



Agenda item 6.3
For information

Council

CNL(17)37

***Annual Progress Report
on Actions Taken Under the Implementation Plan for the Calendar Year 2016***

EU – Ireland

CNL(17)37

Annual Progress Report on Actions taken under the Implementation Plan for the Calendar Year 2016

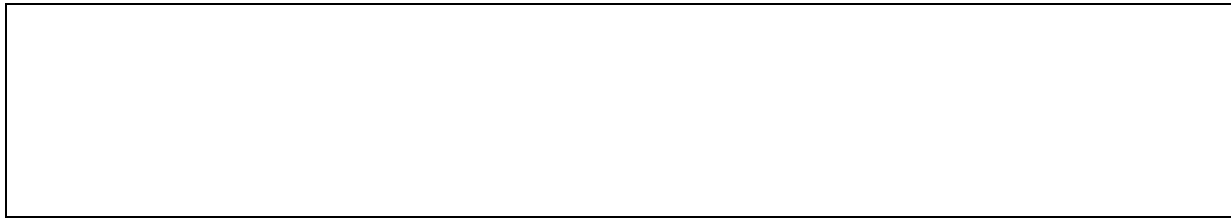
The primary purposes of the Annual Progress Reports are to provide details of:

- any changes to the management regime for salmon and consequent changes to the Implementation Plan;
- actions that have been taken under the Implementation Plan in the previous year;
- significant changes to the status of stocks, and a report on catches; and
- actions taken in accordance with the provisions of the Convention

These reports will be reviewed by the Council. Please complete this form and return it to the Secretariat **no later than 24 March 2017**.

Party:	European Union
Jurisdiction/Region:	Ireland

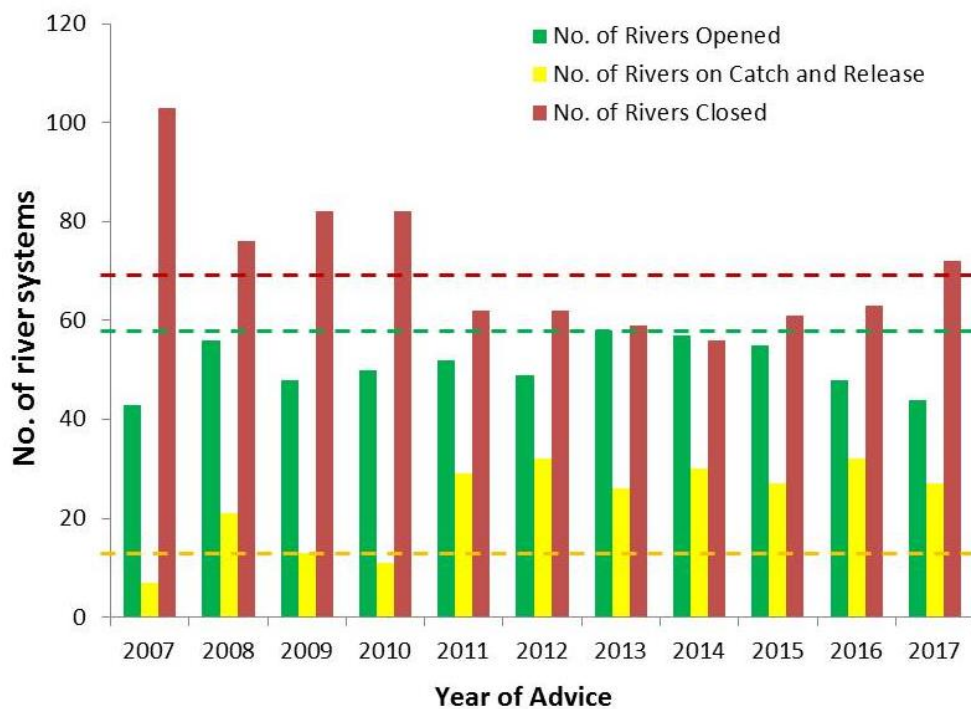
1: Changes to the Implementation Plan
1.1 Describe any proposed revisions to the Implementation Plan <i>(Where changes are proposed, the revised Implementation Plans should be submitted to the Secretariat by 1 December).</i>
No changes.
1.2 Describe any major new initiatives or achievements for salmon conservation and management that you wish to highlight.



2: Stock status and catches.

2.1 Provide a description of any new factors which may significantly affect the abundance of salmon stocks and, if there has been any significant change in stock status since the development of the Implementation Plan, provide a brief (200 word max) summary of these changes.

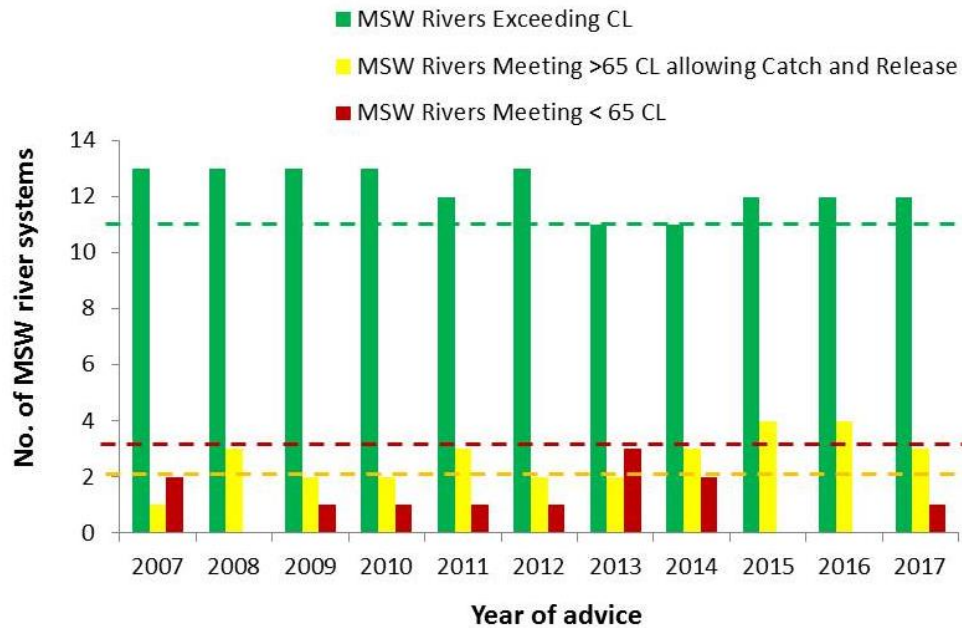
Summary of status of stocks and catch advice and forecast for 2017 fishery season



(Dashed lines indicate corresponding baseline stock status reference points as set out in the Implementation Plan)

The stock status and catch advice forecasted for the 2017 fishery is that 44 rivers have an advised harvestable surplus as they are exceeding their conservation limits (CL). A further 27 river systems could open for catch and release-only (C&R) fishing based on exceeding a minimum fry threshold (>17 salmon fry/5 min electro-fishing average) in catchment-wide electrofishing surveys or based on IFI management criteria that they meet over 65% of their CL but do not exceed their CL. 72 river systems should be closed for fishing as they do not exceed the management target of meeting 65% of CL, electrofishing thresholds have not been met or there is insufficient information for full stock assessment. In comparison to the baseline stock status reference points as set out in the

Implementation Plan, this represents a decline in the number of systems open as a harvest fishery, an increase in fisheries open solely for C&R and a marginal increase in closed fisheries.



(Dashed lines indicate corresponding baseline stock status reference points as set out in the Implementation Plan)

There are 16 river systems for which a separate assessment is made for multi-sea winter (MSW) salmon where there are significant fisheries. Of these, 12 have an advised harvestable surplus as they are exceeding their CL. Three of these river systems can open for catch and release-only fishing based on exceeding a minimum fry threshold in catchment-wide electrofishing surveys or based on IFI management criteria that they meet over 65% of their CL but do not exceed CL, and one river system was closed.

In addition, there are four assessments on river systems used for hydropower which have been assessed as being below their CL (Upper Liffey (Dublin), Upper Lee (Cork), Upper Shannon (Limerick) and the River Erne).

In applying the scientific advice to management, it should be noted that where rivers are only marginally above their CL they may be restricted to C&R so that the actual number of rivers open for harvest under regulation can be less than the number of rivers actually achieving CL.

2.2 Provide the following information on catches:(nominal catch equals reported quantity of salmon caught and retained in tonnes ‘round fresh weight’ (i.e. weight of whole, ungutted, unfrozen fish) or ‘round fresh weight equivalent’).

(a) provisional nominal catch (which may be subject to revision) for 2016 (tonnes)	In-river	Estuarine	Coastal	Total
	39.4t	18.7t	0	58.1t

(b) confirmed nominal catch of salmon for 2015 (tonnes)	42.5t	20.8t	0	63.3t
(c) estimated unreported catch for 2016 (tonnes)			0	5.81t
(d) number and percentage of salmon caught and released in recreational fisheries in 2016.	10,280 (41 % of total rod catch)			

3: Implementation Plan Actions.

3.1 Provide an update on progress against actions relating to the Management of Salmon Fisheries (Section 2.8 of the Implementation Plan).

Note: The reports under 'Progress on Action to Date' should provide a brief overview with a quantitative measure of progress made. While referring to additional material (e.g. via links to websites) may assist those seeking more detailed information, this will not be evaluated by the Review Group.

Action F1:	Description of Action (as submitted in the IP)	Protection against illegal fishing is a high priority in Ireland and the state invests a considerable amount of resources on these activities (Fishery Inspectors, Navy, Garda etc). More outreach to local communities is planned to bring the problems of poaching as a major impediment to stock recovery into focus.
	Expected Outcome (as submitted in the IP)	Buy-in by local communities in identifying active illegal practices.
	Progress on Action to Date (Provide a brief overview with a quantitative measure of progress. Other material (e.g. website links) will not be evaluated.)	<p>188,404 fishery staff man hours were spent on protecting Ireland's fishing resource in 2016. 31,180 protection patrols were carried out using different methods on lakes, rivers, estuaries and at sea. This protection was largely related to salmon but fishery patrols were also targeted at other fish species. In total, 301 nets were seized measuring 14,782 metres and 160 Fixed Charge Notices were issued for Fishery Offences in 2016. There were 66 prosecutions in 2016.</p> <p>In spring 2017, Inland Fisheries Ireland (IFI) were informed by the Department of Communications, Climate Action and Environment (DCCA) that, following legal advice received by the Department, IFI does not have explicit powers to prosecute offences</p>

		<p>under the Fisheries Acts. It became apparent that the powers of the predecessors to IFI (the Central and Regional Fisheries Boards) to prosecute fisheries offences were not transferred into the 2010 Fisheries Act that established IFI. The DCCAE have commenced drafting amending legislation to urgently rectify this issue. Judgements stand in all cases which have already gone through the courts and are outside the appeal period. However, initiated cases, cases currently under appeal and those awaiting sentencing will likely be withdrawn and this may affect a currently unknown number of the prosecutions as reported above for 2016. It is important to note, that all current provisions and offences of the Inland Fisheries Acts continue to be in full force and effect and those found in contravention of the acts in the interim period can be prosecuted once the amending legislation is in place.</p>
	Current Status of Action	Ongoing
	If 'Completed', has the Action achieved its objective?	
Action F2:	Description of Action <i>(as submitted in the IP)</i>	IFI is actively promoting the returns of accurate information from anglers through the national carcass tagging and logbook scheme. This scheme facilitates the identification of inaccurate information and allows some follow-up to redress the issue. Move towards electronic Salmon licences.
	Expected Outcome <i>(as submitted in the IP)</i>	More awareness by stakeholders on the need for accurate statistics.
	Progress on Action to Date <i>(Provide a brief overview with a quantitative measure of progress. Other material (e.g. website links) will not be evaluated.)</i>	Return of logbooks by anglers was 68.6% in 2016 compared to 70.5% in 2015. All anglers who do not return logbooks are written to as a means of improving logbook returns and a proportion are taken to court annually and fined for non-return of logbooks. Return of commercial licences has been 100% for 2016 and in recent years. The electronic licence system is in operation and can be accessed at salmonlicences.ie.
	Current Status of Action	Ongoing
	If 'Completed', has the Action achieved its objective?	

Action F3:	Description of Action (as submitted in the IP)	IFI is developing a National Fish Counter Strategy to maintain, operate and enhance the current counter resources and to evaluate where extra counters might be required. This will be enacted in 2014.
	Expected Outcome (as submitted in the IP)	A more robust and reliable counter assessment using the most up to date methods for validation of counts (video surveillance, tracking, tagging etc). New database for verification and data capture.
	Progress on Action to Date (Provide a brief overview with a quantitative measure of progress. Other material (e.g. website links) will not be evaluated.)	A national reporting mechanism for fish counter data and validation has been in place since 2014. This is facilitated through a national fish counter website and database for the input and validation of fish counter data. In total, counts from 31 fish counters were used by the Standing Scientific Committee on Salmon in their 2016 assessment for the 2017 forecast of the status of salmon stocks, an increase of 10 counters since the 2011 assessment.
	Current Status of Action	Ongoing
	If 'Completed', has the Action achieved its objective?	

3.2 Provide an update on progress against actions relating to Habitat Protection and Restoration (Section 3.4 of the Implementation Plan).

Note: The reports under 'Progress on Action to Date' should provide a brief overview with a quantitative measure of progress made. While referring to additional material (e.g. via links to websites) may assist those seeking more detailed information, this will not be evaluated by the Review Group.

Action H1:	Description of Action (as submitted in the IP)	<p>Agricultural enrichment</p> <p>Following the implementation of the Water Framework Directive and the formation of River Basin District management structures, a collective approach to reducing all adverse impacts including agricultural enrichment and eutrophication on aquatic resources is now in place. Having characterised the risks posed to water-bodies nationally, Programmes of Measures are being developed to address habitat impacts / land use practices and to restore impaired water bodies to good status. The aim of the Water Framework Directive is to prevent any deterioration in the existing status of our waters, including the protection of good and high status where it exists, and to ensure that all waters are restored to at least good status by 2015. As a consequence of the implementation of the WFD and the Nitrates Directive,</p>
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		<p>the impact of agricultural enrichment on salmon rivers is expected to reduce considerably over the coming decades.</p> <p>The CAP reform due in 2013 also provides an important opportunity for aligning agriculture objectives with habitat protection.</p>
	<p>Expected Outcome <i>(as submitted in the IP)</i></p>	<p>Significant improvement in water quality due to improved agricultural practice</p>
	<p>Progress on Action to Date <i>(Provide a brief overview with a quantitative measure of progress. Other material (e.g. website links) will not be evaluated.)</i></p>	<p>Ireland faces major challenges to achieve water quality targets set for 2021 and 2027 as required by the WFD. The WFD target for 2015 has not been met. In advance of publishing the official <i>Water Quality in Ireland</i> report, the Environmental Protection Agency (EPA) have reported preliminary water quality results in Ireland for the period 2013-2015 in their latest <i>State of the Environment</i> report. These results indicate that there has been “no overall improvement in water quality over the first river basin cycle (2009-2015). The target of a 13.6% improvement in the ecological status of surface waters (from the 2009 baseline) by 2015 was not achieved. Water quality improvements are required at approximately 50% of rivers, lakes and estuaries that are impacted by pollution or other pressures.” The main suspected cause of pollution in rivers is from agricultural sources, accounting for 53% of cases.</p> <p>While overall the length of unpolluted river channel has remained relatively constant since the 1990s with some minor variation throughout the time series, there has been a substantial loss in the number of highest quality river sites (as measured by the Q value macroinvertebrate biotic index). In the most recent monitoring period (2013-2015) only 21 river sites were classified as having the highest quality (0.7% of sites) compared with 575 between 1987 and 1990 and 82 between 2001 and 2003. The main success story to date has been the virtual elimination of seriously polluted (<i>bad</i> ecological status) river sites to just over 6 km in the 2013 to 2015 period compared with 17 km</p>

between 2010 and 2012 and 53 km between 2007 and 2009.

Preliminary results for the 2013 to 2015 period show that water quality is impacted in 54% of monitored lakes, representing a 3% increase in the *moderate* or worse category compared to the baseline period of 2007-2009. The number of coastal water bodies at *high* or *good* status has increased from 68% in 2012 to 76% in 2015 with no change observed in terms of surface area assessed, where 93% of coastal water area were deemed to be *high* or *good* status. 47% of transitional water bodies remain at moderate or worse status which is the same as the last 2010-2012 assessment.

The second round of WFD River Basin Management Plans (RBMPs) covering the period 2018-2021 were published for public consultation in December 2016 with finalisation expected in December 2017. This includes a re-alignment of the main WFD target which is to ensure that all relevant waters are restored to at least good status. Following reviews of the first round of RBMPs (2010-2015), the Irish Government established a new structure and assigned responsibility for various tasks in developing and implementing the next cycle of RBMPs. This includes:

- 1) a Water Policy Advisory Committee (WPAC), responsible for policy, legislation and resourcing which held four meetings in 2016;
- 2) the EPA, responsible for technical reporting and implementation; and
- 3) the Local Authorities Water and Communities Office (LAWCO), which has been operational since February 2016. This body is responsible for undertaking and enforcing WFD programmes of measures, for WFD-related community engagement initiatives and associated WFD public consultations.

		One of the key milestones in designing the second cycle of the RBMPs was identification of the significant water management issues in Ireland (SWMI). The SWMI public consultation document was published in mid-2015 which provided an overview of the status of Irish waters and outlined the challenges ahead. The main thematic concerns raised from the consultation process were collated and reviewed in 2016 at WPAC meetings as well as at a post-SWMI workshop and they have additionally informed the development of a programme of measures in the 2 nd RBMPs cycle.
	Current Status of Action	Ongoing
	If Completed, has the Action achieved its objective?	
Action H2:	Description of Action (as submitted in the IP)	Forestry Related Impacts Many Irish forests that are now mature, or approaching maturity, were planted in landscapes that were unsuited to economically viable forest production. The increasing recognition of the impacts from forestry on water resources has led to the development of a Code of Practice for forestry (Forest Service, 2000). Generally, forest management is based on the Code of Practice, although a new Forestry Bill, which will replace the out of date Forestry Act 1946, has been drafted with the opportunity to ensure that forestry management is better able to protect sensitive habitats.
	Expected Outcome (as submitted in the IP)	Improved water quality and protection of habitats
	Progress on Action to Date (Provide a brief overview with a quantitative measure of progress. Other material (e.g. website links) will not be evaluated.)	The Forest Service's IFORIS GIS-based management system for forestry grants continues to be used to ensure that planting, felling and road building operations in forests are approved only following detailed environmental consultation with a range of public bodies and the general public. There are been general compliance with the forestry codes of practice nationally. Many companies are also participating in additional independent forest certification schemes (e.g. FSC & PEFC). Many estates are being managed with biodiversity as the primary objective, e.g. when

conifer trees are felled, there is now a greater percentage of broadleaved trees being planted in their place.

The Forestry Act was passed into law in October 2014 (Number 31 of 2014). This confers responsibility on the Minister for Agriculture, Food and the Marine to promote and monitor the protection and enhancement of water quality in all aspects of forestry, including ensuring that forestry operations and forest-based activities regulated under this Act are compatible with the requirements of the Water Framework Directive.

In late 2015, Coillte (the state-sponsored forestry company) updated their Business Area Unit (BAU) strategic plans for their national estate which is comprised of eight forestry regions for the period (2016-2020). In addition to setting out how Coillte's policies and objectives will be implemented within each BAU, these plans re-enforce their commitment to sustainability and environmental protection including outlining measures to protect water quality during forestry management practices. Such measures (as in previous policies) include specifying aquatic buffer zones to minimise adverse impacts to aquatic species and habitats.

In 2016, the HYDROFOR (Assessment of the Impacts of Forest Operations on the Ecological Quality of Water) project report was published. This seven year research project investigated the relationships between conifer forests, forestry operations, and surface water quality and ecology in Irish rivers and lakes in order to address specific knowledge gaps to inform the further development of the WFD Programmes of Measures. Project output includes policy recommendations in this regard as well as identifying key areas of future research.

In December 2016, The Forest Service-Department of Agriculture, Food and the Marine (DAFM) published the document *Environmental Requirements for*

		<i>Afforestation</i> , which has updated the mandatory requirements for any new afforestation and consolidates relevant existing environmental guidelines. These include detailing various additional safeguards such as the specification of greater aquatic buffer zone areas and on sustainable pesticide use to better protect vulnerable waters and aquatic species.
	Current Status of Action	Ongoing
	If Completed, has the Action achieved its objective?	
Action H3:	Description of Action (as submitted in the IP)	<p>Poor water quality from Inadequate Sewage Treatment and Industrial Discharges</p> <p>In Ireland, there has been considerable investment in upgrading of treatment facilities, primarily in larger towns, and this process will continue with the Programme of Measures under the Water Framework Directive. The Department of the Environment have invested many millions of Euro nationally over the recent years in new treatment facilities, and many of the smaller town and village schemes have been upgraded in this process. It is therefore anticipated that the impact on productive capacity of salmon rivers from inadequate sewage treatment will decrease considerably over the coming years with the requirements of the WFD being achieved.</p> <p>Significant upgrading of wastewater treatment plants has occurred in recent years to assist local authorities in complying with the Urban Wastewater Treatment Directive. The EPA regulates major industrial activities through the Integrated Pollution Prevention and Control (IIPC) regulations while the local authorities license small-scale industrial discharges to waters under the Water Pollution Acts. The Work of the EPA in enforcing the regulations and the implementation of the EU Water Framework Directive are likely to ensure that industrial discharges are adequately regulated to prevent impact on rivers nationally.</p>
	Expected Outcome (as submitted in the IP)	Improved waste water treatment targeting upgrading of the most urgent facilities

<p>Progress on Action to Date (Provide a brief overview with a quantitative measure of progress. Other material (e.g. website links) will not be evaluated.)</p>	<p>Irish Water was formed in 2013 as an independent State-owned subsidiary within the Ervia group. It has taken over the water investment programmes of the 34 county and city councils, with the key aim of delivering water and sewerage schemes, and water conservation works aimed at finding additional water supply capacity. In recent years, 81 wastewater projects have been completed in Ireland with 25 such projects currently in progress. Despite this, further sustained investment in wastewater infrastructure continues to be required.</p> <p>The latest report available on urban wastewater, <i>Urban Waste Water Treatment in 2015</i> published by the EPA in 2016, reviewed the performance of over 500 urban wastewater schemes and assessed compliance with the requirements of the EU Urban Waste Water Treatment Directive (UWWTD). The report sets out compliance status and identifies the key national priorities that require resolution which include the following:</p> <ul style="list-style-type: none"> • 94% of Ireland's urban wastewater receives secondary treatment. • 83% of large urban areas complied with the mandatory treatment standards in the UWWTD, increasing from 74% in 2012. • 45 urban wastewater schemes are linked with river pollution. • Untreated wastewater is discharged from 43 areas in rivers, estuaries and coastal waters. • River water quality monitoring stations where <i>bad</i> ecological status (i.e. serious pollution) was attributed to urban wastewater discharges have reduced from 9 in 2009 to 1 in 2015. • By the end of 2015, 212 recurring reportable incidents were recorded at 189 different wastewater works, 87% of which involved breaches of the effluent quality standards set out in EPA licensing authorisations.
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		<p>The Water Services (Amendment) Act 2012 provides for the introduction of a registration and inspection system for domestic wastewater treatment systems, including septic tanks and similar systems. Owners of domestic wastewater treatment systems are required to register their systems in accordance with these regulations to ensure protection of water quality. The EPA has developed a National Inspection Plan related to this. All areas of the country are liable to inspection but priority is given to areas where water quality is most at risk from pollution from on-site waste water treatment systems. The aim of the plan is to protect water and human health by using a two-strand approach of education and awareness strategies linked with a risk-based inspection process. The latest published quantitative information available indicate that 987 inspections were undertaken in the first year of the plan (1st July 2013 – 30th June 2014), with an initial failure rate of 48%. However, by February 2015 79% of these were compliant after remediation works were undertaken. 1,000 inspections annually are planned in the period 2015-2017.</p>
	<p>Current Status of Action</p>	<p>Ongoing</p>
	<p>If Completed, has the Action achieved its objective?</p>	

Action H4:	Description of Action <i>(as submitted in the IP)</i>	<p>Salmon Farms in Estuaries</p> <p>Both existing and proposed salmon farms in estuaries may pose a threat to wild salmon populations and a number of publications have raised concerns regarding lice induced mortalities of salmon. In Ireland protocols are in place with regard to permitted sea lice thresholds on salmon farms and measures can be taken for farms in breach of protocols. In 2011, this led to stringent action taken by the Irish authorities in removing farmed salmon from an area. The challenge for management is to develop strategies including effective lice treatments to ensure low lice levels on farmed salmon in spring prior to and during wild salmon migration. In fact the thresholds are treatment triggers and when they are reached a treatment must be carried out to reduce lice infestation levels. This is clearly set out in protocols.</p> <p>Annual fallowing of sites, use of single generation sites, avoidance of partial lice treatments and harvesting carried out remote from grower sites are planned to reduce the potential impact of sea lice infestation. Availability of new sea lice treatments are also being pursued to increase effectiveness of sea lice control.</p>
	Expected Outcome <i>(as submitted in the IP)</i>	Improved compliance with sea lice protocols and lower sea lice levels in spring
	Progress on Action to Date <i>(Provide a brief overview with a quantitative measure of progress. Other material (e.g. website links) will not be evaluated.)</i>	<p>This strategy has led to stringent action by the Irish authorities in enforcing treatment trigger levels which include accelerated harvests and early fallowing of sites.</p> <p>A detailed investigation was conducted by the EU Commission into complaints that stocks in a number of rivers in the west of Ireland designated as special areas of conservation for Atlantic salmon were under threat - they closed this case in 2014 stating that no evidence was provided to show that particular SACs designated for wild Atlantic salmon do not meet their conservation objectives and that this failure could be attributed to aquaculture and sea lice infestation.</p>

	Current Status of Action	Ongoing
	If Completed, has the Action achieved its objective?	

3.3 Provide an update on progress against actions relating to Aquaculture, Introductions and Transfers and Transgenics (Section 4.8 of the Implementation Plan).

Note: The reports under 'Progress on Action to Date' should provide a brief overview with a quantitative measure of progress made. While referring to additional material (e.g. via links to websites) may assist those seeking more detailed information, this will not be evaluated by the Review Group.

Action A1:	Description of Action (as submitted in the IP)	<p>Escapes of farmed fish</p> <p>The industry comply with the codes of practice regarding husbandry and good engineering practices.</p> <p>In the event of an escape, the farm operator will make an emergency application to the Department of Agriculture for a special licence under Section 14 of the Fisheries Act 1959 to deploy nets to recapture the escaped fish. Inland Fisheries Ireland may take such action as it considers necessary to recapture stock which has escaped from a facility operated under a licence. Under 77(2), the Minister (DCENR), may authorise a licensee or other person or body to take such action as is specified in the authorisation to recapture stock which has escaped from a facility.</p>
	Expected Outcome (as submitted in the IP)	Prevention of escapes generally. In the event of escapes, prompt recapture of a significant proportion of the stock.
	Progress on Action to Date (Provide a brief overview with a quantitative measure of progress. Other material (e.g. website links) will not be evaluated.)	<p>In the recent FP7 project <i>Prevent Escape</i>, a pan-European review of farm escape events was carried out. This shows that where both mandatory reporting, and sound regulation & licensing of aquaculture structures are implemented the incidence of escapes is lower. Reductions in the levels of escapes were recorded in Norway following on the introduction of equipment standards. The same study showed that the level of escapes in Ireland is low in comparison to the other countries assessed (Jackson <i>et al.</i>, 2015). In 2016, there were only two fish identified as escapees during scanning for coded wire tags in catches (3937 examined) from 11 locations while no escapees were reported from broodstock recovery in programmes (2959 examined) for seven rivers. This is consistent with most years and indicates a very low incidence of escapees. However not all rivers have scanning programmes for escapee salmon.</p> <p>In April 2016 the DAFM brought in a <i>Protocol for Structural Design of Marine Finfish Farms</i> to standardise an improved structural design process for marine finfish</p>

		farm installations in Ireland to apply to all new or renewal licence applications.
	Current Status of Action	Ongoing
	If Completed, has the Action achieved its objective?	
Action A2:	Description of Action (as submitted in the IP)	<p>Sea lice Infestation</p> <p>During the spring period Sea lice protocols are in place which set out ovigerous lice thresholds (0.3-0.5 ovigerous lice per fish March –May and 2.0 ovigerous lice per fish outside this period). When the threshold is breached a notice to treat is issued to the salmon farm to bring lice levels under control.</p> <p>In 2008, a new pest Management Strategy was developed that introduced detailed fallowing requirements and a new approach to monitoring to deal with situations where target lice levels were not being achieved. This approach will identify ‘breakout’ site options for sites with persistent sea lice problems.</p> <p>While some farms do exceed these thresholds annually, in spring 2012, non-compliance with lice thresholds at two salmon farms resulted in the Minister giving an order to harvest fish early, prior to wild smolt migration.</p>
	Expected Outcome (as submitted in the IP)	Reduced sea lice levels on farmed salmon
	Progress on Action to Date (Provide a brief overview with a quantitative measure of progress. Other material (e.g. website links) will not be evaluated.)	<p>The continuous on-farm sea lice level monitoring has facilitated early intervention which has resulted in better sea lice control generally. Notably, the Single Bay Management platform has helped to coordinate efforts to reduce lice levels among sites within bays.</p> <p>The use of alternative approaches, particularly cleaner fish, to complement husbandry and medicinal treatments, coupled with rigorous pro-active regulatory oversight, has meant that sea lice levels in Ireland during 2016 have generally been managed well.</p> <p>In 2016 all of the 115 sea lice inspections carried out on smolts were below the Treatment Trigger Levels (TTL); this compares with 97% in 2015 and 94% in 2014. On one-sea-winter salmon 84% of the 91 sea lice inspections were below TTL in 2016 compared to 78% in 2015 and 71% in 2014.</p>

		<p>Reference: O'Donohoe, P., Kane, F., Kelly, S., McDermott, T., D'Arcy, J., Casserly, J., Nixon, P. & Jackson, D. (2017). National Survey of Sea lice (<i>Lepeophtheirus salmonis</i> Krøyer and <i>Caligus elongatus</i> Nordmann) on Fish Farms in Ireland in 2016. Irish Fisheries Bulletins Number 47, Marine Institute.</p>
	Current Status of Action	Ongoing
	If Completed, has the Action achieved its objective?	
Action A3:	Description of Action (as submitted in the IP)	<p>Transfer and increases in incidence of diseases Early harvesting of farmed salmon where gill damage has been recorded is effective in preventing further outbreaks. See section 4.7 – improved treatments and investment in R&D will result in greater control of gill related disorders in 2013.</p>
	Expected Outcome (as submitted in the IP)	Reduced incidence of disease outbreaks in aquaculture facilities.
	Progress on Action to Date (Provide a brief overview with a quantitative measure of progress. Other material (e.g. website links) will not be evaluated.)	<p>All aquaculture operators in Ireland comply with Council Directive 2006/88/EC on animal health requirements for aquaculture animals and products thereof, and on the prevention and control of certain diseases in aquatic animals. Under this legislation, each farm is required to put in place appropriate biosecurity measures to prevent disease incursion and disease spread. They are also required to investigate all increased mortality with their private veterinarian and to notify the Competent Authority where the presence of a listed disease is suspected or confirmed. Compliance with this legislation is assessed during an annual audit carried out by the official services. In addition to these mandatory measures, all farms in Ireland voluntarily comply with a <i>Fish Health Code of Practice</i> and the <i>Farmed Salmonid Health Handbook</i>, in order to minimise and control the number outbreaks of non-listed diseases on Irish farms.</p> <p>There were no outbreaks of listed diseases in Ireland in 2016. All salmon farms were inspected under Council Directive 2006/88/EC and only minor non-compliances</p>

		were observed. A combination of good biosecurity measures, vaccination, early veterinary intervention and expedient treatments, ensured that outbreaks of non-listed diseases were kept to a minimum during 2016. Mortalities caused by environmental changes such as phytoplankton blooms or jellyfish swarms did however, cause problems on certain sites during the year.
	Current Status of Action	Ongoing
	If Completed, has the Action achieved its objective?	

4: Additional information required under the Convention	
4.1	Details of any laws, regulations and programmes that have been adopted or repealed since the last notification.
	No new legislation has been adopted. Fisheries Regulations and By-laws regulating recreational and commercial fishing were updated for the 2016 fishing season.
4.2	Details of any new commitments concerning the adoption or maintenance in force for specified periods of time of conservation, restoration and other management measures.
	No new commitments since last reported.
4.3	Details of any new actions to prohibit fishing for salmon beyond 12 nautical miles.
	No new actions.
4.4	Details of any new actions to invite the attention of States not Party to the Convention to matters relating to the activities of its vessels which could adversely affect salmon stocks subject to the Convention.
	No new actions.
4.5	Details of any actions taken to implement regulatory measures under Article 13 of the Convention including imposition of adequate penalties for violations.
	No new actions.