Background
The First meeting of HELCOM FISH-PRO II (1-2014) welcomed the initiative from Finland to send a questionnaire to each country and compile a short summary report based on national reviews to be presented at the next Meeting of the project, including

- description of the recreational fisheries in each country
- available information on catches within the recreational fisheries
- information on the relative contribution of the catches of the recreational fisheries.

This document represents the outcomes of a questionnaire sent to the participant countries and the results will be presented in the Meeting (FISH-PRO II 2-2015).

This revision document includes additional information provided by Poland.

Action required
The Meeting is invited to

- consider the document, and
- provide missing information to the Meeting.
Recreational fisheries in the Baltic Sea countries

A questionnaire was sent to the participants of FISH_PRO II in January 2015. Replies were received from Josianne Stottrup (Denmark), Jens Olsson and Martin Karlsson (Sweden), Kaj Ådjers (Åland), Outi Heikinheimo (Finland), Lauri Saks and Roland Svigsden (Estonia), Laura Briekmane and Eriks Kruze (Latvia), Linas Lozys (Lithuania), Adam Lejk (Poland), and Norbert Schultz (Germany). Information on recreational fisheries in Russia (Kalinigrad) was presented by Sergey Shibaev in the meeting. The information gathered is summarized below, and more detailed replies are presented in the annexed table (Annex 1). The questions presented in the questionnaire are in italics.

1) Is there any monitoring or recent surveys on the recreational fisheries in the Baltic Sea in your country? Which method is used in the monitoring (questionnaires, numbers of licenses etc.) and at which frequency are the surveys carried out?

Surveys on recreational fisheries in the Baltic Sea are carried out on a regular basis in Denmark, Sweden and Finland including Åland; annually in Denmark and Sweden and every two years in Finland. In other countries (Latvia, Poland, Estonia, Germany, Russia) there is no regular monitoring of anglers’ catches but the numbers of fishing licenses are monitored in Poland, Estonia and Germany. However, there is data from occasional studies based on interviews or questionnaires. In addition, catch data is available from specific areas in Estonia, e.g. from salmon rivers.

Subsistence fishery (using gill nets, long lines etc.) is more intensively monitored in Latvia and Estonia. In Latvia, the subsistence fishermen have to fill in daily logbooks as do the commercial fishermen. In Estonia, the obligation to report catches is often ignored.

2) Recreational fisheries catch and effort data starting from the beginning of 2000s (if available). If there is no monitoring, please give a rough estimate of the recreational fisheries catches compared to commercial fisheries?

In Denmark the recreational catches are clearly smaller than the commercial catches. In Sweden and Finland the significance of recreational fisheries is larger, and the catches of most desired species (perch, pike, pikeperch, sea trout) clearly exceed the commercial catches, or are at least on the same level (pikeperch and whitefish in Finland). In Estonia there is obligation to report data on the catches of passive gears, but this obligation is often ignored, which decreases the reliability of the data. Thus the significance of recreational fisheries in relation to commercial catches is not well known in other countries than Denmark, Sweden and Finland. In Germany, the cod catch of anglers is of the same magnitude as the commercial cod catch. In Latvia, the flounder catches of recreational fishermen may be significant.

3) Which kind of licenses are needed for recreational fisheries?

In some countries angling without reel is free (Sweden, Finland, Estonia). For other gear types licenses and permits from water owners are needed, and often the license is for a restricted number of gear units (see the Appendix table for details). In Germany, anglers have to attend a one week’s education to get a license. In Russia, there is free access for recreational fishermen to common waters without any licenses, but access to private or rented area depends on the owner.

4) Which gear types are allowed/used in the recreational fisheries?

In almost all countries non-commercial fishermen are allowed to use also passive gears such as gill nets and fyke nets. However in Poland only angling and spearfishing is allowed. In Germany only “hobby fishermen” (having a former job in fishery) are allowed to use passive gears. In Russia, recreational fishermen are not allowed to use any nets, and number of hooks is restricted to 10.

5) Most important target species
The fish species mainly targeted by recreational fishermen are largely the same in all countries, but there are some differences depending on the type of the coastal waters. There are freshwater species such as perch, pike and pikeperch, migratory species such as sea trout and whitefish, and marine species such as cod, salmon, herring, and various flatfish species. In Denmark, Latvia, Poland and Germany also garfish (Belone belone) and eel are important.

6) Which management measures are used in the recreational fishery? Are there catch quotas, minimum or maximum size limits for given species, restricted effort?

Catch quotas are seldom used in recreational fisheries, only Sweden, Latvia, Poland and Germany reported daily quotas for e.g. sea trout, salmon, pike, perch and flounder. More common are limitations of the effort, mainly as numbers of gear units. Minimum size limits are applied mostly to e.g. salmon, sea trout, pikeperch, pike and in Poland and Latvia also several other species. In connection with the minimum size limits mesh sizes of gillnets are often regulated. Other management measures include closed areas or seasons, mainly to protect the spawning of the target species. Specific restrictions can be set by water owners.

7) Significant changes in recreational fisheries or catches during recent decades?

In Sweden and Finland the development of recreational fisheries is largely similar. The use of gillnets and other passive gears has become less popular, and rod fishing takes a larger proportion of the catches than before. The equipment for rod fishing is very effective and species-specific methods and lures are available.

In the Polish marine waters, rising popularity of recreational fishing is notable. Availability of specialized equipment and fishing methods has increased. There are also conflicts between anglers and professional fishermen.

In Lithuania, salmon and sea trout fishing in marine waters has increased. There has also been a considerable increase in recreational fishing of cod in the Baltic Sea during the past decade.

Thus the recreational fishing may apparently affect the fish stocks in coastal areas and should be more intensively monitored.
### Annex 1. Results of the questionnaire by country

<table>
<thead>
<tr>
<th>Country</th>
<th>Denmark</th>
<th>Sweden</th>
<th>Åland</th>
<th>Finland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring of recreational fisheries</td>
<td>Annual interview survey (combined telephone and internet recall survey). EU obligations to monitor recreational catches of cod, eel and sea-trout. Relative catches of these species to commercial fisheries are estimated.</td>
<td>Annual questionnaires (sent out three times a year). Results reported every fourth year, since 2014 annually. Starting in 2015 more intensive monitoring in focus areas.</td>
<td>Surveys every two years (Åland included in the national surveys of Finland).</td>
<td>National surveys every two years, from some years also other surveys</td>
</tr>
<tr>
<td>Data availability or significance vs. commercial fisheries?</td>
<td>Anglers: &gt;70 % fish in marine waters. Data available: cod and eel catches from 2009 and for sea-trout since 2010. Eel 80-116 t annually (Commercial landings in 2011 was 370 t). Cod: 1231 -1666 t annually (mostly angling). Recreational catch of cod was 4.5 % of total yield.</td>
<td>For perch, pike and pikeperch recreational catches 90-95% of total catches. Whitefish 65%, trout 80%, salmon 20 % of the total catches.</td>
<td>Catches 2012: Perch 92 tons (commercial 134 tons) Whitefish 28 tons (commercial 53 t) pike 33 tons (commercial 15 tons) Total 228 tons (commercial 302 tons)</td>
<td>Catch and effort data available by sea area. Catches in the 2000s: Perch 2000-3000 tons Pike 1400-2300 tons Roach 400 -1300 tons Whitefish 400-900 tons Pikeperch 300-600 tons Sea trout 100-300 tons The recreational perch, pike and roach catches are multifold compared to the commercial catches; sea trout about double, and whitefish and pikeperch catches roughly on the same level as the commercial catches.</td>
</tr>
<tr>
<td>Country</td>
<td>Denmark</td>
<td>Sweden</td>
<td>Åland</td>
<td>Finland</td>
</tr>
<tr>
<td>---------</td>
<td>---------</td>
<td>--------</td>
<td>-------</td>
<td>---------</td>
</tr>
<tr>
<td>Licenses</td>
<td>License is needed for rod or angling fishing for persons between 18 and 65 y. Passive gear fisheries (eg. gillnets, fykenets) have to pay a license that is slightly higher than the angler license and is obligatory for all. This license allows fishing with 3 gillnets plus 3 fykenets or a total of 6 fykenets. The catch cannot be sold.</td>
<td>Free angling (except MPAs). Gillnets or other passive gears permits from water owners. In public waters restricted number of nets or pots allowed for anyone</td>
<td>License from water owner, no general license.</td>
<td>Angling without reel, and rod fishing from ice are free; for other fishing license is needed for persons between 18 and 65 years. In addition, for rod and reel fishing regional licenses; for gillnets, fyke nets etc. permits from water owners.</td>
</tr>
<tr>
<td>Gear types</td>
<td>Anglers: rod and reel Passive gears: gillnets, fykenets</td>
<td>Gillnets, fyke nets, pots, rods and reels (no strict restrictions)</td>
<td>Gill nets, rods, small fyke nets, short long lines</td>
<td>Gill nets, rods, small fyke nets, wire traps, short long lines</td>
</tr>
<tr>
<td>Target species</td>
<td>Anglers: Sea trout, garfish (Belone belone), cod, salmon, various flatfish species. Passive gear: eel caught in fykenets, flounder (Pleuronectes flesus) caught in gillnets.</td>
<td>Pike, whitefish, perch, pikeperch, sea trout, salmon, cod, herring, flounder, plaice, turbot.</td>
<td>Perch, whitefish, pike</td>
<td>Perch, pike whitefish, pikeperch, sea trout, bream and other species, e.g. Baltic herring</td>
</tr>
<tr>
<td>Catch quotas or effort restrictions</td>
<td>Effort restrictions (gear number and size).</td>
<td>Pike 3 fish per day (Bothnian Bay not included). Kattegat 2 fish per day for salmon and sea trout. Limitations for the number of passive gears.</td>
<td>No quotas</td>
<td>No quotas, local restrictions of effort, e.g. numbers of gillnets</td>
</tr>
<tr>
<td>Country</td>
<td>Denmark</td>
<td>Sweden</td>
<td>Åland</td>
<td>Finland</td>
</tr>
<tr>
<td>---------</td>
<td>---------</td>
<td>--------</td>
<td>-------</td>
<td>---------</td>
</tr>
<tr>
<td><strong>Minimum size limits</strong></td>
<td>Size limits (minimum sizes of fish)</td>
<td>Pike length 40-75 cm TL. For pikeperch, grayling, salmon, sea trout and cod minimum size limits for angling.</td>
<td>pike 55 cm pikeperch 37 cm salmon 60 cm sea trout 50 cm bream 42 cm whitefish35 cm</td>
<td>pikeperch 37 cm salmon 60 cm sea trout 60 cm grayling 35 cm</td>
</tr>
<tr>
<td><strong>Other restrictions</strong></td>
<td>Closed periods, areal restrictions in coastal areas, gillnets not allowed closer than 100 m to coastline and protected areas around all river mouths.</td>
<td>River mouths and waters &lt; 3 meters depth passive gears not allowed in the Gulf of Bothnia (to protect sea trout, salmon, whitefish, eel). Protected spawning areas/times or migrations along the coast for different species. Salmon with intact adipose fin have to be released.</td>
<td>Fishing of pikeperch prohibited 1-25 July. The water owners can set different regulations: closed areas or seasons, higher minimum sizes, restricted number of gears.</td>
<td>The water owners can set different regulations: closed areas or seasons, higher minimum sizes, restricted number of gears.</td>
</tr>
<tr>
<td><strong>Others</strong></td>
<td>Fishing with passive gears has become rarer, fishing with rods and reels more common. More effective equipment for rod fishing, almost 2 million sport fishermen. Local impacts on ecosystem are likely.</td>
<td></td>
<td></td>
<td>Similar development as in Sweden: fishing with passive gears is less popular as before, rod fishing specifically targeted for e.g. pikeperch, perch or pike has become very effective, fishing tourism from inland areas is common.</td>
</tr>
</tbody>
</table>
# Annex 1: Results of the questionnaire by country

<table>
<thead>
<tr>
<th>Country</th>
<th>Latvia</th>
<th>Estonia</th>
<th>Lithuania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring of</td>
<td>No monitoring of anglers’ catches, daily logbooks in subsistence fishery</td>
<td>Numbers of licenses continuously monitored. Other data from areas of special interest (salmon rivers etc.)</td>
<td>No monitoring</td>
</tr>
<tr>
<td>recreational fisheries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data availability or</td>
<td>Data from subsistence fishery from 1993, data from angling in 2007 and 2012</td>
<td>Obligation to report data on catches from gillnets, longlines or areas of special interest (data not reliable as often not reported).</td>
<td>No data on recreational catches</td>
</tr>
<tr>
<td>significance vs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>commercial fisheries?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Licenses</td>
<td>License is needed for rod fishing or angling for persons between 18 and 65 years, gear-specific limited licenses for subsistence fishing.</td>
<td>No license for angling without reels. Daily licenses for other rod fishing. Separate licenses (limited numbers) for gillnets, longlines and special areas.</td>
<td>Licenses needed for recreational fishing; daily licenses in salmon and sea trout rivers.</td>
</tr>
<tr>
<td>Gear types</td>
<td>Only rods and spear fishing allowed (in subsistence fishery (own consumption) also gillnets, trap nets etc.)</td>
<td>Gillnets, longlines, rods, live bait, harpoon guns</td>
<td>Rods and traps for crayfish</td>
</tr>
<tr>
<td>Target species</td>
<td>Perch, flounder, sea trout, cod, garfish and several other species</td>
<td>Pike, pikeperch, sea trout, salmon, perch, whitefish, flounder</td>
<td>Inland and Curonian lagoon: almost all freshwater species (e.g. perch, pikeperch, pike, bream etc. Baltic Sea: e.g. cod, flounder, perch, round goby, smelt, garfish, salmon and seattrout.</td>
</tr>
<tr>
<td>Catch quotas or effort</td>
<td>10 kg/day for perch and flounder, 5 individuals of sea trout (+ several other quotas in subsistence fishery)</td>
<td></td>
<td>7 kg bag limit for the Curonian Lagoon, since 2015 smelt is not limited. Baltic Sea: 1 salmon, 1 sea trout, 1 whitefish; 5 turbot, 15 cods</td>
</tr>
<tr>
<td>restrictions</td>
<td></td>
<td></td>
<td>Restricted effort (number of rods/hooks)</td>
</tr>
</tbody>
</table>
### Minimum size limits

| E.g. perch 17 cm, flounder 21 cm  |
| sea trout 50 cm, and several other size limits for different species |

| TL (cm) |
| Perch 19 (only in sea), pikeperch 44 (sea), pike 45, salmon 60, sea trout 50, whitefish 35, flounder 21 (ICES area 28) or 18 (ICES areas 29 and 32) |

| See e.g. |
| http://www.kalateave.ee/et/kalapuuk/kuteline-puuk/kalade-alammoodud for complete list |

| Minimum size limits for several species |

### Other restrictions

| No fishing allowed during spawning time and river mouths |

| Gillnet mesh size limitations, no fishing allowed during spawning time on certain areas and river mouths. (See http://www.kalateave.ee/et/kalanduse-teabekeskuse-trukised1/3739-veebi-ja-nutiseadme-rakendus-kalapuugipiirangu for details) |

| Closed seasons for some species related to their spawning seasons |

### Others

| Increase in salmon and sea trout fishing in marine waters. Considerable increase in recreational fishing of cod in the Baltic sea during the past decade. |
## Country: Poland

### Monitoring of recreational fisheries
No monitoring of catches before, but from 2014 onwards obligation to report efforts and catches

### Data availability or significance vs. commercial fisheries?
Number of angling licenses annually, data available since 2004. Data from the questionnaire interviews with participants of organized fishing cruises. Data from board observer programme since 2006.

### Licenses
Individual licenses, or ship owners or for the organizer of the fishing event

### Gear types
Only angling and spearfishing allowed

### Target species
Cod, sea trout, salmon, garfish, sea trout, bream, eel, herring, flounder

### Catch quotas or effort restrictions
Limits of daily catch of each species per one angler, limited number of rods (one rod per person).

### Minimum size limits
Individual size limits for several species (more details in the document 4.2).

### Other restrictions
Protected spawning seasons/areas.

### Others
Rising popularity of recreational fishing in the Polish marine waters. Availability of specialized equipment, fishing methods. Increasing conflict between anglers and professional fishermen. Currently developed new Law on Marine fisheries provides a number of changes in the recreational fishing in the Polish marine waters. It implies significant pricing of fishing licenses and the rules of reporting the catch (see document 4.2).

## Country: Germany

### Monitoring of recreational fisheries
No regular monitoring, exceptions for specific areas and occasional surveys

### Data availability or significance vs. commercial fisheries?
Cod catch of anglers is almost in the same range as the commercial cod catch

### Licenses
One week’s education needed for the license; also regional fees

### Gear types
Only angling allowed (fly fishing, trolling, jigging, bait fishing with rods etc.); “hobby fishermen” who had a former job in the fishery are allowed to use limited numbers of gillnets, hooks and eel baskets.

### Target species
Off coast herring, cod, flounder, garfish
River inlets: perch, pikeperch, herring

### Catch quotas or effort restrictions
Limits of daily catch in numbers of valuable species

### Minimum size limits
Minimum landing sizes

### Other restrictions
Limited number of rods per angler, closed seasons or areas

### Others
The number of anglers at the German Baltic coast is on a constant level, about 100 000, estimated from the number of sold licenses.