GERMAN NATIONAL FISHERIES DATA SAMPLING PROGRAMME 2007 update

Based on

EU Council Regulation 1543/2000 and Commission Regulations 1639/2001 and $1581/2004\,$

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1. Introduction

1.1 General framework

The German National Programme for sampling of fisheries data refers to the Community Data Sampling Programme defined in Council Regulation 1543/2000 and the Commission Regulations 1639/2001 and 1581/2004. It describes the planned actions by articles and modules of the Commission Regulations 1639/2001 and 1581/2004.

This NP proposal covers the forthcoming year, 2007 (= NP-year).

In comparison with previous years, there are no major changes in the NP approaches. The requirements specified in Reg. 1581/2004 were already included in the NP 2006, and efforts in 2007 will continue to be in accordance with these obligations.

Articles of Regulations 1639/2001 and 1581/2004:

Article 3: Requirements for the national programmes

Data on fleet capacity, fishing effort are sampled/collected nationally as well as sampling of commercial fishing vessels under German flag. Data on landings in terms of weight and value are sampled on national basis and in co-operation with other member states or third countries, as the major part of landings under German flag are landed outside of Germany. Biological sampling of landings outside Germany can only be done in close co-operation with other member states or third countries. This is valid especially in the case of Denmark, The Netherlands and Sweden (see Module H).

Biological data and survey data are sampled on national basis and in (mainly ICES-) coordinated survey programmes.

Depending on the results of pilot studies, economic data will be sampled also on national or international basis.

Article 5: Transmission of data to international organisations

Landings and effort data in the relevant aggregation are submitted yearly to ICES and NAFO in the STATLANT format. Due to conventional agreement, NEAFC receives weekly information on landings from the NEAFC Regulatory Area by ships under German flag. Monthly reports are also sent to NAFO and ICES.

Biological data are transmitted to the relevant Assessment Working Groups of ICES and NAFO.

Article 6: Coordination between Commission and Member States

The Federal Research Centre for Fisheries (BFAFi) has been determined as the responsible organisation and the national co-ordinator of the data sampling programme. In this function, the BFAFi is the national correspondent to the Commission. Details have been communicated to the Commission by 31. May 2001. Germany will take measures to comply with article 6 (2)-(5).

Article 9: Management of primary and aggregated data

In Germany, four institutions own the data which are required by the common and national data sampling programmes:

• The fishing vessel list including capacity data based on EU Regulations 2090/98, 2091/98 and 2092/98 as well as landings and effort data based on EU Regulations

2807/83 and 2897/93 are kept in the Federal Agency for Agriculture and Food (BLE) in Bonn.

- Biological data, biological survey data as well as data from sampling of commercial fishing vessels under German flag are held at the Federal Research Centre for Fisheries (BFAFi) in Hamburg.
- Data on the economy of the German fishing fleet, first calculated for 2002, are owned by the Federal Agricultural Research Centre (FAL) in Braunschweig.
- Data on the processing industry are kept at the Federal Statistical Office Germany (StBA) in Wiesbaden and FAL in Braunschweig.

Aggregated data requested by the data sampling programme are transferred to a common database at the Centre for Documentation and Information in Agriculture (ZADI). This institution has the technical skills and equipment to secure the requests stated in paragraphs 1 to 6 of this Article as well as to serve and run the database. The relevant institutions are responsible for the input and content of the database.

National access rights to the database are restricted to the above mentioned institutions only for their relevant part of the database. It will be secured that only aggregated data will be available via internet and that no relation can be concluded between these data and individual ships, natural or legal persons.

For further details on the national database development, see section 12.

Article 10: Access to data by the commission

Requests for electronic access to German data by the commission directed to the national correspondent of the German national data sampling programme will be transferred to ZADI which will determine a time window and password within 20 days for the access by the commission.

Article 11: Access to data by member states

The same procedure as in Article 10 for other member states is applied.

1.2 General description of the fisheries

Table 1.1 shows a general overview on the German fisheries activities during recent years and to be expected for the NP-year. In the Northeast Atlantic (incl. the Baltic), demersal, pelagic and a smaller fraction of industrial fisheries are conducted. In ICES Sub-areas V-VII(excl. Div.VIId) and VIII-XIV, few vessels under German flag are conducting deep-water fisheries. In the NAFO area, a small fraction of the fleet is conducting two fisheries only, targeting Greenland halibut (*Reinhardtius hippoglossoides*) in Div. 1D (demersal) and redfish (*Sebastes mentella*) in Div. 1F, SA2 and Div. 3K (pelagic).

2. Participating institutes

2.1 National correspondent

By 1 January 2007, the National Correspondent representing Germany is:

Dr. Christoph Stransky
Federal Research Centre for Fisheries
Institute for Sea Fisheries
Palmaille 9
D-22767 Hamburg
Germany
Tel +49 40 38905 228
Fax +49 40 38905 263

E-mail: christoph.stransky@ish.bfa-fisch.de

2.2 Participating Institutes

In Germany, four institutions own data which are relevant to requirements outlined in Regulations 1639/2001 and 1581/2004 in relation to national data sampling programmes:

• Bundesanstalt für Landwirtschaft und Ernährung (BLE) (Federal Agency for

Agriculture and Food)

Deichmanns Aue 29

53179 Bonn, Germany

Tel +49 228 6845-0

Fax +49 228 6845-3444

Website: http://www.ble.de

• Bundesforschungsanstalt für Fischerei (BFAFi) (Federal Research Centre for

Fisheries)

Palmaille 9

22767 Hamburg, Germany

Tel +49 40 38905-0

Fax +49 40 38905-263

Website: http://www.bfa-fisch.de

• Bundesforschungsanstalt für Landwirtschaft (FAL) (Federal Agricultural Research

Centre)

Bundesallee 50

38116 Braunschweig, Germany

Tel +49 531 596-0

Fax +49 531 596-5399

Website: http://www.fal.de

• Statistisches Bundesamt (StBA) (Federal Statistical Office Germany)

Gustav-Stresemann Ring 11 65189 Wiesbaden, Germany

Tel +49 611 75-0

Fax +49 611 75-3330

Website: http://www.destatis.de

The **BLE** keeps the fishing vessel list including capacity data based on EU Regulations 2090/98, 2091/98 and 2092/98 as well as landings and effort data based on EU Regulations 2807/83 and 2897/93.

The **BFAFi** collects biological data, biological survey data as well as data from sampling of commercial fishing vessels under German flag. The Institute for Baltic Sea Fisheries (**IOR**) is responsible for the Baltic Sea. The Institute for Sea Fisheries (**ISH**) is responsible for the North Atlantic and the other areas.

The **FAL** handles data on the economy of a part of the German fishing fleet based on a test programme.

The **StBA** compiles data on the processing industry including fish processing industry.

BLE, FAL and BFAFi are institutions within the **Bundesministerium für Ernährung**, **Landwirtschaft und Verbraucherschutz (BMELV)** (Federal Ministry of Food, Agriculture and Consumer Protection), whereas the StBA belongs to the **Bundesministerium für Inneres** (**BMI**) (Ministry for Internal Affairs).

Within the institutions of BMELV, responsible persons were appointed in order to co-operate and establish a national fisheries data sampling programme. The BFAFi was determined as national coordinator.

The group of responsible persons met several times in 2001 and made basic decisions on the national programme. Concerning the requirement for a data base system for aggregated data a database combining all programme relevant data was seen as an advantage for access from outside via internet by the commission and other member states as well as for internal national issues. Therefore, BMELV decided to combine the aggregated data requested by the data sampling programmes in a combined database at the **Zentralstelle für Agrardokumentation und –information (ZADI)** (Centre for Documentation and Information in Agriculture) in Bonn reflecting the required data by the data sampling programmes. ZADI has the technical skills and equipment to secure the requests stated in Regulations 1639/2001 and 1581/2004 as well as to serve and run the database. The relevant institutions are responsible for the input and content of the database. A database for a part of the data was already established and tested in the first half of 2002 and further developed in 2003-2006.

The contact details for ZADI are:

Zentralstelle für Agrardokumentation und –information (ZADI) (Centre for

Documentation and Information in Agriculture)

Villichgasse 17

53177 Bonn, Germany

Tel: +49 228 9548-0 Fax: +49 228 9548-111 Website: http://www.zadi.de

Compared to other member states Germany has no central institution which deals with the economy of the fishing fleet or the economy of the fish processing industry. Relevant data and analytical work are distributed all over Germany. Therefore, basic work in relation to sampling of economic data has to be done in order to comply with the requirements of Regulations 1639/2001 and 1581/2004.

In 2005 and 2006, a national legal regulation for fisheries data collection has been prepared, but is not in force yet.

3. Module C – Fishing capacities

3.1 MP - Planned sampling

The database contains the list of German fishing vessels covered by the MAGP IV further on called Fishing Vessel Register. The requirements for the Fishing Vessels Register are stated in EU Regulations 2090/98, 2091/98, 2092/98 as well as 2930/86. This Fishing Vessel Register includes vessels with a license to fish under German flag is kept in the BLE. The list is updated daily.

The list of fishing vessels contains inter alia the required parameters

- number of fishing vessels
- gross tonnage
- maximum continuous engine power in kW
- age of the vessel hull

Vessels of less than 10 m overall length are not obliged to report logbook data. In the Baltic, however, vessels larger than 8 m have to report to logbooks since 1 Jan 2006 (Reg. 52/2006).

Aggregation

Besides the segmentation of the fleet due to the MAGP, a new segmentation parameter for a segmentation defined in Appendix III of Regulations 1639/2001 and 1581/2004 was added to the list. Based on this segmentation, mean values of the required parameters (see above) will be calculated.

3.2 MP – Derogations and non-conformities

None.

3.3 EP – Planned sampling

Germany does **not** apply for an extended programme under this module.

3.4 EP – Non-conformities

Not relevant.

4. Module D – Fishing effort

4.1 MP - Planned sampling

In Germany, information on fishing effort is derived from logbook data. The collection of logbook data is determined by Regulations 2807/83 and 2847/93. However, some parameters like fuel consumption required by Regulations 1639/2001 and 1581/2004 are not mandatory to be reported in the above mentioned regulations.

Other parameters not required by Regulations 1639/2001 and 1581/2004, but which are essential for calculation of useful effort units, are not mandatory to be reported. These are the length of set nets or drift nets as well as the number of hooks on long-lines.

All fishing vessels of the Fishing Vessels Register are obliged to report logbook data including effort which are stored in the logbook database. Vessels of less than 10 m overall length are not obliged to report logbook data. These vessels report landings in a landings declaration which contains no effort or gear reporting. In the Baltic, vessels larger than 8 m have to report to logbooks since 1 Jan 2006 (Reg. 52/2006). However, the effort data of vessels <10 m are sampled in a pilot study described in section 10.

Aggregation

Based on the logbook database, the compilation of:

- fishing effort by type and special effort as defined in Module D (1)(a)(ii)
- specific fishing effort as defined in Module D (1)(a)(iii)

per segments defined in Appendix VIII, quarter and division can be conducted. **Mean fuel consumption per segment (as defined in Appendix III) is dealt with in section 10.**

Eel sampling

Species-specific effort data for eel (*Anguilla anguilla*) are collected in respect with Module J in collecting economic parameters (section 10.1 sub-section Fishing effort). Germany is currently preparing a **pilot study** on eel monitoring, which is outlined in Annex 1.

4.2 MP - Derogations and non-conformities

As the average annual eel landings during recent years were considerably lower than 100 t (cf. Table 8.2), Germany is not obliged to provide data under this module, but effort data are collected in the logbook database.

4.3 EP – Planned sampling

Germany does **not** apply for an extended programme under this module.

4.4 EP -Non-conformities

Not relevant.

5. Module E – Catches and landings

5.1 MP – Landings - Planned sampling

Based on logbooks, the landings are gathered exhaustively for vessels recording on logbooks. Landed product weight is corrected by application of conversion factors (Table 5.1) to live weight and distributed proportionally due to logbook records. For vessels not obliged to record on logbooks, landings declarations are used to calculate live weight using conversion factors. These vessels are small boats normally not changing between divisions as they fish more or less locally. The gathering of landings data for this part of the fleet is also exhaustive i.e. by census.

Data on landings of fishing vessels under German flag are gathered under the Regulations 2807/83, 2847/93 and 104/2000. Vessels under German flag have to report logbook data and landings declarations and/or trans-shipment declarations. Logbooks contain inter alia information by species on catch (landings) weight, effort, gear, and geographical origin of catches (landings). Landings declarations contain inter alia information by species on landed processed products in terms of weight and value, landing site as well as information on the

fishing trip. Information from logbook and landings declaration are merged and stored in a logbook database and a landings database. The merging process starts with the application of conversion factors for each landed processed product by species. The resultant life weight is summed up per species. Using the logbook information the species live weight is raised by sub-area, division (subdivision) and statistical rectangles. Resultant data are stored in the landings database.

Landings are aggregated according to level 2 (statistical sub-areas) of Appendix I of Regs. 1639/2001 and 1581/2004. For landings of stocks in Appendix XII of Regs. 1639/2001 and 1581/2004, the aggregation is used as indicated in that Appendix.

Vessels less than 10 m overall length are not obliged to report on logbooks. They are only obliged to fill in landings declarations. However, these data cannot be related to gear and effort. In the Baltic, vessels larger than 8 m have to report to logbooks since 1 Jan 2006 (Reg. 52/2006). For the landings by gear, the same situation exists as for the estimation of effort. Almost all of these vessels have static gear and are not equipped to operate mobile gears.

Compilation of landings in weight and value per segment listed in Appendix III per species, quarter and sub-area is dealt with in section 10.

Budget planning for Module E is integrated into Module H (section 8), as the sampling is done simultaneously for both modules.

Eel sampling

Landings data for eel (*Anguilla anguilla*) are collected in the logbook database. Germany is currently preparing a **pilot study** on eel monitoring, which is outlined in Annex 1.

5.2 MP – Landings - Derogations and non-conformities

As the average annual eel landings during recent years were considerably lower than 100 t (cf. Table 8.2), Germany is not obliged to provide data under this module, but landings data are collected in the logbook database.

5.3 EP – Landings – Planned sampling

Germany does **not** apply for an extended programme under this module.

5.4 EP – Landings - Non-conformities

Not relevant.

5.5 MP & EP – Discards – Planned sampling

Monitoring of discards is also dealt with in section 8, as this will be done simultaneously with sampling of commercial catches at sea (Module H). Thus, some of the fisheries sampled do not indicate that discarding is important (Table 5.2), but will be sampled in accordance with Module H (Table 8.4). The fleet segmentation follows Appendix III of Regs. 1639/2001 and 1581/2004. Information on discards is combined with landings to an estimation of catches. For those species for which yearly estimates are requested and which are covered by fisheries to be sampled (Table 8.2), the estimation of discards will be done for 2007 (see Tables 5.2 and 5.3). Most of the fisheries are sampled at sea (Table 5.3).

Estimation of discards will be done only for those stocks which have to be sampled in Module H after applying derogation rules (see section 8). However, if species are caught from stocks indicated in Appendix XII (Reg. 1639/2001 and 1581/2004), they will be sampled as well as any species brought on deck. To comply with all listed species in App. XII would in the case of Germany result in establishing illegal fisheries (no quota) or reactivating non-active fisheries only in order to get estimations on discards for these stocks.

5.6 MP & EP – Discards – Derogations and non-conformities

The present status of a sampler on board of a German fishing vessel is still a guest status. The possibility for biological sampling depends on the hospitality of ship owners and companies. Based on the present situation, random sampling of the fleet is yet not possible. These led already in the past to a preference in sampling onboard vessels of owners with some degree of positive understanding of aims and situation of the fishery research in general and the individual observer in particular. Thus, the immense number of sampling strata to cover segments relevant to gear types, areas, seasons and species is reduced.

5.7 MP – Recreational – Planned sampling

Data sources

There are no regulations in coastal German countries obliging the recreational fishery to record their catches taken from the Baltic Sea or North Sea. The data will therefore have to be collected by means of direct interviews of the recreational fishermen. It will be essential to work closely with the different angling associations and the governmental administrations of the countries, and to cooperate with angling clubs and the owners of angling cutters.

Methods of the recreational fishery

The recreational fishery can be divided in two groups.

The first group are the anglers. Anglers use fishing rods and, on occasion a small net for catching fish bait. Fishing with rods can be subdivided into beach fishing (demersal fishing with natural baits from the beach and angling whilst wading, using artificial or natural baits) and boat and cutter angling (with natural or artificial baits) including trolling as a special method.

The second group uses fishing methods like the commercial fishery, e.g. traps, eel pots, stow nets, long lines and gillnets. It is different from federal country to federal country which of the passive methods mentioned above are permitted for this group.

Data sampling

Cod is the main target species of all sampling in this pilot study. In addition, the data for all other fish species, e.g. flounder, herring and sea trout, caught by the recreational fishery and obtained during sampling are collected.

Baltic Sea

ANGLERS

EFFORT

The exact hours fished will be recorded during the census of landings of recreational fishermen on the beaches and an in harbours (see LANDINGS). The data collected should allow to estimate the duration of an angling day and a catch per hour.

A questionnaire to collect data of the effort (angling days) in 2006 should be coordinated with the German Sea Angler Association.

LANDINGS

In 2007, a stratified random sampling will be realised to gather information on angling landings. Harbours, beaches and sampling days will be randomly selected for the interviews of sports fishermen.

The coastal area of Mecklenburg-Vorpommern and Schleswig-Holstein are subdivided into five regional strata. The regional strata are broken down into substrata (defined beaches and harbours) which are to be sampled.

The regional stratum "Rostock" is sampled more intensely compared to the other regions and has the character of a reference area. Most of the sampling effort for boat and cutter angling is exerted on the harbours of Rostock, because this is by far the region with the highest density of sports fishing in the reference area.

In the other areas the beaches to sample are selected randomly. To ensure an effective use of the available labour, time and the financial resources boat and cutter angling harbours to sample are then selected under the aspect of geographical closeness to the randomly selected beach.

It is expected that angling activities are not distributed equally over time and the different methods. It is assumed that relatively more anglers are involved in boat and cutter fishing on Saturday, Sunday and holiday than on the other days. Further, higher activity for beach fishing is expected to take place on Friday, Saturday and the day before a public holiday, compared to other days. Therefore these days will also be sampled more intensely than the other ones.

Generally the following monthly sampling is planned for 2007:

beach fishing		boat und cutter angling							
reference area "Rostock"									
			harbours of Rostock	other harbours					
time period	No. of samples	time period	No. of samples	No. of samples					
Fri., Sat., day before holiday	2	Sat., Sun, holidays	1	1					
Sun., Mon., Tue., Wed., Thu, holiday (if it is not a Fri./Sat.)	2	Mon., Tue., Wed., Thu., Fri.	1	1					
other areas									
No. of samples		No. of samples							
4		4							

Additional cod landings data will be received in cooperation with some owners of angling cutters.

The Boat-Angler-Club will provide data from the Trolling Meeting in spring 2007 and from the Boat-Angling-Festival in autumn 2007.

Along with an article in the "Meeresangler-Magazin", the members of the German Sea Angler Association e.V. receive a questionnaire related to their effort and catch in 2006.

LENGTH COMPOSITION OF LANDINGS

Length compositions of the landings will be collected in cooperation with the Angling Associations and Angling Clubs. It is important to approach more Angling Clubs to provide their data from the angling events.

Normally no angling events for boat and cutter angling are realised in the first quarter of the year. Therefore three samples (one per month) will be taken to record the length composition of the catches on board of angling cutters in the first quarter.

RECREATIONAL FISHERY WITH COMMERCIAL FISHING METHODS

10 % of the fishermen (randomly selected) which are fishing for cod will be interviewed for their effort and landings.

North Sea

ANGLERS

The studies and the sampling conducted in 2004/05 demonstrated that the landings of anglers are without importance for the cod stock in the North Sea. Therefore no further activities are planed for 2007.

RECREATIONAL FISHERY WITH COMMERCIAL FISHING METHODS

The pilot study is only extended in 2006 to cover this aspect of the recreational fishery. Data is therefore insufficient at present to serve as basis for a detailed planning of sampling activities in 2007.

Note: Changes to the sampling scheme might be required following the evaluation of the Pilot Study for the recreational fishery on cod, taking place after the end of the study on March 31st, 2007.

Aggregation

Landings of the recreational fishery will be aggregated as required.

5.8 MP – Recreational – Derogations and non-conformities

None.

5.9 EP – Recreational – Planned sampling

Germany does **not** apply for an extended programme under this module.

5.10 EP – Recreational – Derogations and non-conformities

Not relevant.

6. Module F – Catches per unit effort

6.1 MP - Planned sampling

All CPUE series which have been provided to the relevant assessment working groups in preceding years will also be provided in 2007 (Table 6.1).

Other CPUE series used in the various stock assessments are also submitted to the corresponding ICES and NAFO working groups.

Germany **applies for the inclusion of the Greenland halibut** (*Reinhardtius hippoglossoides*) **CPUE series in ICES sub-areas V and XIV** in addition to the series listed in SEC 2003 843. This series is provided to the ICES NWWG since 1995 and is used in the assessment (monitoring of trends in stock abundance) since 1995 (ICES 2006b). During recent years, Germany had major shares of the total landings (around 25%) and >80% of the EU TAC share.

6.2 MP – Derogations and non-conformities

None.

6.3 EP - Planned sampling

Germany does **not** apply for an extended programme under this module.

6.4 EP – Non-conformities

Not relevant.

7. Module G – Scientific evaluation surveys

General comment

For most of the surveys listed below, the final planning for 2007 with regard to haul positions and hydroacoustic tracks has not been concluded by 31 May 2006. Thus, the given details and survey maps are only preliminary or show examples based on the 2005 or 2006 surveys.

7.1 MP - Planned Priority 1 surveys

Germany will continue to conduct the Priority 1 surveys as in previous years (Table 7.1) and will contribute financially (and with staff, if possible) in the Atlanto-Scandian Herring Acoustic Survey and Blue Whiting Survey conducted by Denmark. There will be no changes in strategy or design except when co-ordinated with the relevant ICES working group. Of

course, the number of hauls and length of tracks that can be achieved depend on weather conditions as well as on the performance of the equipment and/or of the vessel. The number of hauls and length of tracks (Table 7.1) will in all surveys be within the range of records for the former survey years.

In the following, the surveys are described in detail:

1) Baltic International Trawl Survey (BITS) in the 1st and 4th Quarter

Target species are demersal fish species, mainly Baltic cod, and flat fish species, mainly flounder, plaice, dab and turbot. The main aim is to determine the year-class strength of the target species. Target data are abundances, weight and length distributions of all fishes and length-weight-age-sex-maturity-feeding data of commercially important species as well as hydro-graphic data (temperature, salinity, oxygen). The collected data are stored in a national Access database and submitted to the ICES WGBFAS and DATRAS database.

Germany is participating in the survey in the first quarter and in the fourth quarter. Germany is co-ordinating this survey within the ICES WGBIFS (ICES 2003). The survey parts will be conducted from 14 Feb to 5 Mar 2007 and from 29 Oct to 16 Nov 2007 on FRV "Solea". Refer to Fig. 7.1 for an example of the station grid of both survey parts. The final station locations are randomly assigned at the next WGBIFS.

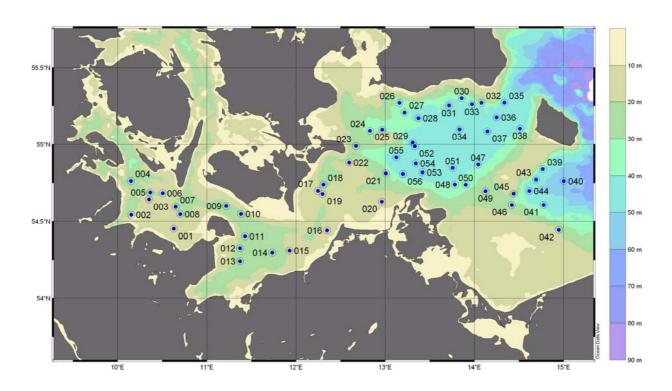


Fig. 7.1: Baltic International Trawl Survey (BITS, 1st and 4th quarter). Example of station grid (final positions will be allocated at the WGBIFS).

2) Baltic Herring Acoustic Survey

Target species are pelagic fish species, mainly herring and sprat. Target data are: Area scattering coefficient (s_A) and related species composition as abundances, weights and length distributions of all species and additional length-weight-age-sex-maturity data of commercially important species, as well as hydrographic data of the water column at the fishing stations: Temperature, salinity and oxygen.

The collected data are stored in a national Access data base. Data are also submitted to ICES PGHERS and WGBIFS and BADII data bases. The survey will take place 4-23 Oct 2007 on FRV "Solea". Fig. 7.2 shows an example plot (from 2005) of the cruise tracks and fishery stations conducted on the German part of the Baltic Herring Acoustic Survey.

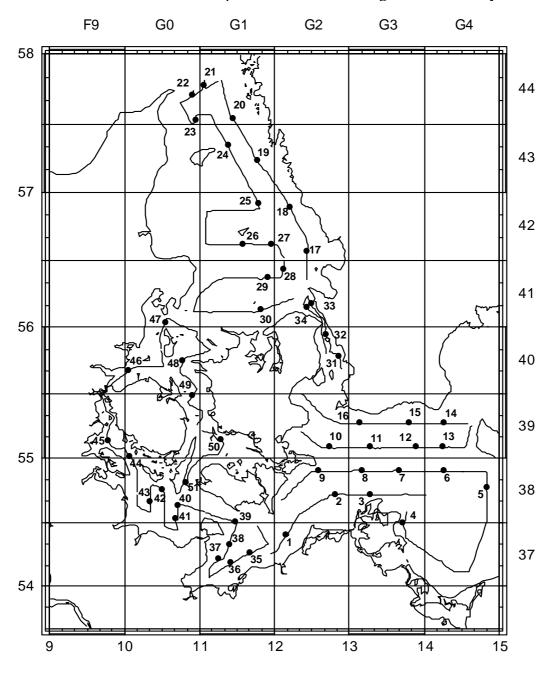


Fig. 7.2: Baltic Herring Acoustic Survey. Example of cruise track and fishery stations.

3) Baltic Sprat Acoustic Survey

The main objective of the survey is to assess the sprat stock in the south-western Baltic Sea. The main achievements of the survey are to get data on:

- basic values for the computation of the abundance (survey area, mean s_A , mean scattering cross section σ , estimated total number of fish and percentage of herring and sprat per rectangle),
- abundance of sprat per age group,
- mean weight of sprat per age group
- hydrography (salinity and temperature by depth, CTD) and oxygen data Summarized data are stored in the database BASS (Baltic acoustic spring survey), and detailed data are stored locally in specific databases of the Federal Research Centre for Fisheries. The survey will take place from 16 May to 4 Jun 2007 on FRV "Walther Herwig III". Please refer to Fig. 7.3 for an example of the cruise track and trawl stations to be conducted on the German part of the Baltic Sprat Acoustic Survey.

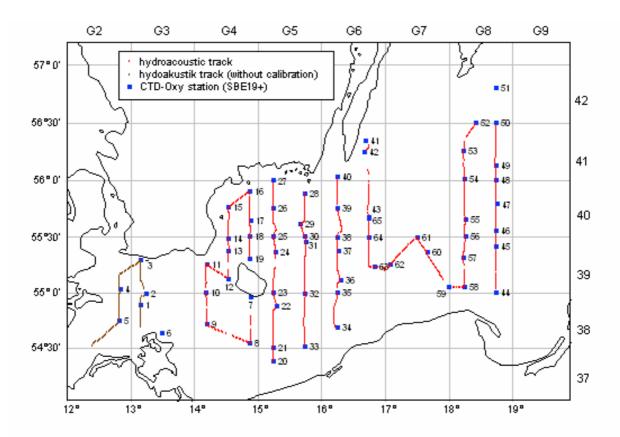


Figure 7.3: Baltic Sprat Acoustic Survey. Example of cruise track and trawl positions.

4) International Bottom Trawl Survey (IBTS) in Quarter 1

The main aim of the 1st quarter IBTS is to provide abundance indices of the target species haddock, cod, saithe, herring, sprat whiting, mackerel and Norway pout. Types of data collected include biological data, gear, haul procedures, positions, hydrographic data, weather as well as the sea state. The data are stored locally on an Access data base in the national institute. Data are also submitted to ICES. The survey in quarter 1 will be conducted from 17 Jan to 16 Feb 2007 on FRV "Walther Herwig III". Please refer to Fig. 7.4 for a preliminary map of the survey area and allocation to the participating countries.

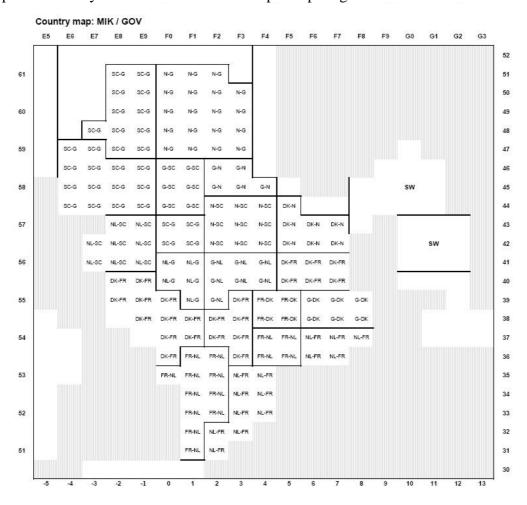


Fig. 7.4: International Bottom Trawl Survey (IBTS) 1st quarter. Preliminary survey area and allocation to countries (G=Germany). The first country mentioned in each rectangle has first responsibility for MIK sampling.

5) Atlanto-Scandian Herring Acoustic Survey

Germany will participate in this survey with staff and will continue to contribute to its financing in order to support Denmark to conduct the survey. The survey will take place in Apr-May 2007.

6) International Bottom Trawl Survey (IBTS) in Quarter 3

The main aim of the IBTS survey is to provide abundance indices of the target species haddock, cod, saithe, herring, sprat whiting, mackerel and Norway pout. Types of data collected include biological data, gear, haul procedures, positions, hydrographic data, weather as well as the sea state. Additionally, data of epibenthos, nutrients and seabirds are collected. The data are stored locally in Access databases in the national institutes. Data are also submitted to ICES. The IBTS survey in Quarter 3 is conducted in conjunction with a national survey from 17 Jul to 15 Aug 2007 on FRV "Walther Herwig III". Only eight days within this period are devoted to IBTS. The other days are covering a programme on national expense. Please refer to Fig. 7.5 for the investigation area of the German part of the International Bottom Trawl Survey in Quarter 3.

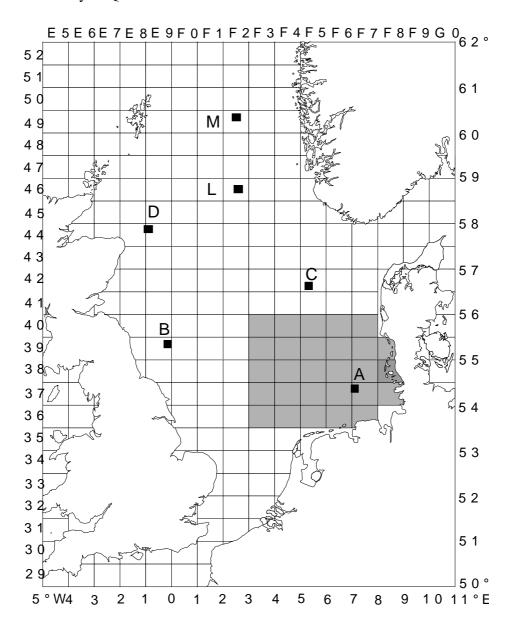


Fig. 7.5: International Bottom Trawl Survey (IBTS) 3rd quarter. Preliminary investigation area allocated to Germany (grey) and small areas (black boxes) of the national survey in conjunction with the IBTS.

7) North Sea Herring Acoustic Survey

Target species are herring and sprat. The main aim of the survey is to provide an estimate of the abundance and biomass of the target species in the North Sea. Types of data collected include 1nm NASCs for clupeid fish (acoustic data), age and length distribution for all clupeids in the investigation area, maturity at age and parasite infestation. The data is stored locally in the national institute's database and centrally on the HERSUR database (raw and derived data). The survey will take place from 28 Jun to 17 Jul 2007 on FRV "Solea". Please refer to Fig. 7.6 for an example (from 2006) of the cruise track of the German part of the North Sea Herring Acoustic Survey.

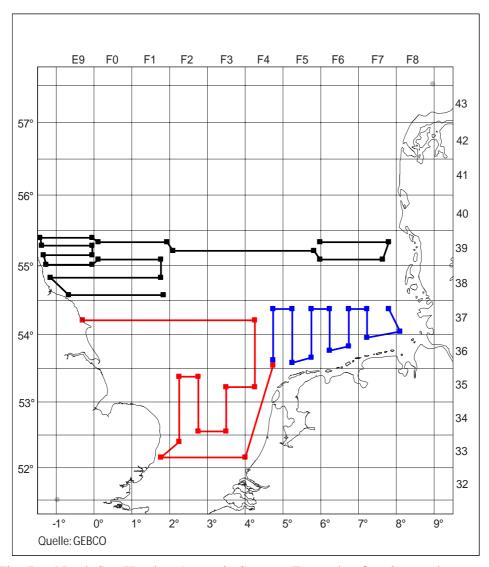


Fig. 7.6: North Sea Herring Acoustic Survey. Example of cruise track.

8) North Sea Beam Trawl Survey (BTS)

Target species of this survey are mainly sole and plaice but also associated species. The survey provides densities (abundance and biomass) indices for the target species as well as hydrographic data. Data are stored locally in an Access data base and a database held by the chairman of ICES WGBEAM at CEFAS in Lowestoft. The survey will take place from 16-31 Aug 2007 on FRV "Solea". Please refer to Fig. 7.7 for an example of the trawl positions of the German part of the North Sea Beam Trawl Survey.

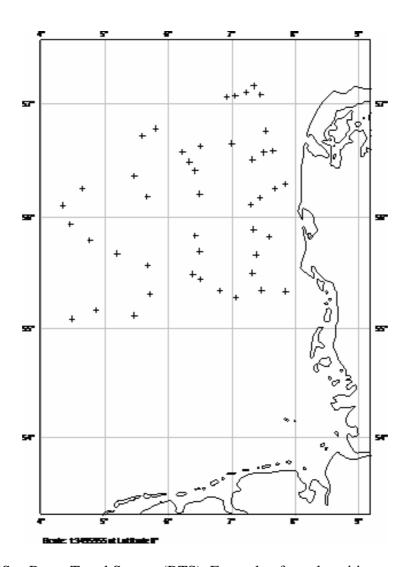


Fig. 7.7: North Sea Beam Trawl Survey (BTS). Example of trawl positions.

9) Demersal Young Fish Survey

The aim of the survey is to provide abundance indices of sole, plaice, whiting and cod as well as of brown shrimp in German coastal waters. The indices are part of a time series which started in the early 1970's. The collected data are stored locally in a national Access data base. Data are also submitted to ICES WGNSSK, WGBEAM and WGCRAN and will be relevant to the trilateral Wadden Sea Monitoring Programme (TMAP) of DK, D and NL. Comparable investigations are conducted in NL, B and the UK. The German part of the survey consists of five components (short trips on chartered fishing cutters) which will take place in five different areas (Fig. 7.8) in Sep-Oct 2007. The Jade/Weser area was added to the survey in accordance with the WGBEAM 2005 Report (ICES 2005c), section 3.2, page 36: "The Weser will be included in the survey by Germany from 2005 onwards (...)."

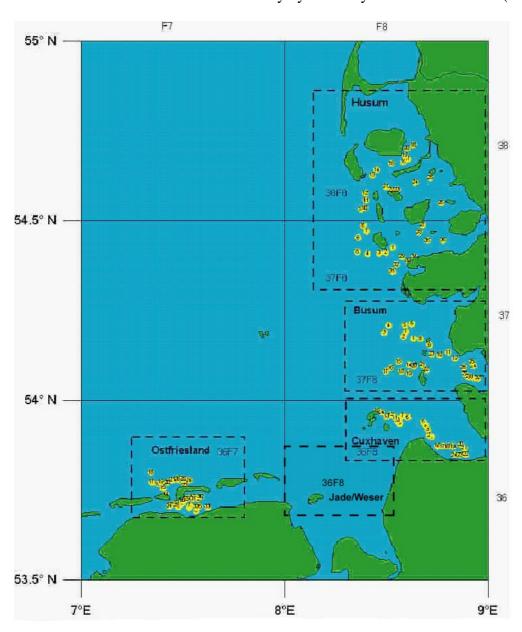


Fig. 7.8: Demersal Young Fish Survey (DYFS). Preliminary station map of the German part.

10) Mackerel and Horse Mackerel Egg Survey

The main objective of this triennial survey is to produce both an index and a direct estimate of the biomass of the North East Atlantic mackerel stock and the southern and western horse mackerel stocks. The general method is to quantify the freshly spawned eggs in the water column on the spawning grounds and to determine the fecundity of the females. This is done by sampling sufficient numbers of gonads before during and after the spawning. These are then histologically analysed. In combination, the realised fecundity (potential fecundity minus atresia) of the females and the actual number of freshly spawned eggs in the water render an estimate of the spawning stock biomass.

Data collected include plankton data mainly production data of mackerel and horse mackerel eggs in different development stages plus filtered water volumes, temperature and salinity data. For the adult sampling programme data on abundance, weight, length and individual gonad/liver/intestines-weights as well as samples for the determination of fecundity and fat contents are collected. Data are stored locally in the institute's database and a database held by the co-ordinator of the north-western part of the survey at FRS Marine Lab (Aberdeen, Scotland). The German part of the survey will take place at the beginning of the spawning season from 20 Mar to 26 Apr 2007 on FRV "Walther Herwig III". Fig. 7.9 shows the preliminary survey area.

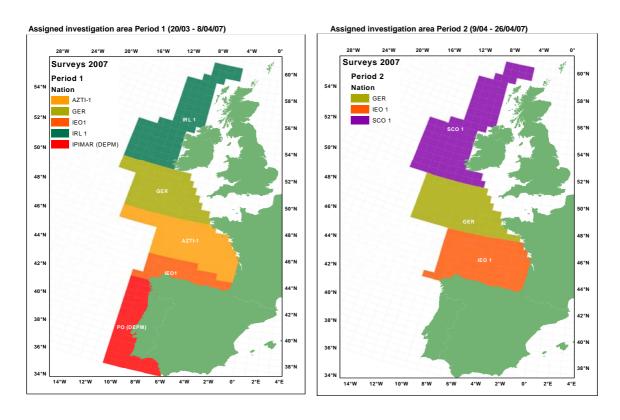


Fig. 7.9: Mackerel and Horse Mackerel Egg Survey. Preliminary survey areas (GER=German part).

11) International Hydro-Acoustic Oceanic Redfish Survey

The main aim of this biennial survey is the investigation of the distribution and estimation of abundance and biomass of pelagic redfish (*Sebastes mentella*) in the Irminger Sea and adjacent areas by means of hydroacoustic measurements and trawl hauls. Besides the hydroacoustic data, biological data from the catches (length distributions, individual weights, sex and maturity and parasitation) are collected and raised to the total surveyed area. In addition, hydrographic (CTD) and weather data are collected. All data are stored in national and international databases and submitted to the ICES SGRS. The report from the survey is provided to the ICES NWWG. The German part of the survey will probably focus on the northern part of the survey area, as in 2005 (see Fig. 7.10), and will be carried out from 11 Jun to 13 Jul 2007 on FRV "Walther Herwig III".

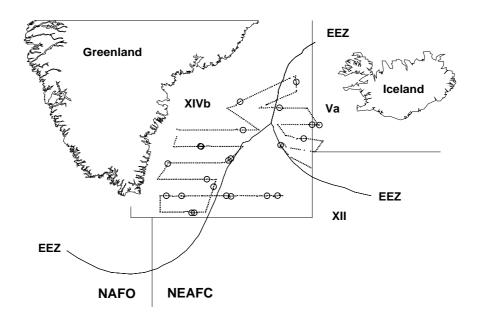


Fig. 7.10: International Hydro-Acoustic Oceanic Redfish Survey. Hydroacoustic survey tracks (dotted line) and trawl hauls (open circles) of the German part of the survey in 2005. The planning of the survey tracks will be done at the ICES SGRS in Jan/Feb 2007.

12) Blue whiting survey

Germany will contribute to the survey financing in order to support Denmark to conduct the survey. The survey will take place in Mar-Apr 2007.

7.2 MP – Derogations and non-conformities

Due to bad weather conditions or technical problems of the vessels, some of the planned survey effort could be reduced. Vessels and equipment are always kept in good conditions; however, sudden technical problems cannot be prevented.

The number of trawl hauls on acoustic surveys is determined by the occurrence of the target species aggregations (ICES 2003, 2005a, 2005b, 2006). Therefore, the number of hauls cannot be exactly planned.

7.3 EP – Planned Priority 2 surveys

Surveys with Priority 2 (Table 7.2) that have been conducted in previous years will also be continued in 2007. Since the NP 2006, the Greenland groundfish survey is co-financed within the EP. The other Priority 2 surveys listed in Table 7.2 are carried out on national expense.

Greenland groundfish survey

The German groundfish survey started in 1982 and was primarily designed for the assessment of cod, but covers the entire groundfish fauna down to 400 m depth. It is carried out annually during the 4th quarter and provides the only fishery-independent information about the abundance & biomass of groundfish off Greenland (ICES Div. XIVb and NAFO Div. 1B-1F). Designed as a stratified random survey, the hauls are allocated to 14 strata (7 geographic areas * 2 depth strata, 0-200m, 201-400m) off West and East Greenland. The fishing gear used is a standardized 140-feet bottom trawl. Biological data from the catches (length distributions for all species, individual weights, sex and maturity for the commercial species) are collected, raised to the total surveyed area and submitted to the ICES NWWG and NAFO SC and used in the respective stock assessments. In addition, hydrographic (CTD) and weather data are collected. The survey will be carried out 11 Oct to 23 Nov 2007 on FRV "Walther Herwig III". Figure 7.11 shows the survey area.

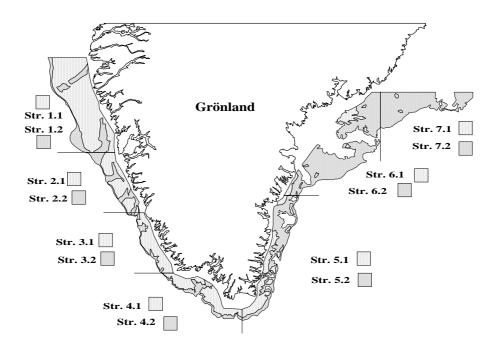


Fig. 7.11: Greenland groundfish survey. Survey area (strata), with depth strata 0-200m (Str. X.1) and 201-400m (Str. X.2).

Herring Larvae Survey (Baltic)

The herring larvae survey in the western Baltic (ICES areas 22+24 and Div. IIIa) is focusing on the major spawning areas of the "Rügen" herring (Greifswalder Bodden, Strelasund) for the estimation of year-class strength. Larvae are sampled with a "bongo" (double-bag) plankton net during 10 weeks in April-June 2007 on FRC "Clupea. The resulting data on larvae density and length distributions are stored in a national database, and are being used in the ICES HAWG. In addition, hydrographic (CTD) data are collected on each station. Figure 7.12 shows the survey area.

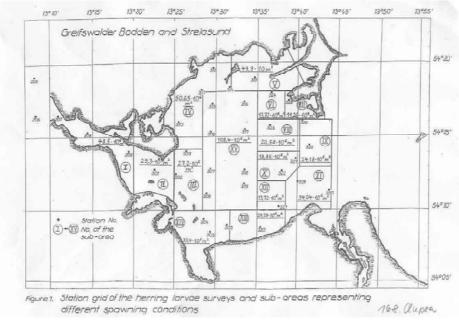


Fig. 7.12: Herring Larvae Survey in the Baltic. Survey area.

German Flatfish Survey

The main objective of the survey was to assess the young flounder stock in the south-west Oderbank Area (Baltic Sea, ICES areas 22+24). The main achievements of the survey are to obtain data on the determination of year class strength of demersal fish in the Arkona Sea for flounder, turbot and plaice and stock indices for flounder. In addition, biological data on length, age and individual weights are collected in SD 22 for cod and flatfish in SD 22. The data are stored in a national database, and aggregated data are transmitted to the ICES database DATRAS. The next survey will be carried out in July 2007 on FRC "Clupea". Figure 7.13 shows the survey area.



Fig. 7.13: German Flatfish Survey in the Baltic. Survey area.

German Cod Survey

The main aim of this survey is the estimation of abundance and biomass of cod and other demersal fish in the German EEZ. Until 2004, the survey has been conducted in the 1st and 4th quarter. The survey has been reviewed nationally in 2005, and it has been decided to conduct the survey only in the 4th quarter. Bottom and beam trawls are deployed, alternating biennially. The data are stored in a national Access database and currently used nationally. In addition, hydrographic (CTD) data are collected on each station. The next survey will take place 22 Nov to 10 Dec 2007 on FRV "Solea". Figure 7.14 shows the survey area.

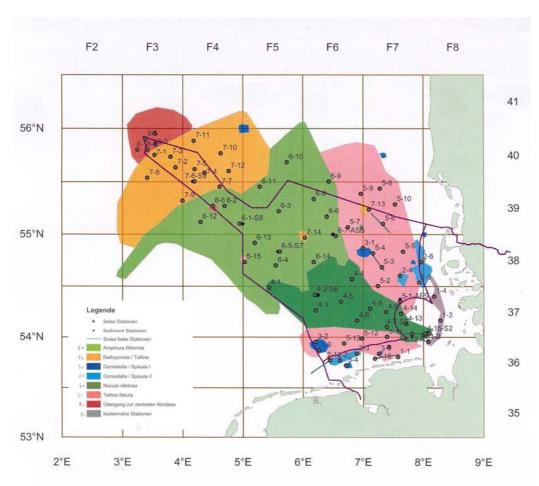


Fig. 7.14: German cod survey. Survey area and station grid.

Herring Larvae Survey (North Sea)

The main objective of the survey is to assess the herring stock in the North Sea. The results of the herring larvae surveys are used to calculate a biomass index of the SSB of North Sea autumn spawning herring. The main achievements of the surveys are to obtain data on the distribution and abundance of herring larvae from the main spawning locations, the length-frequency of herring larvae, and CTD-data. Data about larvae abundance and length-frequencies are stored together with basic hydrographic information in the IHLS database (International Herring Larvae Surveys). The IHLS database is located at the Federal Research Centre for Fisheries in Hamburg, Germany. The CTD-profiles for each station are available from the individual institutes involved in the surveys. The next survey will take place in January and September 2007 on RV "Alkor" or RV "Heincke". Figure 7.15 shows the station grids.

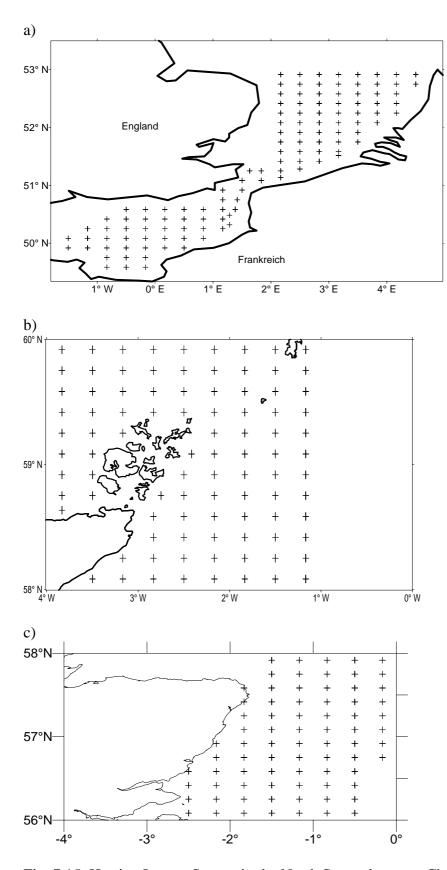


Fig. 7.15: Herring Larvae Survey in the North Sea and eastern Channel. Station grids in a) the southern North Sea and eastern Channel (January 2007), b) the Orkney/ Shetland area (September 2007), and c) the Buchan area (September 2007).

7.4 EP – Non-conformities and priority upgrades

The German Cod Survey has been reviewed nationally in 2005, and it has been decided to conduct the survey only in the 4th quarter. Due to the new survey design and strategy, it is not appropriate to upgrade this survey to Priority 1 for the target species cod (which is under the recovery plan).

8. Module H – Length and age sampling

General remarks

Several reasons imply that the discard estimation part of **Module E** as well as **Modules H** and **I** should be handled at the same time in the German Data Collection Programme:

- Sampling at sea is necessary on board of freezer trawlers and trawlers with processing units. This is the case in the fishery for pelagic species as these are landed in frozen packages. The same is true for landings of demersal species from waters off Norway and Greenland which are landed as partly processed products.
- In order to monitor discarding (in relation to module E), sampling has to be done on board of vessels. It would be highly ineffective not to sample the landings and other biological data at the same time.
- Sampling at sea provides the possibility to sample at the same time landings, discards and other biological data referred to in module I.
- Discards of species listed in Appendix XV of Reg. 1639/2001 and 1581/2004 as by-catch in fisheries directed towards other species can only be recorded on board.
- 39%, 53% and 63% of the landings in 2003, 2004, 2005, respectively, from stocks that have to be sampled (Table 8.2) occurred in foreign countries, which confirms the situation in recent years.

Due to the reasons mentioned above, Germany prefers in most cases to sample catches at sea. The provision of a legal basis for biological sampling on board of German fishing vessels is still in preparation. In 2005 and 2006, a legal text was prepared for this purpose. The present status of a sampler on board of a German fishing vessel is a guest status. The possibility for biological sampling depends on the hospitality of ship owners and companies. Based on the present situation, random sampling of the fleet is still difficult.

8.1 MP - Landings - Planned sampling

Table 8.1 gives an overview on the species and stocks that will be sampled in 2007, and Table 8.4 provides the fisheries that will be covered by length and age sampling of landings and discards.

Stocks in the Baltic will be sampled at harbours at the German Baltic coast and for discard estimation at sea. Stocks in the North Sea will be sampled at harbours along the German Bight, and saithe landings will be sampled in Cuxhaven. Stocks off Greenland and Norway will be sampled at sea as the fleet fishing there consists entirely of freezer trawlers. Pelagic stocks will also be sampled on board, as these species are also landed only as frozen product.

Sampling Methodology

Sampling strategy, methods and sampling procedures will be the same as described in the Final Reports of EU-Study 97/004 "Sampling of 8 German Commercial Fisheries" as well as EU Studies 96/002 and 98/024 "International Baltic Sea Sampling Programme I and II" which provided data requested in modules H and I since 1996.

Sampling at fish markets and processing plants

The fish markets in Bremerhaven and Cuxhaven are sampled irregularly, mainly for saithe and redfish landings. Redfish is usually landed by Icelandic trawlers and saithe by vessels flying the flag of EU member states including Germany. Additionally, herring landed at the fish plant in Mukran/Sassnitz (Rügen Island) will be sampled.

For stocks under recovery plans, the sampling intensity of the relevant extended programme will be provided.

Bilateral agreements for foreign flag vessel landings

Three bilateral sampling agreements were reached for 2006 and 2007. Annex 2 provides an agreed text on sampling responsibilities between The Netherlands and Germany, and Annex 3 represents a formal agreement between Sweden and Germany concerning fisheries catch data. Between Denmark and Germany, the formal agreement from 2005 (see Appendix 13 of NP 2006) will be prolonged in 2006-2007, with adjustments to the amount of landings. The bilateral agreements include market sampling.

8.2 MP - Landings – Derogations and non-conformities

After utilisation of derogation rules, Germany needs to sample the stocks listed in Table 8.2 with the sampling intensity specified in Appendix XV of Regs. 1639/2001 and 1581/2004 for the stocks in question (Table 8.1). In case different sampling intensities were given in Appendix XV for stocks with a TAC covering several divisions, the sampling intensity of that division was chosen in which the German fleet took the bulk of the catches.

In many cases, a higher sampling effort than required will be applied to provide the relevant ICES/NAFO assessment working groups with catch in numbers at age, mean weight at age as well as maturity at age for the German landings. With the numbers requested in Appendix XV of Regs. 1639/2001 and 1581/2004, this cannot be ensured.

Eel sampling

As the average annual eel landings during recent years were considerably lower than 100 t (Table 8.2), Germany is not obliged to provide data under this module. Germany is currently preparing a **pilot study** on eel monitoring, which is outlined in Annex 1.

8.3 EP - Landings - Planned sampling

Germany does **not** apply for an extended programme under this module.

8.4 EP - Landings – Non-conformities

Not relevant.

8.5 MP & EP - Discards – Planned sampling

Germany will monitor discards only in those stocks which are by-catches in the fisheries targeting the stocks to be sampled (Tables 5.2 and 5.3). Fisheries not listed in Table 8.4 proved to be less exploited by the German fleet applying the derogation rules in Chapter III, H. 1(d) of Regs. 1639/2001 and 1581/2004. This implies in most cases that discards are of lesser amount. If this is not the case, measures will be taken to cover the relevant fisheries. However, if species sampled in addition to the ones in Table 8.1 are caught, they are also sampled as well as any other species brought on deck.

8.6 MP & EP - Discards – Derogations and non-conformities

See previous sections 8.2 and 8.5.

9. Module I – Other biological sampling

9.1 MP - Planned sampling

Biological data referred to in this module will be sampled in actions covered in Modules G (section 7) and H (section 8). Data of other biological parameters are gathered during sampling at sea of commercial vessels as well as during scientific surveys. Table 9.1 provides an overview over the species by area/stock that were sampled during 2002-2006 and will be sampled in 2007. Data are usually sampled on a yearly basis.

All species listed in Appendix XVI (Regs. 1639/2001 and 1581/2004) in addition to the species to be sampled according to Module H will be sampled on market and observer trips as well as surveys if they occur in the catch (Tables 9.2 and 9.3).

9.2 MP – Derogations and non-conformities

There are the same problems as described in section 5.6.

Eel sampling

As the average annual eel landings during recent years were considerably lower than 100 t (Table 8.2), Germany is not obliged to provide data under this module.

Germany is currently preparing a **pilot study** on eel monitoring, which is outlined in Annex 1.

9.3 EP - Planned sampling

Germany does **not** apply for an extended programme under this module.

9.4 EP – Non-conformities

Not relevant.

10. Module J – Economic data on fishing vessels

10.1 MP - Planned sampling

- What data will be collected
- Who the data will be collected from.
- How the data will be collected.

General remarks

A pilot study on the economic situation of the German fisheries has been started in 2004 (reference year for the 2006 NP), was carried out in 2005 and will be continued in 2006. The German data collection programme for 2005 to collect economic data of vessels is based on three sources: (i) an accountancy network which consists of about 140 vessels providing the requested economic data annually and (ii) a mail questionnaire which is regularly sent to owners of small scale vessels, and (iii) a questionnaire (face-to-face) for the two segments demersal trawl > 40 m and pelagic trawl > 40 m. All surveys are carried out on a voluntary basis. The following parameters will be sampled.

Segmentation

The procedure of segmentation follows Regulation 1639/2001. The first indicator is the overall length (LOA) and the more than 50% time spent using a specific type of fishing technique. Inactive vessels or vessels which are not obliged to logbook reporting (vessels less

than 10 m) are segmented by their main (first) gear documented in the fleet register (see , Commission Regulation (EC) No 26/2004 of 30 December 2003). Hence, for segmentation all vessels under the German flag are included *exhaustively*.

Landings by value and volume

According to the Regulation and the Paris workshop document, the income is defined as total proceeds from fish sales. The base for the calculation is the sales slips. All first-hand sales have to be reported to the German authorities, including volume and value. For the very small amount of fish for private consumption which has to be reported too, prices are not available. For this little fraction of nonmonetary income, the reported volume of fish will be multiplied by an price estimated within species, segment and season. So the calculation of the income covers the landings of the whole fleet (exhaustive) under the assumption of no or negligible 'unreported landings'. The landings by value are given on geographical disaggregation level 2 according to Appendix I, quarterly and per species. The sampling rate is 100%, thus no precision level is needed. The Appendix III segmentation is used.

Production Costs

The source of data of the below mentioned parameters is the tax return (taxable bookkeeping). This accounting system is based on the FADN (Farm Accountancy Data Network, http://europa.eu.int/comm/agriculture/rica/index_en.cfm) of the EU. Within this system the report contains data (sheets) to the following topics:

- (1) General data to the enterprise and the accountancy
- (2) Balance sheet with assets and liabilities
- (3) Profit and loss statement of account
- (4) An annex to the balance sheet with investments in material and tangible assets
- (5) A second annex with the liabilities (part of the balance sheet)
- (6) Employment sheet with data to the employed people on board include gender, age and FTE
- (7) Additional data to the technical equipment on board particularly active and in-active time (for repairs and maintenance or for seasonal reasons (weather, closed season). About 140 vessels of the *coastal and small high sea fisheries* take part in this monitoring system. The participation on this FADN based system for the coastal fishery is not mandatory. Furthermore, all eleven vessels of the *long distance water fishery* under the German flag are in a separate monitoring system. For these fisheries an agreement is reached between the vessel owner and the institute involved in the data collection programme to get access to their accounting, supplemented by face-to-face interviews. For details of the entries of the (taxable) accounting system, see Annex 4.

Operating costs

There under: Crew (including social cost) Fuel oil costs / consumption Repairs and maintenance Other operational costs

Crew (including social costs)

Based on the FADN adopted accounting data network a cost statement of the employment on board is available (see annex entries of the FADN system, code 2799).

Fuel Consumption

The fuel consumption is estimated by a specific data collection procedure, based on the so called 'Testbetriebsnetz' in the framework of the FADN adopted data collection (code 8107 and 2773). For a vessel group of about 140 vessels the fuel consumption will be gathered on a voluntary base. The fuel consumption per fleet segment will be computed in three steps. In the first step, the specific fuel consumption per hour at sea and engine power (kW) will be calculated for the 'Testbetriebsnetz' - vessels. In the second step, the hours at sea for these vessels will be extracted from the logbook information. Finally, both gathered information of step 1 and 2 combine results in a segment specific fuel consumption (volume) as stored in the data collection database. This procedure includes all vessels of the active fleet. No precision level is needed, since the sampling rate is 100% (*exhaustively*). Costs (value) are estimated multiplying volume by an average, more or less constant, fuel price for 2004.

Repairs and maintenance

Based on the FADN adopted accounting data network, detailed data of different disaggregated cost items of repairs and maintenance are available (see list of entries, profit and loss, of the FADN, code 2829, in Annex 4).

Other operational costs

Based on the FADN adopted accounting data network detailed data of different disaggregated cost items of repairs and maintenance are available (see annex list of entries, profit and loss, of the FADN). All costs except the crew, fuel and costs for repairs and maintenance are covered by this item (code 2789 + 2897 except 2773 (fuel) + 2799 (crew) + 2829 (repairs and maintenance)).

Fixed costs

The fixed costs (average costs on investment) are defined tax based. The depreciation periods depend on the equipment (hull 20 years, equipment between one and five years). The costs are derived from these parameters, investment and depreciation period. The source of information is the data of the accounting (Annex of the FADN balance sheet, code 1019 + 1079 resp. code 3019 + 3079, column 7 and 8).

Financial position

The annex of the FADN (assets and liabilities, include annex of liabilities) gives meaningful data to the own and borrowed capital. These data are used for computing the shares (code 1568, 1559 and 3996).

Investments (assets)

There is no obligation (legislation) to insure vessels in Germany. For insured vessels the insured vessel value depends on the priorities and risk awareness of the vessel owner. Unlike the regulation 1639/2001, the assets of the balance sheet of the FADN is taken to calculate the assets (code 3019 + 3079, column 2 and 7). For the small scale fisheries, the owner estimated value of the vessel (replacement value or current value) and is taken such as for the distant water fishery.

Prices per species

The prices of all caught fish species will be computed at the same level as the landings (volume) and income (value, quarterly and the segmentation according to the Appendix III, see above).

Employment

Forced by this data collection programme additional information to employment is included in the fleet register. Thus detailed information on employed persons on board of all registered vessels is exhaustively available in the official fleet register. The distinction between full / part time and FTE causes shortfalls for the whole population. Information in such detail (full / part time and full time equivalent)is only available for the small 'Testbetriebsnetz' vessels group (140 vessels, FADN, code 7001 - 7099) and the high sea fishery (11), but for vessels with more than 12m LOA part time employment is unusual (high fixed vessel costs). The study on the small scale fishery will give further information on the vessel group less than 12m. The result will be given in this study when finished.

Fleet

Number of Vessels

The basis for computing the quantity of the German fishing fleet is the official fishing vessel register (Commission Regulation (EEC) No 163/89 of 24 January 1989 and Commission Regulation (EC) No 109/94 of 19 January 1994, No 2090/1998 of 30 September 1998, No 26/2004 of 30 December 2003). All vessels registered in the fleet register are included. This population based calculation method (exhaustively) covers also vessels which have not been active all-season (EXP exported, IMP imported, CHA Change of activity during 2002). Therefore, this method of computation tends to result in a slight overestimation number of vessels compared to official German statistics.

Gross tonnage

The gross tonnage calculation has the same base for computation as the above mentioned for the number of vessels calculation. All fleet registered vessels are included (exhaustively). So the declared gross tonnage capacity will be slightly overestimated (part-time active vessels).

Engine power (kW)

The calculation of the engine power by segment is based on the whole vessel population (fleet registered vessels, exhaustively). As before, the overall kW capacity is moderately overestimated due to non-corrected temporary registered vessels (see chapter Number of vessels).

Age

The entry 'year of construction' of the fleet register is the basis for the estimation of the age of the vessel. In an exhaustive way the data of the German register is used.

Gear used

No further information is given how to "calculate" the gear used in the Regulation 1639/2001. As described in the chapter on the 'basic segmentation' (Appendix III) the gear (used or main gear-type) itself is the basis for the segmentation. Hence for 'gear used' see Appendix III segmentation table of the Regulation 1639/2001.

Fishing effort

The basis for the calculation of the effort are the logbooks. Hence *exhaustive* collection for vessels more than 10 m LOA is established. The fishing effort for vessels with less than 10 m (no logbooks are available) was gathered in the framework of a pilot study on small scale fisheries - still in progress -, involving a questionnaire.

Data Protection Act

In other cases the number of vessel within the length-gear-type group is less than three. The German Data Protection Act does not allow to publish these numbers. Also, for few segments there are no neighbouring length-gear-type vessel groups available.

Standard table 10.1. gives a general outline of (i) the population nos. by fleet segment, (ii) the planned sampling levels and sample rates no., and (iii) the sampling method(s) that will be used. The fleet segments in table 10.1 correspond to those listed in Appendix III (MP) of the DCR.

10.2 MP – Derogations and non-conformities

None.

10.3 EP – Planned sampling

Germany does **not** apply for an extended programme under this module.

10.4 EP - Non-conformities

Not relevant

11. Module K – Data Concerning Fish Processing Industry

Background data situation: In Germany, several indicators of Appendix XIX of the DCR could be provided by the Federal Statistical Office [turnover (total and by products based on the European PRODCOM classification), production cost, material use, energy cost, labour cost, investment, employment, prices per product based on the European PRODCOM classification] and the ifo Institute [capacity utilisation]. This data does not completely fulfil the requirements of the DCR:

- (i) Raw material, investment (asset), and financial position are not available;
- (ii) The Federal Statistical Office applies an employment threshold of 20 employees, i.e. the segment 1-19 employees is not considered.

To fulfil the requirements of the DCR additional surveys were carried out by the Federal Agricultural Research Centre (FAL). In 2004 a mail questionnaire was sent to 259 fish processing enterprises. Even with a reminder by telephone we received only 16 more or less filled questionnaire forms, which is insufficient for precise statistical analysis. In order to gather some basic information of the total population for stratifying an additional survey was initiated by FAL in 2005. Another mail questionnaire was sent to an updated number of 223 fish processing enterprises. This questionnaire consisted of very few easy to answer questions such as turnover and employment. However, only 38 filled questionnaires were received which is not enough to stratify the population.

Thus, in the current situation the main problem for the success of the additional surveys is the low willingness of fish processing enterprises to respond. As long as the additional surveys are on a voluntary basis, higher response rates cannot be expected. Since the business register of small scale fish processing enterprises (< 20 FTE) is and was hardly used for analytical or survey purposes, it can be expected that this database does not cover the 'real' total population very well.

11.1 MP - Planned sampling

Standard table 11.1. gives a general outline of (i) the population nos. by segment of the processing industry, (ii) the planned sampling levels and sample rates, and (iii) the sampling methods that will be used.

What data will be collected.

The following indicators of appendix XIX of DCR will be collected. The definitions refer to EUROSTAT.

Income: Will be interpreted as gross production value and is defined as total value of *sales* by producing enterprises in an accounting period (includes turnover and turnover from trading).

Production cost (variable production cost) consists of **personnel** cost, consumption of raw material (**material use**), **energy cost**, and **other running cost** (consisting of cost for temporary worker and industrial services).

Packaging cost is surveyed every four years since it cannot be regarded as an important cost item (this view is consistent with STECF, cf. the report of SGECA-06-01: Processing Industry and Aquaculture: Review of Economic Issues). Because of its minor importance packaging cost will be interpolated for the annual statistics.

Fixed cost is interpreted as annual additional gross investment in tangible goods (including land).

Prices per product: The production statistics based on the European PRODCOM classification is used to provide average prices per product (group).

The indicator **employment** provides the total number of employees and the number of part time employees.

Capacity utilisation is defined as annual utilisation in relation to standard (average) utilisation (in %).

Although additional surveys were carried out in 2004 and 2005 to provide missing indicators, the following items are <u>not available</u> (because of a very low response rate): **investment** (asset), financial position and raw material use (total and by species) (see chapter on nonconformities below).

Who the data will be collected from.

The information will be collected from fish processing enterprises. Enterprises are allocated to industry branches according to their main activity. The processing industry is defined according to EUROSTAT definition NACE code 15.20: Processing and preserving of fish, crustacean and molluscs and production of products thereof. The Business Register is the population framework for enterprises with 20 and more employees.

How the data will be collected.

Methods: For enterprises with 20 and more employees a stratified random sampling is carried out by the Federal Statistical Office. Strata are defined according to the employment classes (20-49; 50-99; 100-249; 250-499; >=500). The sample size per stratum is iteratively optimised using the known turnover of the last investment statistics a survey which comprises

the entire sector. This procedure ensures that strata with relatively higher total turnover are represented to a greater extent in the sample. The sample is constructed to estimate at least 90% of the indicators with a standard error of less than 5 %.

For enterprises with less than 20 employees, a mail questionnaire will be carried out by the Federal Agricultural Research Centre (FAL). The questionnaire will be sent to the known entire population.

Definitions of critical indicators:

- Investment (assets) is defined as capital value. It is an estimated indicator, for which different methods exist. The method applied depends on the objective of the survey. Companies' balance sheets contain the capital value for tax purposes and cannot be regarded meaningful for analysis of economic performance.
- Fixed cost can be interpreted as depreciation or annual additional investment in tangible goods. The weakness of using capital value is also valid for depreciation. Companies' balance sheets contain the depreciation for tax purposes which cannot be regarded meaningful for analysis of economic performance. Hence, for the case of Germany fixed cost is defined as annual additional gross investment in tangible goods.

<u>Data sources</u> per indicator are provided in the following table.

Indicator	Source
income	company accounts
production cost	company accounts
fixed cost (defined as annual investment in tangible goods)	company accounts
employment	company accounts
capacity utilisation	estimate by company

11.2 MP - Derogations and non-conformities

Because of the above mentioned low response rate, the indicators investment (assets), financial position and raw material use could not be gathered so far for the fish processing sector. A request for support to the German association of food processing enterprises was rejected because they do not want to increase the bureaucratic burden of their members. It seems that additional indicators can only be successfully gathered if the response to our questionnaires will be compulsory for the fish processing enterprises.

Furthermore, identifying the total population of fish processing enterprises below 20 employees seems to be very difficult. The official business register contains about 270 fish processing enterprises, while more than 600 German enterprises have an official permission of public health authorities to process fish. However, the response rate of the small scale enterprises was also too low in 2004 and 2005. In 2006 and 2007, it is planned to introduce a significant financial incentive to increase the feedback rate.

Suggestion:

The whole data collection exercise for the fish processing sector has not been seriously discussed yet on a European level. Further steps should only be taken into consideration after a detailed evaluation of the national data collection experiences regarding Module K.

11.3 EP - Planned sampling

Germany does **not** apply for an extended programme under this module.

11.4 EP - Non-conformities

Not relevant.

12. Databases

12.1 Database development and data management

The envisaged database development will focus on one common, central database (described in programmes 2002 to 2006) for all national institutes involved in the collection of fishery data, hosted by ZADI. In a stepwise process, the different databases at each institute will be integrated. Through controlled and secured remote access, the institutes remain the owner of their data, have full access to it and are responsible for data quality.

Goals are:

- To concentrate subject specific knowledge in fisheries science and fisheries statistics and to concentrate and use specialist IT and database management skills in a central information service centre.
- To improve information transparency on fishery data in Germany.
- To improve the quality and consistency of fishery data e.g. by avoiding duplicates.
- To improve actuality of data for national and international use.

The first step towards this direction will be the establishment of a central database as a prototype, including the following issues:

- 1) Establishing a central data server
 - Hardware architecture: Network, server(s), software licences.
 - Security aspects: Firewalls, VPN, authentication mechanisms.
- 2) Establishing a central database
 - Design of a non redundant data model.
 - Implementation of a relational database.
 - Migration of existing data.
- 3) Establishing a data access interface (remote access, online content management)
 - Rights and access control schemas.
 - User friendly interfaces (also for input of large data sets).
 - Integrity and plausibility checks.
- 4) Data presentation and output
 - Web presentation of selected / aggregated data; graphical output when appropriate.
 - Full access to the data for owner, SQL-querying.
 - Data exchange interface (Web service, wrapper).
 - Support of production of export files (XML, csv...).

Germany will continue to participate in the Web Services developments and Data Control Exercises of the Joint Research Centre (JRC) and all necessary adaptations of the database.

13. National and international co-ordination

13.1 National co-ordination

Apart from one extended national co-ordination meeting, several meetings will be held in Hamburg, Rostock and Bonn to consider different issues. However, for these meetings, no financial contribution can be requested in 2007.

13.2 International co-ordination

Please refer to table 13.1 for a list of ICES and other working groups coordinating surveys, databases and other issues of the DCR.

13.3 Follow-up of RCM recommendations and initiatives

The following table provides the actions that are and will be taken in accordance with the RCM recommendations related to MS.

LIST OF RECOMMENDATIONS

Source	Recommendation	Action
RCM Baltic (Jan	Baltic RCM recommends in case where	Bilateral agreements were reached with
2005)	more than 5 percent of the national quota is	The Netherlands, Denmark and Sweden for
	landed in a foreign country, bilateral	2006 and 2007 (see section 8.1).
	agreements should be made.	
RCM Baltic (Jan	The RCM recommends that for both	Due to the move of the Institute for Baltic
2005)	Eastern and Western Baltic cod, otoliths	Sea Fisheries (IOR) into a new building in
	weight should on a routine basis be	2005/6, the purchase and usage of special
	collected as a complement to age reading.	scales for otolith weighing was delayed.
i	This must start from 2005.	Otoliths will be weighed from material
		collected from January 2006 onwards.
RCM Baltic (Jan	The RCM recommends that sampling	Sampling of other biological parameters in
2005)	should be carried out through out the entire	the German NP is done annually.
	tri annual period.	
RCM Baltic (Jan	(Section on economic parameters)	Germany participated in the Meeting on
2005)	MS should prepare a short presentation on	small-scale fisheries in Kavala (12-16 Sep
	methods and practical implementation in the	2005) and presented these data.
	next meeting for the small scale fishery.	
RCM Baltic (Oct	RCM Baltic concludes that MSs must	conducted and submitted to Jenny Nord
2005)	conduct analysis of stability on the national	(IMR Sweden)
	fleet. This analysis could be conducted by	
	comparing the results from segmentation of	
	economic data according to Appendix III in	
	the current segmentation and according to	
	the exclusiveness criteria, suggested in the	
DOM D. Id. (O.)	Nantes report.	1 1 1 1 20 1 T N 1
RCM Baltic (Oct	The RCM Baltic concludes that MS must	conducted and submitted to Jenny Nord
2005)	conduct analysis of national data on which	(IMR Sweden)
	length groups yield the most homogenous economic structure.	
RCM Baltic (Oct	RCM Baltic concludes that the two analyses	anduated and submitted to James Naud
2005)	[i.e. analysis of stability and analysis of	conducted and submitted to Jenny Nord (IMR Sweden)
2003)	fleet segments for homogeneity - <i>LM</i>	(INK Sweden)
	rapporteur] should be conducted before 1st	
	of January 2006. [] The combined results	
	from the Baltic will then be presented at the	
	next workshop on fleet based approach in	
	the beginning of 2006.	
RCM Baltic (Oct	The RCM Baltic recommends that all	conducted and submitted to Jenny Nord
`	member states attempt to fill in the matrix	(IMR Sweden)
2005)	i member states attembi to ini in me marrix	I (IIVIK Swedell)

	data (by default expressed in days at sea and	
	in number of vessels for 2004) with a view	
	to defining the final version of the matrix	
	before the 1st of January 2006. The data	
	must be sent to Jenny Nord (Sweden) before	
	this date.	
RCM Baltic (Oct	The RCM Baltic strongly recommends all	German data have been checked and
2005)	Baltic countries to upload or re-upload	uploaded.
	quality checked CA data (SMALK data) to	
	the ICES DATRAS database before 1.	
	January 2006.	
RCM Baltic (Jan	RCM Baltic recommends seeking	First multilateral discussions were started
& Oct 2005)	multilateral agreements to overcome the	at the RCM Baltic in Oct 2005 and will be
	obligation to provide data for species by	continued in 2006 and 2007.
	member states that have small catches of	
	these species.	
RCM Baltic (Oct	RCM Baltic recommends that MS upload	The algorithm for determination of the
2005)	landing statistics by fishing activity (level	fishery (target species, gear, mesh size)
,	6) and ICES statistical Rectangle from 2004	were developed, but the data have not been
	and 2005 starting from the beginning of	uploaded during 2005.
	2006 and preferable can re-upload landing	17
	statistics on this low aggregation level a	
	couple of years back.	
RCM North Sea	MS start bilateral talks as soon as possible,	Bilateral agreements were reached with
(Sep 2004)	with a view to establishing bilateral	The Netherlands, Denmark and Sweden for
(2 °F = 2 °)	agreements on the issue of foreign flag	2006 and 2007 (see section 8.1).
	vessel sampling.	2000 4110 2007 (000 50011011 011).
RCM North Sea	RCM North Sea expects that all institutes	As this spreadsheet has not been
(Sep 2004 & Sep	will update the spreadsheet with their cod	implemented yet, there was no action
2005)	sampling summary information on a	possible.
2003)	monthly basis.	possible.
RCM North Sea	MS carry out a precision analysis on at least	As there were no common standards
(Sep 2004)	one selected stock from within the NS RCM	available for precision estimates (see
(Sep 2001)	region, using the guidelines and protocols	PGCCDBS Reports 2005 & 2006), no
	suggested at the Precision Workshop held in	action was taken. This issue was not
	Nantes 2004. The results of this analysis	considered at the RCM North Sea in 2005.
	should be reported back to the NS RCM in	considered at the Reivi Porth Sea in 2005.
	time to be considered at its next meeting.	
RCM North Sea	A preliminary analysis of the level of	The German maturity data were submitted
(Sep 2004)	maturity sampling and sampling coverage	to Belgium in due time before the RCM
(Bep 2001)	by area and time should be carried out and	North Sea 2005 and were included in the
	presented to the next meeting of the RCM	combined analysis.
	with a view of establishing task sharing	combined unarysis.
	agreements from 2007 onwards. It was	
	agreed that Belgium would take on	
	responsibility for the demersal species and	
	the Netherlands would describe the situation	
	in relation to pelagic species.	
RCM North Sea	The FishFrame database should be used on	As the North Sea version of FishFrame
(Sep 2004)	a exploratory basis to input raw level data	was only implemented during Aug 2005,
(Sep 2004)	from 2004 from both EU and non-EU	the German North Sea cod data for 2004
	countries. Countries should input data in	were uploaded before the RCM North Sea
	time to be used by the stock coordinators of	in Sep 2005.
	the WGNSSK by May 2005. A database	sop 2003.
	subgroup (chaired by Henrik Degel) will	
	provide guidelines for data entry and the	
	timing of data submission.	
RCM North Sea	RCM North Sea recommends that all	Garmany participated in the EighEvama
		Germany participated in the FishFrame
(Sep 2005)	countries having data on North Sea cod	User Workshop.
	participate in the proposed workshop on	
	FishFrame (Chair: Henrik Degel, mid-	

	January 2006, Copenhagen, Denmark).	
RCM North Sea	RCM North Sea expects that all institutes	The German North Sea cod data for 2004
(Sep 2005)	having data on NS cod for 2004 and 2005	were uploaded before the RCM North Sea
(Sep 2003)	upload these to FishFrame in order to	in Sep 2005.
	ensure that the aggregations carried out in	III Sep 2003.
	FishFrame exactly match those undertaken	
	conventionally by stock coordinators and to	
	allow exploratory analyses of the sampling	
	data to be completed by stock coordinators.	
RCM North Sea	RCM North Sea insists that all countries	The German sampling strategy
(Sep 2005)	participate in the exercise of comparing	specifications were submitted to the
(BCP 2003)	sampling strategies on commercial catches	Swedish coordinators during the RCM
	and discards by providing the relevant	North Sea 2005.
	information to the Swedish coordinators.	1101111 504 2005.
RCM North Sea	RCM North Sea recommends that where	There are no initiatives yet. These
(Sep 2005)	discard sampling coverage is restricted to a	agreements should be handled during the
(Sep 2003)	low level, the country concerned considers	RCM meetings.
	whether the inputs from other countries are	Rew meetings.
	sufficient and enters into bilateral	
	agreements where appropriate.	
RCM North Sea	RCM North Sea recommends that countries	There are no initiatives yet. These
(Sep 2005)	enter into bi- or multilateral agreements in	agreements should be handled during the
(Sep 2003)	cases where the required level of sampling	RCM meetings.
	under the DCR is too low to make a useful	Rem meenigs.
	contribution to maturity estimates by	
	individual member states.	
RCM North Sea	The RCM North Sea reiterates its 2004	Bilateral agreements were reached with
(Sep 2005)	recommendation on the conclusion of	The Netherlands, Denmark and Sweden for
(Sep 2003)	formal bilateral agreements on the sampling	2006 and 2007 (see section 8.1).
	of foreign flag vessels, and on the inclusion	2000 and 2007 (see section 0.1).
	of these agreements in the MS' national	
	program proposals.	
RCM North Sea	RCM North Sea understands that certain	Bilateral agreements were reached with
(Sep 2005)	countries/institutes may have legal	The Netherlands, Denmark and Sweden for
(Sep 2000)	objections against signing formal bilateral	2006 and 2007 (see section 8.1).
	agreements. RCM North Sea insists that	2000 4110 2007 (500 500 11011 511).
	agreement be reached between the	
	countries/institutes concerned on the	
	sampling of each other's flag vessels, and	
	that the commitments made are clearly	
	spelled out in the national program	
	proposals.	
RCM North Sea	RCM North Sea considers that a MS's	Germany undertook the necessary actions
(Sep 2005)	agreement with the recommendations of a	to fulfil the recommendations of the RCMs
	RCM or with its initiatives to set up	and will continue to do so.
	concerted actions implies that the MS will	
	take the necessary steps to implement these	
	recommendations and to participate in the	
	proposed actions.	
RCM NEA (Sep	MEMBER STATES start bilateral talks as	In preparation.
2004)	soon as possible, with a view to establishing	
	bilateral agreements on the issue of foreign	
	flag vessel sampling.	
	RCM encourages MEMBER STATES to	
	include copies of these agreements in their	
	National Program submissions for the year	
	2006	
RCM NEA (Oct	The RCM NEA recommends that all	The German fleet matrix was presented at
2005)	member states attempt to fill in the matrix	the RCM NEA 2005 and was further
	with readily available effort data with a	adapted to the most recent version after the
	view to defining the final version of the	RCM.

		T
	matrix for the revision of the DCR, i.e.	
	before January 2006	
RCM NEA (Oct	RCM NEA strongly recommends that MS	As the German fisheries are not operating
2005)	take necessary steps to fill in the gap in	in ICES Subarea X, there was no action
	discard sampling in Area X	necessary.
RCM NEA (Oct	RCM NEA recommends seeking	In preparation. There are no initiatives yet.
2005)	multilateral agreements to overcome the	These agreements should be handled
	obligation to provide data for species by	during the RCM meetings. First
	member states that have small catches of	discussions were started at the RCM NEA
	these species.	in 2005 and will be continued in 2006 and
		2007.
RCM NAFO (Apr	NAFO RCM recommends that all the	Germany did not attend the RCM NAFO
2005)	Member States involved in the fisheries in	but submitted all data and descriptions
	the NAFO area attend future meeting	required and ensured that the relevant staff
		was available to the Chair by e-mail. In
		2007, however, Germany will participate
		in the RCM NAFO.
RCM NAFO (Apr	NAFO RCM recommends that sampling	There are only two German fisheries in the
2005)	programmes be co-ordinated among	NAFO area that are covered well by the
	countries between bilateral or multilateral	NP geographically and in terms of
	agreements in order to require the precision	precision.
	levels	
RCM NAFO (Apr	RCM NAFO recommends seeking	There are no initiatives yet. These
2006)	multilateral agreements to overcome the	agreements should be handled during the
	obligation to provide data for species by MS	RCM meetings.
	that have small catches of theses species.	
RCM NAFO (Apr	RCM NAFO recommends providing	Germany is already providing maturity
2006)	aggregated maturity data to the assessment	data annually and will continue to do so.
	working groups on a yearly basis for those	
	stocks that are sampled on a routine basis	
	yearly, in a format agreed by the working	
	group.	

14. List of acronyms and abbreviations

A ononym/	
Acronym/ Abbreviation	Explanation
AFWG	Arctic Fishery Working Group
BAD	Baltic Acoustic Database (BADI = aggregated data; BADII = raw data)
BASS	Baltic Acoustic Spring Survey
BFAFi	Bundesforschungsanstalt für Fischerei (Federal Research Centre for Fisheries)
BITS	Baltic International Trawl Survey
BLE	Bundesanstalt für Landwirtschaft und Ernährung (Federal Agency for Agriculture and Food)
BMI	Bundesministerium für Inneres (Ministry for Internal Affairs)
BMELV	Bundesministerium für Ernährung, Landwirtschaft und Verbraucherschutz (Ministry of Food, Agriculture and Consumer Protection)
CEFAS	Centre for Environment, Fisheries & Aquaculture Science (Lowestoft, England)
CPUE	Catch per unit and effort
CTD	Conductivity-Temperature-Depth-Probe
DATRAS	Database trawl surveys
DCR	Data Collection Regulation
DYFS	Demersal Young Fish Survey
EU	European Union
EUROSTAT	Statistical Office of the European Communities
FADN	Farm Accountancy Data Network system
FAL	Bundesforschungsanstalt für Landwirtwirtschaft (Federal Agricultural Research Centre)
FIDES	Data transmission system
FRC	Fishery Research Cutter
FRS	Fisheries Research Services (Marine Lab, Aberdeen, Scotland)
FRV	Fishery Research Vessel
FTE	Full time employment
GNS	Set nets/Gill nets
gt	Gross Tonnage
HAWG	Herring Assessment Working Group for the Area South of 62° N
HERSUR	Herring Survey
JRC	Joint Research Centre
IBTS	International Bottom Trawl Survey
IBTSWG	International Bottom Trawl Survey Working Group
ICES	International Council for the Exploration of the Sea
IFREMER	French Institute for Exploitation of the Sea
IOR	Institut für Ostseefischerei, Rostock (Institute for Baltic Sea Fisheries)
ISH	Institut für Seefischerei, Hamburg (Institute for Sea Fisheries)
kW	kilowatt
LOA	Length overall
MAGP	Multi-annual Guidance Programme
MIK	Midwater-Isaak-Kidd (sampling device for fish plankton)
MS	Member State(s)
NACE	Nomenclature statistique des Activites economiques dans la Communaute Europeenne (Statistical classification of economic activities in the European Community; used to designate various statistical classifications of economic activities)
NAFO	Northwest Atlantic Fishery Organization
NASC	Nautical Area Scattering Coefficient
NEAFC	North East Atlantic Fisheries Commission

No	Number
NP	National Programme
NR	Not relevant
NWWG	North Western Working Group
OTB	Otter trawl bottom
OTM	Otter trawl midwater
PGCCDBS	Planning Group on Commercial Catch, Discards and Biological Sampling
PGHERS	Planning Group for Herring Surveys
PTB	Two ship trawl
PRODOM	PRODuction COMmunautaire (EU-wide harmonised classification of products produced by the industrial sector, directly linked to the external trade commodity classification, specified in Council Reg. 3294/91
Reg.	Regulation
SC	Scientific Council
SGRN	Subgroup on research need and data collection
SGRS	Study Group on Redfish Surveys
SQL	Structured Query Language, standard computer language for accessing & manipulating database systems
StBA	Statistisches Bundesamt (Federal Statistical Office)
STECF	Scientific, Technical and Economic Committee for Fisheries
TAC	Total allowable catch
TBB	Beam trawl
UK	United Kingdom
WG	Working Group
WGBEAM	Working Group on Beam Trawl Surveys
WGBFAS	Baltic Fisheries Assessment Working Group
WGCRAN	Working Group on Crangon Fisheries and Life History
WGMEGS	Working Group on Mackerel and Horse Mackerel Egg Survey
WGMHSA	Working Group on the Assessment of Mackerel, Horse Mackerel, Sardine, and Anchovy
WGNPBW	Northern Pelagic and Blue Whiting Fisheries Working Group
WGNSSK	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerak
XML	Extensible Markup Language, text format
ZADI	Zentralstelle für Agrardokumentation und Information (German Centre for Documentation and Information in Agriculture)

15. Comments, Suggestions and Reflections

Data safety and protection (Articles 9 and 12)

In full compliance with Articles 9 and 12 of Regulation 1639/2001, national access rights to the database are restricted to the institutions directly involved in the DCR only for their relevant part of the database. A separate secure server was purchased in 2003, and the relevant staff has been trained accordingly to ensure data safety. It is further secured that only aggregated data are available via internet and that no relation can be concluded between these data and individual ships, natural or legal persons.

Data Accessibility

Provisions for the data accessibility by the commission and other member states in relation to articles 10 and 11 were made.

Other Issues

- Units defined in Appendix V in relation to specific effort are not useful for static gears.
- Appendix III of Reg. 1581/2004 contains a category "Vessels without License". This is in contradiction to Reg. 1639/2001 Chapter II Module C Collection of data concerning fishing capacities. Under C.1.a) it is stated that all vessels covered by the multi-annual guidance programme (MAGP) IV have to be included in the sampling. However, these vessels have to be registered by Reg. 3760/1992. More relevant for the data sampling programme would be vessels which are registered but not active in fishing. These vessels influence the perception of the economic situation of the fleet segments. They are, however, not relevant for the biological issues.
- The German version of Reg. 1639/2001 is incorrectly translated respective section chapter III Module H 1.d). in relation to ages. (1) i and ii says derogation for sampling if quota is less than 5%, whereas the English version says 10%.

16. References

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Annexes

Annex 1: Summary of the planned pilot study for eel monitoring

The recruitment of European eel (*Anguilla anguilla*) into the continental waters has been in decline since the late 1970s. ICES considered the eel stock to be "outside safe biological limits". The European Commission has issued a proposal for a Community Action Plan for the Management of European Eel (COM 2003, 573), aiming at recovery of the stock. Further implementation of the Action Plan is detailed in the proposed Council Regulation establishing measures for the recovery of the stock of European Eel.

In order to improve the data basis for eel catches and stock parameters, the eel was included in the EU Data Collection Regulation (DCR). The information gathered in this data collection programme will also be used to post-evaluate the effect of the national management plans.

In September 2005, a workshop on national data collection for the European eel under the DCR took place in Sånga Säby (Stockholm, Sweden). The workshop reviewed present practices and developed recommendations based on expert judgement. It was stated that, in the light of future implementation, the monitoring procedures have to be worked out in more detail and promising approaches have to be developed and tested, preferentially in pilot studies. Possible approaches may include quantification of recruitment and silver eel escapement in a river basin or the assessment of mortality rates in the river basin.

Since the goal of the management plan is defined in terms of silver eel escapement, it seems plausible to relate data collection also to this stage. Furthermore, a comprehensive monitoring of the eel stock during all of its freshwater stages is not feasible in the long run due to financial, personal and technical limitations. Due to the very scattered nature of the inland fishery (many small scale fisheries, different types of waters and fishing gears, the complex of recreational fishery) the typical instruments of the DCR from the marine areas do not appear to be suitable in the freshwaters. Instead, it appears promising to establish an estimate of silver eel escapement based on catch statistics (*cpue* data) of specialised silver eel fishing gears, in particular in the lower reaches of large catchments. On one side, such data have the advantage that they integrate over the whole catchment and consequently, the effort would no become too high. On the other side, the data will not allow conclusions about the stocks or mortalities in sub-catchments or tributaries. Yet, it is questionable if this is necessary, particularly, if the River Basin District (according to the Water Framework Directive) is the spatial unit for the eel management plan.

If it is possible to establish a relationship between total silver eel escapement and *cpue* data of one or a series of fishing gears, the data will be particularly valuable, if long-term data of these gears exist. This would enable estimates of silver eel escapement not only in the future but also for the past.

Based on these facts and considerations, a pilot study under the DCR is planned by the Federal Research Centre for Fisheries. The objective of this project is to develop a method for monitoring of glass eel immigration into and silver eel escapement from a large river system. However, the study will also include the assessment of population parameters during the yellow eel stage. This will offer the possibility to relate these parameters describing the stock to silver eel escapement in cases where silver eel monitoring can not be established. Data on fishing effort will become available, if the DCR is applied for the freshwater fishery on eel.

The main focus of the study is on the development of a practicable method for future monitoring purposes, which will enable assessment of silver eel escapement on a sufficient precision level at appropriate effort (personal, financial).

The study will be conducted at the River Elbe. With a length of 1094 km and a catchment area of 148,268 km², it is one of the big and important catchments. Consequently, the data gathered here are of special importance in the "overall balance". The Elbe connects the

majority of the north German fresh waters with the North Sea. On a German basis, these waters belong to systems with the highest production potential for eel.

Glass eel monitoring will be conducted at the weir Geesthacht (approx. 140 km upstream from the estuary, forming the tidal limit), which is the only weir at the Elbe in Germany. The eels will be caught by an eel ramp which is installed in the fish pass. In 2006, preliminary investigations are conducted by the regional institution (the federal country Lower Saxony) at Geesthacht to establish the method (to find out the best position of the eel ramp; comparison of the catches of the eel ramp to the catch of the meshwire fykenets, which can be installed in the fish pass; timing of the glass eel immigration).

With regard to the time lag between immigration and spawning migration of the eel, a "true" balance will not be possible in the proposed study. Therefore, it is tried to obtain all stocking data, which are available for the relevant period.

Monitoring of yellow eel stocks in the catchment upstream of the silver eel monitoring station is planned to offer the possibility to estimate silver eel escapement in cases, where direct silver eel monitoring is not possible (e.g. if no suitable fishing gear is operating in the respective river). The study will provide data on length-frequency distributions, growth, sex ratios and on proportion of silver eels in the stocks. These data will be obtained in a range of typical waters in the catchment, including rivers and lakes. The results will also be used to estimate different mortalities (fishing, natural, cormorant predation, turbines / technical).

For silver eel monitoring, total coverage of the whole river by fishing gears is not possible in a big river like the Elbe. Consequently, for an assessment of total silver eel escapement, the efficiency of the fishing gear used must be known. Typical gears for the catch of migrating silver eels in the downstream regions of bigger rivers are stow nets which are operated from boats anchored in the river or from the shore. Principally, the efficiency of these fishing gears could be estimated by mark-recapture experiments. However, several studies have shown that even if only "silver eels" were tagged, not all of them really migrated in the same season. Consequently, the efficiency of such a passive gear can only be determined if the number of (tagged) fish, which really pass the river at the position of the fishing gear, is known. This information can be obtained by using a telemetric system which covers the entire river bed. For this purpose, it is planned to use the *Nedap Trail* system. It consists of an antenna covering the entire river bed and a semi-mobile detection station. The fish will be tagged by an individually coded transponder, which is surgically implanted into the body cavity. As the tag is not visible from outside, the fish will be additionally marked by an external mark (FLOY-Tags, colour marks - still to be determined in cooperation with the fishermen) in order to find the tagged fish in the catches.

One antenna and the detection station will be installed at the stow net fishery in Gorleben, Lower Saxony. From these stow nets, a detailed (daily) catch statistics exists reaching back to the year 1966. Up to four stow nets can be operated by the fisherman.

About 1500 silver eels caught at Gorleben or upstream in the Elbe or its tributaries will be tagged. From all fish, we will measure length, weight, length of the pectoral fins and eye diameter. These variables are related to silvering. The exclusive use of silver eels will at least increase the probability that the majority of the fish really start the migration during the study period. The fish will be released not more than 100 - 150 km upstream from Gorleben in the Elbe or a tributary.

The catches of the stow net fishery in Gorleben are available for the study. As the number of tagged fish passing the antenna, the number of tagged fish in the catch, and the proportion of tagged and non-tagged fish in the catch are known the total number of downstream migrating fish can be calculated. As a result, it will become possible to relate the *cpue* data of the stow net to total silver eel escapement at this position.

Another detection station (and antenna) will be installed further downstream (exact position still to be determined). This one will not be connected to a fishing gear. However, the

difference in passages between both detection stations will allow an estimate of mortality along the migration route. This can also be related to the fishery because at least the commercial and semi-commercial fisheries are well known.

All tagged fish in the catches and a sufficient number of all eels in the stow net will be sacrificed for further investigations. With regard to aspects of the migration, population dynamics and spawner quality, data on sex ratio, gonado-somatic index, hepato-somatic index gut index, age and growth (which age groups migrate?), condition factor, infection with *Anguillicola crassus* and possibly contamination (e. g. PCBs) will be obtained.

The method to estimate silver eel escapement, which will be developed in this pilot study, will offer a suitable solution for a cost-efficient silver eel monitoring in the future. Whereas the study itself requires a considerable financial effort due to the relatively high costs for the technical equipment, the future monitoring will be far less expensive. After the pilot study, the antenna and the detection station can be moved to other rivers. Thus, the relationships between *cpue* data and silver eel escapement could be obtained in succession at the other river systems.

Annex 2: Agreed text on Sampling responsibilities between The Netherlands and Germany

A coordination meeting between The Netherlands (Sieto Verver) and Germany (Hans Peter Cornus) was held in Rostock on the 2nd of March 2006.

The Netherlands and Germany agreed on the following transfers of sampling responsibilities for the 2007 program:

German Landings into The Netherlands

Germany takes over the responsibility of The Netherlands to sample German Landings in the Netherlands: (because on-board sampling)

Herring 2a
Herring 4ab
Herring 5b,6aN,6b
Horse Mackerel IIa(EU), IV(EU)
Horse Mackerel Vb(EU),VI,VII,VIIIabde;XII,XIV
Mackerel IIa(nonEU),Vb(EU),VI,VII,VIIIabde,XII,XIV
Blue Whiting Vb(EU),VI,VII,XII,XIV

The sampling will be carried out by observers on board.

Dutch Landings into Germany

Germany takes over the responsibility of The Netherlands to sample Dutch Landings in Germany:

Blue Whiting IIa, Vb, VI, VIIa-c, e-k, VIIIabde, XII, XIV (13 samples in 2007)

Due to the above agreement, there is no need for data transfer from the Netherlands to Germany. Data sampled by Germany on Netherlands landings of Blue whiting in Germany will be transferred to the Netherlands by ad hoc agreement on transfer procedures

Agreement

between the Swedish Board of Fisheries, Institute of Marine Research and the German Federal Research Centre for Fisheries

concerning collection of fisheries catch data in 2006 and 2007

In accordance with the Data Collection Regulation (DCR) (Commission Regulation 1639/2001) Sweden and Germany have agreed entering co-operation on collection of fisheries data. This agreement has been establish due to common interests in the fisheries in the Baltic Sea and the North Sea. Furthermore, substantial landings by German flagged vessels take place in Sweden and therefore, in order to optimize the quality of the sampling programme, exchange of information and knowledge is necessary.

Agreement:

It has been agreed that if landings in a specific country are below 5 percent of the national quota for the flag country then the receiving country is not obliged to sample these landings but the flag country should instead compensate for the missing samples in the national sampling scheme. If there is a change in the situation, it is the responsibility of both institutions to inform on eventual changes and initiate changes in the sampling scheme.

A certain fishery might be sampled anyway taking into account other issues even though the landings do not justify a sampling scheme for this fishery according to the DCR.

Sampling of the following species has been discussed and agreed:

Baltic Sea

Cod

The German landings in Sweden in 2005 were below 5 percent of the German quota in 2004. Therefore, no sampling is made in Sweden. Germany will in 2006 and 2007 adjust the national sampling to compensate for the missing sampling of the landings in Sweden.

The Swedish landings in Germany in 2005 were below 5 percent of the Swedish quota. Sweden will adjust national sampling to compensate for the landings in Germany.

In relation to the change of management regime of the Baltic cod into separate management areas of eastern- and western cod stocks, the involved countries will be observant of any change in the distribution of landings from the two management areas and will inform on these changes and adjust the sampling schemes in relation to such changes in landing distribution. The sampling scheme will be carried out in accordance

with the DCR. Due to the present status of the stocks the sampling will be carried out according to the extended programme in DCR.

Flounder

There were no German landings of Flounder in Sweden in 2005

There were no Swedish landings of flounder in Germany in 2005.

Plaice.

German landings in Sweden in 2005 were less than 5% of the German quota. There is no need for sampling by Sweden.

There were no Swedish landings of plaice in Germany in 2005.

Herring

German landings in Sweden in 2005 were more than 5% of the German quota (Landings in SWE = 3009 t (German record 3197t), DE quota = 26207t). Sweden is responsible to take 3 samples of each 100 fish measured by length and taking otoliths of 100 fish for aging or adjusted for changes in landings one sample per 1000t according to 100 fish for length measurement and 100 otoliths for aging following the DCR rules.

Swedish landings in Germany in 2005 were 1261t which is less than 5% of the Swedish quota of 47000t. There is at the moment no need for Germany to take samples.

However, due to the development of the fish processing plant at Mukran (Rügen, Germany) it is expected that the selection of landing sites may change drastically in the next years. Therefore, both institutions will inform each other on eventual changes and adjust the sampling schemes in relation to such changes in landing distribution

Sprat

German landings in Sweden in 2005 were more than 5% of the German quota (Landings in SWE = 18150 t, DE quota = 26299t). Sweden is responsible to take 7 samples of each 100 fish measured by length and taking otoliths of 50 fish for aging or adjusted for changes in landings one sample per 2000t according to 100 fish for length measurement and 50 otoliths for aging following the DCR rules.

Swedish landings in Germany in 2005 were 165t which is less than 5% of the Swedish quota of 75000t. There is at the moment no need for Germany to take samples.

However, due to the development of the fish processing plant at Mukran (Rügen, Germany) it is expected that the selection of landing sites may change drastically in the

next years. Therefore, both institutions will inform each other on eventual changes and adjust the sampling schemes in relation to such changes in landing distribution

Concerning **otoliths taken for herring and sprat** it was agreed that at both institutions the otoliths are aged and sent to the other institution with accompanying relevant parameters for crosschecking. If any disagreement occurs a bilateral meeting will be called in to solve the problem.

Due to the fact that German landings were separated and transhipped before landed in Sweden, the landings could not be traced by Swedish scientists. Therefore no samples of landings could be taken in 2005.

Germany in 2006 and 2007 will put scientific observers on board of vessels fishing for herring and sprat in the Baltic in order to get samples at sea of landings and discards. Therefore there is no need for Sweden to sample German landings of sprat and herring in Sweden in 2006 and 2007.

North Sea

Herring (4a)

There were no German landings of Herring from 4a in Sweden in 2005

There were no Swedish landings of herring in Germany in 2005.

Mackerel (4a)

There were no German landings of Mackerel from 4a in Sweden in 2005

There were no Swedish landings of mackerel in Germany in 2005.

Exchange of staff on surveys

It has been agreed to encourage cooperation on national surveys in the Baltic and the North Sea. The agreement would involve scientists and/or technicians. This may depend in praxis on the staff resources.

Contact persons

The German contact persons in general matters concerning sampling and handling of samples is:

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Swedish Board of Fisheries

Annex 4: List of entries (accounting) for economic data (Section 10)

0.) General data to the enterprise and the accountancy

Descripti	on	Cod
	accountancy (encoded)	0001
	internal accountancy number of the enterprise	0002
	federal state	0003
	administrative district	0004
	NUTS Code	0005
	community	0006
	currency	0009
	EU Code of the vessel	0010
	not relevant for fisheries	0016
	socio-economic type of enterprise	0018
	entfällt, da fisheries	0019
	legal form	0020
	objective (area)	0021
	kind of enterprise (conventiell/alternative)	0023
	date of the statement of accounts	0024
	compensation recieved	0025
	type of the account statement (tax or others)	0026
	kind of entries (netto, brutto)	0027
	type of the turnover tax system	0028
	not relevant for fisheries	0029
	not relevant for fisheries	0031

1.) balance sheet with assets

	ription	Code
A) (Contribution	
,	outstanding contributions	1000
	there under accepted	1002
B) c	apital/fixed/permanent assets	
I.	tangible assets	
	tangible / immaterial assets	1014
	sum of immatrial assets	1019
II.	material assets	
	land and properities	
	land/property (§55 Abs. 1 EStG)	1020
	land/properties, others buildings	1021
	operating buildings	1025
	sum of 1020 - 1025	1029
	technical equipment and machineries	
	facilities	1030
	machinery	1031
	vessel	1035
	engine of the vessel fisheries equipment on board	1036 1037
	sum of 1030 - 1039	1037
	other assets	1000
	car	1040
	fleet of lorries	1041
	factory equipment	1043
	sales equipment furniture and fixtures	1045 1046
	others	1046
	inferior economic goods	1048
	sum of 1040 - 1048	1049
	down payments and installations plants under construction	
	down payments made and installations / plants in progress	1078
	sum of 1029, 1039, 1049 and 1078	1079
III.		
III.	financial participations	1087
III.	financial participations financial investments	1087 1088
	financial participations financial investments sum of 1019, 1079 and 1088	1087
D) F	financial participations financial investments sum of 1019, 1079 and 1088 loating assets	1087 1088
D) F	financial participations financial investments sum of 1019, 1079 and 1088 loating assets stock in hand	1087 1088
D) F	financial participations financial investments sum of 1019, 1079 and 1088 loating assets	1087 1088 1089 1109 1118
D) F	financial participations financial investments sum of 1019, 1079 and 1088 loating assets stock in hand row material and supplies products / service in progress produced products	1087 1088 1089 1109 1118 1120
D) F	financial participations financial investments sum of 1019, 1079 and 1088 loating assets stock in hand row material and supplies products / service in progress produced products stock-in-trade	1087 1088 1089 1109 1118 1120 1121
D) F	financial participations financial investments sum of 1019, 1079 and 1088 loating assets stock in hand row material and supplies products / service in progress produced products	1087 1088 1089 1109 1118 1120
D) F	financial participations financial investments sum of 1019, 1079 and 1088 loating assets stock in hand row material and supplies products / service in progress produced products stock-in-trade down payment made	1087 1088 1089 1109 1118 1120 1121 1148
D) F	financial participations financial investments sum of 1019, 1079 and 1088 loating assets stock in hand row material and supplies products / service in progress produced products stock-in-trade down payment made sum of 1109, 1118, 1121 and 1148	1087 1088 1089 1109 1118 1120 1121 1148
D) F	financial participations financial investments sum of 1019, 1079 and 1088 loating assets stock in hand row material and supplies products / service in progress produced products stock-in-trade down payment made sum of 1109, 1118, 1121 and 1148 debts trade accounts receivable other debtors	1087 1088 1089 1109 1118 1120 1121 1148 1149
D) F I.	financial participations financial investments sum of 1019, 1079 and 1088 loating assets stock in hand row material and supplies products / service in progress produced products stock-in-trade down payment made sum of 1109, 1118, 1121 and 1148 debts trade accounts receivable other debtors sum of 1150 and 1158	1087 1088 1089 1109 1118 1120 1121 1148 1149
D) F	financial participations financial investments sum of 1019, 1079 and 1088 loating assets stock in hand row material and supplies products / service in progress produced products stock-in-trade down payment made sum of 1109, 1118, 1121 and 1148 debts trade accounts receivable other debtors sum of 1150 and 1158 Securities	1087 1088 1089 1109 1118 1120 1121 1148 1149 1150 1158 1159
D) F I.	financial participations financial investments sum of 1019, 1079 and 1088 loating assets stock in hand row material and supplies products / service in progress produced products stock-in-trade down payment made sum of 1109, 1118, 1121 and 1148 debts trade accounts receivable other debtors sum of 1150 and 1158 Securities securities	1087 1088 1089 1109 1118 1120 1121 1148 1149 1150 1158 1159
D) F I. II.	financial participations financial investments sum of 1019, 1079 and 1088 loating assets stock in hand row material and supplies products / service in progress produced products stock-in-trade down payment made sum of 1109, 1118, 1121 and 1148 debts trade accounts receivable other debtors sum of 1150 and 1158 Securities securities sum of 1168	1087 1088 1089 1109 1118 1120 1121 1148 1149 1150 1158 1159
D) F I. II.	financial participations financial investments sum of 1019, 1079 and 1088 loating assets stock in hand row material and supplies products / service in progress produced products stock-in-trade down payment made sum of 1109, 1118, 1121 and 1148 debts trade accounts receivable other debtors sum of 1150 and 1158 Securities securities securities sum of 1168 unconditional order of pay	1087 1088 1089 1109 1118 1120 1121 1148 1149 1150 1158 1159
D) F I. II.	financial participations financial investments sum of 1019, 1079 and 1088 loating assets stock in hand row material and supplies products / service in progress produced products stock-in-trade down payment made sum of 1109, 1118, 1121 and 1148 debts trade accounts receivable other debtors sum of 1150 and 1158 Securities securities sum of 1168	1087 1088 1089 1109 1118 1120 1121 1148 1149 1150 1158 1159
D) F I. II. III. IV.	financial participations financial investments sum of 1019, 1079 and 1088 loating assets stock in hand row material and supplies products / service in progress produced products stock-in-trade down payment made sum of 1109, 1118, 1121 and 1148 debts trade accounts receivable other debtors sum of 1150 and 1158 Securities securities securities sum of 1168 unconditional order of pay cheques, bills an notes in hand sum of 1149, 1159, 1169 and 1179	1087 1088 1089 1109 1118 1120 1121 1148 1149 1150 1158 1159
D) F I. II. IV. E) d	financial participations financial investments sum of 1019, 1079 and 1088 loating assets stock in hand row material and supplies products / service in progress produced products stock-in-trade down payment made sum of 1109, 1118, 1121 and 1148 debts trade accounts receivable other debtors sum of 1150 and 1158 Securities securities securities sum of 1168 unconditional order of pay cheques, bills an notes in hand sum of 1149, 1159, 1169 and 1179 eferral entry	1087 1088 1089 1109 1118 1120 1121 1148 1149 1150 1158 1169
D) F I. II. IV. E) d F) s	financial participations financial investments sum of 1019, 1079 and 1088 loating assets stock in hand row material and supplies products / service in progress produced products stock-in-trade down payment made sum of 1109, 1118, 1121 and 1148 debts trade accounts receivable other debtors sum of 1150 and 1158 Securities securities securities sum of 1168 unconditional order of pay cheques, bills an notes in hand sum of 1149, 1159, 1169 and 1179 eferral entry pecial loss account of reserves (§17 Abs. 4 DMBilG)	1087 1088 1089 1109 1118 1120 1121 1148 1149 1150 1158 1169 1168 1169 1199
D) F I. II. IV. E) d F) s G) d	financial participations financial investments sum of 1019, 1079 and 1088 loating assets stock in hand row material and supplies products / service in progress produced products stock-in-trade down payment made sum of 1109, 1118, 1121 and 1148 debts trade accounts receivable other debtors sum of 1150 and 1158 Securities securities securities sum of 1168 unconditional order of pay cheques, bills an notes in hand sum of 1149, 1159, 1169 and 1179 eferral entry	1087 1088 1089 1109 1118 1120 1121 1148 1149 1150 1158 1169 1168 1169 1199 1209

1.) balance sheet with liabilities

Des	scription	Code
A)	Property capitel	
,	opening stock	1449
	deposit recieved	1459
	deposit issued	1469
	profit	1479
	loss	1489
	deficit not covered by equity capital	1498
	sum of 1449 - 1498	1499
B)	Property capitel	1518
C)	sepcial entries (reserves)	
	due to currency change over	1519
	due to §6b EStG	1520
	due to tax based depreciation	1521
	due to grants, subsidies	1522
	others	1528
	sum of 1519 - 1528	1592
D)	reserves	
	other reserves	1538
	sum of 1538	1539
E)	liabilities	
	liabilities in bank	1540
	creditors	1545
	(own) bills payable	1547
	(other) bills payable	1555
	bills payable (tax based)	1556
	bills payable (social insurance)	1557
	sum of 1540 - 1557	1559
F)	deferral entry	
	deferral entry	1567
	sum of 1499, 1518, 1529, 1539, 1559 and 1567	1568

2.) Profit and loss statement of account (1)

	Des	scription	Code
١,	1.	Turnover	
1	-		
	g)		0040
		turnover (domestic) from fish and other sea food	2310
		turnover (abroad) from fish and other sea food	2311
		sum of 2310 and 2311	2319
	h)	trade, services and other proceeds	
		from other activities (vessel related, but non-fisheries)	2328
		from wages and machine hire	2332
		from tourism	2333
		from charter	2334
		from other services	2336
		sum of 2328 - 2336	2337
	i)	impairments	2338
		sum of 2319, 2337 and 2339	2339
	4.	andere aktivierte Eigenleistungen	2349
	5.	others earnings	
٠.			
	a)		
		on investments	2357
		grants for economic plights	2358
		other grants	2359
		subsidies on beginning	2360
		subsidies for economic plights	2366
		grants from scrapping	2367
		other subsidies	2368
		other subsidies on investments	2377
		subsidies on interest (annually)	2381
		subsidies on interest (once)	2382
		grants for social insurances	2384
		grants on wages	2385
		other subsidies on expenses	2388
		grants to secure the existency	2447
		other subsudies	2448
		sum of 2357 - 2448	2449
	b)	other operating earnings	
	,	lease and hire	2451
		activating reserves	2452
		appreciation (in value)	2453
		remuneration in kind	2454
		private parts	2455
		turnover tax (period related)	2456
		indemnification	2457
		other income on operating activities	2458
		sum of 2451 - 2459	2459
	c)	non-period related earnings	
	٠,	returns from debits of tangible assets	2460
		returns from debits of land and buildings	2461
		returns from debits of technical equipment and machineries	2462
		returns from debits of other permanent assets and investments	2463
		returns from debits of financial contributions	2489
		returns from debits of valuation reserves (activating)	2492
		returns from debits of special entry reserves	2493
		returns from debits of reserves	2494
		non-period related turnover tax	2495
		other non-period related returns	2496
		sum of 2460 - 2496	2497
		sum of 2449, 2459 and 2497	2498
		- 200 01 = 110, = 100 000 = 101	2.00

2) Profit and loss statement of account (2)

De	esc	cription	Code
6.	,	operating expenses	
	e)	trade, services and others	
	-,	supplementary enterprises	2758
		wages and hire on machines	2762
		tourism	2763
		charter	2764
		other services	2767
		sum of 2758 - 2767	2769
	f)	other energting expenses	
	1)	other operating expenses	2770
		heating	2770
		electricity	2771 2772
		water, waste, ice fuel and lubrication oil	2773
			2780
		packing	2781
		other expenses	
		wages and hire on machines	2782
		charging and recharging	2783
		other miscellaneous services sum of 2770 - 2784	2784
			2785
	g)	discounts /allowances	2786
	h)	changes of the inventory upon the raw material and suplies	2787
	i)	changes of the inventory upon products sum of 2769, 2785, 2786,2787 and 2788	2788 2789
7.	1	personnel expenses	
	,	wages and salaries of permantal stuff	2790
		wages of non-permantal stuff	2791
		old-age pension	2792
		• ,	2792
		social (insurance) costs	(2000)
		other allowances	2794
		accident insurance	2798
		sum of 2790 - 2798	2799
8.		depreciation	
		tangible assets (budgedet)	2800
		impersonal assets (budgeted)	2801
		tangible assets (unbudgedet)	2802
		impersonal assets (unbudgeted)	2803
		floating assets (special effects)	2805
		floating assets (expected special effects in future)	2806
		special loss account	2808
		sum of 2800 - 2809	
			2809
).		other operating expenditure	
	a)	maintenance	
		maintenance buildings	2813
		maintenance operating devices	2816
		maintenance machines and technical tools	2817
		maintenance fishing vessel	2821
		maintenance fishing vessel engine	2822
		maintenance fish finding equipment	2823
		maintenance car	2824
		maintenance fleet of lorries	2825
		maintenance others	2826
		sum of 2800 - 2809	2809
1	b)	working insurance	
		building insurance	2830
		car insurance	2831
		lorry insurance	2832
		legal costs insurance	2836
		third party insurance	2837
		other insurances	2838
		outor mourainos	2030
		sum of 2830 - 2838	2839

2) Profit and loss statement of account (3)

Des	scription	Code
c)		
	leasing	2841
	rent	2845
	real estate levy	2846
	other levies	2851
	assiciation levies	2852
	presents till 38 € (§4 Art.5 EStG)	2853 2854
	entertainment expenses (§4 Art.5 EStG) expenses for the tax consultancy, bookkeeping and audit	2855
	economic consultation	2856
	legal consultation	2857
	operating budget	2859
	valuation reserves	2860
	special transfer to reserves	2861
	transfer to the general reserves	2862
	non deductible working expenses	2863
	marketing expenses	2865
	telecommunication expenses	2866 2867
	advance tax payments other operating expenditure	2868
	sum of 2841 - 2868	2869
ď	non - periodical expenditure	
	expenses of items disposed / retirements of intangible assets	2870
	expenses of items disposed / retirements of land and buildings	2871
	expenses of items disposed / retirements of technical equipment and machines	2872
	expenses of items disposed / retirements of other operating devices	2873
	expenses of items disposed / retirements of financial positions	2889
	valuation reserves	2890
	special transfer to reserves	2891 2894
	non - periodical expenses of advance tax payments other non - periodical expenditure	2895
	sum of 2870 - 2895	2896
	sum of 2829, 2839, 2869 and 2896	2897
	operating result as balance of 2339, 2347, 2349, 2498, 2789, 2799, 2809, 2897	2899
10.	earings of participations	2900
11.	earings of investments in securities	2902
12.	earings of interest on deposits	2904
13.	earnings of profit sharing participation contracts	2906
14.	earnings of loss takeover	2908
15.	depreciation allowance of financial participations and securities of the	2000
13.		2910
•	floating capital	0040
16.	expenses of loss takeover	2912
17.	pay over of profit sharing participation contracts	2913
18.	loan services and similiar expenses	2914
19.	profit premium based on §4 Art. 5 EStG	2916
	financial result 2900, 2902, 2904, 2906, 2908, 2910, 2912, 2913, 2914, 2916	2870
20.	result of the normal acitities as balance of 2899 and 2918	2919
21.	extraordinary earnings	2920
22.	extraordinary expenses	2924
		2929
23.	result of all extraordinary events as balance of 2920 and 2924	2929
24.	taxes from incom	
	corporation (income) tax tax on capital income	2930 2931
	local business tax	2931
	sum of 2930 - 2932	2939
24.	taxes from incom	
	real estate tax	2940
	car tax	2941
	lorry tax	2942
	local capital business tax	2944
	operating property tax	2945
	other business tax	2948
	sum of 2930 - 2932	2949
	profit and loss as balance of 2919, 2929, 2939, 2949	2959

3.) appendix sheet with assets

code	description	historic value at market	additions	ransfers	etirements	depreciation value (accumulated)	book value (current year)	book value (previous year)	depreciation value (current year
3014 3019	I Intangible asset sum of 3014								
3020 3021 3022 3023 3025 3029	II) tangible asset 1. land and buildings land (§SS Art. 1 ESIG) other land / property soil improvement buildings operating buildings sum of 3020 - 3025								
3030 3031 3035 3036 3037 3039	technical equipment and machineries facilities machinery vessel engine of the vessel fisheries equipment on board sum of 3030 - 3037								
3040 3041 3043 3045 3046 3047 3048 3049	3, other assets and furnitures and fixtures car lorry fleet factory equipment factory equipment furniture and fixtures others inferior economic goods / assets sum of 3040 - 3048								
3078 3079	 advanced payments and plants in progress advanced payments and plants under construction sum of 3029, 3039, 3049, 3078 								

4.) Itemized list of liabilities to banks

code	description	nominal value [€]	total term of loan [years]	residual term of loan [years]	loan rate [%]	loan payments [€]	amount (business year) [€]	amount (previous year) [€]	redemption [€]
3920 3921 3922 3923 3924 3925 3926 3927 3928 3930 3931	sum of 3920 - 3995								
3997 3998 3999	thereunder short-term thereunder medium-term thereunder long-term	\equiv	=	=	\equiv				=

ind of	labour								
ode	description	person [no/units]	FTE [units]	gross wages [€/years]	(vocational) education / training (encoded)	depreciation value (accumulat.)	disablement [%]	year of birth	gender (encoded
7001 7002 7003 7004 7005 7006 7007 7008 7010 7011 7012	I. non - remunerated labour (works manager / ownwer, family members,)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							
1090 1091 1092 1093 1094 1095 1096	II. salaried personnel andwage - earners								
098	sum of 7090 - 7096								28
099	III. salaried personnel and sum of 7089 - 7098								_

Des	scription	Code
I.	vessel	
	vessel EU No.	8100
	type of construction / vessel (encoded)	8101
	length overall	8102
	gross tonnage	8103
	year of construction	8105
	engine power	8106
	fuel oil consumption	8107
I.	activity	
	fishing area (encoded, Baltic and North Sea)	8110
	type of fishery (active/passive/both)	8111
	fishing days	8112
	supply and services days at sea	8113
	shipyard and repair and maintenance days	8114
	bad wheather down days	8115
III.	share of sales	
	shrimps [%]	8117
	salt - water fish [%]	8118
	fresh water fish [%]	8119