Mixed-Stock Fisheries (Tabled by the European Union)

1) Brief description of existing MSFs

EU-Ireland

Since 2021, there are four managed mixed-stock fisheries in Ireland: Castlemaine Harbour, Killary Harbour, Owenmore Esturary and Tullaghan Ferry. The Owenmore Estuary and relatively minor Tullaghan Ferry mixed-stock fisheries formerly comprised the Tullaghan Bay mixed-stock fishery which operated until 2013. Each year, in advance of the fishing season, the scientific advisory group, the Technical Expert Group on Salmon (TEGOS) undertake a specific risk assessment for each common estuary mixed-stock fishery. This results in a higher requirement for spawners in contributing rivers than simply combining their individual river-specific conservation limits (CLs) to ensure simultaneous attainment of CL. If the common estuary CL is sufficiently exceeded then a surplus for exploitation is advised.

Castlemaine Harbour

The mixed-stock fishery in Castlemaine Harbour, Co. Kerry was closed over the 2007 to 2010 period as the fishery was perceived to exploit salmon from a range of rivers entering Castlemaine Harbour. A pilot fishery was conducted in the mixed-stock area of Castlemaine in 2010 to provide genetic samples for analysis of the rivers contributing to the fishery. Results revealed that the Castlemaine fishery almost exclusively exploited salmon from three rivers entering Castlemaine Harbour, namely, the Caragh, Laune and Maine, all of which were meeting and exceeding CL. The Castlemaine fishery has operated since 2011 from the total available surplus of the three contributing rivers. For the mixed-stock Castlemaine fishery to operate, the total available surplus for the three rivers combined was reduced in a common estuary analysis to ensure that each river would meet CL simultaneously. The mixed-stock Castlemaine fishery and the draft net and rod angling fishery on the three rivers all exploit salmon from this reduced surplus calculation.

Killary Harbour

In the case of the Killary Harbour fishery, there are two contributing river stocks (Bundorragha (Delphi) and Erriff) both of which are exceeding their CLs. The TEGOS undertake a risk assessment for the common estuary which results in a higher requirement for spawners in both rivers than simply combining the CLs for the rivers to ensure simultaneous attainment of CL in both rivers. The mixed-stock Killary Harbour fishery and the rod angling fishery on both rivers exploit salmon from this reduced surplus calculation, although the River Erriff rod fishery is managed as a catch and release-only fishery by local agreement.

The Owenmore Estuary and Tullaghan Ferry

The Owenmore Estuary and the relatively minor Tullaghan Ferry mixed-stock fisheries formerly comprised the Tullaghan Bay mixed-stock fishery which operated until 2013. The operation of the Tullaghan Bay mixed-stock fishery was reviewed in 2012 and it was noted that the fisheries are mostly confined to the immediate vicinity of the Carrowmore/Owenmore and Owenduff river mouths with only a relatively small mixed-stock fishery in the bay (Ferry). Therefore, it was advised that it was more appropriate to apply a specific risk analysis for Owenmore Estuary (which exploits stocks from the Carrowmore and Owenmore rivers). This results in a higher requirement for spawners for this mixed-stock fishery than simply combining the CLs for the two contributory rivers which ensures a simultaneous attainment of CLs is required to permit this fishery to operate. As such the draft net and rod angling fisheries for the

Owenmore and Carrowmore 1SW must be taken from this reduced surplus if available. In addition, a small TAC is assigned to the relatively minor Tullaghan Ferry mixed-stock fishery (which potentially exploits stocks from the Carrowmore/Owenmore and Ownduff rivers). This TAC is allocated from a percentage of the Owenmore Estuary surplus and the Owenduff surplus when available. Neither the Owenmore Estuary or Tullaghan Ferry mixed-stock fishery was permitted to operate until 2021 as one of the three contributary stocks, the Owenmore River, was below CL. However, as all three rivers were assessed as exceeding CL since 2021, both mixed-stock fisheries have since been permitted to operate.

EU-Finland

Salmon fishery in the main stem of the large River Teno, including both various netting methods and angling, is exploiting c. 30 genetically different salmon populations from different tributaries and areas of the main stem.

Conservation limits are established for 24 populations of the Teno stock complex. Annual target attainment evaluations have recently been available for 10-14 populations in tributaries (partly including and combining lower order tributaries), in the main stem, and for the Teno system as a whole. Exploitation of these populations in MSF of the Teno main stem has been assessed through catch information and genetic stock identification.

EU-Sweden

Sweden has taken following management measures to phase out mixed stock fisheries on wild salmon stocks:

Trap net fisheries at the coast

There have, due to national regulation, not been any trap net fisheries during the years 2013 – 2023.

Gill net fisheries at the coast

Gill net fishing in the sea at depths <3 m is not expected to be a MSF. Since 2013 it is strictly regulated with respect to effort, period and mesh size to avoid catches of salmon. Marine protected areas are located nearby wild salmon rivers. In these areas no gill net fishery is allowed irrespective of the depth.

Bban on gill net fishing for salmon in remaining coastal waters with a depth >3m has been implemented from 2014 to phase out mixed stock fisheries targeting salmon stocks. There has not been any reported MSF or illegal gill net fisheries for salmon during 2016-2023 in coastal waters with a depth > 3m.

MSF on salmon at the coast

No catch was recorded from coastal commercial fishing in 2023 (9th year in a row).

Sweden considers that there are practically no mixed stock fisheries in marine waters on Atlantic salmon in Sweden.

2) Recent catch data

EU-Ireland

- Castlemaine Harbour mixed-stock fishery (Laune, Caragh and Maine rivers)
  - 2023 catch = 642 salmon (1.73 t)
  - mean five year catch = 598 salmon (1.61 t)
- Killary Harbour mixed-stock fishery (Erriff and Bundorragha rivers)
  - 2023 catch = 237 salmon (0.64 t)
  - mean five year catch = 191 salmon (0.52 t)

- Owenmore Estuary mixed-stock fishery (Carrowmore and Owenmore rivers)
  - 2023 catch = 199 salmon (0.54 t)
  - mean three year catch = 101 salmon (0.27 t)
- Tullaghan Ferry mixed-stock fishery (Carrowmore, Owenduff and Owenmore rivers)
  - 2023 catch = 20 salmon (0.05 t)
  - mean three year catch = 45 salmon (0.12 t)

EU-Finland

Salmon catch in the River Teno in 2023: 0 t, a total ban on salmon fishing in the catchment in 2023.

EU-Sweden

The total reported catch in rivers during 2023 was 10,5 tonnes and the estimated unreported catch in rivers 1,1 tonnes.

The reported and estimated catch in estuarine and coastal waters was 0 tonnes during 2023.

Fig. 2.2 Information on catches reported in the Swedish Annual Progress Report on Actions taken under the Implementation Plan for the Calendar Year 2023.

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 2023 (tonnes)	In-river	Estuarine	Coastal	Total
	10.5	0	0	10.5
(b) confirmed nominal catch of salmon for 2022 (tonnes)	8.3	0	0	8.3
(c) estimated unreported catch for 2023 (tonnes)	1.1	0	0	1.1
(d) number and percentage of salmon caught and released in recreational fisheries in 2023	956 salmon were caught and released, which accounts to 29% of total catches (wild and reared origin). For wild salmon only, 691 salmon were caught and released (45% of the wild salmon catches).			

3) Updates to the Implementation Plan (IP) related to MSF

EU-Ireland

There are no changes related to MSF in the Implementation Plan for the period 2019-2024.

EU-Finland

Parliaments in Finland and Norway have accepted the new bilateral fishery agreement, which came into force for the 2017 fishing season. The agreement concerns river fisheries, including MSF in the main stem, but the coastal MSF is the responsibility of Norwegian national management. The agreement includes a fishing rule for the border river section between Finland

and Norway. Atlantic salmon monitoring programme has also been updated as a part of the implementation work of the new agreement.

EU-Sweden

There are no changes related to MSF in the Implementation Plan for the period 2019-2024.

4) Changes or developments in the management of MSFs in this IP period to implement NASCO's agreements

EU-Ireland

2021 was the first year that the Owenmore Estuary and Tullaghan Ferry mixed-stock fisheries were each permitted to operate. Their operation continued since that time including in 2023.

EU- Sweden

There are no changes in the management of MSF in this IP period. EU Sweden consider that it is practical no MSF in coastal waters due to the regulations that was decided during the period 2013 – 2014.

4) Changes or developments in the management of MSFs in this IP period to implement NASCO's agreements

EU-Finland

Management regime for salmon fishing is based on biological reference points and scientific assessments of their attainment, including a targeted reduction of fishing pressure by c. 30% defined in connection with the new bilateral agreement in 2017. The reduction of exploitation is especially focusing on salmon stocks with the weakest status in the Teno stock complex by tailored fishery regulations in time and space, and on specific fishing methods.

Despite the reduced exploitation rates verified by monitoring programmes since 2017, salmon stocks showed worse status in 2019-2023 than in previous years. Likely explanations for this development include increased natural mortality factors in different life stages of salmon, especially those at sea. Data from monitoring programmes, e.g. counts of ascending grilse in relation to estimated abundance of smolts one year before, indicate that the marine survival rate has decreased in recent years, resulting in lowered pre-fishery abundance. Further investigations on such possible factors are underway. Finland and Norway jointly decided to close salmon fishing in Tana river and its tributaries for 2023, similar to the decision for 2021 and 2022 seasons. The salmon fishing ban has increased the number of spawners in various populations considerably compared to the all-time lows in 2019-2020. However, the stock status and especially PFA estimates are still poor for all the populations in the Teno system.

Negotiations with Norway on a new fishing rule, which would be better adapted to the present status of salmon stocks for Teno, were concluded at the end of 2023, and the rule will enter into force for 2024 fishing season. According to the new rule, fishing opportunities will be reviewed annually based on the status of the salmon stocks in the previous fishing season and the potential exploitable surplus in salmon populations.