

MINISTÈRE DE L'ÉCOLOGIE, DU DÉVELOPPEMENT DURABLE  
ET DE L'ÉNERGIE

La Défense, le 22 OCT. 2015

Direction des pêches maritimes et de l'aquaculture

Sous-direction des ressources halieutiques

Nos réf. : 008991  
Vos réf. :

**M. Ian Gatt**  
**Président du CC Pélagique**

Louis Braillelaan 80  
2719 EK Zoetermeer  
The Netherlands  
Royaume des Pays-Bas

**Objet :** Invitation to the next NS HLG / Transmission of NS CEG report on pelagic LO control  
**P.J. :** Adopted recommendations on control of the landing obligation in pelagic fisheries

Dear Mr. Gatt,

On behalf of the Scheveningen Group, chaired in 2015 by France and in response to your letter of 18<sup>th</sup> June 2015 (focused on a Meeting request on monitoring, control and enforcement), I am glad to invite you, as chair of the Pelagic Advisory Council (PELAC), to attend the next North Sea High Level Group (NS HLG) meeting organised in Paris – La Défense the 19<sup>th</sup> November 2015 at 11 am (detailed practical information will be sent to your Secretariat).

In order to fuel our discussion, you will find enclosed, for your information, the recommendations, adopted by consensus in September 2014, made by the North Sea Control Expert Group on control of the landing obligation in pelagic fisheries.

Besides, the NS HLG would welcome PELAC's advice on lessons learned from the introduction of the pelagic landing obligation, bearing in mind that the landing obligation has been in place since January 2015. It would be greatly appreciated if you could present your first observations during this meeting.

Sincerely Yours,

Le Directeur  
des Pêches Maritimes et de l'Aquaculture

Frédéric GUEUDAR DELAHAYE

SCHEVENINGEN CONTROL EXPERTS GROUP

REPORT ON EVALUATION OF DIFFERENT CONTROL  
METHODS FOR MONITORING COMPLIANCE WITH THE  
PELAGIC LANDING OBLIGATION

August 2014

## Terms of reference

1. To consider which methods of control and monitoring could be employed by Member States in order to detect discarding and slipping of pelagic fish with a high degree of confidence, incorporating existing on-board vessel equipment where appropriate, whilst taking into account the differences in métiers and vessels that participate in pelagic fisheries. The principles of efficiency and proportionality should be taken into account.
2. Methods or systems should be evaluated to demonstrate effectiveness and show whether they deliver equivalent outcomes. Consideration should also be given to the full supply chain. This should take account of existing work done or underway by the EU / Coastal States Control Experts Group and the Control Agency.
3. To advise on which fisheries, if any, pose a higher compliance risk and therefore require greater attention in terms of control and enforcement.
4. To suggest any additional actions that may support effective control and enforcement of the discard ban in pelagic fisheries.
5. The Control Experts Group will provide advice by June 2014 with a view to achieving the same level of confidence across the fleets comprising each pelagic fishery, in order to deliver an equivalence of outcomes.

## **Executive Summary**

The Scheveningen Control Experts Group has evaluated methods to detect discarding and slipping and has assessed them in terms of effectiveness. Fisheries with a higher compliance risk, which therefore need greater attention, have been identified.

To this end eight control tools have been scrutinized. The two workshops that have been held cannot deliver an exhaustive scientific evaluation but rather broad categories based on experience and expert knowledge. The categories have been scored from A to C, whereby the highest A-category consists of the following tools: REM (CCTV plus sensors) and the use of sufficient observers.

On the other hand the main pelagic fisheries have been scored in terms of likelihood and impact of discarding. In the Group's opinion freezer trawlers and RSW vessels operating in the herring, mackerel and horse mackerel fisheries need greater attention and the use of tools out of category A is considered advisable.

It should be emphasised that, in line with the terms of reference that we were given, this report deals only with monitoring compliance with the pelagic discard ban. It should not be considered as creating any sort of precedent for monitoring compliance with the demersal discard ban, which will offer very different challenges due to the complexities of the fisheries involved. This would need to be subject to a separate study by the Group.

All North Sea Member States who are members of the Scheveningen Group have taken part in the workshops with the exception of Belgium but including Ireland. It is recognised that for the sake of consistency and transparency it would be beneficial for this work to be shared with members of the North West Waters Group who are not members of the Scheveningen Group.

## **Detail**

In order to answer to the terms of reference of the Scheveningen High Level Group two workshops have been organised by the Control Experts Group.

The first workshop was on 4 March 2014 at Schiphol, the second on 9 April in Edinburgh. This report is the result of those two workshops.

## **Evaluation of control tools**

Eight potential control tools have been evaluated:

- REM systems (CCTV + sensors)
- Vessel detection systems (VDS)
- Control Observers (assuming sufficient provided to provide continuous observation of fishing activity)
- At sea inspection with patrol vessels
- At-sea controls with aircraft
- UAVs (Drones)
- Catch composition comparison based on a reference fleet
- Controls at landing

It was acknowledged that exact comparison of these different tools is very difficult and that there are many outside factors that may affect their effectiveness. Nevertheless in broad terms, and based upon our knowledge and experience, we scored the tools against a variety of criteria as set out in Annex A such as the percentage of the fishing trip that can be monitored and the behavioural impact on the fleet. These criteria relate to the degree of confidence that they would deliver of compliance with the landing obligation.

Having carried out this scoring we concluded that the tools could be placed into three broad categories in terms of their effectiveness (whereas A is the most effective):

- Category A: REM (CCTV and sensors) or sufficient control observers;
- Category B: At sea inspection with patrol vessels, at sea controls with aircraft, UAVs and reference fleets; and
- Category C: VDS and controls at landing

## **Evaluation of the risk of non-compliance**

The next step has been the consideration, in general terms, of how the use of these control tools might be tailored to the compliance risk in different sectors of the fleet and different fisheries, taking account of proportionality. The results of this discussion are set out at Annex B.

In doing this we considered not just the likelihood of non-compliance but its potential impact as well. A non-exhaustive set of criteria used to risk assess fisheries was used as a guide which is set out in Annex C. These criteria were not designed by the group, nor discussed at length. They were first introduced at the start of the second workshop. During the exercise of using them, it was demonstrated that the way the criteria had been set up had its limitations and was open to different interpretations. On several points during the risk assessment exercise there was no full consensus in the group on how to understand the criteria and how they might apply.

The scores arrived at from this exercise were then used to categorise the different métiers and fisheries on a red/amber/green basis. It should be noted that these are very broad fishery classifications and may require further fine tuning by Member State control authorities.

It is the view of the group that that for fisheries and métiers designated red, the control tools that are most likely to deliver the highest degree of confidence of compliance with the ban on slipping and discarding are those in category A, either singly or in combination – i.e. REM or the use of sufficient observers. The number of observers necessary during a fishing trip may vary depending on the kind of vessel.

In this context there were differing views as to what might constitute sufficient observer coverage. It was generally recognised that that in order to provide equivalence to REM in the detection of discarding and slipping sufficient must mean 100% coverage – i.e. enough observers to enable all fishing activity on all trips to be observed. However some felt that in practice this would be impracticable and that on grounds of proportionality it should be possible to use risk assessment to target the use of observers, with those with a demonstrable record of compliance not requiring observers on every trip. The effectiveness of less than 100% observer coverage could be further improved by their use in combination with other available enforcement tools to reach the highest level of confidence possible.



The cost of observer coverage is generally likely to be considerably higher than the use of REM depending on the level of coverage required in both cases. The use of REM in trials has shown encouraging results and whilst this represents significant costs there may be scope for increasingly cost-effective technology solutions which have yet to be tested.

It should be noted that while the coverage of REM on a vessel might be 100% of the fishing activity, experience of those who are familiar with the operation of the system is that not all of the material actually needs to be analysed. As little as 10% of the footage may need to be analysed on a risk assessment basis, concentrating on actual fishing activity, to deliver confidence in the compliance of the vessel. At present no member state has experience of REM coverage of its entire pelagic fleet or of even all its high risk vessels. The group has made no projections on the amount of data that will be gathered in this case or the amount of capacity needed for analysis and follow-up. Only a few member states have run pilot projects with one or two pelagic vessels equipped with REM.

It is important to take account of the fact that the perception of risk of slipping or discarding in pelagic fisheries is subject to varying degrees of uncertainty. It is recommended that a precautionary approach is used when identifying appropriate control measures and that risk is subject to ongoing evaluation based on the evidence provided by them. Category B and C tools may provide absolute evidence of discarding (such as through direct surveillance) or indicative evidence such as through reference sampling or analysis of landed catch through the supply chain. Category A tools are likely to provide much greater and continuous confidence of activity at the point of capture. The advantage of REM is that while only a small portion of the coverage might be directly observed, the fishermen do not know which part will be analysed. Therefore it is likely to have a deterrent effect.

For fisheries identified as Amber or Green, the required level of confidence of compliance could be delivered by the use of one or more of the tools in Categories B and C. Alternatively, for these fisheries it is quite feasible that the use of category A tools at a coverage rate of less than that recommended for fisheries identified as red may deliver equivalent or more cost effective outcomes than the use of category B or C tools in some circumstances.

## **Reverse burden of proof**

As part of its work, the Group considered the potential alternative bottom-up approach to demonstrating compliance with the landing obligation, the so-called 'reverse burden of proof'. Such a concept would seek to transfer more responsibility to industry and reduce the role of Member States' authorities. It was the general view of control experts that this concept is worthy of further consideration but that there was insufficient time for the group to consider the potential implications within the timescale set down by the high level group. It is clear to the group that the overall approach to the rule in the end should be one in which the industry takes ownership and responsibility of the landing obligation and changes its scope and behaviour so as to comply with the landing obligation. Fisheries management and control schemes should be designed to this effect. Further exploration of this subject is advisable.



## Annex A Draft control tool scoring matrix

Criteria/tool	REM systems CCTC + sensors	Vessel detection systems (VDS)	Control Observers (assuming sufficient)	At sea inspection with patrol vessels	At-sea controls with aircraft	UAV Drones	Catch composition comparison based on a reference fleet	Controls at landing
% of voyage that can be monitored.	5	0	4	2	2	3	5	0
Reliability tamper proof	3	5	4	4	5	5	4	4
Staff analysis costs.	4	5	1	2	3	3	4	3(vessel diff)
Non-staff system/ equipment costs.	2	2	5	1	1	3	4	5
Potential additional benefits (contribution to overall control strategy)	5	1	5	3	2	2	2	3
Behavioural impact on fleet (discarding)	5	0	4	3	3	3	2	1
Ability to agree & cross-check that tool used in same way across all MS fleets.								
Expanded capacity	4	0	2	2	2	3	5	1
Evidence admissibility as proof	5	1	5	5	5	5	1	1
<b>Total score</b>	<b>33</b>	<b>14</b>	<b>30</b>	<b>22</b>	<b>23</b>	<b>27</b>	<b>27</b>	<b>18</b>

Score 0: not suitable, score 5: very suitable.

## Annex B Fleet and metiers risk scoring

High 12-16	Med 5-11	Low 1-4							
			Risk – Likelihood	Risk - Impact	Score	Enforcement tool category			
Herring (HER)	Freezer		3	4	12	A			
	RSW		3	4	12	A			
	Polyvalent		3	2	6	B		Fleet/fishery dependent	
Mackerel (MAC)	Freezer		4	4	16	A			
	RSW		4	4	16	A			
	Polyvalent		3	2	6	B			
Horse Mackerel (JAX)	Freezer		4	3	12	A			
	RSW		4	3	12	A			
	Polyvalent		3	2	6	B			
Blue Whiting (WHB)	Freezer		2	2	4	C			
	RSW		2	2	4	C			
	Polyvalent		1	1	1	C			
Sprat (SPR)	Freezer		3	2	6	B			
	RSW		3	2	6	B			
	Polyvalent		3	2	6	B			
Boarfish (BOR)	Freezer		N/A	N/A	N/A				
	RSW		1	1	1	C			
	Polyvalent		N/A	N/A	N/A				
Argentine (ARG)	Freezer		N/A	N/A	N/A				
	RSW		N/A	N/A	N/A				
	Polyvalent		N/A	N/A	N/A				

## Annex C Fleet and metiers generic risk scoring criteria

Source: STECF Paper

	<b>Impact (of illegal discarding and need for fully verified catch documentation) indicators.</b>
1	Fishery is for non-TAC species with minimal or no catch of TAC species. Discards have high survival rate. Landings data is considered sufficient for scientific evaluation.
2	Fishery takes a small by-catch of TAC species in relation to overall TAC. Discard rates are low (<10%). Discards are exempt because of high survival but are required to be fully documented.
3	Fishery targets TAC species or TAC species make up a significant by-catch. Fishery has a significant discard rate for TAC species (>10%). Fishery would benefit from enhanced scientific data. Selectivity and avoidance measures require evaluation.
4	Fishery takes a high proportion of target TAC species per vessel. Fishery has a very high discard rate for TAC species (>20%) or the discard rate is data-limited. Target TAC species are subject to recovery measures or are outside safe biological limits. Fishery has potential for de-regulation (e.g. effort regimes) and enhanced technical flexibility as a result of full accountability for fishing mortality. Corroborative data required to justify TAC uplift.
	<b>Likelihood (of illegal discarding and need for fully verified catch documentation) indicators.</b>
1	No improvements to selectivity necessary. Little or no incentive to discard TAC species.
2	Selectivity measures can be adopted and checked by inspection. Some high-grading/discarding is expected. High confidence in self-reported data.
3	Economic incentive to high-grade or discard unwanted catch. Selectivity measures can be checked on inspection.

	<p>Self-reported data requires robust corroboration. Exemptions may be open to abuse.</p>
4	<p>Strong economic incentive to high-grade or discard unwanted catch. Vessels are/can be equipped to grade out unwanted catch. Species or size selectivity difficult to achieve, or unproven. Self-reporting of accurate discard data is considered to be difficult to achieve or pose a disproportionate burden on crews. High likelihood that discards exemptions are open to abuse. Fleet segment has a history of non-compliance.</p>

