

GERMAN NATIONAL FISHERIES DATA SAMPLING PROGRAMME 2008 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, **2008** (= 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 2007, and efforts in 2008 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-) co-ordinated 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, were owned by the Federal Agricultural Research Centre (FAL) in Braunschweig until 2007. In 2008, the fishery economy tasks will be transferred to BFAFi in Hamburg.
- Data on the processing industry are kept at the Federal Statistical Office Germany (StBA) in Wiesbaden, FAL in Braunschweig and (from 2008) BFAFi in Hamburg.

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. In 2008, ZADI will be part of BLE. 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.VIIId) 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). In the CECAF area, quota allocations for areas 34.1. and 34.3 (Mauretanian EEZ) are not given every year (recently: 2004 and 2006).

2. Participating institutes

2.1 National correspondent

By 1 January 2008, 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. These tasks will be **transferred to BFAFi during 2008**.

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 was further developed in 2003-2007. Due to re-organisation of the BMELV research institutions, **ZADI will be part of BLE in 2008**.

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 has prepared 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 live 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.

Eel sampling

Landings data for eel (*Anguilla anguilla*) are collected in the logbook database.

Germany has prepared 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 2008 (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

Regulations do not exist in German coastal federal countries which require the recording of the catch taken by the recreational fishery in the Baltic Sea and in the North Sea. Therefore, it is only possible to collect data related to the effort and the catch of anglers by means of interviews of the recreational fishermen. It is further important to work close together with the different angling associations and the governmental administrations of the federal 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 partly small gear for catching fish bait. Fishing with rods can be subdivided into the beach fishing (demersal fishing with natural baits from the beach and angling whilst wading, using artificial or natural baits) and the boat and cutter angling and trolling (with natural or artificial baits).

The second type of recreational fishery uses methods which are comparable to the commercial fishery, e.g. traps, eel pots, fykes, long lines and gillnets. Which of the methods mentioned above is permitted is depending on the federal country.

Data sampling

Cod is the main target species of the sampling, but data for all other fish species, e.g. flounder, herring and sea trout, which are caught by the recreational fishery, are additionally collected.

Baltic Sea

ANGLERS

EFFORT

The effort of an angler per angling day, measured in duration of the total angling day and the effective angling hours, is sampled by census of recreational fishermen at the beaches and in the harbours (see LANDINGS). The numbers of effective angling hours which were realized during trips of angling cutters are sampled in cooperation with the owners of the cutters. The sampled effort data are used to estimate the duration of an angling day and the landings per hour.

LANDINGS

A randomized sampling scheme will be used in 2008 to estimate to total landings of cod by anglers.

The coastal areas of the federal countries Mecklenburg-Western Pomerania and of Schleswig-Holstein are subdivided into five regional strata. The regional strata are broken down into different sampling units (defined beaches and harbours). The sampling day together with the regional strata and the sampling unit are selected for the interviews of anglers using randomized processes.

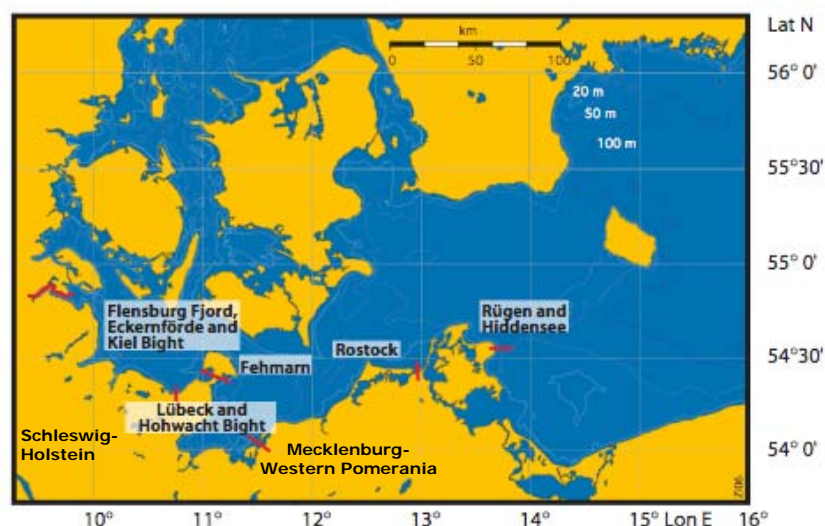


Fig. 5.1: Sampling strata for recreational fisheries sampling.

Two types of sampling are defined. One-day based sampling is realized in the regional strata “Rostock” because the required time for sampling is relative low due to the fact that the institute is located in Rostock. Two-day samples are used in all other regions to reduce the necessary amount of time and man power. In this case, the regional strata and two sampling units in this stratum for beach fishing and angling whilst wading are randomly selected. To ensure an effective use of the available labour, time and the financial resources, the harbours to sample boat angling, cutter angling and trolling are then selected under the aspect of geographical vicinity to the randomly selected beach.

The intensity of angling activities by angling methods is differently distributed during the week. The highest intensity of boat and cutter angling is observed on Saturday, Sunday and public holidays. Angling from the beach is dominant on Friday and Saturday as well as before public holidays in relation to the other week days. Therefore, the intensity of sampling is adapted to the different intensity of angling.

Generally the following monthly sampling is planned for 2008:

beach fishing and angling whilst wading^{1,2}		boat und cutter angling, trolling¹	
time period	No. of samples	time period	No. of samples
Fri., Sat., day before holiday	4	Sat., Sun, holidays	4
Sun., Mon., Tue., Wed., Thu, holiday (if it is not a Fri./Sat.)	4	Mon., Tue., Wed., Thu., Fri.	4

¹ ... reduced sampling in winter time possible, because of bad weather conditions
² reduced by 50 % in Jul./Aug., because in principle there is no fishing for cod from the beach during these months.

Analyses presented in the Report of the Pilot Study “The German recreational fisheries’ cod catch in the Baltic and North Seas, 2004-2006” have shown that the high variability of the boat angling data (effort and catch) explained approximately 50 % of the total variability of the estimated total cod landings in numbers.

Therefore, during the sampling of the boat angling/cutter angling/trolling, the effort will be more directed to the boat angling. An increase of the sampling intensity of boat angling is not possible with the available sampling capacity.

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

In the Pilot Study, the assumption was made that the cod landings from the interior coastal waters of Mecklenburg-Western Pomerania are marginal and without importance for the total cod landings of the recreational fishery. This assumption will be checked in 2008. A sampling system is to be developed, based on information collected from angling clubs and/or angling guides fishing in the interior coastal waters in the second half of 2007.

LENGTH COMPOSITION OF LANDINGS

Length compositions of the landings from the beach fishing and cutter angling 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 cutter angling are realised in the first quarter and only very few in the fourth quarter of the year. Therefore, it is planned to take samples (one per month) to record the length composition of the landings onboard of angling cutters in the first and fourth quarters.

Length compositions of the landings from the boats angling will be collected during the boat sampling for landings.

RECREATIONAL FISHERY WITH COMMERCIAL FISHING METHODS - LEISURE FISHERY

The Pilot Study has shown that the leisure fishery is responsible for less than 1 % of the landings of the recreational fishery. Therefore, sampling of this fishery is not planned for 2008.

North Sea

The cod landings of the recreational fishery in the North Sea present approximately 1 % of total landings of the German commercial fishery, as indicated by the Pilot Study “The German recreational fisheries’ cod catch in the Baltic and North Seas, 2004-2006”. Therefore, no sampling is planned for 2008. The fishery will be monitored and new conclusions will be drawn for 2009.

Aggregation

Landings of the recreational fishery will be aggregated as required.

5.8 MP – Recreational – Derogations and non-conformities

Derogations exist for blue fin tuna and salmon:

Commission Staff Working Paper. Scientific, Technical and Economic Committee for Fisheries. Evaluation of pilot surveys undertaken under the Commission Regulation (EC) No 1639/2001. Brussels, 23.08.2004. SEC(2004) 1066. Appendix 1, p. 16:

- *“The conclusion that there are no German recreational fisheries for **blue fin tuna** in the North Sea and Baltic was accepted.”*
- *“In view of the low level of the **salmon** recreational fishery, SGRN has no suggestions on follow-up studies.”*

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 2008 (Table 6.1).

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

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 2008 with regard to haul positions and hydroacoustic tracks has not been concluded by 31 May 2007. Thus, the given details and survey maps are only preliminary or show examples based on the 2006 or 2007 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 13 Feb to 6 Mar 2008 and from 27 Oct to 13 Nov 2008 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.

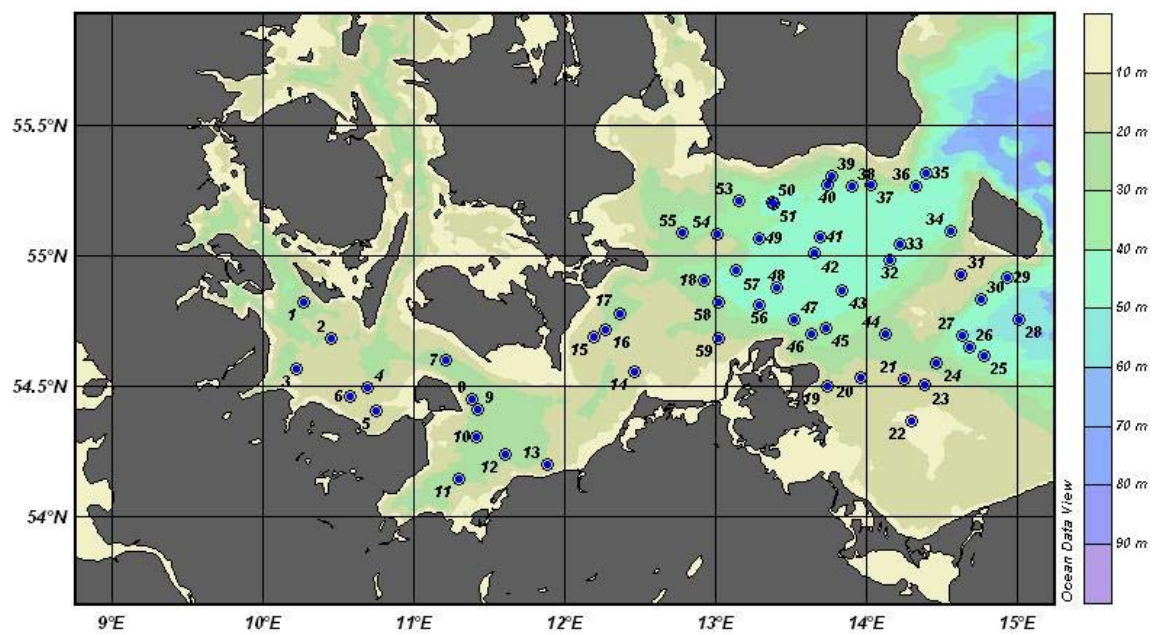


Fig. 7.1a: Baltic International Trawl Survey (BITS, 1st quarter). Example of station grid (final positions will be allocated at the WGBIFS).

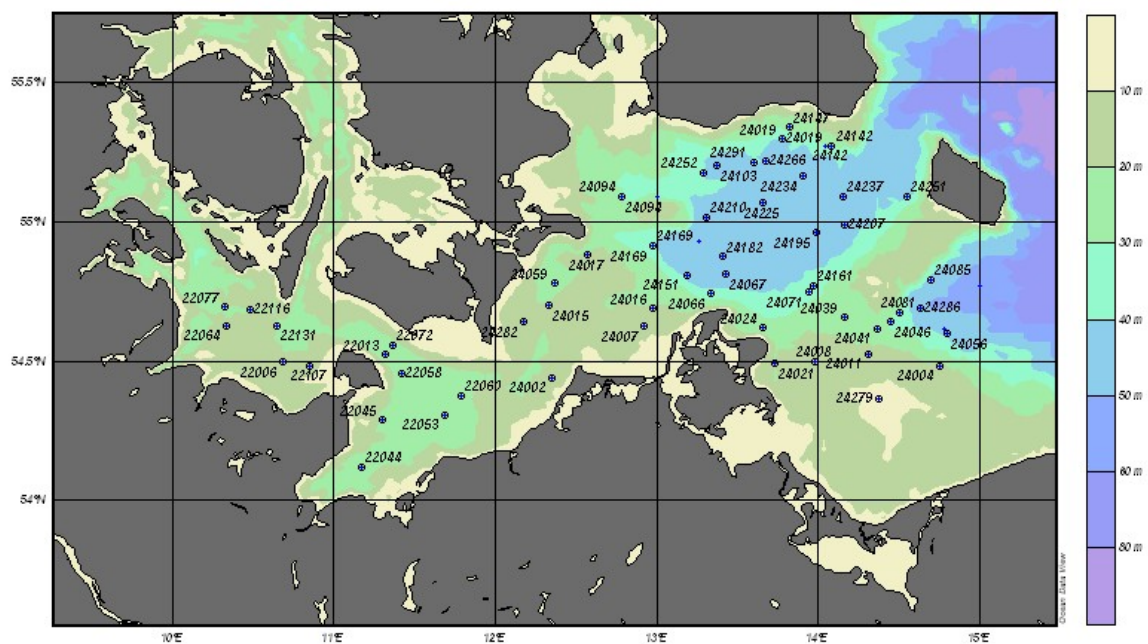


Fig. 7.1b: Baltic International Trawl Survey (BITS, 4th quarter). Example of station grid (final positions will be allocated at the WGBIFS).

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 2-21 Oct 2008 on FRV "Solea". Fig. 7.2 shows an example plot (from 2006) of the cruise tracks and fishery stations conducted on the German part of the Baltic Herring Acoustic Survey.

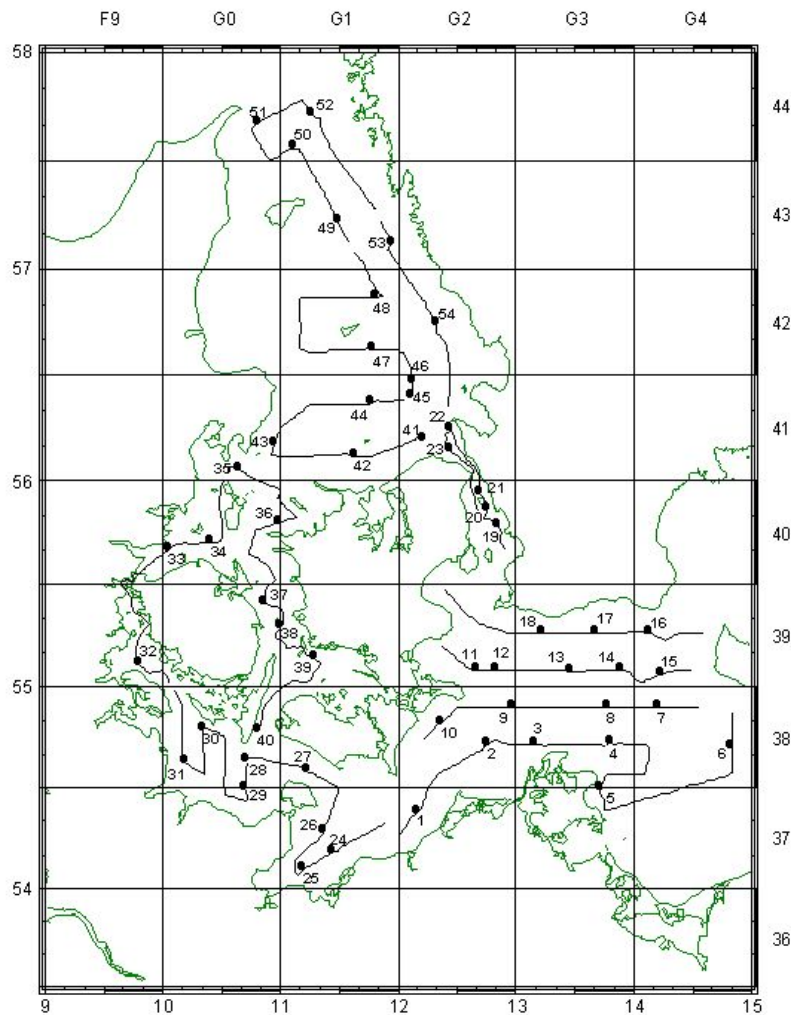


Fig. 7.2: Baltic Herring Acoustic Survey. Example of cruise track and fishery stations.

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 5-26 May 2008 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.

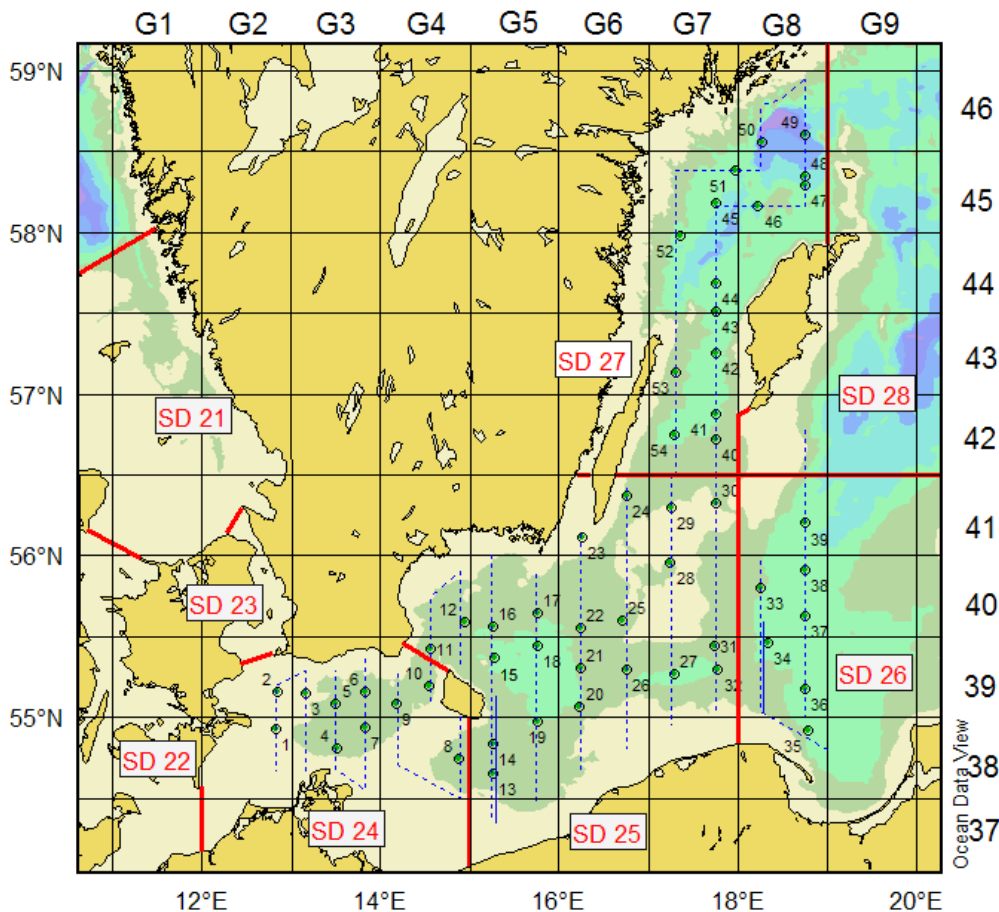


Figure 7.3: Baltic Sprat Acoustic Survey. Example of cruise track and trawl positions. Dashed line: standard transects at daylight, solid line: transects at night.

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 2008 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.

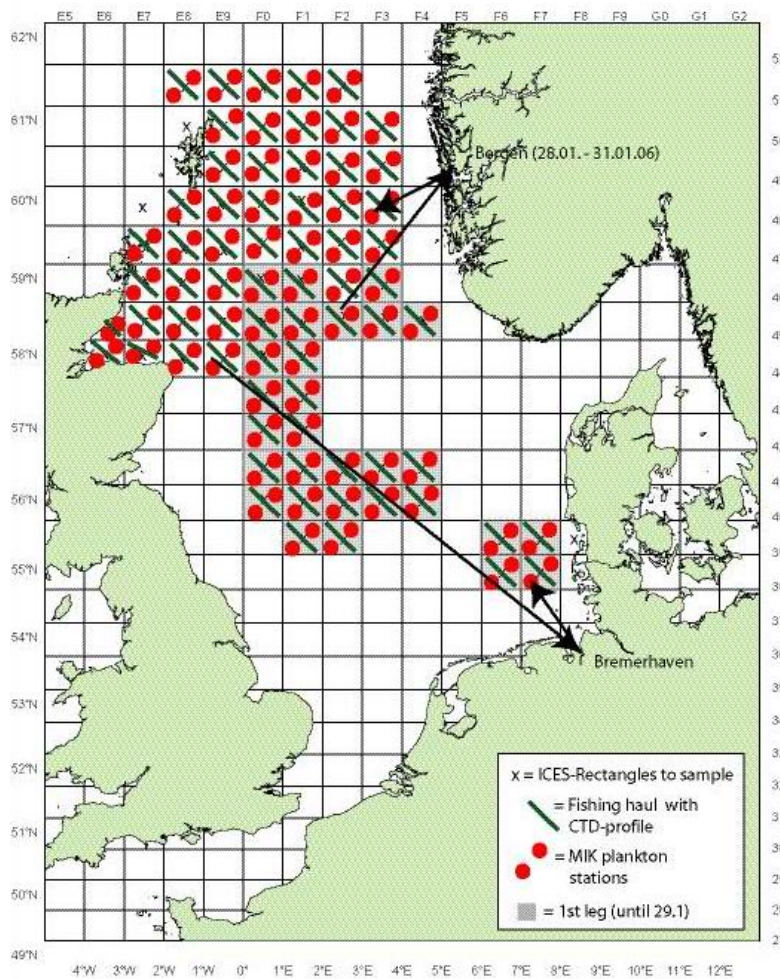


Fig. 7.4: International Bottom Trawl Survey (IBTS) 1st quarter. MIK and fishery stations of the 2006 survey as an example for the study area.

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 2008.

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 22 Aug 2008 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 (German Small Scale Bottom Trawl Survey, GSBTS). Please refer to Fig. 7.5 for the investigation area of the German part of the International Bottom Trawl Survey in Quarter 3.

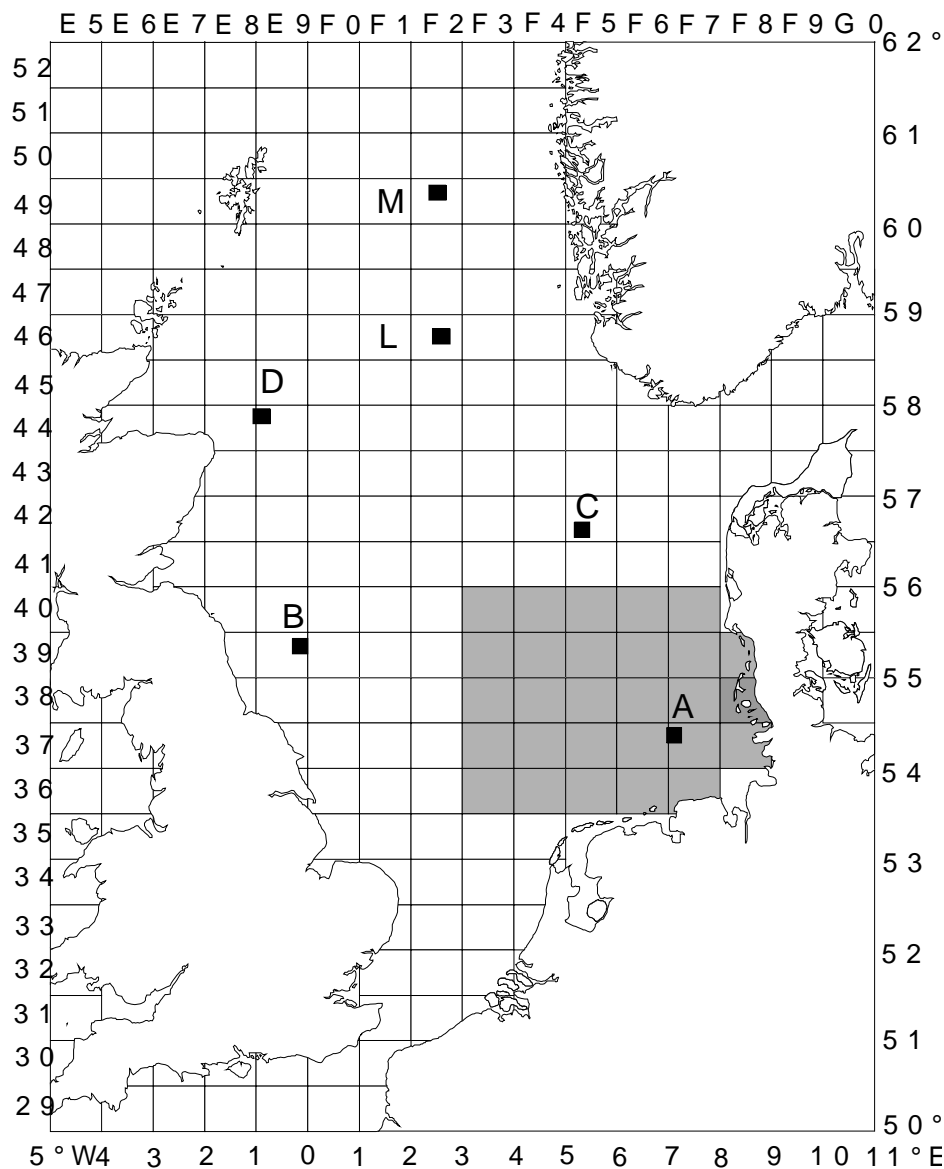


Fig. 7.5: International Bottom Trawl Survey (IBTS) 3rd quarter. Preliminary investigation area allocated to Germany (grey) and small areas (black boxes) of the national survey (GSBTS) in conjunction with the IBTS.

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 26 Jun to 16 Jul 2008 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.

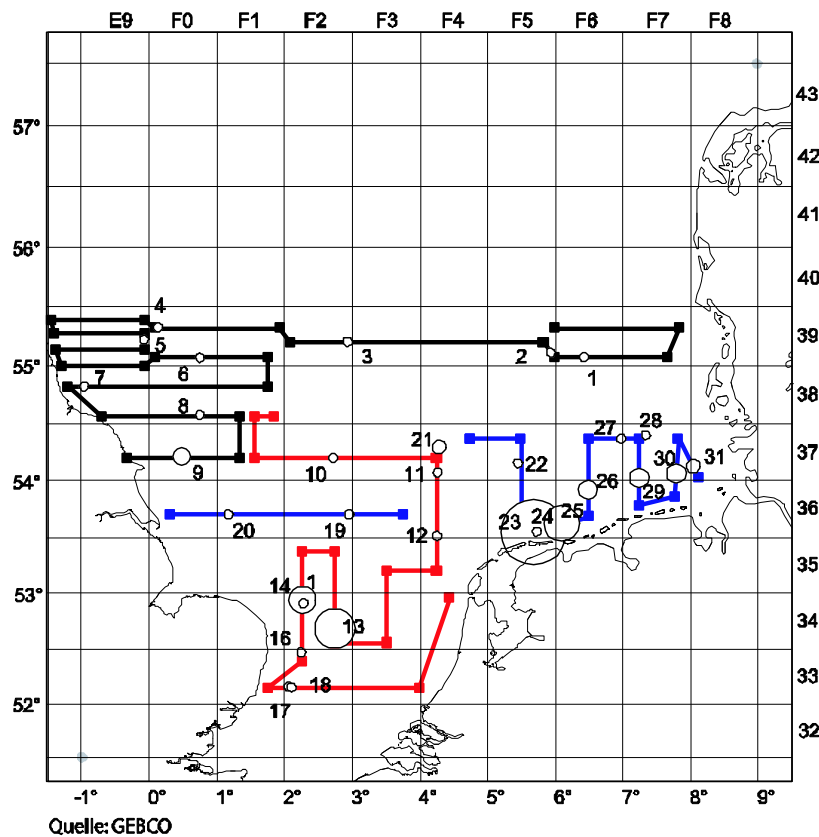


Fig. 7.6: North Sea Herring Acoustic Survey. Example of cruise track.

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 14-29 Aug 2008 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.

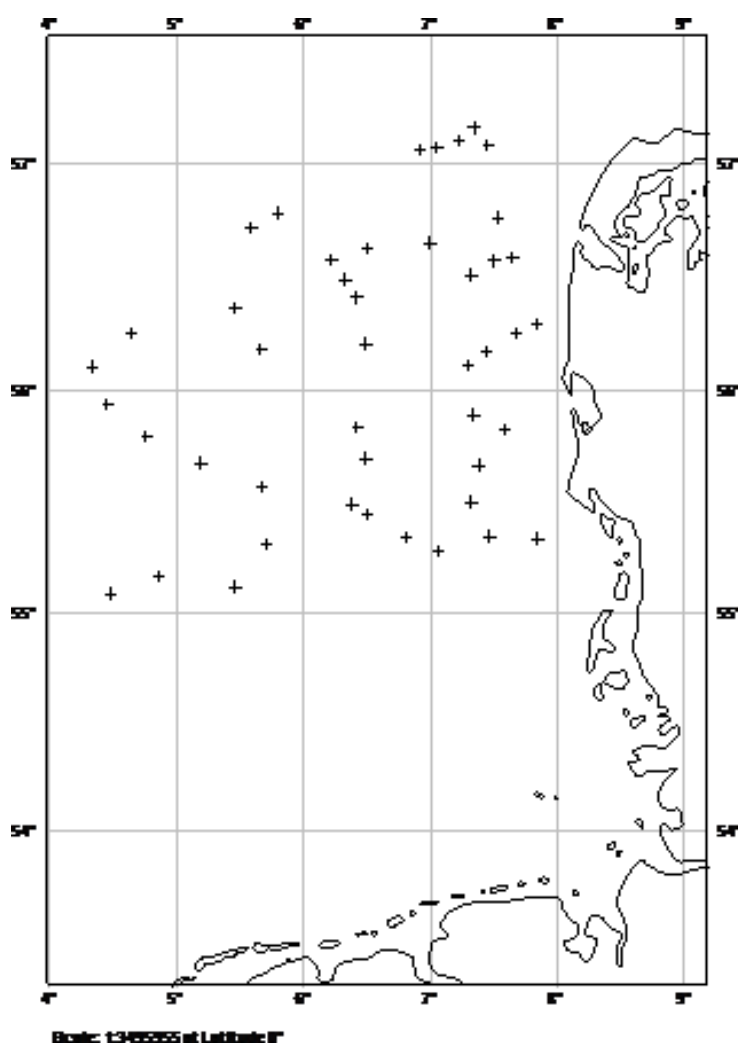


Fig. 7.7: North Sea Beam Trawl Survey (BTS). Example of trawl positions.

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 2008.

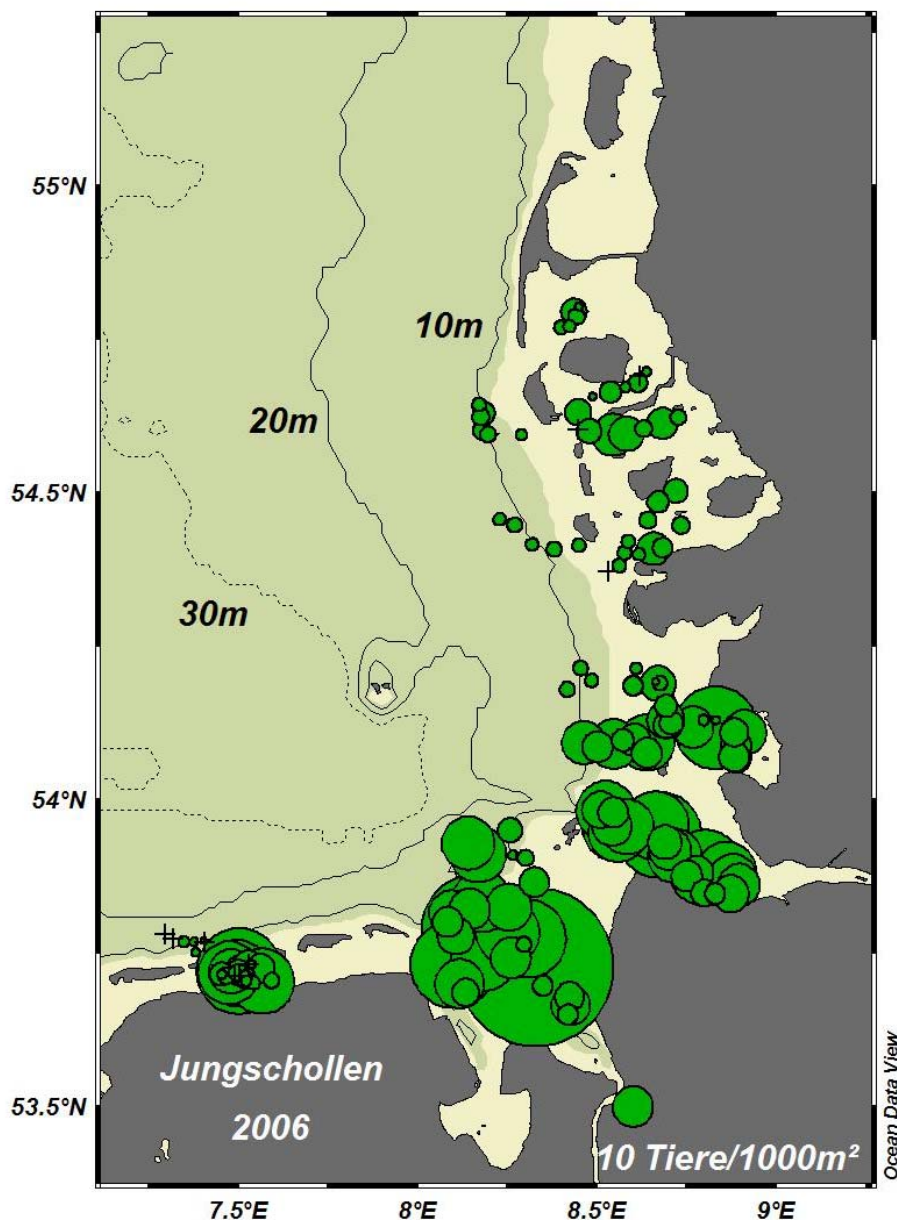


Fig. 7.8: Demersal Young Fish Survey (DYFS). Example of station map of the German part, with abundances (10 individuals per 1000 m²) of young plaice in 2006.

10) Mackerel and Horse Mackerel Egg Survey

This triennial survey will not be carried out in 2008, as the next survey is planned for 2010.

11) International Hydro-Acoustic Oceanic Redfish Survey

This biennial survey will not be carried out in 2008, as the next survey is planned for 2009.

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 2008.

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, 2005). 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 2008. 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 2 Oct to 23 Nov 2008 on FRV “Walther Herwig III”. Figure 7.9 shows the survey area.

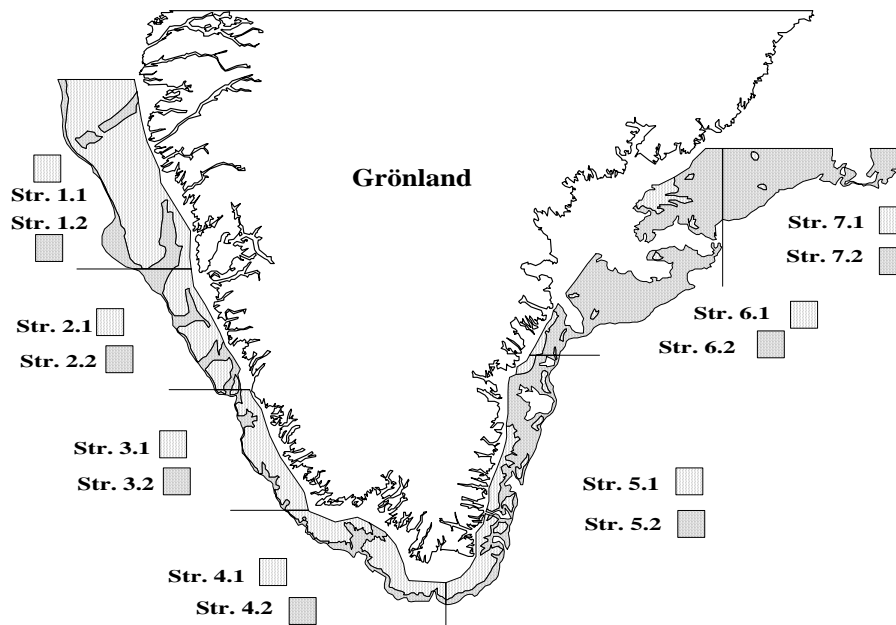


Fig. 7.9: Greenland groundfish survey. Survey area (strata), with depth strata 0-200m (Str. X.1) and 201-400m (Str. X.2).

(Rügen) Herring Larvae Survey in the Baltic

The (Rügen) Herring Larvae Survey (RHLS) 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 2008 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 7.10 shows the survey area.

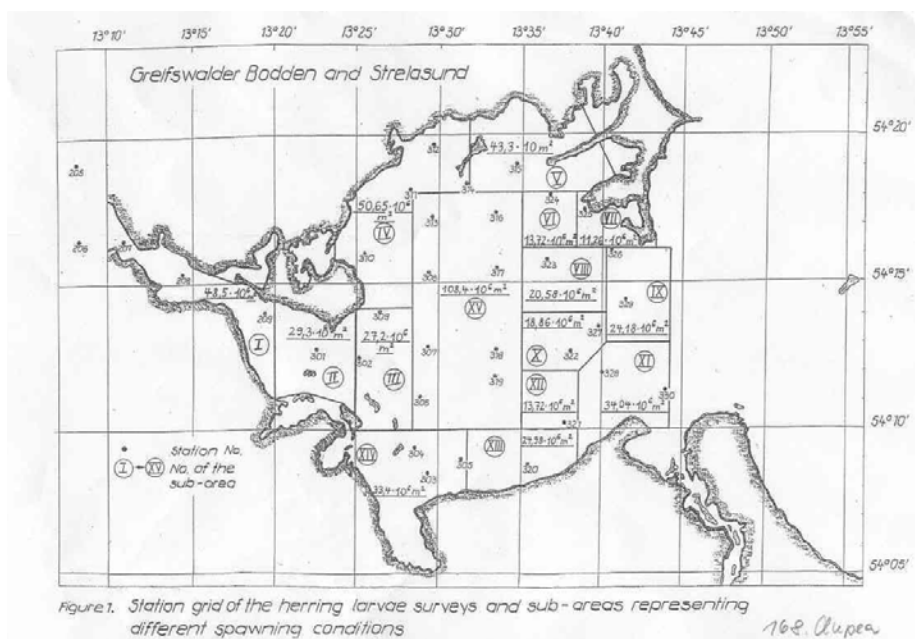


Fig. 7.10: (Rügen) Herring Larvae Survey in the Baltic. Survey area.

German Flatfish Survey

This Priority 2 survey, carried out until 2007 (inclusive) on national expense, will not be carried out in 2008.

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 17 Nov to 5 Dec 2008 on FRV "Solea". Figure 7.11 shows the survey area and station grid.

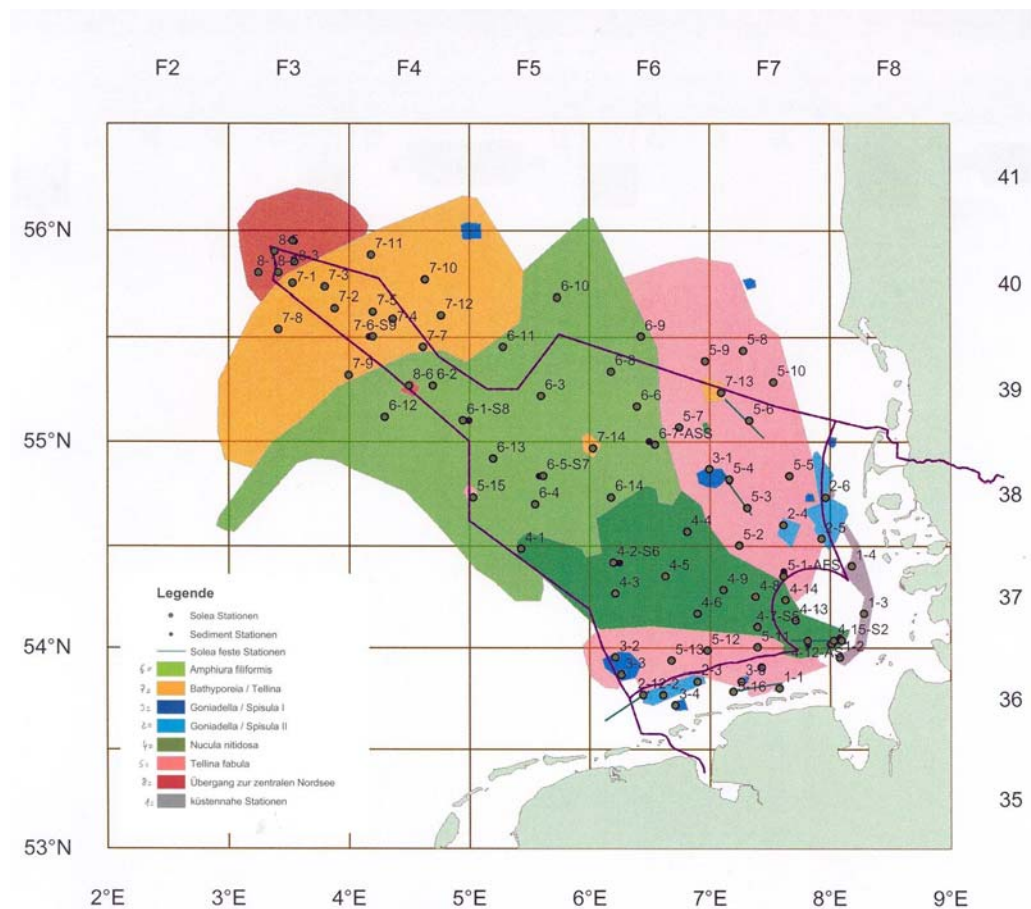


Fig. 7.11: German cod survey. Survey area and station grid.

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 2008 on RV “Alkor” or RV “Heincke”. Figure 7.12 shows the station grids.

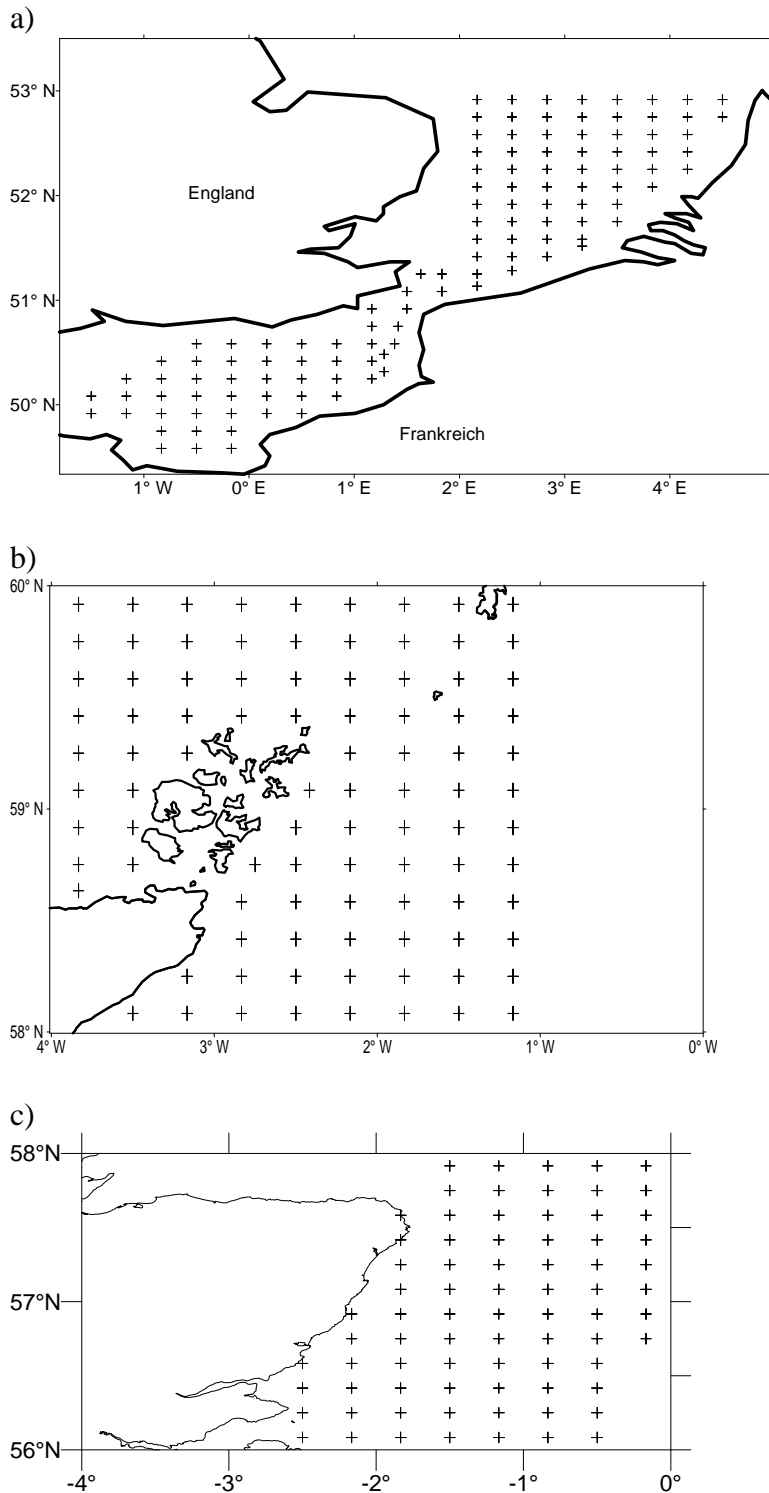


Fig. 7.12: Herring Larvae Survey in the North Sea and eastern Channel. Station grids in a) the southern North Sea and eastern Channel (January 2008), b) the Orkney/ Shetland area (September 2008), and c) the Buchan area (September 2008).

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.
- 53%, 63% and 54% of the landings in 2004, 2005, 2006, 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 2008, 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 by observers-at-sea. Stocks off Greenland and Norway will be sampled at sea as the fleet fishing there consists entirely of freezer trawlers. Redfish landings will be sampled in Bremerhaven occasionally. Pelagic stocks will also be sampled on board, as these species are also landed only as frozen product.

Sampling Methodology

The 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” (Anon. 2000b) as well as EU Studies 96/002 and 98/024 “International Baltic Sea Sampling

Programme I and II” (Anon. 1999 and 2000a) 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 concluded for 2007 and 2008. Annex 2 provides an agreed text on sampling responsibilities between The Netherlands and Germany, Annex 3 represents a formal agreement between Sweden and Germany concerning fisheries catch data, and Annex 4 represents the formal agreement between Denmark and Germany. The bilateral agreements include market sampling.

8.2 MP - Landings – Derogations and non-conformities

After utilisation of derogation rules, Germany is required 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 has prepared 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 2002-2007 and will be sampled in 2008. 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 has prepared 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

- *Which 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 2006 and will be continued in 2007 and 2008. The German data collection programme for 2008 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, (ii) a mail questionnaire which is regularly sent to owners of small scale vessels, and (iii) a questionnaire 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 8 m) are segmented by their main (first) gear documented in the fleet register (see Reg. 26/2004). 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 (Anon. 2004), 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 a 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 5.

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 5).

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 5 for the 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 are 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 logbook data are the basis for the calculation of the effort. Hence *exhaustive* collection for vessels more than 8 m LOA is established. The fishing effort for vessels with less than 8 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 publishing 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 staff 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 and 2005. The return rate was insufficient for further analysis. The lack of some basic information on the processing sector, in particular on the 1-19 FTE stratum, required further effort. This is of particular importance, since the EFF funds are aimed on small enterprises. Therefore, another package of measures has been accomplished by the Federal Research Centre for Fisheries (BFAFi) to increase the rate of return of the questionnaires. The measures are described in detail in the 2006 Technical Report.

Currently the main problem for the success of the additional surveys remains the reluctance of fish processing enterprises to respond. As long as the participation in the surveys is on a voluntary basis, higher response rates are not very likely to be achieved.

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.

Which 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 %).

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 %.

In order to provide the missing data, a questionnaire survey, covering the entire sector, will be accomplished, trying to further increase the response rate and therefore finally achieve representative data.

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.

Data sources 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

None.

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

Documentation Wiki

A documentation wiki will be set up in 2007 and be further developed in 2008 by ZADI (BLE) in order to provide a centralized documentation platform on all issues concerning German DCR data. The documentation wiki will be accessible to all German partners through the Web.

The documentation wiki will contain a full documentation of:

- The underlying EC legal framework for the DCR;
- All relevant links from JRC and DG Fish;
- The data import into the German Oracle database (data formats, procedures);
- The Oracle database instances, users and structures;

- The codification standards and translation tables;
- The methodology and steps for calculating the different DCR data categories;
- All issues concerning data export to the EC;
- German DCR-related documents (e.g. technical reports).

Clearing up the Oracle database

After a few years of the DCR programme running, the German Oracle database is overcrowded with dozens of temporary tables, views and other database objects which increasingly difficult the use of the database. In 2008, a major reorganization of the Oracle database will take place. The rough idea is to separate the temporary database objects from the definitive ones.

Data repository

The work started in 2006 of providing a data repository for the Institute for Baltic Sea Fisheries (BFAFi-IOR) will be continued in 2008.

The main future targets are:

- To design and implement a data structure to which the historical data be transferred. This will allow to search the entire data regardless of the year, e.g. for producing general statistics and finding biological trends.
- For data integrity and security reasons, the original data will be kept parallel as it is.
- To develop a prototype for capturing data online. When such a module becomes fully operational, then IOR will be able to immediately enter their data to the Oracle database.

13. National and international co-ordination

13.1 National co-ordination

Apart from one extensive 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 2008.

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.

Source	Recommendation	Action
RCM North Sea & East Arctic 2006	The RCM North Sea and East Arctic recommends that all species, including vulnerable fish species, caught at the following surveys be measured for length and weight: IBTS, BTS, Channel Groundfish Survey, English Channel Groundfish Survey and DYFS.	Germany is participating in the IBTS, BTS and DYFS. It keeps with the relevant survey manuals and the DCR requirements (Reg. 1581/2004 App. XV and XVI). Germany is sampling for all species listed in the manual and in the DCR appendices.

RCM North Sea & East Arctic 2006	The RCM NS & EA highlighted the need to continually monitor landings, fleet activity etc. so that participating countries could react to any variation to their originally planned sampling schedule. In order for this to be effective, it would be desirable for the individual responsible for a particular agreement to maintain this as a high priority in their work tasks.	Germany is monitoring the activities of the fishing sector constantly and provides adaptations to the concluded bilateral agreements (with DK, NL and SWE) where necessary.
RCM North Sea & East Arctic 2006	The RCM NS & EA recommends that collection of age, size and maturity of commercially targeted species should be carried out at the IBTS. Furthermore, it is recommended that the feasibility of the distinction between the northern and southern North Sea, or by Roundfish Area regarding the sampling effort has to be evaluated.	Germany is following the relevant survey manuals and the DCR requirements (Reg. 1581/2004 App. XV and XVI). Germany is sampling for all species listed in the manual and in the DCR appendices. The sampling is taking place by Roundfish Area.
RCM North Sea & East Arctic 2006	The RCM NS & EA recommends that if an area is covered by one dedicated trip per year only, the effort put into this single trip could better be allocated to other fleet segments ensuring better coverage of these segments.	Germany aims at quarterly sampling if possible. Some fisheries, however, are conducted seasonally, subject to area closures (e.g. Baltic cod) or impossible to cover quarterly due to limited staff size.
RCM North Sea & East Arctic 2006	The RCM NS & EA recommends that to upload the 2004-2006 landings and effort statistics into FishFrame together with the associated data from market and on-board sampling, for all species within the remits of the WGNSSK by April 1st, 2007.	Due to ongoing data validation, the 2006 data have not been uploaded yet, but will be uploaded in summer 2007. Cod data for 2004-2005 had been uploaded previously. So far, the North Sea FishFrame is not used in the WGNSSK. Thus, Germany will only provide data for cod for the time being to allow test runs.
RCM NAFO 2006	NAFO RCM repeats last year recommendation that "both surveys of NAFO SA 3 should continue in the future" NAFO RCM recommends that "other MS involved in the fishery should participate to these surveys".	Germany does not participate in the NAFO 3M surveys.
RCM NAFO 2006	RCM NAFO recommends seeking multilateral agreements to overcome the obligation to provide data for species by MS that have small catches of these species.	Germany has concluded bilateral agreements with the Netherlands, Denmark and Sweden (see National Programmes).
RCM NAFO 2006	RCM NAFO recommends providing aggregated maturity data to the assessment 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.	Germany is prepared to provide maturity data to the assessment working groups, but it should be insured that the maturity data are used in the working groups.
RCM NEA 2006	RCM North East Atlantic recommends a sampling design oriented for the proper area and season to obtain maturity data, intensifying the maturity sampling in the period of sexual activity.	Germany is prepared to sample for maturity. Nevertheless, it needs to be considered that the overall sampling design in frame of the DCR is either following the fishing activities or the survey targets (mostly abundance estimation).

RCM North Sea & East Arctic 2006	The RCM North Sea and East Arctic recommends that harmonisation of sampling and compilation of fishery dependent data should be made.	Germany is prepared to provide information on the used sampling methods and will follow internationally accepted standards, once concluded.
RCM North Sea & East Arctic 2006	The RCM North Sea and East Arctic recommends that to start the harmonisation process otoliths should be sampled in homogenous strata as this would give the opportunity to combine ALKs within an area.	Germany is prepared to provide information on the used sampling strata and will follow internationally accepted strata, once concluded.

13.4 Follow-up of SGRN recommendations

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

Source	Comments	Action
SGRN Evaluation of Tech.Rep. 2005 (July 2006)	DEADLINES AND TRANSLATION PROBLEMS For the completeness and equitability of its work, SGRN insist that, in future, MS scrupulously respect the deadline. SGRN recommends that, in the future, MS use the scientific Latin name for all species in the tables.	Germany respects the deadline set by SGRN. Latin names are used for all species in the tables of the technical report.
SGRN Evaluation of Tech.Rep. 2005 (July 2006)	ON THE QUALITY OF THE TECHNICAL REPORTS SGRN re-iterates its standpoint that the Technical Reports should be as concise as possible, while at the same time providing all the information that is necessary for the evaluation of the MS's achievements.	Germany is trying to layout the technical report as concise as possible while providing all required information.
SGRN Evaluation of Tech.Rep. 2005 (July 2006)	ON PRECISION LEVEL AS A DCR TARGET SGRN is of the opinion that a number of standard statistical methods are available and the absence of common procedures to calculate precision levels should not be used as an excuse for not providing estimates in the Technical Reports.	Germany is trying to find an appropriate statistical method to calculate precision levels not only for discards but also for other parameters. Nevertheless, Germany is in favour of the development of a common tool to estimate precision that guarantees the international comparability of precision levels.
SGRN Evaluation of Tech.Rep. 2005 (July 2006)	ON THE DEROGATION RULES REGARDING LOW LEVEL OF LANDINGS SGRN proposes that MS should undertake to sample to precision levels rather than on the basis of historical landings so that the mortality estimates derived from catch age and length sampling are accurate and achieve a high precision for the individual species and stocks affected.	Before sampling programmes are directed in order to reach certain precision levels, Germany is in favour of the development of a common tool to estimate precision that guarantees the international comparability of precision levels.

SGRN Evaluation of Tech.Rep. 2005 (July 2006)	ON THE FINAL STATUS OF THE NATIONAL PROGRAMMES SGRN recommends that the changes to the NP Proposals that were agreed during the bilateral negotiations be laid down in an addendum to the NP Proposal, and that these addenda be made available on the JRC data collection website.	Germany will ensure that the finally accepted version of the NP will be available to SGRN before the corresponding evaluation meeting.
SGRN Evaluation of Tech.Rep. 2005 (July 2006)	ON THE USE OF DCR DATA FOR OTHER THAN SCIENTIFIC PURPOSE SGRN stresses that sensitive data which has been collected only with the cooperation of the fishing industry such as discard or economic data should only be used for scientific purposes and MS shall take all necessary measures to ensure that primary data collected under the DCR are dealt with in a confidential way (Article 9, 1639/2001).	Germany does make every effort to guarantee that collected sensitive data are only used for scientific purposes and are dealt with in a confidential way.
SGRN Evaluation of Nat.Prog. 2007 (Nov. 2006)	On Parameter definition for economic data collection on the processing industry Firstly, SGRN recommends that MS should comply with the provisions of the DCR. (...) SGRN suggests that the MS provide clear information in their NP Proposals and Technical Reports concerning the measurements of the parameters listed in Appendix XIX of the DCR.	Germany provides clear information in the NP Proposals and Technical Reports concerning the measurements of the parameters listed in Appendix XIX of the DCR.

14. List of acronyms and abbreviations

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 Landwirtschaft (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 Activités économiques dans la Communauté Européenne (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 <i>Crangon</i> 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 Skagerrak
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 Sångärdalen (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 not 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 2008

A coordination meeting between The Netherlands (Sieto Verver) and Germany (Christoph Stransky) was held at the ICES PGCCDBS on Malta on 8 March 2007.

The Netherlands and Germany agreed on the following transfers of sampling responsibilities for the 2008 programme:

German landings into The Netherlands

Germany takes over the responsibility of The Netherlands to sample German landings in the Netherlands (target number of observer trip samples given in brackets):

Herring IIa (3 samples)

Herring IVab (15 samples)

Herring IVc, VIId (3 samples)

Herring Vb, VIaN, VIb (1 sample)

Horse Mackerel IIa(EU), IV(EU) (2 samples)

Mackerel IIa(nonEU), Vb(EU), VI, VII, VIIIabde, XII, XIV (6 samples)

Blue Whiting I, II, III, IV, V, VI, VII, VIIIabde, XII, XIV (24 samples)

Plaice IIa(EU), IV (5 samples)

Annex 3: Bilateral agreement between Germany and Sweden

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 2007 and 2008

In accordance with the Data Collection Regulation (DCR; Reg. 1639/2001 and 1581/2004), Sweden and Germany have agreed upon a co-operation in the collection of fisheries data. This agreement has first been established in 2005 due to common interests in the fisheries in the Baltic Sea and in the North Sea. Furthermore, substantial landings by German-flagged vessels take place in Sweden and therefore, in order to optimise the quality of the sampling programmes, exchange of information and knowledge is necessary.

Agreement:

It has been agreed that if landings in a specific country are below 5% of the national quota for the flag country for a given TAC stock unit, then the receiving country is not obliged to sample these landings. If there are major changes in the foreign flag landing fractions, it is the responsibility of both institutions to inform each other about these changes and to jointly adapt to the corresponding sampling scheme.

The sampling obligations were derived from landings statistics and quota from the two most recent years (Annex 1):

- **Sweden** should collect **3 samples** of **herring in SD 25-32** (eastern Baltic) landed by German vessels, with 100 fish per sample measured by length and age-determined
- **Sweden** should collect **9 samples** of **sprat in ICES IIIbcd** landed by German vessels, with 100 fish per sample measured by length and 50 fish per sample age-determined
- **Germany** should collect **1 sample** of **herring in ICES SD 22-24** (western Baltic) landed by Swedish vessels, with 100 fish measured by length and age-determined
- **Germany** should collect **1 sample** of **herring in ICES IVab** landed by Swedish vessels, with 50 fish measured by length and 25 fish age-determined

When sampling these stocks, the **seasonality** in the landings has to be taken into account (e.g. German landings of herring and sprat from SD 25-29 in Sweden were to >90% done in the 1st quarter in 2006!). Due to the fact that German herring and sprat landings were transhipped before landing in Sweden in 2005 and 2006, those landings could not be traced by Swedish scientists. In order to obtain data from landings and discards of these fisheries, Germany will continue efforts to place scientific observers onboard of vessels fishing for herring and sprat in the Baltic. Sweden, however, will continue aiming at the sampling of German landings in Sweden according to this Agreement.

Concerning the **sample processing**, the **otoliths** of these samples should be sent to the flag country, accompanied with station data, the length distribution protocol and the group weights per length (1/2 cm) class for these samples.

It has been agreed to encourage cooperation on national **surveys** in the Baltic and the North Sea, involving scientists and/or technicians. This may, however, depend on the staff resources available.

Contact persons:

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

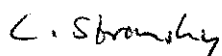
Species/area	Name	e-mail	Tel.
<u>Germany:</u>			
North Sea and Skagerrak	Kay Panten	kay.panten@ish.bfa-fisch.de	+49 40 38905-108
Baltic and Kattegat	Ulrich Berth	ulrich.berth@ior.bfa-fisch.de	+49 381 8116-128
<u>Sweden:</u>			
Baltic sprat & North Sea herring	Birgitta Krischansson	birgitta.krischansson@fiskeriverket.se	+46 523 18721
Baltic herring	Carina Jernberg	carina.jernberg@fiskeriverket.se	+46 523 18718

These contact persons shall report to their respective National Correspondent in due time about any difficulties they might have regarding the conduction of sampling according to this Agreement.

Signatures:

For BFAFi

Date: 12 April 2007



Christoph Stransky
German National Correspondent
Federal Research Centre for Fisheries
Institute for Sea Fisheries

For IMR

Date: 18 April 2007



Fredrik Arrhenius
Swedish National Correspondent
Institute of Marine Research
Swedish Board of Fisheries

Annex 3.1: Foreign flag landings (close to or above 100 t) of German vessels in Sweden and vice versa and quota in the two most recent years, fraction of landings to quota, landing ports and sampling obligations according to Reg. 1581/2004.

German landings in Sweden (in tonnes)

TAC stock unit	Landings 2005	Landings 2006	Quota 2006	Quota 2007	Average %	Remarks	Main landing ports	Sampling obligations		
								No. of samples	No. of fish (length)	No. of fish (age)
Herring SD 25-32	3,197	2,794	3,234	774	92.6	(1)	Karlskrona, Västervik	3 (1/1000 t)	300 (3*100)	300 (3*100)
Herring IVab	0	764	47,836	34,118	0.9		Ellös			
Cod SD 25-32	116	100	4,143	3,520	2.8		Simrishamm			
Sprat IIIbcd	18,302	18,657	26,299	28,403	67.6		Västervik, Karlskrona	9 (1/2000 t)	900 (9*100)	450 (9*50)

Swedish landings in Germany (in tonnes)

Stock unit	Landings 2005	Landings 2006	Quota 2006	Quota 2007	Average %	Remarks	Main landing ports	Sampling obligations		
								No. of samples	No. of fish (length)	No. of fish (age)
Herring SD 22-24	1,184	624	8,451	10,992	9.1	(2)	Mukran	1 (1/1000 t)	100 (1*100)	100 (1*100)
Herring SD 25-32	174	0	38,744	44,389	0.2		Mukran			
Herring IVab	1,231	1,394	4,627	3,470	32.4		Mukran	1 (1/1000 t)	50 (1*50)	25 (1*25)
Sprat IIIbcd	175	95	80,250	86,670	0.2		Mukran			

(1) Quota 2006 includes transfers of 2558 t from Sweden and Denmark; Quota 2007 according to Reg. 1941/2006

(2) Quota 2006 includes transfers of 2541 t from Germany; Quota 2007 according to Reg. 1941/2006

Annex 4: Bilateral agreement between Germany and Denmark

Agreement between the Danish Institute for Fisheries Research and the German Federal Research Centre for Fisheries concerning collection of fisheries catch data in 2007 and 2008

In accordance with the Data Collection Regulation (DCR; Reg. 1639/2001 and 1581/2004), Denmark and Germany have agreed upon a co-operation in the collection of fisheries data. This agreement has first been established in 2005 due to common interests in the fisheries in the Skagerrak (ICES Div. IIIa North), Kattegat (ICES Div. IIIa South), Baltic Sea and North Sea. Furthermore, substantial landings by German flagged vessels take place in Denmark, and therefore, in order to optimise the quality of the sampling programmes, exchange of information and knowledge is necessary.

Agreement:

It has been agreed that if landings in a specific country are below 5% of the national quota for the flag country for a given TAC stock unit, then the receiving country is not obliged to sample these landings. If there are major changes in the foreign flag landing fractions, it is the responsibility of the receiving country to initiate corresponding changes in the sampling scheme.

The **sampling obligations** were derived from landings statistics and quota from the two most recent years (Annex 1).

- Demersal species (IIa, IV): Germany will compensate for landings of German-flagged vessels in Denmark by on-board sampling of those vessels.
- Pelagic species (IIa, IV): Denmark will sample landings of German-flagged vessels in Denmark.
- Pelagic species (IIIb-d): Denmark will sample landings of German-flagged vessels in Denmark.
- Pelagic species (IIIa, IV): Danish sampling in Denmark will compensate for the Danish landings in Germany.

When sampling these stocks, the **seasonality** in the landings has to be taken into account (e.g. German landings of herring and sprat from SD 25-29 were to >90% done in the 1st quarter in 2006!).

Concerning the **sample processing**, the **otoliths** of the samples should be sent to the flag country, accompanied with station data, the length distribution protocol and the group weights per length (pelagic species 1/2 cm and demersal species 1 cm) class for these samples.

It has been agreed to encourage cooperation on exchange of scientists and/or technicians on research vessel surveys. It has been agreed that Denmark will participate in the German acoustic survey carried out in the Kattegat, Belt Sea and the Western Baltic area by sending one scientist/technician.

Contact persons:

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

Species/area	Name	e-mail	Tel.
<u>Germany:</u>			
North Sea and Skagerrak	Kay Panten	kay.panten@ish.bfa-fisch.de	+49 40 38905-108
Baltic and Kattegat	Ulrich Berth	ulrich.berth@ior.bfa-fisch.de	+49 381 8116-128
<u>Denmark:</u>			
North Sea and Skagerrak	Aage Thaarup	att@difres.dk	+45 3396 3248
Baltic and Kattegat	Frank I. Hansen	fih@difres.dk	+45 3396 3363

These contact persons shall report to their respective National Correspondent in due time about any difficulties they might have regarding the conduction of sampling according to this Agreement.


Signatures:

For BFAFi

For DIFRES

Date: ... 15 May 2007

Date: ... 22/5-07



Christoph Stransky
German National Correspondent
Federal Research Centre for Fisheries

Jørgen Dalskov
Danish National Correspondent
Danish Institute for Fisheries Research

Annex 4.1: Foreign flag landings (close to or above 100 t) of German vessels in Denmark and vice versa and quota in the two most recent years, fraction of landings to quota, landing ports and sampling obligations according to Reg. 1581/2004.

German landings in Denmark (in tonnes)

TAC stock unit	Landings 2005	Landings 2006	Quota 2006	Quota 2007	Average %	Remarks	Main landing ports	Sampling obligations		
								No. of samples	No. of fish (length)	No. of fish (age)
Herring SD 22-24	943	2,429	26,207	27,311	6.3		Gedser, Rødby, Klintholm	2 (1/1000 t)	200 (2*100)	200 (2*100)
Herring SD 25-32	239	410	676	774	44.7		Skagen	1 (1/1000 t)	100 (1*100)	100 (1*100)
Cod SD 22-24	83	122	6,061	5,697	1.7		Rønne, Køge, Hirtshals			
Cod SD 25-32	70	135	4,143	3,729	2.6		Køge, Hanstholm			
Sprat IIIbcd	9,435	11,400	26,299	28,403	38.1		Skagen	5 (1/2000 t)	500 (5*100)	250 (5*50)
Herring IIIa	751	556	564	463	98.6	(1)	Hirtshals, Skagen	1 (1/1000 t)	100 (1*100)	100 (1*100)
Herring IVab	1,537	7,694	47,836	34,118	11.3		Hirtshals, Skagen, Esbjerg	7 (1/1000 t)	350 (7*50)	175 (7*25)
Saithe IIa, III, IV	8,139	9,921	12,906	12,906	70.0		Hansth., Thyborøn, Hirtsh.	50 (1/200 t)	2500 (50*50)	1250 (50*25)
Cod IIa, IV	2,455	2,294	2,498	2,148	91.8		Hanstholm, Thyborøn	11 (1/200 t)	550 (11*50)	275 (11*25)
Haddock IIa, IV	721	789	2,067	2,180	35.6		Hanstholm, Thyborøn	4 (1/200 t)	200 (4*50)	100 (4*25)
Plaice IIa, IV	126	703	3,220	2,835	13.7		Thyborøn, Esbjerg	1 (1/500 t)	50 (1*50)	25 (1*25)

Danish landings in Germany (in tonnes)

TAC stock unit	Landings 2005	Landings 2006	Quota 2006	Quota 2007	Average %	Remarks	Main landing ports	Sampling obligations		
								No. of samples	No. of fish (length)	No. of fish (age)
Herring SD 22-24	545	30	6,658	6,939	4.2		Mukran			
Herring IIIa	1,488	3,015	34,052	28,907	7.2		Mukran	3 (1/1000 t)	300 (3*100)	300 (3*100)
Herring IVab	3,045	7,531	76,348	50,349	8.3		Mukran	7 (1/1000 t)	350 (7*50)	175 (7*25)

(1) Quota 2006 includes transfers of 19 t from Denmark; Quota 2007 according to Reg. 1941/2006

Annex 5: List of entries (accounting) for economic data (Section 10)

0.) General data to the enterprise and the accountancy

Description	Code
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 statemant 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

Description	Code
A) Contribution	
outstanding contributions	1000
there under accepted	1002
B) capital/fixed/permanent assets	
I. tangible assets	
tangible / immaterial assets	1014
sum of immaterial assets	1019
II. material assets	
<i>land and properties</i>	
land/property (§55 Abs. 1 EStG)	1020
land/properties, others	1021
buildings	1023
operating buildings	1025
sum of 1020 - 1025	1029
<i>technical equipment and machineries</i>	
facilities	1030
machinery	1031
vessel	1035
engine of the vessel	1036
fisheries equipment on board	1037
sum of 1030 - 1039	1039
<i>other assets</i>	
car	1040
fleet of lorries	1041
factory equipment	1043
sales equipment	1045
furniture and fixtures	1046
others	1047
inferior economic goods	1048
sum of 1040 - 1048	1049
<i>down payments and installations / plants under construction</i>	
down payments made and installations / plants in progress	1078
sum of 1029, 1039, 1049 and 1078	1079
III. financial assets	
financial participations	1087
financial investments	1088
sum of 1019, 1079 and 1088	1089
D) Floating assets	
I. stock in hand	
raw material and supplies	1109
products / service in progress	1118
produced products	1120
stock-in-trade	1121
down payment made	1148
sum of 1109, 1118, 1121 and 1148	1149
II. debts	
trade accounts receivable	1150
other debtors	1158
sum of 1150 and 1158	1159
III. Securities	
securities	1168
sum of 1168	1169
IV. unconditional order of pay	
cheques, bills and notes in hand	1168
sum of 1149, 1159, 1169 and 1179	1169
E) deferral entry	1199
F) special loss account of reserves (§17 Abs. 4 DMBilG)	1209
G) deficit not covered by equity capital	1219
activa sum of 1000, 1089, 1099	1229

1.) balance sheet with liabilities

Description	Code
A) Property capital	
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 capital	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)

Description	Code
1. Turnover	
g) turnover of fish and other sea food	
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	
a) grants and subsidies	
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 subsidies	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	
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

2) Profit and loss statement of account (2)

Description	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 operating expenses	
heating	2770
electricity	2771
water, waste, ice	2772
fuel and lubrication oil	2773
packing	2780
other expenses	2781
wages and hire on machines	2782
charging and recharging	2783
other miscellaneous services	2784
sum of 2770 - 2784	2785
g) discounts /allowances	2786
h) changes of the inventory upon the raw material and supplies	2787
i) changes of the inventory upon products	2788
sum of 2769, 2785, 2786,2787 and 2788	2789
7. personnel expenses	
wages and salaries of permantal stuff	2790
wages of non-permantal stuff	2791
old-age pension	2792
social (insurance) costs	2793
other allowances	2794
accident insurance	2798
sum of 2790 - 2798	2799
8. depreciation	
tangible assets (budgetet)	2800
impersonal assets (budgetet)	2801
tangible assets (unbudgetet)	2802
impersonal assets (unbudgetet)	2803
floating assets (special effects)	2805
floating assets (expected special effects in future)	2806
special loss account	2808
sum of 2800 - 2809	2809
9. 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
b) working insurance	
building insurance	2830
car insurance	2831
lorry insurance	2832
legal costs insurance	2836
third party insurance	2837
other insurances	2838
sum of 2830 - 2838	2839

2) Profit and loss statement of account (3)

Description	Code
c) trade, services and others	
leasing	2841
rent	2845
real estate levy	2846
other levies	2851
association levies	2852
presents till 38 € (§4 Art.5 EStG)	2853
entertainment expenses (§4 Art.5 EStG)	2854
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
advance tax payments	2867
other operating expenditure	2868
sum of 2841 - 2868	2869
d) 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
non - periodical expenses of advance tax payments	2894
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. earnings of participations	2900
11. earnings of investments in securities	2902
12. earnings 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 floating capital	2910
16. expenses of loss takeover	2912
17. pay over of profit sharing participation contracts	2913
18. loan services and similar 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 activities as balance of 2899 and 2918	2919
21. extraordinary earnings	2920
22. extraordinary expenses	2924
23. result of all extraordinary events as balance of 2920 and 2924	2929
24. taxes from income	
corporation (income) tax	2930
tax on capital income	2931
local business tax	2932
sum of 2930 - 2932	2939
24. taxes from income	
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
24. profit and loss as balance of 2919, 2929, 2939, 2949	2959

3.) appendix sheet with assets

code	description	historic value at market	additions	transfers	retirements	depreciation value (accumulated)	book value (current year)	book value (previous year)	depreciation value (current year)
3014	I Intangible asset								
3019	sum of 3014								
	II) tangible asset								
	1. land and buildings								
3020	land (§55 Art. 1 EStG)								
3021	other land / property								
3022	soil improvement								
3023	buildings								
3025	operating buildings								
3029	sum of 3020 - 3025								
	2. technical equipment and machineries								
3030	facilities								
3031	machinery								
3035	vessel								
3036	engine of the vessel								
3037	fisheries equipment on board								
3039	sum of 3030 - 3037								
	3. other assets and furnitures and fixtures								
3040	car								
3041	lorry fleet								
3043	factory equipment								
3045	sales equipment								
3046	furniture and fixtures								
3047	others								
3048	inferior economic goods / assets								
3049	sum of 3040 - 3048								
	6. advanced payments and plants in progress								
3078	advanced payments and plants under construction								
3079	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									
3929									
3930									
3931									
...									
...									
...									
3996	sum of 3920 - 3995	_____	_____	_____	_____				_____
3997	thereunder short-term	_____	_____	_____	_____				_____
3998	thereunder medium-term	_____	_____	_____	_____				_____
3999	thereunder long-term	_____	_____	_____	_____				_____

5.) labour

kind of labour									
code	description	person [no/units]	FTE [units]	gross wages [€/years]	(vocational) education / training (encoded)	depreciation value (accumulat.)	disablement [%]	year of birth	gender (encoded)
I. non - remunerated labour (works manager / ownwer, family members, ...)									
7001		1		_____					
7002		1		_____					
7003		1		_____					
7004		1		_____					
7005		1		_____					
7006		1		_____					
7007		1		_____					
7008		1		_____					
7009		1		_____					
7010		1		_____					
7011		1		_____					
7012		1		_____					
...				_____					
...				_____					
7089	sum of 7001 - 7088			_____					
II. salaried personnel and wage - earners									
7090									
7091									
7092									
7093									
7094									
7095									
7096									
7098	sum of 7090 - 7096			_____	_____	_____	_____	_____	_____
III. salaried personnel and									
7099	sum of 7089 - 7098			_____	_____	_____	_____	_____	_____

8.) additional data to the enterprise

Description	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
II. 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