establishes the landing obligation rules and the general principles to its implementation that needs to be developed by the specific discard plans. A detailed analysis of this article is included in Annex I.

Sub-paragraph 4 of Article 14 of Control Regulation (Council Regulation (EC) No. 1224/2009) requires that “*Masters of Community fishing vessels shall also record in their fishing logbook all estimated discards above 50 kg of live-weight equivalent in volume for any species.*”

A detailed analysis of compliance with this requirement, undertaken utilising a detailed regional knowledge of the fisheries - facilitated via discard mapping, observer reports, sampling or other means - can facilitate risk management and enable a better focus on compliance with existing or emergent measures established to monitor and control discarding practices.

3. Overarching objectives

The overarching objectives are:

- a. **To ensure compliance with the requirements for accurate recording of discards.**
- b. **To assist Member States in the development of practical control and monitoring tools for the enforcement of the landing obligation through the detection of discarding practices.**
- c. **To support the development of specific discard plans or multiannual plans with suggested recommendations to facilitate the controllability of the landing obligation.**

4. Operational objectives

EFCA strategy will be organised around three main operational objectives:

- a. **Compliance with requirements for accurate recording of discards**
 - Dedicated project under the EFCA JDPs to:
 - o Identify information needs and risk assessment
 - o Develop a practical toolbox for inspectors

¹ Control tools consisting of CCTV and sensors to the devices for operating the fishing gear (RES)

A more detailed description of the tasks in support of this objective is presented in Annex II.

b. Development of practical control and monitoring tools:

- Description of the different causes for discarding and identification of possible mitigating measures (A first summary table is provided in Annex III).
- Identification and evaluation of control tools available (Annex IV)
- Discard risks and enforcement tools by metier (Annex V)

The regional fisheries dimension would need to be further considered in this respect, both in terms of risk analysis and control and inspection tools available. A complete analysis is needed at a regional level, considering the priorities and the characteristics of the different fisheries. A mid-term strategy to fully implement control tools to detect discarding behaviour is then proposed in Annex VI.

c. Proposed recommendations for specific discard plans.

In order to facilitate the monitoring of the landing obligation, EFCA suggests a set of recommendations for the preparation of the specific discard plans and/or the multiannual plans in order to improve their controllability. These recommendations are particularly addressing issues related to *de minimis*, exemptions, risk analysis and enforcement measures to be adopted in specific cases.

It seems evident that the ERS recording and exchange formats will have to be adapted to permit the proper reporting of discards. One important possible new provision which would greatly aid the monitoring of compliance would be the mandatory issuance of an ERS catch report on completion of each haul.

A set of recommendations is proposed in Annex VII.

5. Other considerations

In addition to the control tools detailed in the Annex IV, there are other considerations which may provide for improved possibilities for compliance with the 'land all catches' obligation:

- *Reverse Burden of Proof:* This is an idea which has been raised in multiple discussions due to its widespread application in terrestrial environmental management. The basic premise is that in order to gain access to a given fishery, the prospective fishermen would need to demonstrate (perhaps by the submission of an 'environmental impact statement') that the impact of the proposed activities were within certain established boundaries. This approach could specify 'approved gears' (i.e. with optimal selectivity characteristics), spatial and temporal restrictions, reporting obligations, landing rules etc. Random or risk-based audit would inform on compliance in this regard.
- *Incentives and disincentives:* A driver in the discussions on discards has been the need to create conditions whereby those fish which have until now been discarded are no longer caught. This can be either at the level of the gear through enhanced selectivity, or by spatial and temporal avoidance. Examples of an incentive are that access to a certain area and / or at certain times will only be granted to those using specific approved gears, or that

those using approved gears benefit from additional quota or effort allocations. An example of a disincentive is to make it compulsory that all reject fish (i.e. that which would normally be discarded) is to be kept aboard and stowed separately. The idea being that this would force fishermen either to adopt more selective gears, avoid the area, or undertake non-compliance. It is of course fully recognised that achieving the right balance in this respect is a significant challenge.

6. EFCA Roadmap

EFCA mandate is to coordinate control and inspection by Member States relating to the control and inspections obligations of the Union. EFCA position is that the coordinated implementation of the landing obligation is necessary to ensure the use of common methodologies and a level playing field for the industry.

EFCA coordination can be incorporated to the current EFCA Regional Joint Deployment Plans for the implementation of regional specific control and inspection programmes established by the Commission in accordance with Article 95 of Regulation (EC) No1224/2009 or international control and inspection programmes². It is also possible that Member States requests to EFCA to coordinate through Operational Plans the control activities in relation to a fishery or area not subject to a specific control and inspection programme³. In this last case, EFCA shall propose in the Operational Plan that all Member States authorise access of the control means of other Member States to their jurisdictional waters, and that Union inspectors are assigned to the implementation of the operational plan.

A range of control tools are available in order to ensure compliance with both existing and emergent CFP obligations. These include new tools, such as Remote Electronic Monitoring (REM), including Closed Circuit Television (CCTV⁴), Electronic Reporting Systems (ERS) and the use of reference fleets⁵ for catch comparison, along with more traditional Monitoring, Control and Surveillance ones such as landing and at-sea inspections.

The actual tools selected and employed in the regional cooperation initiatives will depend largely on the situation in the fisheries. Mapping and risk analysis will greatly facilitate the work in that regard.

EFCA has been contributing to and working with BALTFISH and with the STECF in the past months and will continue to do so. A meeting with the Member States aiming at conveying the new features of the Common Fisheries Policy in the framework of the JDPs is scheduled in January 2014.

EFCA will use this document as a basis for its participation to the previously mentioned fora, and to other fora to which it will participate (technical groups, RAC meetings...).

² Articles 8 and 9 of Regulation (EC) 768/2005

³ Articles 5 and 15 of Regulation (EC) 768/2005

⁴ CCTV consultation mainly based in risk analysis. Online access is to be limited to specific cases.

⁵ Reference fleets to be regionally defined based in fully documented fisheries, or a group of fishing vessels using the same metier.

In order to comply with the requirements of emergent legislation, EFCA considers that there could be merit in following a roadmap as outlined in the next table:

Year	Quarter	Key milestones	Objective a: Ensure accurate reporting of discards	Objective b: Develop practical control and monitoring tools	Objective c: Support development of discard plans
2013	4 th quarter		STECF meeting, Dublin BALTFISH Meeting		
	1 st quarter		January 15-16: EFCA Seminar Dubrovnik		
2014	1 st quarter		Launch of project under JDPs: BS, NS, WW and MED	STECF BALTFISH Scheveningen (NS)	
	2 nd quarter	June 2014: Deadline for the presentation of regional discard plans under article 17 for BS, WW, MED and Black Sea.	Implementation/collection of info on discards	MED? WW? Black Sea?	
	3 rd quarter		Implementation/collection of info on discards	EC adoption of delegated acts SCIP amendments	
	4 th quarter		Analysis of data for Risk analysis		
2015	1 st quarter	Obligation to land all catches enters into force for BS and pelagics	Launch of project under JDPs NS	Scheveningen (NS) Implementation JDP BS, WW and MED (Black Sea?)	Scheveningen (NS)
	2 nd quarter		Implementation/collection of info on discards		
	3 rd quarter		Implementation/collection of info on discards	EC adoption of delegated acts SCIP amendments	EC adoption of delegated acts SCIP amendments
	4 th quarter		Analysis of data for Risk analysis	Implementation JDP BS, WW and MED (Black Sea?)	
2016	1 st quarter	Obligation to land all catches enters into force for NS, NWW, SWW	Integrations of control of landing obligation under JDPs	Implementation of JDP BS, WW, NS, MED (Black Sea?)	Development of multiannual plans
	2 nd quarter				
	3 rd quarter				
	4 th quarter				
2017	1 st quarter	Obligation to land all catches enters into force for all BS species, Med and Black Sea.			
	2 nd quarter				
	3 rd quarter				

Year	Quarter	Key milestones	Objective a: Ensure accurate reporting of discards	Objective b: Develop practical control and monitoring tools	Objective c: Support development of discard plans
2018	4 th quarter				
	1 st quarter				
	2 nd quarter				
	3 rd quarter				
	4 th quarter				
2019	1 st quarter	Obligation to land all catches enters into force for all remaining species in EU waters.			
	2 nd quarter				
	3 rd quarter				
	4 th quarter				

Annex I: The landing obligation (art. 15)

The basic rules for the obligation to land all catches are contained in article 15 of the new CFP Regulation.

The **paragraphs 1 to 4** establish the **scope** of this obligation:

Elements	Description
Species	All submitted to TAC and quotas + species with MLS in Mediterranean
Areas	Union waters or by Union vessels in high seas – excluded Third Country waters
Obligations	Species shall be brought and retained on board, recorded, landed and counted against the quotas (except live bait)
Calendar	2015: Small pelagic fisheries, Large pelagic fisheries, Industrial fisheries, Baltic sea (salmon and species defining the fishery)
	2016 NS, NWW, SWW (species defining the demersal fisheries) and other fisheries subject to TAC and quotas
	2017 Mediterranean, Black Sea and High seas
Derogations	International obligations, to be implemented via delegated act.
Enlarging the scope	Regional decision by unanimity to cover additional species
Species Exemptions	Species which fishing is prohibited by EU law Species with high survival rates demonstrated by scientific evidence Catches falling under <i>de minimis exemptions</i>

These are the general rules that will have to be implemented by different instruments. In particular, when the landing obligation is foreseen by 2016 to “species defining the fisheries” in different areas, and not later than 1 January 2019 “for all other species”, the discard plans should establish a calendar for the application of the landing obligation to the rest of the species.

In **Paragraphs 5 to 7** the **procedure** to implement the landing obligation is established, in cascade by defect:

- The first option is to specify the measures inside Multiannual Plans adopted following articles 9 and 10 of the new CFP.
- Where no multiannual plan is adopted, the Commission shall be empowered to adopt a delegated act a specific discard plan by the regional cooperation procedure (art. 18)
- Where no measures have been adopted to specify the *de minimis* exception by a multiannual plan or a specific discard plan, the Commission shall adopt Delegated acts (art.46) setting the *de minimis* exception:

Implementation of landing obligation	Content
<i>Multiannual Plans – adopted by EU and where relevant specified by regional approach</i>	<ul style="list-style-type: none"> - <i>Specification provision regarding fisheries or species covered by the landing obligation</i> - <i>Exceptions for high survival rate spp.</i> - <i>De minimis (developed infra)</i> - <i>Provisions on documentation of catches</i> - <i>Fixing minimum conservation reference sizes</i>
<i>(if not) Discard Plan – adopted by the Commission under regional procedure art. 18 (valid</i>	- <i>Same content as the landing obligation part of the multiannual plan</i>

no more than 3 years)

(if not) De minimis exception, adopted by the Commission as a delegated act

- Maximum de minimis of 5% of all species to which the landing obligation applies
- Adopted as from the beginning of the landing obligation.

De minimis

Content	<i>Up to 5% of total annual catches of all species subject to the landing obligation</i>
Conditions	<ul style="list-style-type: none">- Scientific evidence that increases in selectivity are very difficult to achieve- Avoid disproportionate costs in handling catches for those fishing gears where unwanted catches do not represent more than a certain percentage of the total annual catch of the gear
Management	<i>Catches discarded not be counted against quotas, but to be recorded</i>
Transitional period	<i>7% in first two years- 6 % next two years.</i>

The intention is clearly to ensure that a *de minimis* measure is in place when the time arrives for the landing obligation. Some elements need to be fixed:

In **paragraphs 8 and 9**, additional derogations are established to eliminate the previous discard obligation of catches of species with no quota:

Derogation to count catches against quotas	<i>If catches are in excess of quota or of species with no quota, catches to be deducted from target species up to the 9% of the TAC</i>
Year-to-year flexibility	<i>10 % of permitted landings allowed from one year to another</i>

Paragraphs 10 to 12 fix the concept of minimum conservation reference size and destiny of the catches:

10. Minimum conservation reference sizes may be established with the aim of ensuring the protection of juveniles of marine organisms

11. For the species subject to an obligation to the landing obligation as specified in paragraph 1, the use of catches of species below the minimum conservation reference size shall be restricted to purposes other than direct human consumption, including fish meal, fish oil, pet food, food additives, pharmaceuticals and cosmetics.

12. For species that are not subject to the landing obligation as specified in paragraph 1, the catches of species below the minimum conservation reference size shall not be retained on board, but shall be returned immediately to the sea.

Finally, **Paragraph 13** is dedicated to control

13. For the purpose of monitoring compliance with the landing obligation, Member States shall ensure detailed and accurate documentation of all fishing trips and adequate capacity and means, such as observers, CCTV and others. In doing so, Member States shall respect the principle of efficiency and proportionality.

These elements are required without specification if they are addressed to Flag or Coastal Member States, but the fact that observers schemes or REM systems are mentioned, suggests that the obligation is for the flag Member State. A reference to proportionality and efficiency is also established by this article.

Annex II- Immediate tools towards enhanced compliance with the requirement to record discards.

Sub-paragraph 4 of Article 14 of the so-called 'control regulation' (Council Regulation (EC) No. 1224/2009) requires that "*Masters of Community fishing vessels shall also record in their fishing logbook all estimated discards above 50 kg of live-weight equivalent in volume for any species.*"

The control regime applying to the landing obligation should focus on two different collateral objectives:

- Absolute: Did the fisherman discard?
- Relative: Did he correctly record?

In order to answer these two questions, immediate measures, incorporated to a toolbox for inspectors indicating where discards are expected in a specific region following a general risk analysis based in gears, area and another elements can be initiated in 2014. Moreover, controlling the annotation in the logbook of discards, compiling data and analyzing them to have a first risk analysis in 2014 can be done both at shore and sea inspections.

The current version of ERS allows for the recording of discards by date, time, position and species. Unfortunately there is no direct provision for recording the 'Reason' for discard or the 'Minimum Conservation Reference Size'. However, there may be scope to re-use some existing data elements along with the use of code lists, to capture this information, without the need for changes to on-board systems or indeed the overall EU ERS XML. This could be implemented on an interim basis as part of the 2014 analysis phase outlined above.

The technical feasibility of this would need to be examined at the Member state level.

In order to ensure compliance with this obligation, the following steps are proposed from 2014. These actions should be undertaken in the context of JDP management, with appropriate support to the inspectors in the field.

1. Planning: Planning of inspection campaigns focused in discard recording should be undertaken as far in advance as possible. Planning should take into account all key aspects of the fisheries where inspections are planned (geography, vessel class, seabed topography, target species and bycatch, relative 'cleanliness' of fisheries, gear, markets).

2. Information needs and risk assessment: During the planning process, due consideration should be given to the information needs of the inspectors who will carry out the vessel inspections, namely:

- Specific outputs from the EFCA Regional Risk Analysis (RRA) for the fisheries and areas concerned, plus any other relevant risk factors;
- ERS information ;
- Logbook information for vessels not subject to ERS
- Relevant VMS information;
- Mapping or discard atlas information for the areas in which the fisheries take place;
- Information on vessel compliance history and shortlisted target vessels;
- Detailed analysis of corrections made to ERS submissions prior to entry into port.

Specific information toolbox will be developed for inspectors acting in the framework of JDPs, developed in basis of the previous risk analysis of fishing gears and areas. This information will be enriched during the implementation of the project.

Vessels which have not recorded any discards in accordance with obligations arising by virtue of the above legislation, and whose activities indicate a high possibility of discards following the specific risk analysis, should be regarded as target vessels. Knowledge of the fisheries and gears will provide some indication as to the likelihood that the vessel has engaged in discarding.

3. Actions possible during inspections: Given the probable lack of available substantiated proof that a vessel has in fact been discarding and has not recorded the discards, the best advisable course of action is that a formal reminder is issued to the master of the fishing vessel of his obligations in this regard.

4. Collection of information: Information to be collected by inspectors will be defined, including:

- Vessel and fishing activity (fishery, gear, area, target species)
- Discards recorded or not by species
- Quantities of undersized fish caught
- Inspection result

A system of collection of all information will be organised in each JDP concerned, with the intention to elaborate an evaluation of compliance with the discard recording and a first risk analysis for 2015. The fishery/vessel may be classified by different grades (i.e, green, orange, red) what will influence the vessel's target factor and her subsequent situation in the risk analysis

5. Joint Deployment Plans: As early as is practicable in 2014, specific projects will be developed in the framework of the JDPs, to introduce a specific objective with regards to ensuring compliance with the requirement to record discards. These measures should be applied at least in the JDPs covering areas and fisheries to which the landing obligation will be applied by 2015, as Baltic Sea, Western Waters and Mediterranean Sea.

Annex III: Overview of discard causes, mitigating measures and possible control tools

List of discard causes	Analysis of each discard cause	Risk analysis by regional fishery	Possible mitigation through Regulation	Control tools
Catches under minimum conservation reference size	Size (and type) of the mesh	RRA / analysis by MS	Omnibus Regulation to establish selectivity and minimum conservation reference size Certified gears	At sea inspection with patrol vessel, Observers Reference fleet
	Type of species	RRA / analysis by MS / ERS monitoring	Minimum conservation reference size; RTCs, spatial and temporal measures	REM systems (CCTV ⁶⁷), ERS, VMS Reference fleet Observers At sea inspection with patrol vessel Control at landing
	Area and period	RRA / analysis by MS / VMS monitoring	RTCs, spatial and temporal measures	REM systems (, MarSurv) ERS, VMS Reference fleet Observers At sea inspection with patrol vessel At sea inspection with aircraft
No fishing opportunities	Quota exhausted by MS / PO	Member State monitoring and implementation; RRA by EFCA in JDP framework.	Provided for in control regulation / CFP. Implementation of flexibility rules (art. 15 8) and 9)	REM systems Reference fleet Observers At sea inspection with patrol vessel

⁷ Most likely not in real-time basis

List of discard causes	Analysis of each discard cause	Risk analysis by regional fishery	Possible mitigation through Regulation	Control tools
				Control at landing
	Protected species			REM systems ERS,VMS Reference fleet Observers At sea inspection with patrol vessel Control at landing
	Area closure			REM systems ERS,VMS Observers At sea inspection with patrol vessel At sea inspection with aircraft
	TAC exhausted			REM systems ERS,VMS Reference fleet Observers At sea inspection with patrol vessel Control at landing
	ITQ exhausted			REM systems ERS,VMS Reference fleet Observers At sea inspection with patrol vessel Control at landing

List of discard causes	Analysis of each discard cause	Risk analysis by regional fishery	Possible mitigation through Regulation	Control tools
TCM catch composition	Mesh size range	RRA, analysis by MS, catch composition analyses, ERS	Approved gears by fishery.	At sea inspection with patrol vessel, Observers Reference fleet
	Minimum mesh size	RRA, analysis by MS, catch composition analyses, ERS	Approved gears by fishery.	At sea inspection with patrol vessel, Observers Reference fleet
	Percentage of target species	RRA, analysis by MS, catch composition analyses, ERS	Omnibus Regulation	REM systems ERS,VMS Reference fleet Observers At sea inspection with patrol vessel Control at landing
Other economic reasons (no profit)	No commercial value of catches	RRA, analysis by MS, discard atlases & mapping, ERS	RTCs, spatial and temporal measures Prohibition of highgrading	REM systems ERS,VMS Reference fleet Observers At sea inspection with patrol vessel Control at landing sampling
	Excess of catches to process on board	RRA, analysis by MS, discard atlases & mapping, ERS	RTCs, spatial and temporal measures Prohibition of highgrading	REM systems ERS,VMS Reference fleet Observers At sea inspection with patrol vessel

Annex IV: Evaluation of control tools

	Pros	Cons	Relative cost
REM- systems (CCTV, MARSURV, ...)	<ul style="list-style-type: none"> • Can provide continuous monitoring of fishing operations. • Determines where and when a fishing operation takes place. • Could be used to estimate the total catch and discards and species composition by haul, to be compared with the reported catch. • Allow retrospective examination and can be used in evidence. • Cost is low compared to other monitoring programmes. • Significant deterrent effect throughout the fishing trip. • Not intrusive to fishery operation. 	<ul style="list-style-type: none"> • Verification of catches in multi-species fisheries and fisheries with large catches are difficult. • Considered by some fishermen to be invasive on privacy, would require consultation with European Data Protection Supervisor. • Pilot studies and experience from some types of fisheries are limited. • Substantial data management logistics required. • Uncertainty around use of such data in legal cases. • Requires trained controllers and significant time to analyse data. • Technical limitations e.g. component failure, maintenance. • Not suitable for all vessels, e.g. small vessels without power. • CCTV can only be real-time with significant transmission cost. 	MEDIUM
Control Observers	<ul style="list-style-type: none"> • Can provide continuous monitoring of fishing operations. • Real-time information from the fishing activity. • Scientific sampling such as species and length composition can be carried out. • Strong deterrent effect to comply. • Veracity of the information in respect to species is high. 	<ul style="list-style-type: none"> • Particularly costly enforcement method. • Some vessels are not able to take observers on board for safety and security reasons. • Requires training and experience. • Antagonistic working conditions. • Difficulties to cover all activities during the entire trip – cannot provide absolute assurance. • Requires extensive management infrastructure. • Observers not efficient in all fisheries in which they cannot cover simultaneous activities onboard (i.e. factory vessels). 	HIGH
At sea inspections	<ul style="list-style-type: none"> • Infrastructure already in place. • Presence of inspection vessels has a 	<ul style="list-style-type: none"> • Costly. • Discontinuous. Only covers a small part of the trip. 	HIGH

	Pros	Cons	Relative cost
with patrol vessels	<p>deterrent effect within a fishery, while present.</p> <ul style="list-style-type: none"> • Can verify that the catch at the time of the boarding, including MLS fish retained on-board, is coherent with the logbook. • Can verify the compliance with selectivity measures e.g. gear-type at the time of boarding. • At sea inspection can be planned on more complete risk basis, as opposed to awaiting the landing. • Can be used to validate/refine risk assessment, close to real-time. • The observations can be used as comparison with the sales notes. • Can be less invasive/intrusive on fishermen than observers or cameras. • Possibility to contribute to support measures such as RTC and move-on provisions. 	<ul style="list-style-type: none"> • Only effective as deterrent when present in fishery. • Can only verify catch documentation at the time of boarding. • Difficult to conduct inspections unannounced. • Poor sensitivity to observe illegal discarding. • Interferes with fishing operation. 	
At-sea controls with aircraft	<ul style="list-style-type: none"> • Infrastructure already in-place in some Member States. • Can cover large geographical areas. • Can detect discarding behaviour. • Aircraft can operate either overtly or covertly. • Can monitor without fisher being aware. • Visible aircraft have a deterrent effect while present. • Not intrusive to fishery operation. • Can be rapidly deployed. 	<ul style="list-style-type: none"> • Costly • Discontinuous. Only covers a small part of the trip. • Only effective as deterrent when present in fishery. • Robustness of the evidence (linking floating fish to a vessel). • Difficult identification of species discarded, with some exceptions for large pelagics. • Cannot reliably differentiate between illegal discarding and legitimate discarding, or discharge of other biological material. 	MEDIUM

	Pros	Cons	Relative cost
- Catch composition comparison based in a Reference fleet	<ul style="list-style-type: none"> Reference fleet selected regionally based on one vessel or a group of vessels for fishery Less costly to only equip part of the fleet Less intrusive Can provide a baseline for comparison Facilitates risk analysis using automated systems. 	<ul style="list-style-type: none"> Does not provide full coverage of the fleet. Only sample data Could affect the level playing field. Evidence of observer bias. Incentivising the reference fleet can be difficult Could not be used as evidence. Difficult to choose participants of the reference fleet, concerns about maintaining a level playing field Potentially requires a high level of definition. 	LOW
Controls at landing	<ul style="list-style-type: none"> Infrastructure already in place in Member States. Not intrusive to fishery operation. Can be rapidly organised. Can verify that landing, including MLS fish, is coherent with the logbook. Can be used to validate/refine risk assessment and reference fleet. The observations can be used as comparison with the sales notes. Less costly compared to other tools. Permits to crosscheck correct reporting of catches under MLS 	<ul style="list-style-type: none"> Not possible to detect discarding behaviour. Cannot reliably differentiate between illegal discarding and legitimate discarding, or discharge of other biological material. Can only verify catch documentation at the time of landing. 	LOW
Market Tools	<ul style="list-style-type: none"> Could be a useful input for risk management 	<ul style="list-style-type: none"> Data quality issues Time lag (lack of close to real-time data) 	LOW

Annex V-Discard risks⁸ and tools by métier – General analysis to be adapted at a regional level

Fishing Gear / Target Species	Risk Factors	Risk/Region	Tools
Bottom trawl targeting shrimps and prawns, no selection grid.	Small cod end mesh size; very poor selectivity; may take large catches of juveniles and unwanted fish species.	NS WW BS Med	<ul style="list-style-type: none"> ○ Mandatory selectivity grids used in conjunction with 'approved gear' rules. ○ ERS ○ REM or human observers ○ Incentives & Disincentives ○ Landing and sea inspections
Bottom trawl, diamond mesh cod end, no selectivity devices fitted, targeting mixed species.	Poor selectivity; mesh size not suited to mixed species fishery; diamond meshes close under longitudinal strain.	NS WW BS Med	<ul style="list-style-type: none"> ○ 'Approved gears' with improved selectivity ○ ERS ○ REM or human observers ○ Incentives & Disincentives ○ Landing and sea inspections ○ RTCs
Beam trawl, diamond mesh cod end, no selectivity devices fitted, targeting demersal species (flatfish/monkfish).	Poor selectivity; mesh size not suited to mixed species fishery; diamond meshes close under longitudinal strain.	NS WW	<ul style="list-style-type: none"> ○ 'Approved gears' with improved selectivity ○ ERS ○ REM or human observers ○ Incentives & Disincentives ○ Landing and sea inspections ○ RTCs
Danish / anchor seines, diamond mesh cod end, no selectivity devices fitted, targeting mixed species.	Poor selectivity; mesh size not suited to mixed species fishery; diamond meshes close under longitudinal strain.	NS WW BS	<ul style="list-style-type: none"> ○ 'Approved gears' with improved selectivity (depends on fishery specific issues) ○ ERS ○ REM or human observers ○ Incentives & Disincentives ○ Landing and sea inspections ○ RTCs
Pelagic trawls, no selectivity devices fitted, targeting small	Poor selectivity. Highgrading and slipping risks.	NS	<ul style="list-style-type: none"> ○ REM or Human Observers ○ ERS

⁸These discard risk ratings are generic for each gear and should not be taken to indicate any given fisheries.

Fishing Gear / Target Species	Risk Factors	Risk/Region	Tools
pelagics.		WW BS	<ul style="list-style-type: none"> ○ RTCs ○ Landing and sea inspections
Purse seines, no selectivity devices fitted, targeting small pelagics.	Poor selectivity. Highgrading and slipping risks.	NS WW BS Med	<ul style="list-style-type: none"> ○ Selectivity devices mandatory where specific issue may be addressed. ○ REM or Human Observers ○ ERS ○ RTCs ○ Landing and sea inspections
Trammel nets, hanging ratio ≤ 0.3 , and targeting mixed demersal fish.	Very poor selectivity. May result in high levels of discards.	NS WW BS Med	<ul style="list-style-type: none"> ○ If justified by impact assessment, prohibit the use of trammel nets.
Gillnets, demersal, hanging ratio ≈ 0.5	May result in some discards. Biggest problems from ghost fishing of lost gear.	NS WW BS Med	<ul style="list-style-type: none"> ○ REM or Human Observers ○ ERS ○ RTCs ○ Landing and sea inspections
Longlines, pelagic.	Some discards of non-target species (mainly sharks) possible. Handling / release issues.	NS WW BS Med	<ul style="list-style-type: none"> ○ REM or Human Observers ○ ERS ○ RTCs ○ Landing and sea inspections
Longlines, demersal.	Where fish with swim bladder are retrieved from depth, survival on release may be compromised.	NS WW BS	<ul style="list-style-type: none"> ○ REM or Human Observers ○ ERS ○ RTCs ○ Landing and sea inspections

Fishing Gear / Target Species	Risk Factors	Risk/Region	Tools
Traps, demersal.	Fish usually alive, but could be survival issues when fish with swim bladder hauled from depth.	Med NS WW BS Med	<ul style="list-style-type: none"> ○ Discards usually negligible.
Handlines	Adopt adequate release procedures.	NS WW BS Med	<ul style="list-style-type: none"> ○ Discards usually negligible.
Pole and line	Adopt adequate release procedures.	WW Med	<ul style="list-style-type: none"> ○ Discards usually negligible.

Annex VI: Mid-term strategy to fully implement control tools to detect discarding behaviour

A 2 to 5 years strategy to permit the full use of the control and monitoring tools available for the enforcement of the landing obligation will be needed, in order to compile the necessary data for its implementation. The time elapsed will provide data (quantities, time, area, gear, mesh size) allowing the development of the following systems and methods:

- Discard atlas (time, area, gear, mesh size) based on ERS reports and scientific knowledge and fully documented fishing trips by observers *inter alia*;
- Reference fleet and catch profiles allowing to model catches, catch rates and related discards;
- General information on the market, mean prices, importations, exports (possible access to the EU Market Observatory);
- Improved risk analysis based on the cross-checking of information available through ERS and REM systems (such as MARSURV3, CCTV...) to determine the likelihood of discarding behaviour.

The combination of the different avenues will provide an integrated maritime fisheries operation picture facilitating comprehensive remote sensing and monitoring of the fishing activities, include the obligation to land all catches.

The strategy proposed by EFCA would then include the following steps:

- 1) Control elements to be considered when drafting specific discard plans at a regional level:
 - Causes of discards
 - Mitigating measures
 - Risk analysis by metier
 - Possible control tools and analysis of their usefulness

Annexes III, IV and V provide a first analysis of discard causes, possible mitigating measures and control tools available, advantages and disadvantages of those control tools, as well as a general overview of discard risks by metier and the regions in which these métiers may be active in the fisheries. These can serve as a basis for the implementation of this strategy at a regional level, and to execute a first risk analysis based in the specificities of the fisheries in the region.

Some tools will require an IT solution; i.e. setting the parameters and alarm criteria for the for the automatic monitoring of reported catch compositions and feed of appropriate cases into risk analysis. Such functionality could be added to the ERS or Cross-check/Validation systems, where historical catch patterns (e.g. rate, composition, grades, tow duration etc.) could be established for vessels or groups of vessels operating in a particular area at different times of the year. The creation of these reference vessels/fleets would also incorporate automated analysis from VMS/MARSURV. Baseline business rules would be developed within the relevant applications and these rules would be modified as the intelligence around the catch patterns evolves and matures.

Other possible control tools such as the establishment of a so-called 'reference fleet' will demand careful reflection in order to achieve agreement regarding a common understanding of what is meant by this term, definitions and a harmonised management approach.

- 2) Inclusion in the specific discard plans of the control tools adapted to the regional needs to ensure compliance with the landing obligation and an implementation calendar for every control tool.
- 3) Implement the control elements of the discard plans by JDPs to achieve:
 - Collection of data needed to fully use the control tools
 - Fully use of the defined control tools at a regional level

Annex VII Proposed recommendations for specific Discard Plans

The Article 15 of the new CFP regulation establishes the principles for the implementation of the landing obligation. Implementing rules to apply this legislation by region or fishery are foreseen to be adopted via a Multiannual Plan and/or a Specific Discard Plan. Ensuring compliance with the rules of the discard plans depends heavily in the rules adopted.

This section proposes recommendations to be considered in the development of specific discard plans, and, where appropriate, some recommendations. The EU Control Regulation and its implementing rules continue to apply in their entirety.

1. Content of the discard plans.

Bullet points a – e of Article 15.5 of the new CFP regulation lay down the requirements for the contents of regional discard plans.

2. Elements to be incorporated to the discard plans

2.1. General elements: Specific rules harmonised at a regional level to facilitate inspection and guarantee a level playing field

- a) **Regional rules preference:** the same rules should apply to all participants in a given fishery, independently of the flag of the fishing vessel. Such rules should be incorporated in the specific discard plan to the maximum extent possible, to give a real regional scope to the discard plan, which will in turn facilitate the establishment and maintenance of a level playing field. The more Member States cooperate and harmonise fully on a regional level, the better the measures could be accepted by industry, through a level playing field.

The enforcement of the landing obligation through JDP is reinforced if the discard rules are adopted at a regional level.

- b) **Rules Specification:** The fact that not all the species are covered by the landing obligation, that some TAC species can be subject to a different period of implementation of the obligation to land, and the need to define the *de minimis* rule, complicates very much the possibility to ensure compliance by fishing vessels. The degree of specification of rules and definition of elements will be crucial to the success of the measure, especially regarding *de minimis*, that if not properly defined could result in a *de facto* loophole to the general principle of adopting measures to tackle the discard issue; facilitating widespread non-compliance.
- c) **Interregional coherence:** the fact that discard plans are to be constructed for several fisheries/regions, and that there is some overlapping (i.e. stocks that are present in more than one region, or fisheries targeting different species in the same region) requires a fully harmonised approach in the preparation of the discard plans. Such harmonisation will greatly facilitate control activities, as the measures would be common in the same region for different fisheries and also in different regions for the same stock.
- d) **Regional coordination of control and inspection activities:** to promote a level playing field between the different MS fleets, the control and enforcement of the

landing obligation rules should also be coordinated at regional level. EFCA mandate is to coordinate control and inspection activities of Member States, either implementing the SCIPs adopted by the Commission through a Joint Deployment Plan, or upon request of Member States concerned through an Operational Plan if a SCIP does not apply. In this last case, and to get the same level of cooperation that in the Joint Deployment Plans, EFCA proposes that all Member States authorise access of the control means of other Member States to their jurisdictional waters, and that Union inspectors are assigned to the implementation of the operational plan.

2.2. Specific rules

The following elements could be considered when preparing the content of the different discard plans in accordance with sub-paragraph 5 of Article 15 of the new CFP regulation:

a) Specific provisions regarding fisheries or species covered by the landing obligation

These elements should be considered in drafting this chapter:

- Geographical scope (region of application): Important in the case of stocks in several regions, and also to define the Member States concerned. Preferable to apply the measures to all the fisheries activities in the areas.
- The plans should establish what are the 'species defining the fisheries', and a calendar fixing when the landing obligation is applicable for each species concerned.
- It is recommended to define slipping of catch as a discard practice .
-
- Clear definition and detailed description of the fisheries of the region (to the level of the métier); this could permit general rules regarding fishing gears, and a promotion of using more selective gears (with appropriate incentive schemes).
- Fishing gear selectivity definition and gear management, defining if possible the problems at métier level in the context of discards;
- The possible application of a 'reverse burden of proof' as discussed in Section 5;
- Utilisation of existing discard maps, studies or other available mapping information to define specific areas to be given special attention following a risk analysis;
- Establish the elements to be incorporated at a regional SCIP level, i.e. regional risk analysis basis for the compliance of landing obligation, needs for further development of regional cooperation mechanisms, if necessary;
- Establish control tools to be used in the fishery, and in which cases (i.e., traditional at-sea or landing inspections, closed areas / RTCs, CCTV or human observers when fishing vessels are considered a high risk for discarding because of the fishing gears used or fishing area, or resulting from non-compliance, human observers in certain specific cases such as industrial fisheries etc.).
- Sharing information on quota management systems established by each MS for the different gears/fisheries should facilitate the control operations

- The actual enforcement tools selected on a regional basis will depend on the policy provisions proposed in the specific regional discard plans, and be dictated by the discard related problems which need to be addressed in each region. Certainly, there are advantages and disadvantages to the various tools available, and in an ideal situation tools would be selected that are considered optimal in terms of effectiveness, costs and feasibility.
- Real-time closures established with respect to spawning areas/seasons and high occurrence of juveniles/seasons should be given special attention as a specific measure to avoid unwanted catches.

b) Exceptions by high survival rates

- Any exception for species that have high survival rates based in scientific evidence needs to be clearly established in the plan: species, area, fishing gear, conditions and time of release, periods.

c) Provision for *de minimis* exemptions: up to 5% of total annual catches of all species subject to the landing obligation may be discarded

- Regarding *de minimis*, clear rules are needed regarding how this measure will be implemented. The Regulation only refers to a percentage (5%) of “total annual catches of all species subject to an obligation to land”. The importance of this definition for control purposes is essential.
- A quantifier element to define the total *de minimis* discards is needed in any case in advance of the campaign/year/ period. A definition is needed regarding species, areas, etc (i.e. 5 % of TAC of demersal species in area X).
- A definition regarding the management of the *de minimis* quantities is needed: i.e. How these quantities/quotas will be managed? By region? By MS? By fishing vessel? By fishery? By sea trip? In any case the greater the level of definition of the *de minimis* requirements, the easier it will be to ensure compliance.

d) Provisions on documentation and recording of catches

- Appendix 1 describes a set of improvements to Member States’ ERS systems could greatly improve the ability of Member States to ensure compliance with the obligation to land all catches.
- Rules for cooperation and exchange of information should be incorporated to the SCIP/JDP.
- Certain industrial fisheries target species for reduction into fishmeal onboard the vessels. Such vessels present a specific problem for the monitoring of compliance.

EFCA considers in this case that the most effective tool could be the use of human control observers (as provided for in Article 73 of the Control Regulation) coupled with possible supplementary measures such as ‘move-on’ rules where certain bycatch levels are exceeded. A key role for the observer could be the close monitoring of the receiving hopper aboard the fishing vessel and random sampling to determine catch composition.

e) Fixing minimum conservation reference sizes

- o Rules to be fixed in consideration of the gear selectivity to *minimis* discards and to identify risks for discards of different species with the use of other gears.

Appendix 1: Additional requirements for MS ERS systems

- A new 'Catch Declaration' (CAT) to be introduced which would be completed after each haul/recovery and would be based on the existing Fishing Activity Report (FAR) declaration.
- It would contain all of the existing data elements of the FAR with the exception of the 'Last Report Marker' and the 'Inspection Marker'.
- The CAT would include the Discard (DIS) sub-declaration with a CIF (Compulsory If) notation, thereby ensuring that all DIS declarations would be associated with a specific haul/recovery.
- The actual DIS declaration to be expanded to include the 'Reason for Discard' and possibly the 'Minimum Conservation Reference Size'
- The CAT would also include a new sub-declaration to record 'Catch purpose for retention' where catches below the Minimum Conservation Reference Size are retained for purposes other than direct human consumption.
- The Gear (GEA) sub-declaration contained within the CAT would be revised to cater for the additional recording of 'Approved Selective Gear'.
- It may be decided to submit each CAT at the time of the event or along with the daily FAR at midnight.
- The requirement to submit the daily FAR would remain and would record the cumulative catch for the day.
- The exchange of ERS data between MS's would include all the CAT declarations as well as the FAR declarations.

The ERS exchange rules would ensure that any data which has been corrected is clearly indicated as having been corrected and that both the original and corrected data is exchanged. The current version of ERS does not allow for the recipient MS to see where data has been corrected.

These suggestions, if agreed, shall require an amendment of the Regulation (EU) 404/2011.