CNL(13)53

NASCO Implementation Plan for the period 2013-18

Denmark (in respect of the Faroe Islands and Greenland) - Faroe Islands

CNL(13)53

NASCO Implementation Plan for the period 2013-18

The main purpose of this Implementation Plan is to demonstrate what actions are being taken by the jurisdiction to implement NASCO Resolutions, Agreements and Guidelines.

Questions in the Implementation Plan refer to the following documents:

- *NASCO Guidelines for Management of Salmon Fisheries, CNL(09)43 (referred to as the 'Fisheries Guidelines');*
- *Minimum Standard for Catch Statistics, CNL(93)51 (referred to as the 'Minimum Standard');*
- *NASCO Guidelines for Protection, Restoration and Enhancement of Atlantic Salmon Habitat, CNL(10)51 (referred to as the 'Habitat Guidelines');*
- *Williamsburg Resolution, CNL(06)48; and*
- *Guidance on Best Management Practices to address impacts of sea lice and escaped farmed salmon on wild salmon stocks (SLG(09)5) (referred to as the 'BMP Guidance').*

Party:	**Denmark (in respect of Faroe Islands and Greenland)**
Jurisdiction/Region:	**Faroe Islands**

1. Introduction

1.1 What are the objectives for the management of wild salmon? *(Max 200 words)*

Fishing for Atlantic salmon in the waters around the Faroe Islands started in 1968. Up to 1978 it continued at a low level ~ 40 tonnes annually or less. In 1979, the fishery intensified and the annual catch remained fairly stable at approximately 500-600 tonnes up to 1990. However, in 1981, the catch exceeded 1,000 tonnes. Since the establishment of NASCO in 1984, the fishery for Atlantic salmon in the Faroese Fisheries Zone has been managed in accordance with regulatory measures/decisions agreed within NASCO. In order to contribute to the conservation and rebuilding of the North Atlantic salmon stocks, the Faroe Islands have refrained from having a commercial fishery for salmon within its fisheries zone for the last two decades. The last year in which a commercial fishery took place was 1991. In some years since 1991, a research fishery was undertaken but there has been no fishery at all since 2001.

The Faroe Islands will manage any salmon fishery through international cooperation and on the basis of the advice from ICES regarding the stocks contributing to the Faroese salmon fishery in a precautionary and sustainable manner.

The assessments of the status of the salmon stocks in the Faroese FFZ are made by ICES. Reference is made to the ICES Advisory Committee reports from 2012 and 2013.

Because of the small size of the Faroese rivers, there is no historic record of any natural wild salmon population in Faroese rivers or fjords. In 1947, Atlantic salmon fry from the Icelandic River "Elliðá" in Reykjavík were released into several rivers in the Faroe Islands. This programme continued for a number of years, and in the early 1960s mature salmon were caught by anglers as well as by electro-fishing in the river 'Fjarðará' in Skálafjørður, Eysturoy and in the river at Saksun, Streymoy. This led to the construction of a hatchery for salmon and sea trout in Tórshavn. Almost every year since then, some form of enhancement has been undertaken, initially by rearing fry for release in the rivers. During this early period grilse stocks were established in three other rivers in the Faroe Islands by releasing fry. Later in the 1980s salmon roe from Norway was introduced to the stock in the Faroes, in an attempt to get a higher proportion of multi sea-winter returns. Due to the fact that there are no self-supporting wild salmon stocks in Faroese rivers, NASCO´s guidelines are not relevant in many cases.

1.2 What reference points (e.g. conservation limits, management targets or other measures of abundance) are used to assess the status of stocks? *(Max 200 words)*

(Reference: Sections 2.4 and 2.5 of the Fisheries Guidelines)

ICES has formulated reference points and conservation limits for the salmon stocks in Faroese FFZ. There is an on-going negotiation process regarding management targets. Otherwise see 1.1.

1.3 To provide a baseline for future comparison, what is the current status of stocks relative to the reference points described in 1.2, and how are threatened and endangered stocks identified?

Category	Description of category and link to reference points	No. rivers
1	See the ICES Advisory Committee reports for 2012 and 2013.	
2		
3		
4		
Insert additional categories as required		
TOTAL:		

Additional comments:

1.4 How is stock diversity (e.g. genetics, age composition, run-timing, etc.) taken into account in the management of salmon stocks? *(Max 200 words)*

See 1.1and the ICES Advisory Committee reports for 2012 and 2013.

1.5 To provide a baseline for future comparison, what is the current and potential quantity of salmon habitat? *(Max 200 words)*
(Reference: Section 3.1 of the Habitat Guidelines)

See 1.1

1.6 What is the current extent of freshwater and marine salmonid aquaculture?

Number of marine farms	25 farms
Marine production (tonnes)	62,783 tonnes gutted weight in 2012 (76,803t live weight)
Number of freshwater facilities	All fresh water production (smolt farms) is in basins on land
Freshwater production (tonnes)	15 million smolt

Append one or more maps showing the location of aquaculture facilities and aquaculture free zones in rivers and the sea.

1.7 To aid in the interpretation of this Implementation Plan, have complete data on rivers within the jurisdiction been provided for the NASCO rivers database?
Yes/no/comments

Yes – information has been provided. It should be noted that the rivers did not originally support self-sustaining stocks of salmon but commencing in 1947 stocking has been undertaken and the salmon in these rivers are maintained by hatchery releases. As such these rivers do not fit the definition of 'maintained' used for the NASCO rivers database so it should be noted in the database that the salmon stocks in these rivers are dependent on hatchery releases.

2. Fisheries Management:

2.1 What are the objectives for the management of the fisheries for wild salmon? *(Max. 200 words)*

Since 1991, there has been no commercial fishery for Atlantic salmon in the waters around the Faroe Islands in order to contribute to the conservation and rebuilding of the Atlantic salmon stocks. No decision has since been taken by the Faroese authorities to reopen a commercial fishery for Atlantic salmon.

By decision NEA(12)7, NASCO agreed not to set a quota for the salmon fishery in the Faroese Fisheries Zone for 2013 – 2015 provided that the application of the Framework of Indicators does not show that a reassessment of the advice is warranted. The decision acknowledges that Faroese management decisions have been (and will be) made with due consideration to the advice of ICES concerning the status of the stocks.	
2.2	**What is the decision-making process for fisheries management, including predetermined decisions taken under different stock conditions (e.g. the stock level at which fisheries are closed)**? *(Max. 200 words)* *(This can be answered by providing a flow diagram if this is available.)* *(Reference: Sections 2.1 and 2.7 of the Fisheries Guidelines)*
See 2.1	
2.3	**Are fisheries permitted to operate on salmon stocks that are below their reference point and, if so, how many such fisheries are there and what approach is taken to managing them that still promotes stock rebuilding?** *(Max 200 words.)* *(Reference: Section 2.7 of the Fisheries Guidelines)*
See 2.1	
2.4	**Are there any mixed-stock salmon fisheries and, if so, (a) how are these defined, (b) what was the mean catch in these fisheries in the last five years and (c) how are they managed to ensure that all the contributing stocks are meeting their conservation objectives?** *(Max. 300 words in total)* *(Reference: Section 2.8 of the Fisheries Guidelines)*
(a) See 2.1	
(b)	
(c)	
2.5	**How are socio-economic factors taken into account in making decisions on fisheries management?** *(Max. 200 words)* *(Reference: Section 2.9 of the Fisheries Guidelines)*
During the 1980s the commercial fishery for Atlantic salmon in the Faroese FFZ was an important source of income for the Faroese economy. Since the commercial fishery was stopped in 1991, the companies have gradually developed alternative income opportunities. Since the Faroese economy is completely dependent on fisheries, a possible future reopening of the salmon fishery, in case of a recovery of the salmon stocks, would be welcomed by the industry.	
2.6	**What is the current level of unreported catch and what measures are being taken to reduce this?** *(Max. 200 words)* *(Reference: Section 2.2 of the Fisheries Guidelines and the Minimum Standard)*
Zero	
2.7	**What are the main threats to wild salmon and challenges for management in relation to fisheries, taking into account the Fisheries Guidelines and the specific issues on which action was recommended for this jurisdiction in the Final Report of the Fisheries Management FAR Review Group, (CNL(09)11)?**
Threat/ challenge F1	Since 1991, there has been no commercial fishery for Atlantic salmon in the waters around the Faroe Islands in order to contribute to the conservation and rebuilding of the Atlantic salmon stocks and in accordance with the ICES advice. Consequently no threats or challenges in relation to the Faroese

	salmon fishery have been identified in the ICES Advisory Committee reports for 2012 and 2013 although ICES highlights the risks from mixed stock fisheries by States of Origin.	
Threat/ challenge F2		
Threat/ challenge F3		
Threat/ challenge F4		
2.8 What actions are planned to address each of the above threats and challenges in the five year period to 2018?		
Action F1:	Description of action:	The Faroe Islands will continue to manage any salmon fishery through international cooperation and on the basis of the advice from ICES regarding the stocks contributing to the Faroese salmon fishery in a precautionary manner and with a view to sustainability.
	Planned timescale:	2013 -2018
	Expected outcome:	
	Approach for monitoring effectiveness & enforcement:	
Action F2:	Description of action:	
	Planned timescale:	
	Expected outcome:	
	Approach for monitoring effectiveness & enforcement:	
Action F3:	Description of action:	
	Planned timescale:	
	Expected outcome:	
	Approach for monitoring effectiveness & enforcement:	

Action F4:	Description of action:	
	Planned timescale:	
	Expected outcome:	
	Approach for monitoring effectiveness & enforcement:	

3. Protection and Restoration of Salmon Habitat:

3.1 How are risks to productive capacity identified and options for restoring degraded or lost salmon habitat prioritised, taking into account the principle of 'no net loss' and the need for inventories to provide baseline data? *(Max. 200 words)*
(*Reference: Section 3 of the Habitat Guidelines)*

As indicated in 1.1 there are no self-sustaining salmon populations in the rivers in the Faroe Islands but stocks are maintained in five rivers through hatchery releases. There are no external factors affecting the Faroese Atlantic salmon rivers and their estuaries, i.e. there is no industry in the areas. In the early 1970`s fish passes were constructed over three obstacles in the river "Leynará" on Streymoy, and salmon fry released further upstream in the system. This work transformed the river "Leynará" to be the most attracted Atlantic salmon river in the Faroe Islands.

3.2 How are socio-economic factors taken into account in making decisions on salmon habitat management? *(Max. 200 words)*
(Reference: Section 3.9 of the Habitats Guidelines)

See 1.1 and 3.1

3.3 What are the main threats to wild salmon and challenges for management in relation to estuarine and freshwater habitat taking into account the Habitat Guidelines, and the specific issues on which action was recommended for this jurisdiction in the Final Report of the Habitat Protection, Restoration and Enhancement FAR Review Group, (CNL(10)11)?

Threat/ challenge H1	
Threat/ challenge H2	
Threat/ challenge H3	
Threat/ challenge H4	

3.4 What actions are planned to address each of the above threats and challenges in the five year period to 2018?		
Action H1:	Description of action:	
	Planned timescale:	
	Expected outcome:	
	Approach for monitoring effectiveness & enforcement:	
Action H2:	Description of action:	
	Planned timescale:	
	Expected outcome:	
	Approach for monitoring effectiveness & enforcement:	
Action H3:	Description of action:	
	Planned timescale:	
	Expected outcome:	
	Approach for monitoring effectiveness & enforcement:	
Action H4:	Description of action:	
	Planned timescale:	
	Expected outcome:	
	Approach for monitoring effectiveness & enforcement:	

4. Management of Aquaculture, Introductions and Transfers, and Transgenics:

4.1 What is the approach for determining the location of aquaculture facilities in (a) freshwater and (b) marine environments to minimise the risks to wild salmon stocks? *(Max. 200 words for each)*

As previously noted there is no historic record of any natural wild salmon population in Faroese rivers or fjords. This diminishes any potential negative impact that aquaculture in the Faroese fjords and sounds could have on wild salmon populations. However, Faroese waters are important feeding grounds for wild salmon originating in other countries. Therefore, the most important measures for the Faroese aquaculture industry in order to protect wild salmon is to prevent disease outbreaks and minimise escapes.

(a) All fresh water production (smolt farms) is on land (no risk of escape).

(b) Each fish farming company requires environmental approval from the Environment Agency. Act of Parliament no. 134 from 1988 on the protection of the environment sets the rules for prevention of pollution and the conservation of a diverse animal and plant life. The Agency has set up a system under which fish farming areas in the Faroe Islands must be inspected. The system is based on similar environmental control systems in Norway and Scotland.

The control system requires regular monitoring of the seabed in fish farming areas. This monitoring is part of the compulsory internal control that is a prerequisite for the environmental approval of fish farms. As a result of the limit values in place, the site must not be used if levels of heavy metals become too high, or too much organic matter has accumulated. Operations may continue only when the state of the seabed has normalized.

4.2 What progress can be demonstrated towards the achievement of the international goals for effective sea lice management such that there is no increase in sea lice loads or lice-induced mortality of wild stocks attributable to sea lice? *(Max. 200 words)*
(Reference: BMP Guidance)

Since the required reporting is relatively new it is too early to say anything about trends in the development of the extent of sea lice but data are being collected on a regular basis and the Food and Veterinary Agency (FVA) can require treatments to be undertaken.

Comprehensive measures have been taken to improve the methods for treatment of sea lice in the Faroese aquaculture industry. Executive Order no. 163 from 2009 on monitoring of sea lice requires counting every second week in the summer and once a month in the winter. The purpose of these regulations is to reduce the occurrence of sea lice in farmed fish and to impair resistance to preventative treatment. The Executive Order requires regular sampling for, and reporting of, sea lice in farmed fish and sets out the required procedures for treatment, which can also require coordinated efforts between different fish farming facilities.

All fish farms must have a contingency plan which describes potential risks and preparedness e.g. escapes and outbreak of diseases. The contingency plans must be approved by the Food and Veterinary Agency (Executive Order no. 134 from 2009). The contingency plan shall describe procedures regarding sea lice counting and treatment and must document that the farm

is capable of following the procedures defined in the Executive Order. The Executive Order states that the FVA can demand prompt treatment. If the treatment fails, the companies are required to report to the FVA. The FVA can demand simultaneous treatment in all farms situated in the same fjord or in several fjords if necessary.

Since 2009, the Aquaculture Research Station (*P/F Fiskaaling*) has, in close cooperation with the aquaculture industry and the Food and Veterinary Agency, initiated several research projects regarding the challenges with sea lice e.g. refractoriness, genes and countings. In order to develop natural methods to combat sea lice, the Research Station has initatied research on the lumpfish, *Cyclopterus lumpus*, as a cleaner-fish.

4.3 What progress can be demonstrated towards the achievement of the international goals for ensuring 100% containment in (a) freshwater and (b) marine aquaculture facilities? *(Max. 200 words each)*
(Reference: BMP Guidance)

(a) All fresh water production (smolt farms) is in basins on land (no risk of escape).

(b) All fish farming facilities must be approved by the FVA. All plants and waste disposal facilities must be installed and maintained in accordance with the standards stipulated and monitored by the FVA.

Fish farming management plans are subject to approval by the Agency, and must fulfil all requirements for ensuring the quality and welfare of the fish, in accordance with the provisions of Executive Order no. 134 from 2009 on disease prevention procedures in fish farms. All fish farms must have a contingency plan which describes potential risks and preparedness e.g. escapes and outbreak of diseases. The contingency plans must be approved by the Food and Veterinary Agency (Executive Order no. 134 from 2009).

All escapes must be reported immediately to the FVA by individual salmon farms and the FVA has the authority to require measures to be taken in response to an escape event. The statistics, therefore, relate to individual salmon farming companies. The FVA can require that the farm owner attempts to recapture the escaped fish or that additional containment measures be taken. Nets are required to prevent birds from catching fish from the sites.

All fish farming equipment and facilities must be built and installed with the adequate strength and other properties necessary to ensure responsible operations in accordance with the legislation and they should be used with the necessary care and precaution. (Act of Parliament No. 83 from 2009 on fish farming)

4.4 What progress has been made to implement NASCO guidance on introductions, transfers and stocking? *(Max. 200 words)*
(Reference: Articles 5 and 6 and Annex 4 of the Williamsburg Resolution)

The approval of imports to the Faroe Islands of all animal livestock, including for fish farming purposes, depends upon the disease status of the exporting country, and must otherwise adhere to existing EU rules, regulations and procedures.

Executive Order no. 98 from 2003 requires approval of transportation companies and transport units for all transportation of farmed fish, farmed fish products and equipment from fish farms at all stages of production.

4.5 What is the policy/strategy on use of transgenic salmon? *(Max. 200 words)* *(Reference: Article 7 and Annex 5 of the Williamsburg Resolution)*		
Under the Parliament Act No 16 of 23 February 2001 on Animal Diseases, alteration of the animal genetic material is not permitted unless authorised through the enactment of special legislation. In accordance with the International Salmon Farmers' Association (ISFA), which firmly rejects transgenic salmon production, there is no tradition in the Faroe Islands in developing transgenic livestock and farmed fish.		
4.6 What measures are in place to prevent the introduction or further spread of *Gyrodactylus salaris*? *(Max. 200 words)*		
See 4.4 above. *Gyrodactylus salaris* has not been reported in the Faroe Islands.		
4.7 What are the main threats to wild salmon and challenges for management in relation to aquaculture, introductions and transfers, and transgenics, taking into account the Williamsburg Resolution, the BMP Guidance and specific issues on which action was recommended for this jurisdiction in the Final Report of the Aquaculture FAR Review Group, (CNL(11)11)?		
Threat/ Challenge A1	Faroese waters are important feeding grounds for wild salmon. Therefore, the most important measures for the Faroese aquaculture industry in order to protect wild salmon is to prevent disease outbreaks and minimise escapes.	
Threat/ challenge A2		
Threat/ challenge A3		
Threat/ challenge A4		
4.8 What actions are planned to address each of the above threats and challenges in the five year period to 2018?		
Action A1:	Description of action:	Continue to apply NASCO's 'Williamsburg Resolution' and 'Guidance on Best Management Practices to Address Impacts of Sea Lice and Escaped Farmed Salmon on Wild Salmon Stocks' in order to minimise the risk of impacts from salmon farming on wild Atlantic salmon.
	Planned timescale:	2013 - 2018
	Expected outcome:	Continuing progress in reducing sea lice and escapees
	Approach for monitoring effectiveness:	Statutory reporting of sea lice and escaped farmed salmon
Action A2:	Description of action:	
	Planned timescale:	
	Expected outcome:	
	Approach for monitoring effectiveness & enforcement:	

Action A3:	Description of action:	
	Planned timescale:	
	Expected outcome:	
	Approach for monitoring effectiveness & enforcement:	
Action A4:	Description of action:	
	Planned timescale:	
	Expected outcome:	
	Approach for monitoring effectiveness & enforcement:	