TECHNICAL REPORT

GERMAN NATIONAL FISHERIES DATA COLLECTION

2007

Table of Contents

1 Introduction	. 4
2 Participating Institutes	. 4
2.1 National Correspondent	. 4
2.2 Participating Institutes	. 4
3 Precision Levels	. 6
3.1 Required and achieved precision levels	. 6
3.2 Methods used to calculate precision levels	. 6
3.3 Other relevant issues	. 6
4 Data Transmission	. 6
4.1 Data transmitted	. 6
4.2 Reasons for non-transmission of data	. 6
4.3 Other relevant issues	. 6
5 Module C – Fishing Capacities	. 7
5.1 MP - Required and achieved sampling	. 7
5.2 MP - Deviations from aim	. 7
5.3 EP - Required and achieved sampling	. 7
5.4 EP - Deviations from aim	7
5.5 Action taken to remedy shortfalls	. 7
6 Module D – Fishing Effort	. 8
6.1 MP - Required and achieved sampling	. 8
6.2 MP - Deviations from aim	. 8
6.3 EP - Required and achieved sampling.	. 8
6.4 EP - Deviations from aim	. 8
6.5 Action taken to remedy shortfalls	. 8
7 Module E – Catches and Landings	. 8
7.1 MP - Landings - Required and achieved sampling	. 8
7.2 MP - Landings - Deviations from aim	9
7.3 EP – Landings - Required and achieved sampling	9
7.4 EP – Landings - Deviations from aim	9
7.5 MP & EP - Discards - Required and achieved sampling	.9
7.6 MP - Discards - Deviations from aim	10
8 Module F – Catches per Unit Effort	14
8.1 MP - Required and achieved sampling	14
8.2 MP - Deviations from aim	14
8.3 EP - Required and achieved sampling	14
8.4 EP - Deviations from aim	14
8.5 Action taken to remedy shortfalls	14
9 Module G – Scientific Evaluation Surveys	15
9.1 MP - Required and achieved Priority 1 surveys	15
9.2 MP - Deviations from aim	25
9.3 EP - Required and achieved Priority 2 surveys	25
9.4 EP - Deviations from aim	26
9.5 Action taken to remedy shortfalls	26
10 Module H – Length and Age Sampling	27
10.1 MP - Landings - Required and achieved sampling	27
10.2 MP - Landings - Deviations from aim	28
10.3 EP – Landings - Required and achieved sampling	29

10.4 EP – Landings - Deviations from aim	29
10.5 MP&EP - Discards - Required and achieved sampling	29
10.6 MP&EP - Discards - Deviations from aim.	29
10.7 Action taken to remedy shortfalls	29
11 Module I – Other Biological Sampling	30
11.1 MP - Required and achieved sampling	30
11.2 MP - Deviations from aim	30
11.3 EP - Required and achieved sampling	30
11.4 EP - Deviations from aim	30
11.5 Action taken to remedy shortfalls	30
12 Module J - Economic Data by Group of Vessels (with references to Module C, D and E	E)31
12.1 MP - Required and achieved sampling	. 31
General remarks on coverage, data quality and accessibility	34
12.2 MP - Deviation from the aim	35
12.3 EP - Required and achieved sampling	35
12.4 EP - Deviation from the aim	35
12.5 Action taken to remedy shortfalls	35
13 Module K – Data Concerning Fish Processing Industry	35
13.1. Required and achieved sampling'	35
13.2. MP - Deviations from aim'	38
13.3 EP - Required and achieved sampling	39
13.4 EP - Deviations from aim	. 39
13.5 Action taken to avoid shortfalls	. 39
14 Databases	. 39
14.1 Database development and data management	39
14.2 Other relevant issues	40
15 National and International Co-ordination	41
15.1 National Co-ordination	41
15.2 International Co-ordination	. 41
15.3 Follow-up of RCM Recommendations and Initiatives	42
15.4 Follow-up of SGRN Recommendations	42
15.5 Other relevant issues	42
16 List of Acronyms and Abbreviations	43
17 Comments, Suggestions and Reflections	45
18 References	. 46
Annexes	. 47
Annex 3.1	. 47
Annex 5.1	. 50
Annex 12.1	. 51
Annex 15.1	. 59
Annex 15.3	. 65
Annex 15.4	. 68

1 Introduction

The German National Programme for sampling of fisheries data refers to the Community Data Collection defined in Council Regulation 1543/2000 and the Commission Regulation 1639/2001. The Technical Report 2007 on the German National Programme refers to the Commission Regulations 1639/2001 and 1581/2004.

The NP-year is 2007. If the reference year differs from the NP-year, it is accordingly stated in the sections for Modules J and K. One survey (Module G) that was carried out on national expense prior to the NP-year was made eligible within the Extended Programme in 2006 for the first time. Otherwise, Germany does not have any Extended Programme, and this will be stated in each of the modules.

2 Participating Institutes

2.1 National Correspondent

The National Correspondent representing Germany is:

Dr. Christoph Stransky Johann Heinrich von Thünen-Institut Federal Research Institute for Rural Areas, Forestry and Fisheries Institute of Sea Fisheries Palmaille 9 D-22767 Hamburg - Germany Tel +49 (0)40 38905 228 Fax +49 (0)40 38905 263 E-mail: <u>christoph.stransky@vti.bund.de</u>

2.2 Participating Institutes

Following a reorganization of some German federal research institutions from 2008 onwards, now three institutions in Germany own data which are relevant to requirements outlined in regulation 1639/2001 in relation to the Data Collection Regulation. The Johann Heinrich von Thünen-Institut (vTI) was created on 1 January 2008 from the German Federal Research Centre for Fisheries, the German Federal Research Centre for Forestry and Forest Products and parts of the German Federal Agricultural Research Centre.

 Bundesanstalt f
ür Landwirtschaft und Ern
ährung (BLE) (Federal Agency for Agriculture and Food) Deichmanns Aue 29 53179 Bonn, Germany Tel +49 228 6845-0

Fax +49 228 6845-3444 Website: <u>http://www.ble.de</u>

- Johann Heinrich von Thünen-Institut (vTI) (Federal Research Institute for Rural Areas, Forestry and Fisheries) Bundesallee 50 38116 Braunschweig, Germany Tel +49 531 596-0 Fax +49 531 596-1099 Website: http://www.vti.bund.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: <u>http://www.destatis.de</u>

The **BLE** keeps the fishing vessels list including capacity data based on EU Regulations 2090/98, 2091/98, 2092/98 and 2093/98 as well as landings and effort data based on EU Regulations 2807/83 and 2847/93. The "Zentralstelle für Agrardokumentation und – information (ZADI)" (Centre for Documentation and Information in Agriculture), which keeps these data centralised for data exchange with the Commission and other member states as well as for internal use, was integrated into the BLE on 1 September 2007.

The **vTI** collects biological data, biological survey data as well as data from sampling of commercial fishing vessels under German flag. The Institute of Baltic Sea Fisheries (**OSF**) is responsible for the Baltic Sea, while the Institute of Sea Fisheries (**SF**) is responsible for the North Sea, North Atlantic and other areas. Data on the economy of the German fishing fleet and on the economy of the fish processing industry were handled by the Federal Agricultural Research Centre (FAL) in Braunschweig until April 2007, but are now handled by the SF as well.

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

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

Both the vTI and BLE were involved in the National Programme 2007.

3 Precision Levels

3.1 Required and achieved precision levels

Compared to 2006, there are no remarkable changes regarding precision levels (Tab. 3.1). Capacity, fishing effort CPUE and landings are gathered exhaustively.

Precision calculations on discard proportion estimates are carried out analytically (see Annex 3.1). The same is valid for parameters of Module J. Precision calculations on length at age, sex at age and maturity at age are carried out with a bootstrapping method (see Annex 3.1).

However, **Germany is in favour of the development of a common tool to estimate precision used by all member states** that guarantees the international comparability of precision levels and is looking forward to the outcome of the COST project (FISH/2006/15, lot 2).

3.2 Methods used to calculate precision levels

Where precision was calculated, analytical methods and re-sampling (bootstrapping) were used (see Annex 3.1). After transforming the methods into an algorithmic scheme, routines were adapted to the design of the national databases. Although every effort has been made, please note that the routines used for the calculations of precision are still a test version and based on data of commercial samplings only.

3.3 Other relevant issues

There are no other relevant issues.

4 Data Transmission

4.1 Data transmitted

Table 4.1 gives an overview of data which were collected by Germany in 2006 and transmitted to international working groups in 2007. Additionally, Germany transmitted aggregated data to the Regional Co-ordinating Meetings (RCMs) North Sea & East Arctic, Baltic and NE-Atlantic and to STECF and relevant sub-groups directly.

4.2 Reasons for non-transmission of data

All data were transmitted.

4.3 Other relevant issues

No issues.

5 Module C – Fishing Capacities

5.1 MP - Required and achieved sampling

A list of fishing vessels flying the German flag and subject to the multi-annual guidance programme (MAGP) is kept within the BLE due to Regulation 2090/1998 respecting the changes outlined in Regulation 839/2002.

The list is updated whenever changes are reported. The update is done daily if necessary. If no value of kW is reported, the relevant vessel has no engine. There are also a few vessels in some segments for which the calculation of BRZ (gross tonnage) is in progress. The gathering of these data is ongoing.

Based on the activity data by gear type recorded in the logbook data 2006 and the fishing vessel list 2006, the fleet was divided into the segments referred to in Appendix III of Regulation 1639/2001. Fishing vessels not obliged to record in logbooks are of small size less than 10m using static gears and so incorporated in the aggregated segment for static gear. However, data on vessels < 10m are collected exhaustively and they are included in the fishing vessel list kept by the MS.

The segmentation (nomenclature in Annex 5.1) was the basis for the calculation of the number of vessels, mean gross tonnage and mean engine power in kW as defined in Regulation 2030/86.

Data on the number of vessels, gross tonnage and engine power are gathered exhaustively, i.e. by census.

Regulation 2030/86 does not cover vessels in the fishing vessel list which are not active in the current year. So these cannot be assigned to a segment. These vessels were excluded from the calculations of the requested parameters relevant for biological issues as they have no fishing activity and thus no relevance for biological issues. However, for Module J, a procedure described in Module J was used to assign these vessels to a segment defined in Appendix III of Reg. 1581/2004 for calculation of economic parameters.

5.2 MP - Deviations from aim

No deviations.

5.3 EP - Required and achieved sampling

No extended programme.

5.4 EP - Deviations from aim

Not relevant.

5.5 Action taken to remedy shortfalls

No actions necessary.

6 Module D – Fishing Effort

6.1 MP - Required and achieved sampling

The logbook data are the basis for the calculation of fishing effort by type of technique and specific fishing effort on certain stocks.

A derogation for excluding vessels under 10m overall length from the calculations was requested but not accepted by STECF. Parameter sampling involving the method of questionnaires on economic data for these vessels included the parameter effort. Further description on this issue is given under Module J (section 12 of this report).

Fishing effort by type of fishing is calculated due to the definition in section 1(a)(ii) by type of fishing technique defined in Appendix VIII on a quarterly basis and statistical divisions (level 3 of Appendix I). Data are stored in the central database for German DCR requested data.

Specific fishing effort as defined in section 1(a)(iii) is calculated in units defined in Appendix V for species defined in Appendix VI on a quarterly basis and by statistical divisions (level 3 of Appendix I). Data are stored in the central database for German DCR requested data.

Logbook data are gathered exhaustively, i.e. by census.

6.2 MP - Deviations from aim

No deviations.

6.3 EP - Required and achieved sampling

No extended programme.

6.4 EP - Deviations from aim

Not relevant.

6.5 Action taken to remedy shortfalls

No actions necessary.

7 Module E – Catches and Landings

7.1 MP - Landings - Required and achieved 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 of the

German National Programme 2007) 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.

Landings are aggregated due to level 2 (statistical sub-areas) of Appendix I of Reg. 1581/2004.

For landings of stocks in Appendix XII of Reg. 1581/2004, the aggregation is used as indicated in that Appendix.

7.2 MP - Landings - Deviations from aim

No deviations.

7.3 EP – Landings - Required and achieved sampling

No extended programme.

7.4 EP – Landings - Deviations from aim

Not relevant.

7.5 MP & EP - Discards - Required and achieved sampling

Discards in terms of weight and numbers are estimated from data provided by sampling described in Module H.

The weight proportion of discards in the catches sampled per quarter per division or the level requested in Appendix XII is used to raise the total amount of discards in terms of weight. In cases where only discards are recorded and no landings, the ratio between the hourly effort of the observed haul to the total effort in fishing hours of the relevant fleet segment is the basis for the estimation of discards.

To estimate/sample discards, it is necessary that the sampling is fishery-based and not stockbased. Obviously, only caught species can be measured. Most probably, these do not cover all the species listed in Appendices XII and/or XIII of Reg. 1581/2004. However, even species which are not listed in the Appendices mentioned above are measured in order to monitor the effects of the fishery on the ecosystem.

Germany's data collection on discards includes vessels < 10m. Only 20 out of 944 active vessels <10m were operating in the North Sea in 2007, landing about 44 tons, and were not considered for sampling. In the Baltic, nearly all these vessels are working with passive gears (set nets and traps). This fleet is sampled regularly for spring-spawning herring from individual vessels at the landing site. The herring fishery in the southern Baltic is a special case of a small-scale fishery with respect to its local (about 4 landing sites) and temporal (about 3 months) concentration of notable (usually > 100 t, 800 t maximum) monthly landings. Due to this landing pattern, the virtual absence of discards at sea, and the relatively small sample sizes, such a simple regular sampling scheme is possible for herring.

For flounder, a temporally less pronounced concentration of the fishery (3 landing sites, about 6 months) and lower monthly landings (usually >5 t, 20 t maximum) can be observed. Such a landing pattern is difficult to sample effectively.

Notable (usually >10 t, 50 t maximum) monthly landings of the cod fishery of vessels less than 10 m are even wider dispersed in space (8 landing sites) and time (9 months).

Due to the usually small daily landing amounts at one landing site, a laboratory-directed selfsampling scheme adequate to the fleet segment's cod landings of about 15% of the country's total is likely impracticable.

New sampling means are under development for sampling the small-scale fishery in the Baltic regularly and if possible at sea.

Table 7.1 provides an overview on the planned and achieved observer trips and the achieved number of hauls sampled in 2007. The column "Fleet segment" shows the segment according to App. III of the Reg. 1639/2001 (see Annex 5.1) plus additional information on the gear and target species. The column "% fishing trips covered" in Table 7.1 shows that the coverage in terms of fishing hours (effort) ranges from <0.01% to 40% with an average of 4.32% (see Tab. 7.1).

Precision was calculated analytical (Annex I). The achieved level of precision varies from 0 to 3, depending on the quarter and fleet segment.

7.6 MP - Discards - Deviations from aim

Based on the list of fishing vessels supplied by the Federal Agency for Agriculture and Food, Germany is always trying to reach a wide participation of vessels in the observer programme and to include vessels which have not been sampled by observers before. Although this is partially successful, there are always vessel owners, of smaller vessels in particular, which are not willing to allow observers onboard. Based on the present situation, random sampling of the fleet is yet not possible. This leads also to a rather opportunistic sampling strategy, taking sampling opportunities when they occur, irrespective if they are planned or not.

Nevertheless, most of the planned trips could be conducted. Only one entire fleet segment could not be sampled at all, namely the set net fishery in the North Sea. This small fleet segment consists of four vessels only. Sampling was not possible due to bad weather situations and missing space to place an observer onboard. Other deviations occurred because of short-notice changes in the fishing behaviour: For example, in the case of the otter trawl fishery in IVa and IVb, instead of otter trawls, Danish seines were used and the skipper decided to work in IIIa and not in IV.

In other cases, when more or other than the planned trips were carried out, opportunities for samplings were taken which arose due to contacts with the fishery.

7.7 MP – Recreational – Required and achieved sampling

The cod landings by the German recreational fishery were estimated based on the finalized pilot study which was carried out as part of the DCR (Reg. 1581/2004, App. XI). The report of the pilot study was submitted to the EU and was accepted in 2007

(Bundesforschungsanstalt für Fischerei, 2007). The sampling of the recreational fishery for cod was continued in 2007 according to the methods described in the report. An overview of planned (German National Data Programme for 2007) and achieved sampling is given in the tables below. The current DCR does not include a defined required sampling for the recreational fishery.

1. Baltic Sea ANGLERS

EFFORT

<u>plaı</u> a.	nned The number of hours fished will be recorded during the census of landings of recreational fishermen.	<u>achieved</u> 162 samples were realized in total, 1,922 anglers were interviewed (see also LANDINGS), and the number of hours fished were recorded.
b.	A questionnaire to collect data of the effort (angling days) in 2006 should be coordinated with the German Sea Angler Association.	The questionnaire was not realized.
LA	NDINGS	
plaı	nned	achieved
a.	A stratified random sampling will be	162 samples were realized in total (beach
	realized to estimate cod landings by	fishing 82 samples, open sea fishing 80
	anglers. 96 samples (8 per month) were	samples; 16 % less than anticipated) and
	quantity for open sea fishing.	catches were recorded.
b.	Additional cod landings data will be	Data from 9 angling trips (6 cutters) with 137
	sampled in cooperation with some	anglers on board were sampled.
	owners of angling cutters.	
С.	Data from the Trolling Meeting in	The data from both meetings are available.

c. Data from the Trolling Meeting in spring 2007 and from the Boat Angling Festival in Autumn 2007 will be provided by the Boat Angler Club.

d. The members of the German Sea Angler Association receive a questionnaire related to their effort and catch in 2006.

LENGTH COMPOSITION OF LANDINGS

<u>planned</u> a. Length compositions of the landings will be collected in cooperation with the Angling Associations and Angling Clubs. b. Three samples will be taken to record the length composition of the catches on board of angling cutters in the first quarter. <u>achieved</u> Lengths of 506 cod were measured during 4 beach fishing events and 26 cod during 3 open sea fishing events. Three samples will be taken to record the length composition of the catches on board of angling cutters in the first quarter.

The questionnaire is not yet realized.

RECREATIONAL FISHERY WITH COMMERCIAL FISHING METHODS

planned

a. 10 % of the recreational fishermen, which are using commercial fishing methods for fishing cod, will be interviewed for their effort and landings. achieved

The interviews were not realized.

2. North Sea

ANGLERS

No activities were planned for 2007 and, therefore, no activities were realized.

RECREATIONAL FISHERY WITH COMMERCIAL FISHING METHODS

planned

a. No activities were planned for 2007. Possible activities should depend on the evaluations of investigations carried out in 2006. As a result of the evaluation of the pilot study, no sampling was carried out in 2007.

7.8 MP – Recreational – Deviations from aim

In the current DCR, the required sampling intensity is not defined for the recreational fishery. Deviations from aim are the deviations from planned sampling.

achieved

Effort

- a. No deviations
- b. Questionnaires in 2004/05, which were realized in cooperation with the German Sea Angler Association and evaluated in the second half-year of 2006 did not provide reasonable results. Therefore, it was refrained from another questionnaire.

LANDINGS

- a. Sampling of the boat angling was reduced by 4 samples during the period January March because only few boats were active due to bad weather conditions. Sampling of beach fishing was reduced by 8 samples during July/August because there was practically no cod fishing from the beach in these months. Further 11 samples could not be realized because of bad weather conditions and 7 samples because of illness of one of the samplers.
- b. No deviations
- c. No deviations
- d. Questionnaires in 2004/05, which were realized in cooperation with the German Sea Angler Association and evaluated in the second half-year of 2006, did not provide reasonable results. Therefore, it was refrained from another questionnaire.

LENGTH COMPOSITION OF LANDINGS

- a. The number of length measurements in recreational fisheries is not given in the regulation. However, the number of planned length measurements of cod taken from the open sea was not achieved in 2007. For the estimation of the cod biomass removed by anglers, this is considered not critical, as the length and weight composition of the commercial fishery in the same area can be used for raising (as was done before). In previous years, a great effort was exerted to convince the organizers of angling events to provide their length measurements to the Institute of Baltic Sea Fisheries. The samplers expected that the delivery of the length data entered in a routine phase in 2007, and therefore, reduced the personal contacts with the organizers. As the provision of data deteriorated immediately, remedial action has been taken in 2008.
- b. Sampling could not be realized during the first half of 2007 because one of the two samplers dropped out due to illness.

RECREATIONAL FISHERY WITH COMMERCIAL FISHING METHODS

a. Interviews of fishermen which are using commercial fishing methods for fishing for cod in 2006 have shown that the catches of cod can be neglected because catches are less than 3 % of the landings of the recreational fishery. Therefore, it was renounced to realize the interviews.

7.9 EP – Recreational – Required and achieved sampling

No extended programme.

7.10 EP – Recreational – Deviations from aim

Not relevant.

7.11. Action taken to remedy shortfalls

LENGTH COMPOSITION OF LANDINGS

- a. Two actions are planned to improve the length sampling:
 - More personal and telephone contacts to the organizers of angling events to receive the length measurements from these events;
 - More measurements from boat angling (as the biggest part of cod landings were originating from boats), mostly by means of self sampling: a measurement sheet will be distributed to up to 30 boats anglers, which will measure their catches on board during 2008.

8 Module F – Catches per Unit Effort

8.1 MP - Required and achieved sampling

CPUE series are derived from effort entries in logbooks. Fishermen in Germany are obliged to enter fishing hours in the logbooks. As this is done exhaustively, there is no need for sampling of effort.

For three stocks (2 in ICES areas, 1 in NAFO areas) Germany provided CPUE series to ICES working groups / NAFO Scientific Council (Tab. 8.1):

1) Saithe in the North Sea (ICES Working Group on the Assessment of demersal stocks in the North Sea and Skagerrak, WGNSSK)

2) Pelagic Redfish in XII and XIV (ICES North Western Working Group, NWWG)

3) Greenland Halibut in NAFO Sub-Area 1 (NAFO Scientific Council)

Precision calculations have not yet been carried out. There is no decision yet what method to be used (cf. section 3.1). CPUE series units are in the form as requested by the relevant working groups.

8.2 MP - Deviations from aim

There are no deviations.

8.3 EP - Required and achieved sampling

No extended programme.

8.4 EP - Deviations from aim

Not relevant.

8.5 Action taken to remedy shortfalls

No action is necessary to remedy shortfalls.

9 Module G – Scientific Evaluation Surveys

9.1 MP - Required and achieved Priority 1 surveys

In 2007, Germany conducted 9 surveys of priority 1 and participated in the Atlanto-Scandian Herring Acoustic Survey conducted by Denmark, as well as the Blue Whiting Survey conducted by the Netherlands. There were no changes in strategy or design except when it was co-ordinated with the relevant ICES working group. Of course, the number of hauls and length of hydroacoustic tracks depended on weather conditions as well as on the performance of the equipment and/or of the vessel, but were for all surveys within the range of records for the former survey years. For the number of hauls and sampling activities, refer to Table 9.1. In the following, the surveys are described in detail:

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

Target species are demersal fish species, mainly Baltic cod, and flatfish 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 hydrographic 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. The survey parts were conducted from 15/02/07 to 02/03/07 and from 29/10/07 to 14/11/07 both with R/V "Solea". Refer to Fig. 9.1a and b for the station grid of both parts.



Fig. 9.1a: Baltic International Trawl Survey - Station grid (1st Quarter 2007)



Fig. 9.1b: Baltic International Trawl Survey - Station grid (4th Quarter 2007)

2) Baltic Herring Acoustic Survey

Target species are all 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 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 database. Data are also submitted to ICES PGHERS and WGBIFS via the FishFrame Acoustics data base. The survey took place from 04/10/07 to 23/10/07 with R/V "Solea". Refer to Fig. 9.2 for the cruise track and fishery stations conducted on the German part of the Baltic Herring Acoustic Survey.



Fig. 9.2: Baltic Herring Acoustic Survey - Cruise track and fishery stations (R/V SOLEA October 2007)

3) Baltic Sprat Acoustic Survey

The main objective of the survey was to assess the sprat stock in the south-western Baltic Sea. The main achievements of the survey are to obtain 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

and hydrographical data. Summarized data are stored in the database BASS (Baltic acoustic spring survey), detailed data are stored locally in specific databases of the vTI-OSF. The survey took place from 03/05/07 to 24/05/07 with R/V "Walther Herwig III". Refer to Fig. 9.3 for the cruise track and trawl stations conducted on the German part of the Baltic Sprat Acoustic Survey.



Figure 9.3: Hydroacoustic tracks and trawl positions on the Baltic Sprat Acoustic Survey in 2007

(dashed line: planned standard transects, green solid line: realized standard transects, blue solid line: realized night track)

4) International Bottom Trawl Survey in Quarter 1

The main aim of the 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. The data are stored locally in an Access database in the national institute. Data are also submitted to ICES (DATRAS database). The survey in Quarter 1 was conducted

from 17/01/07 to 16/02/07 with R/V "Walther Herwig III". Refer to Fig. 9.4 for stations conducted on the German part of the International Bottom Trawl Survey in Quarter 1.



Fig. 9.4: International Bottom Trawl Survey – Station grid (MIK and fishery stations) in the 1^{st} quarter of 2007

5) International Blue Whiting Survey

Germany participated in this survey with one scientist and contributed to the financial share in order to support the Netherlands to conduct the survey. The survey took place from 05/03/07 to 24/03/07.

6) Atlanto-Scandian Herring Acoustic Survey

Germany participated in this survey with one scientist. It also took the financial share in order to support Denmark to conduct the survey. The survey took place from 02/05/07 to 30/05/07.

7) International Bottom Trawl Survey 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 fish stock estimates basing on measurements of length, weight, abundance, biomass, age, maturity as well as the collection of physical and chemical oceanographic data. Additionally, zoobenthos and seabirds occurrence and abundance is monitored. The data are stored locally on Access data bases in the national institutes. Data are also submitted to ICES. The IBTS survey in Quarter 3 was conducted in conjunction with a national survey from 23/07/07 to 19/08/07 with R/V "Walther Herwig III". **Only eight days within this period were devoted to IBTS.** The other days are covering a programme on national expense. Refer to Fig. 9.5 for the investigation area of the German part of the International Bottom Trawl Survey in Quarter 3.



Fig. 9.5: International Bottom Trawl Survey – ICES rectangles covered in quarter 3 2007 (grey), R/V "Walther Herwig III" in July/August 2007

8) North Sea Herring Acoustic Survey

Target species are herring and sprat. The main aim of the survey is the assessment of clupeid resources in the North Sea. The acoustic survey is conducted every year to supply the most important fishery independent data (biomass estimate) to ICES. Types of data collected include nautical area backscattering cross sections (NASC- results of echo integration), sub-samples from trawl hauls to determine length, weight, sex, maturity and age of herring and sprat as well as CTD profiles. The data are stored locally in the national institute's database and centrally on the FishFrame acoustics database (raw and derived data). In 2007, the survey took place from 28/06/07 to 17/07/07 with R/V "Solea". Refer to Fig. 9.6 for the cruise track and trawl positions of the German part of the North Sea Herring Acoustic Survey. As the International Hydro-Acoustic Oceanic Redfish Survey (see below) could not be continued due to technical problems, R/V "Walther Herwig III" was employed in the North Sea Herring Acoustic Survey from 02/07/07 to 06/07/07 in an area that could not be covered by the other vessels in the survey.



Fig. 9.6: North Sea Herring Acoustic Survey – Echo integration tracks and positions of the trawl haul stations (R/V "Solea" Jun/Jul 2007)

9) North Sea Beam Trawl Survey

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 database and a database held by the chairman of ICES WGBEAM at the CEFAS laboratory in Lowestoft. In 2007, the survey took place from 16/08/07 to 30/08/07. Refer to Fig. 9.7 for the trawl positions of the German part of the North Sea Beam Trawl Survey. Only 10 days within the whole survey are exclusively devoted to the Beam Trawl Survey, the rest of the survey is done on national expenses.



Fig. 9.7: North Sea Beam Trawl Survey – Trawl positions (R/V "Solea" Aug 2007)

10) 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 station, hydrographical, meteorological, catch and by-catch data are stored locally in a national Access database. 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 including the Wadden Sea Quality Status Reports (QSR). 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 took place in five different areas (Fig. 9.8) in September and October 2007.



Fig. 9.8: Demersal Young Fish Survey –Map of DYFS stations in Germany including abundance indices of young plaice from September / October 2007

10) Mackerel and Horse Mackerel Egg Survey

The main objective of this triennial survey is to produce both an index and a direct estimate of the biomass of the North East Atlantic mackerel stock and the southern and western horse mackerel stocks. The general method is to quantify the freshly spawned eggs in the water column on the spawning grounds and to determine the fecundity of the females. This is done by plankton sampling and by sampling sufficient numbers of gonads before during and after the spawning. The gonads are then histologically analysed. In combination, the realised fecundity (potential fecundity minus atresia) of the females and the actual number of freshly spawned eggs in the water render an estimate of the spawning stock biomass. In 2007, the survey took place from 20/03/07 to 26/04/07 with R/V "Walther Herwig III". Refer to Fig. 9.9

for the cruise track and trawl positions of the German part of the Mackerel and Horse Mackerel Egg Survey.



Fig. 9.9: Mackerel and Horse Mackerel Egg Survey – cruise track and station grid March/April 2007, upper panel: leg A, lower panel: leg B.

11) International Hydro-Acoustic Oceanic Redfish Survey

The main aim of the survey is the investigation of the distribution and estimation of abundance and biomass of pelagic redfish (*Sebastes mentella*) in the Irminger Sea and adjacent areas by means of hydro-acoustic measurements and trawl hauls. Besides the hydro-acoustic data, biological data from the catches (length distributions, individual weights, sex and maturity and parasitation) are collected and raised to the total surveyed area. In addition, hydrographic (CTD) and weather data are collected. All data are stored in national and international databases and submitted to the ICES SGRS. In 2007, the survey with R/V "Walther Herwig III" had to be cut short (20/06/07-27/06/07) due to technical problems (see section 9.2). Instead, the Russian R/V "Smolensk" was chartered for 8 days (10/7/08-17/7/08) to resume the survey.

9.2 MP - Deviations from aim

The deviations that happened on the conducted surveys were due to bad weather conditions and technical problems.

Sprat acoustic survey - The first days of the cruise were affected by problems with the ship engine and the trawl winches. The repair lasted for two days. A further time delay was caused by the need of medical treatment for two members of the crew. Therefore three ICES rectangles in SD 26 that were planned within this cruise could not be covered. The RV "Atlantniro" took over this area after an arrangement with the Russian colleagues. International Hydro-Acoustic Oceanic Redfish Survey – Problems with the ship's main engine made it impossible continue the survey. The vessel had to return and to be repaired. After fixing the engine and starting again, additional technical problems occurred. Due to these problems, the survey had to be discontinued. After further repairs, however, R/V "Walther Herwig III" was employed in the North Sea Herring Acoustic Survey (see above).

9.3 EP - Required and achieved Priority 2 surveys

In 2007, Germany conducted one survey (Greenland Bottom Trawl Survey) in the frame of the extended programme. The aim of the Greenland survey is to provide abundance indices for cod and redfish in the area East and West off Greenland. The collected data include biological data on the distribution, abundance and biomass of cod and redfish as well as of other demersal and pelagic fish species. These data are stored locally in a national Access database, are being exchanged with Greenland and used as the only fishery-independent data series on Greenland cod within the ICES North-Western WG. Furthermore, oceanographic data (CTD/Rosette sampling) are collected. Data are stored locally in a national Access database but also submitted to the international oceanography database. The survey took place from 10/10/07 to 22/11/07 with R/V "Walther Herwig III". Refer to Figure 9.10 for the positions of the fishing stations during the Greenland survey.



Fig. 9.10: Positions of fishing stations off East and West Greenland (85), sampled NAFO Standard Sections: Fyllas Bank, Cape Desolation; in brackets: No. of stations.

Additionally, there are some priority 2 surveys conducted by Germany on national expense.

9.4 EP - Deviations from aim

The deviations that occurred on the Greenland survey were due to very bad weather and heavy ice conditions.

9.5 Action taken to remedy shortfalls

Bad weather conditions: No action is possible. Technical problems: Vessels and equipment are always kept in good conditions; however, sudden technical problems cannot be prevented.

10 Module H – Length and Age Sampling

General remarks

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

- Sampling at sea is necessary on board of freezer 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 at the same time the landings and other biological data.

- 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. 1581/2004 as by-catch in fisheries directed towardsother species can only be recorded onboard.

- About 68% of the German 2007 landings occurred in foreign countries and not in Germany. Bilateral agreements, however, with the most relevant Member States were concluded to ensure sampling of these catches (see National Programmes).

10.1 MP - Landings - Required and achieved sampling

After utilisation of derogation rules, Germany is required to sample the stocks listed in Section 8 of its National Programme with the sampling intensity specified in Appendix XV (Reg. 1581/2004) for the stocks in question.

In case different sampling intensities were given in Appendix XV for stocks with a TAC covering several sub-areas and/or divisions for a management unit, the sampling intensity of that division was aimed at in which the German fleet took the bulk of the catches. If species listed in Appendix XV of Reg. 1581/2004 are caught, they are also sampled as well as any other species brought on deck.

German fisheries in 2007 which had to be sampled are shown in Table 10.1 of this report with a comparison between the number requested by Appendix XV and the numbers actually sampled in terms of length and age. Precision levels are calculated by the bootstrapping method (see Annex 3.1). Please note, that redfish and blue whiting otoliths were taken but not aged. Therefore, no calculation on precision could be carried out.

The sampling strategy, methods and sampling procedures are the same as described in the Final Reports of EU-Study 97/004 "Sampling of 8 German Commercial Fisheries" (Anon. 2000a) as well as EU-Projects 96/002 and 98/024 "International Baltic Sea Sampling Program I and II" (Anon. 1999 and 2000b) which provided data since 1996 requested in modules H and I. Observers on a sampling trip aim at taking measurements and samples of all species caught independently, whether they are listed in Annexes XII or XIII or not.

Sampling at fish markets and processing plants

Sampling took also place at the fish markets and harbours of the Baltic Sea. Additionally, herring landed at the fish plant in Mukran/Sassnitz (Rügen Island) were sampled.

10.2 MP - Landings - Deviations from aim

In principle, there are the same problems as described in section 7.6 of this report.

In several cases, the planned sample sizes have not been achieved. However, the required numbers have been achieved in any case, but for various reasons, the following stocks could not be covered entirely. Note that Germany has provided sufficient length measurements and age samples to the relevant ICES workings groups for assessment purposes (see Module I).

Horse Mackerel in IIa (EU), IV (EU)

Horse mackerel is only caught occasionally as by-catch in the North Sea and IIa (EU). In 2007, only 4 tonnes were landed which were caught on one fishing trip only. Due to logistic reasons, it was not possible to place an observer on this trip. It concerns 331 fish to be measured.

Brown Shrimp in IV, VIId

In 2007, the sampling of the brown shrimp fishery was newly established. New contacts to the industry had to be made and the sampling procedures had to be developed. Although 2 of the 3 planned observer trips were carried out, due to the lack of experience, the number of measurements on landed brown shrimp were not sufficient.

Greenland Halibut in V, XIV (GRÖ)

The vessel owner was not prepared to allow otolith sampling because of the reduction of value by cutting the fish. Every part of the body of Greenland halibut as a high valued fish is commercially used. Even the heads were sold separately into the Asian market.

Redfish in V, XII, XIV

This fishery was covered by scientific observes on one trip only. Usually, the observer is asked to take 5 otoliths per cm class and sex in order to get an appropriate distribution for assessment purposes. In this case, it was not enough to fulfil the DCR requirements. However, no routine ageing on redfish is performed and in the ICES North-Western WG, age data are not being used due to unreliable age determination (ICES 2006a).

Greater Silver Smelt in V, VI; VII(EU)

Due to logistic problems indicated by the ship owners, this fishery could not be covered by scientific observers. There were landings of 650 t which were exclusively by-catch in the blue whiting fishery on two fishing trips only. It concerns 109 fish to be measured.

Saithe in Vb(EU),VI,XII,XIV

Due to logistic problems indicated by the ship owners, this fishery could not be covered by scientific observers. There were landings of 619 t. It concerns 178 fish to be measured.

Greenland Halibut in NAFO 0,1 (GRÖ)

Due to logistic problems indicated by the ship owners, this fishery could not be covered by scientific observers. In this case, the obligatory presence of an official observer required by the Greenlandic authorities and the corresponding fully occupied accommodation space onboard prevented placing a biological observer onboard the vessel.

In some cases, a lot more sampling has been carried out than requested. The reason for this is simply the necessity 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, this could not have been achieved.

However, it is extremely difficult to distinguish / calculate the exact shares between measurements required by DCR and measurements in excess due to the fact this work is done concurrently.

10.3 EP – Landings - Required and achieved sampling

No extended programme.

10.4 EP – Landings - Deviations from aim

Not relevant.

10.5 MP&EP - Discards - Required and achieved sampling

Germany sampled discards only in those fisheries on stocks which have to be sampled (Tables 8.1 and 8.2 of the National Programmes 2007 and 2008). Stocks not listed in these tables proved to be less exploited by the German fleet applying the derogation rules in section H.1.d of Reg. 1639/2001. This implies in most cases that discards are of less importance. If this was not the case, the relevant fisheries were covered.

Table 10.3 gives an overview of the numbers of length measurements and age samples achieved during the sampling programme. All fish stocks which had to be sampled according to Table 10.1 were also sampled for discards if they were discarded in the fisheries sampled. Additionally, Table 10.3 lists all species listedin Appendices XII and XV for which length measurements of landings and discards were carried out on the observer trips. Also, all samples from market and port samplings are included. Note that zeros indicate no landings or no discards observed, blanks indicate no investigation. Please note, that Germany is only obliged to sample stocks according to Table 10.1. For these stocks, calculations on precision were carried by bootstrapping (see Annex 3.1.). Redfish and blue whiting otoliths were taken but not aged. Therefore, no calculation on precision could be carried out.

10.6 MP&EP - Discards - Deviations from aim

There are the same problems as described in section 7.6 of this report

10.7 Action taken to remedy shortfalls

A legal initiative was started and is still ongoing to regulate the access to fishing vessels for scientific observers. However, this process is very difficult due to related problems in the German legal system. Within the new Framework Regulation 199/2008), however, the vessel owners "shall take observers on board", which will hopefully improve this situation.

11 Module I – Other Biological Sampling

11.1 MP - Required and achieved sampling

See general remarks under section 10. Data are gathered in connection with sampling described in section 10 of this report (Module H) and on surveys. Data are sampled on a yearly basis. Table 11.1 provides an overview over the species by area/stock that were sampled during 2002 to 2008.

Tables 11.2 and 11.3 give an update on the achieved sampling on other biological parameters in 2007. All species listed in Appendix XVI (1581/2004) in addition to the species to be sampled according to the Module H were sampled on market and observer trips as well as surveys if they occurred in the catch. Please note that Germany is only obliged to sample stocks according to Table 10.1. For these stocks, calculations on precision were carried out by bootstrapping (see Annex 3.1.) but only on basis of commercial samplings. No calculations on precision of survey data were carried out (see also 3.2). Redfish and blue whiting otoliths were taken but not aged. Therefore, no calculation on precision could be carried out on these species.

11.2 MP - Deviations from aim

There are the same problems as described in section 7.6 of this report.

11.3 EP - Required and achieved sampling

No extended programme.

11.4 EP - Deviations from aim

Not relevant.

11.5 Action taken to remedy shortfalls

See section 10.7.

12 Module J – Economic Data by Group of Vessels (with references to Module C, D and E)

12.1 MP - Required and achieved sampling

Standard table 12.1 gives a general outline of

- (i) the population nos. by fleet segment,
- (ii) the sampling levels targeted and achieved, and
- (iii) the sampling and response rates.

The fleet segmentation corresponds to those listed in Appendix III (MP) of the DCR (Reg. 1581/2004).

Standard table 12.2 gives further details on the sampling methods used and the sampling levels achieved. As already mentioned above, precision levels are not calculated because of the non-random nature of the German economic data collection methodologies.

- What data is being collected.

Income (Turnover) (Appendix XVII, Module J)

Landings by value and volume (Module E) and Income (Turnover, Module J)

According to the Regulations 1639/2001 and 1581/2004 and the Paris workshop document (Anon. 2004), the income is defined as total proceeds from fish sales. The basis for the calculation is the sales slips. All first-hand sales have to be reported to the German authorities, including volume, value and species. For the very small amount of fish for private consumption which has to be reported as well, prices are not available. For this small fraction of non monetary income, the reported volume of fish was multiplied by the average price for the species, fleet segment and season concerned. So the calculation of the income covers the landings of the whole fleet (exhaustive) under the assumption of none or negligible 'unreported landings'. All commercial German landings are included in the 'sample'. Hence, no precision levels have to be given.

The landings by value are provided on geographical disaggregation level 2 according to Reg. 1581/2004 Appendix I, quarterly and per species. The Appendix III segmentation is being used.

Production Costs

The source of data of the parameters mentioned below is the company accounting (taxable bookkeeping). This accounting system is based on the FADN (Farm Accountancy Data Network, <u>http://ec.europa.eu/agriculture/rica/index_en.cfm</u>) of the EU and modified for fisheries' circumstances. Within this system, the report contains data (sheets) to the following topics:

- General data on the enterprise and the accountancy
- Balance sheet with assets and liabilities
- Profit and loss statement of account
- An annex to the balance sheet with investments in material and tangible assets
- A second annex with the liabilities (part of the balance sheet)
- Employment sheet with data on the employed people onboard including gender, age and FTE
- Additional data on the technical equipment onboard, particularly active and inactive time (for repairs and maintenance or for seasonal reasons (weather, closed season)

About 150 vessels of the coastal and small high seas fisheries take part in this monitoring system. The participation in this FADN based system for the coastal fishery is not mandatory. For details of the entries of the (taxable) accounting system, see Annex 12.1.

Furthermore, all eleven vessels of the long distance water fishery under the German flag are in a separate monitoring system. For these fisheries, a census is performed annually, based upon a standard questionnaire which covers all parameters that are relevant in the DCR. The response rate varies every year, as participation is voluntary.

In the case of voluntary participation, the precision level is not relevant since non random sampling forces a bias.

Operating costs (Appendix XVII, Module J)

Hereunder:

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

Crew (including social costs) (Appendix XVII, Module J)

Based on the FADN adopted accounting data network, a cost statement of the employment onboard is available (see Annex 12.1, entries of the FADN system, code 2799). Depending on the type of business ownership (natural person, legal entity; partnerships), a typical managing salary is applied, if no concrete numbers are available. The sampling rate is identical with other cost parameters and given in the standard table 12.2.

Fuel consumption / cost (Appendix XVII, Module D and J)

The fuel consumption is estimated by a specific data collection procedure, based on the data from the framework of the FADN adopted accounting data network (code 8107 and 2773). For a vessel group of about 150 vessels, the fuel consumption was gathered on a voluntary basis. The fuel consumption per fleet segment was computed using the fuel consumption per effort day of the vessels for which data are available. These data were then extrapolated to the fleet segment with respect to its total effort days. Costs (value) are estimated multiplying the volume by the average fuel price for 2006. Because of the voluntary character of the participation, the precision level is not relevant from the statistical scientific point of view.

Repairs and maintenance (Appendix XVII, Module J)

Based on the FADN adopted accounting data network, detailed data of different disaggregated cost items of repairs and maintenance are available (see Annex 12.1, list of entries, profit and loss of the FADN, code 2829). The sampling rate is identical with other cost parameters and given in standard table 12.2. Because of the voluntary character of the participation, the precision level is from the statistical scientific point of view not relevant.

Other operational costs (Appendix XVII, Module J)

Based on the FADN adopted accounting data network, detailed data of different disaggregated cost items are available (see Annex 12.1, list of entries, profit and loss, of the FADN). All costs except for 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)). The sampling rate is identical with other cost parameters and given in standard table 12.2. Because of the voluntary character of the participation, the precision level is from the statistical scientific point of view not relevant.

Fixed costs (Appendix XVII, Module J)

The fixed costs (average costs on investment) are defined tax-based. The depreciation periods depend on the equipment (hull 20 years, equipment between 1 and 5 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).

The sampling rate is identical with other cost parameters and given in the tables. For the same reasons as above (non random sampling, voluntary participation), no precision level was computed.

Financial position (Appendix XVII, Module J)

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

Due to the voluntary matter of the FADN system, no (meaningful) precision level could be given. Further information of the position of the 'Testbetriebsnetz' sample in technical terms are given by the means of the gross tonnage, engine power and overall length, as mentioned before (see annex of this report).

Investments (assets) (Appendix XVII, Module J)

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 Regulation 1639/2001, the asset accounts of the balance sheet of the FADN are taken to calculate the assets (code 3019 + 3079, column 2 and 7). The sample size as well as the sample rate is the same as for other cost items mentioned above (FADN Testbetriebsnetz, voluntary participation). The voluntary participation offers no possibility to calculate an unbiased variability measure.

Prices per species (Appendix XVII, Module J)

The prices of all fish species sold are computed at the same level as the landings (volume) and income (value, quarterly and the segmentation according to Reg. 1581/2004 Appendix III, see above). Based on a 100% sampling rate, the precision level is not relevant.

Employment (Appendix XVII, Module J)

Information on employed persons onboard all registered vessels is available from the official fleet register. The distinction between full / part time and FTE causes shortfalls for parts of the population. Information in such detail (full / part time and full time equivalent) is only available for the small 'Testbetriebsnetz' vessels group (about 150 vessels, FADN, code 7001 - 7099). Some information can be obtained by extrapolation from survey results of previous years. For vessels with more than 12m LOA, part time employment is uncommon (high fixed vessel costs). In the rare case where working hours per year are available, 1760 hrs are regarded as 1 FTE (8hrs/day×225 working days). Otherwise, any part time employment is counted as 0.5 FTE. The computation of the precision level is redundant (non random sampling, voluntary participation).

Fleet

Number of Vessels (Appendix XVII, Module J)

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

registered all-season. Therefore, this method of computation might result in a slightly higher number of vessels compared to official German statistics. Precision levels are omitted (sumbased indicator and exhaustive census sampling).

Gross tonnage (gt) (Appendix XVII, Module J and C (fishing capacity))

The gross tonnage calculation has the same basis for computation as the above-mentioned one for the number of vessels calculation. All fleet-registered vessels are included (exhaustively). No precision level has to be given (sum based indicator and exhaustive sampling).

Engine power (kW) (Appendix XVII, Module J and C)

The calculation of the engine power by segment is based on the whole vessel population (fleet registered vessels, exhaustively). Because all vessels are included, no precision level was estimated (sum-based indicator).

Age (Appendix XVII, Module J)

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 are being used. Hence no precision levels were computed. The average age of the German fishing fleet is close to 25 years. The long distance vessel groups with 15 vessels in 3 groups (> 40m LOA) are significantly younger with a mean age of 15 years.

Gear used (Appendix XVII, Module J)

The gear used is the basis for segmentation. Gear types are specified as provided in Regulation 1581/2004 (Appendix III). The sources of information on gear used are the logbook entries for active vessels and the fleet register for inactive vessels.

Fishing effort (Appendix XVII, Module D and J)

The basis for the calculation of the effort are the logbooks. Hence exhaustive collection for vessels larger than 8 m LOA is established.

The fishing effort for vessels smaller than 8 m (no logbooks are available) is not available.

- Who the data is being collected from.

The fishing vessel register is the population framework. Detailed information of the number of vessels included in the relevant fleet segments are shown in Table 12.1.

- How the data are being collected.

Definitions and data sources are depicted in detail in Table 12.2.

The German data collection programme for the 2006 fleet economic data is based on two sources: (i) an accountancy network which consists of about 150 vessels providing the requested economic data annually and (ii) a mail questionnaire for the two segments demersal trawl > 40 m and pelagic trawl > 40 m (11 vessels). All surveys are carried out on a voluntary basis. Hence, response rates can differ between years.

General remarks on coverage, data quality and accessibility

Detailed information on the fleet characteristics and catches is collected for all segments, with certain constraints for vessels < 8m, which are exempt from the obligation to file logbook and submit catch data integrated over several trips. The achieved sampling rates on cost items are satisfactory for important fleet segments, in particular for beam trawlers and demersal

trawlers and seiners. However, serious problems have been experienced when sampling the pelagic trawlers and seiners segment, which accounts for roughly half of the total catch weight of the German fleet. The vessel owners have profound information available, as experienced in former years, but do not necessarily provide them for the data collection under Regulation 1639/2001. Another segment with poor coverage of cost items is the segment of vessels < 12m using passive gear. These are important in terms of total numbers, but many fishermen in this segment are fishing on a sideline basis and file business data only in a fragmentary manner.

Sampling of these critical segments is ongoing with increased intensity. Some additional pressure on companies to provide data might be obtained from the fact that provision of data has recently been made a prerequisite for application for EFF payments in Germany.

12.2 MP - Deviation from the aim

No deviations.

12.3 EP - Required and achieved sampling

No extended programme.

12.4 EP - Deviation from the aim

Not relevant.

12.5 Action taken to remedy shortfalls

No action taken.

13 Module K – Data Concerning Fish Processing Industry

13.1. Required and achieved sampling'

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 a general employment threshold of 20 employees at collecting data on cost-structure, gross-investment etc. and a threshold of 10 employees for number of employees and turnover by segment.

To fulfil the requirements of the DCR additional surveys were carried out. In antecedent surveys with mail questionnaires (2004, 2005, by the Federal Agricultural Research Centre (FAL)), the return rate was insufficient for any further analysis. The lack of some basic information on the processing sector, in particular on the 1-19 Employer stratum, required further effort. This is of particular importance, since the EFF funds are foreseen for small

enterprises. Therefore, in 2006 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 Federal Association of German Fish Processors had been informed about the DCR regulation and been asked to arrange the survey amongst the members to which it is addressed. However, the members did not agree to this procedure. The purpose and the different elements of the data collection have then been presented to the business in a specific publication to increase the response rate. The data collection task had then been presented and discussed on a meeting with representatives of the fish processing industry. Finally, the German Centre for Survey Research and Methodology (ZUMA), the leading academic consulting institution, had been consulted to optimize the questionnaire as well as the sampling procedure. The questionnaire was rearranged according to their advice in a way that all the data required by the DCR were collected. The list of companies was updated using a database provided by a professional business information company. This was also a test to find out which of the missing information could be provided by business services of that kind.

In the run-up to the questionnaire survey every company was called, the responsible person was informed and prepared for the survey. The number of employees was determined by phone. On the phone most representatives were willing to provide at least this number, even if they later refused to fill in and return the questionnaire. This way the population could be almost completely stratified by the number of employees. Moreover, by means of the personal calls the number of companies to be regarded as fish processors under the regulation could be diminished to 166. After all, an overall response rate of 23% has been achieved.

In 2007 the experiences with the mail-questionnaire have been evaluated and the decision was to further take part in meetings of German Fish Processors to convince them to participate in the survey, to ask the companies only every two years for data concerning two following years and to enhance compliance by visiting especially the big companies and attending relevant trade fairs.

Some legal forms of companies are obliged to publish their annual balance sheet in the publicly accessible Commercial Registry. The registry has been tested for compliance with the required information in 2007 as well as in 2006. However, this turned out to be of little help, because the forms submitted by the companies are quite heterogeneous, and in most cases the required information is not provided. Furthermore, this source of information by and large covers only the bigger companies, so that the gap in the sector of the companies with 1-9 employees cannot be filled.

The low willingness of fish processing enterprises to respond remains the crucial problem for the success of the additional surveys. As long as the additional surveys are on a voluntary basis, higher response rates cannot be expected.

The standard tables 13.1 und 13.2 refer to the survey of the Federal Statistical Office and do not yet include the additional survey of the Institute of Sea Fisheries which is in progress. Standard table 13.1. gives a general outline of (i) the population nos. by segment of the processing industry, (ii) the sampling levels achieved, and (iii) the sample and response rates. Standard table 13.2. gives further details on the sampling methods used and the sampling and precision levels achieved for the data collected under the MP.

- What data is being collected.

Germany has tried to collect all indicators which are listed in appendix XIX of the DCR for the entire sector. However, because of the problems described above the following indicators
are available so far for enterprises ≥ 20 employees (the indicator definitions refer to EUROSTAT) and where indicated for plants ≥ 10 employees:

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 (available for plants >= 10 employees);

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 is 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 (available for plants >= 10 employees) and the number of part time employees (available for enterprises >= 20 employees).

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

Investment (asset), **financial position** and **raw material use** (total and by species) have been determined with the mail questionnaire.

- Who the data is being collected from.

The information has been 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 the surveys of the Federal Statistical Office. Regarding the enterprises below 20 employees, the Business Register is not updated very well (the business register contains 270 fish processing enterprises while there are about 600 enterprises which have a permission by public health authorities to process fish). The target population of the Federal Statistical Office are fish processing enterprises with 20 and more employees (62 enterprises in NP year 2006) and 85 plants with 10 and more employees.

To collect the three missing indicators and to gather information for the small scale enterprises, additional surveys were carried out by FAL in 2004 and 2005 and by the BFAFi in 2006 and will be repeated in 2008. The Business Register is located at the Federal Statistical Office and protected by the data protection clause of the Federal Statistics Law. Hence, FAL and BFAFi do not have access to the Business Register. Alternatively, the database of the Chamber of Industry and Commerce as total population was used and completed with a database provided by the business data provider Hoppenstedt.

- How the data are being collected.

<u>Methods</u>: The Methods used by the Federal Statistical Office are described in more detail in standard tables 13.1 and 13. 2. The methods vary in a range from stratified random sampling to complete population surveys for enterprises with 20 and more employees. Strata are defined according to the employment classes (20-99; 100-249; 250-499; >=500, for some indicators 10-49; 50-99; 100-249;250-499;500-999; >=1000, some indicators are only available for the whole sector). Where sampling is applied, the sample size per stratum is iteratively optimised using the known turnover of the last complete-population survey. This

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

For enterprises with less than 20 employees, additional surveys have been carried out by FAL in 2004 and 2005 and by BFAFi in 2006 and will be repeated in 2008. Mail questionnaires were sent to the entire known total population. The total population could not be exactly identified. However, with the addition of another business database and some research effort on the internet and in professional journals, the number of enterprises could be further specified in the last years. Many of the additionally assigned enterprises turned out to work on an avocational or recreational basis. Again the major problem was that the surveys have to be carried out on a voluntary basis, since there is no legal enforcement tool.

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, in the case of Germany, fixed cost is defined as annual additional gross investment in tangible goods.

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

Data sources per indicator are provided in the following table.

13.2. MP - Deviations from aim'

Shortfalls:

- (i) Raw material, investment (asset), and financial position are not available on a representative level,
- (ii) Data for the small scale enterprises (segment 1-9 employees) are not available on a representative level, and for the segment 10-19 employees, only some indicators are collected by the Federal Statistical Office.

Because of the above mentioned <u>low response rate</u>, the indicators investment (assets), financial position and raw material use are not available on a representative level for the fish processing sector. To our mind, additional indicators can only be successfully gathered if the response to our questionnaires will be compulsory for the fish processing enterprises.

13.3 EP - Required and achieved sampling

No extended programme.

13.4 EP - Deviations from aim

Not relevant.

13.5 Action taken to avoid shortfalls

In 2008, the mail questionnaire procedure is going to be repeated. The aims of the DCR are going to be further illustrated to the branch. Public agencies which handle the EFF subsidies will be involved in the information procedure to underline the importance of the DCR. It will be assessed, whether there would be an option to have the missing data being included in the regular surveys of the Federal Statistical Office. However, this might require changes of national regulations, which are not easy to be obtained.

14 Databases

14.1 Database development and data management

In 2007, the ZADI/BLE maintained and managed a central Oracle database with German data relevant to the DCR. The central DCR database is a repository of raw and analysed data from which the data exports for the EU's data requests are produced. A number of activities regarding database development and management were carried out during 2007.

1) Data import

The central DCR database is fed with data from different sources:

- BLE: Logbook and catch data as well as the fishing vessel register;
- BFAFi (now vTI): Data on landings and discards, biological sampling data; aggregated economic data.

Data import methodology:

- Agreement on data structure for data transfer (csv format) with the data providers;
- Data providers send csv files to BLE via ftp;
- csv data are imported to Oracle into tmp-tables using sql*loader;
- Transformation (i.a. homogenization of data types) of data from tmp-tables to the final Oracle tables.

2) Processing of data requests and data export

Three data requests issued by the European Commission were processed in 2007 (two on economic data, one on discard data). Each data request implied a number of tasks to be carried out:

- Analysis of the data request: which data is to be delivered in which structure;
- Step-by-step transformation of the underlying original data with SQL;
- Translation of codes used in the original data to codes expected by the EC;
- Checking and testing the result tables;
- Creating xls export files;

- Uploading the resulting xls files using the upload website provided by JRC.

3) Improvement of data

An effort was made in 2007 for improving the data quality of the central DCR database:

- Performing plausibility checks at data imports;
- Improvement and completion of the decoding and translation tables used for translating the codes used in the raw German data to the codes expected by the EC. In 2007, the EC prescribed internationally accepted codes like FAO area code and FAO-ASFIS fish codes, an initiative that we very much welcome.

5) Building up a central repository for fisheries data

In 2007, the ZADI/BLE continued to build a central data repository based on Oracle for the data of the Institute of Baltic Sea Fisheries (OSF, formerly IOR). OSF is the German DCR data provider on landings, discards and biological sampling data in the Baltic Sea. A copy of the complete OSF data set for 2007 was imported to OSF's Oracle repository (which contained already data from 2002 to 2006) and made available to OSF through a web interface.

6) Database maintenance and administration

Regular database maintenance and administration tasks are necessary in order to keep the Oracle database running and to guarantee a level of data integrity and security. In 2007, the following regular tasks were performed:

- Regular data backups;
- Server software updates (and migration);
- Hardware maintenance and enhancement (e.g. increasing storage capacity);
- System administration.

Furthermore, by the end of 2007, the DCR database schema was split into two schemata: one tidy schema containing only definitive and productive database objects and one schema containing temporary and import objects.

7) Documentation

Documentation regarding the central DCR database was performed in 2007:

- Report of the data import into the Oracle database;
- Writing of a methodology paper for the calculation of the segmentation;
- Writing of a methodology paper for the calculation of effort (EffortDays);
- Documenting the SQL transformations performed for the data requests.

14.2 Other relevant issues

Six meetings on national expense were held in 2007 in Hamburg (4), Braunschweig (1) and Rostock (1) regarding the DCR database and DCR data export issues.

15 National and International Co-ordination

15.1 National Co-ordination

A national Co-ordination meeting took place on November, 20th 2007 in Hamburg. The meeting was attended by staff members of BFAFi (ISH Hamburg, IOR Rostock), BLE (Hamburg), FAL (Braunschweig) and ZADI/BLE (Bonn). Topics were:

- 1. German Data Collection: Successes & Problems
 - a. Pilot study: Recreational Fisheries
 - b. EU Data-Calls
 - i. Economy (Jan. & June 2007)
 - ii. Discards (Oct. 2007)
 - c. Communication with the fishery & onboard sampling possibilities
 - d. Other communication (e.g. information on catch regulations, technical regulations etc.)
- 2. Databases: Status quo & future
 - a. Field definitions
 - b. List of species
 - c. Notification of changes
 - d. Quality control
- 3. Website: dcr-germany.de (wiki)
- 4. Allocation of DCR meetings and workshops
 - a. ICES-/STECF-SGRN-workshops & meetings, PGCCDBS
 - i. Diagram of the STECF with subgroups
 - b. Regional co-ordinating meetings (RCMs)
 - c. Evaluation meetings (Programme/Technical report)
 - d. STECF-SGECA meeting (Economy)
- 5. Sampling scheme for 2008
- 6. Quality control: Sampling manual, procedures for error corrections & validation of the collected data
- 7. Communication with data users
- 8. Working time recording
- 9. The future EU data collection regulations
- 10. Pilot projects (Studies)
- 11. Publications

Refer to Annex 15.1 for the minutes of the meeting (in German language).

Further meetings were held in Hamburg and Rostock to consider different issues. However, for these meetings, no financial contribution is requested in 2007.

15.2 International Co-ordination

Please refer to table 15.1 for a list of ICES and other expert groups coordinating surveys, databases and other issues of the DCR. During the ICES PGCCDBS in February/March 2006 and 2007, co-ordination meetings with Denmark, the Netherlands and Sweden respectively were held. The matter of these meetings were an agreement on the sampling of foreign landings of the above mentioned flag states in each of the countries for the year 2007. See programmes of 2007 and 2008 for the agreements.

15.3 Follow-up of RCM Recommendations and Initiatives

Please refer to Annex 15.3 for the list of recommendations from the relevant RCMs for Germany. For every DCR-related recommendation with a demand to Member States, a brief description of the responsive action is listed.

15.4 Follow-up of SGRN Recommendations

Please refer to Annex 15.4 for the list of recommendations from the relevant STECF meetings for Germany. For every DCR-related recommendation with a demand to Member States, a brief description of the responsive action is listed.

15.5 Other relevant issues

There are no other relevant issues.

Acronym/ Abbreviation	Explanation
aeglef.	aeglefinus
AFWG	ICES Arctic Fishery Working Group
BAD	Baltic Acoustic Database (BADI = aggregated data; BADII = raw data)
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 for Food, Agriculture, and Consumer Protection)
BRZ	Bruttoraumzahl (gross tonnage)
BSRP	Baltic Sea Research Project
CPUE	Catch per unit and effort
CTD	Conductivity-Temperature-Depth-Probe
DATRAS	Database trawl survey
DCR	Data Collection Regulation
DIFRES	Danish Institute for Fishery Research
DMV	Deutsche Meeresangler Vereinigung e.V. (German Marine Anglers Association)
DYFS	Demersal Young Fish Survey
EU	European Union
FADN	Farm Accountancy Data Network system
FAL	Bundesforschungsanstalt für Landwirtwirtschaft (Federal Agricultural Research Centre)
FTE	Full time employment
Funct.	Functional
FYK	Fish traps
GNS	Set nets/Gill nets
gt	Gross Tonnage
HAWG	ICES Herring Assessment Working Group
HERSUR	Herring Survey
JRC	Joint Research Centre
IBTS	International Bottom Trawl Survey
IBTSWG	ICES 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
MIX	Mixed fisheries
NACE	Statistical classification of economic activities in the European Community (Nomenclature statistique des Activites economiques dans la Communaute Europeenne)
NAFO	Northwest Atlantic Fishery Organisation
NASC	Nautical Area Scattering Coefficient
No	Number
NP	National Programme

16 List of Acronyms and Abbreviations

NR	Not relevant
NWWG	ICES North-Western Working Group
OSF	Institut für Ostseefischerei, Rostock (Institute of Baltic Sea Fisheries) [new abbreviation]
OTB	Otter trawl bottom
OTM	Otter trawl midwater
PGCCDBS	ICES Planning Group on Commercial Catch, Discards and Biological Sampling
PGHERS	ICES Planning Group for Herring Surveys
poutas.	poutassou
PRODCOM	The EU-wide harmonised classification of products produced by the industrial sector (PRODuction COMmunautaire)
РТВ	Two ship trawl bottom
PTM	Two ship trawl midwater
RCM	Regional Co-ordinating meeting
REDFISH	EU Project: Population structure, reproductive strategies and demography of redfish (Genus Sebastes) in the Irminger Sea and adjacent waters
Reg.	Regulation
RIVO	Netherlands Institute for Fishery Research
SC	Scientific Council
SF	Institut für Seefischerei, Hamburg (Institute of Sea Fisheries) [new abbreviation]
SGABC	ICES Study Group on Ageing Issues in Baltic Cod
SGBYSAL	ICES Study Group on the Bycatch of Salmon in Pelagic Trawl Fisheries
SGRN	STECF Subgroup on research need and data collection
SGRS	ICES Study Group on Redfish Survey
StBA	Statistisches Bundesamt (Federal Statistical Office)
STECF	Scientific, Technical and Economic Committee for Fisheries
TAC	Total allowable catch
TBB	Beam trawl
TTB	Twin trawl (Special gear which is used by the demersal fishery)
UK	United Kingdom
vTI	Johann Heinrich von Thünen-Institute, Federal Research Institute for Rural Areas, Forestry and Fisheries
WG	Working Group
WGBEAM	ICES Working Group on Beam Trawl Surveys
WGBFAS	ICES Baltic Fisheries Assessment Working Group
WGFAST	ICES Working Group on Fisheries Acoustic Science & Technology
WGMEGS	ICES Working Group on Mackerel and Horse Mackerel Egg Survey
WGMHSA	ICES Working Group on the Assessment of Mackerel, Horse Mackerel, Sardine, and Anchovy
WGNPBW	ICES Northern Pelagic and Blue Whiting Fisheries Working Group
WGNSSK	ICES Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerak
WKSDDA	ICES Workshop on Survey Design and Data Analysis
WKSDFD	ICES Workshop on Sampling Design for Fisheries Data
WKSCMFD	ICES Workshop on Sampling and Calculation Methodology for Fisheries Data
ZADI	Zentralstelle für Agrardokumentation und Information (German Centre for Documentation and Information in Agriculture)
ZUMA	Zentrum für Umfragen, Methoden und Analysen (Centre for Emperical Social Research and Methodology)

17 Comments, Suggestions and Reflections

- 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 (MAPG) 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. However, they are not relevant for the biological issues.

- Germany is in favour of the development of a common tool to estimate precision (see section 3.1).

- the German version of Reg. 1639/2001 is incorrectly translated in 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%.

18 References

Anon. 1999. International Baltic Sea Sampling Programme I. Final Report, Study 96/002 Anon. 2000a. Sampling of 8 German commercial fisheries. Final Report, EU Study 97/004

Anon. 2000b. International Baltic Sea Sampling Programme II. Final Report, Study 98/024

Anon. 2002a. Monitoring discarding and retention on fishing vessels towing demersal gears in the North Sea and Skagerrak. Final Report, EU Study 98/097

Anon. 2002b. Sampling of German commercial fisheries. Final Report, EU Study 00/037 Anon. 2004. Report of the Workshop on Economic Indicators. IFREMER, Paris, 10-14 May 2004, 41 pp.

Bundesforschungsanstalt für Fischerei 2007. The German recreational fisheries' cod catch in the Baltic and North Seas, 2004-2006 (in German). Institut für Ostseefischerei Rostock, 78 pp. + 15 Annexes + Executive Summary (in English) 15 pp.

Dillman, D.A. (1978): Mail and telephone surveys: The total design method. New York: Wiley

ICES 2004. Report of the Workshop on Sampling and Calculation Methodology for Fisheries Data. ICES CM 2004/ACFM:12.

ICES 2004a. Report of the Planning Group for Herring Surveys ICES CM2004/G:5 App.IV (Manual for Herring Acoustic Surveys).

ICES 2005 (a). Report of the Planning Group on Commercial Catch, Discards and Biological Sampling (PGCCDBS). ICES CM 2005/ACFM:15.

ICES, 2005 (b). Report of the Study Group on Redfish Stocks. ICES C.M.2005/D:03 ICES, 2005 (c). Report of the Planning Group for Herring Surveys. ICES CM2005/G:04 ICES, 2005 (d). Report of the Workshop on Sampling Design for Fisheries Data. ICES CM 2005/ACFM:11.

ICES 2006. Report of the Planning Group on Commercial Catch, Discards and Biological Sampling (PGCCDBS). ICES CM 2006/ACFM:18.

ICES 2006a. Report of the Workshop on Age Determination of Redfish (WKADR). ICES CM 2006/RMC:09.

Annexes

Annex 3.1

Method for the calculation of precision (analytical)

Precision was estimated as described in the following formula:

$$x = t(1 - \alpha/2, n-1) * s / \sqrt{n} / m$$

where:

- α = probability of error
- $1 \alpha = \text{confidence level (required 95\%)}$
- n = number of observations
- s = standard deviation from observed mean m
- t = t -quantile of Student's distribution
- m = arithmetic mean
- x = precision
- precision levels defined by DCR 1639/2001

0.25 (= +/- 25% of the mean for Level 1) 0.10 (= +/- 10% of the mean for Level 2)

 $0.05 (= \pm - 5\% \text{ of the mean for Level 3})$

Method 2 for the calculation of precision (re-sampling, bootstrap)

The precision was determined as described in the following algorithmic scheme:

Start procedure

Step 1: Raise length sample densities to the haul (if appropriate)

Step 2 Do

Step 2.1 Randomly re-sample the length samples within stratum

Step 2.2 Sum up the re-sampled length densities within stratum Step 2.3 Randomly re-sample individuals with given sex-maturity-age-length within stratum length class

Step 2.4 sum up individuals in sex-maturity-age-length class within stratum length class

Step 2.5 Raise individual number at sex-maturity-age-length class with the quotient stratum length density / sum of individuals at length class

Step 2.6

calculate and store in result_table length_at_age, weight_at_age, male_at_age, mature_at_age, number at age

Step 2.7

calculate and store in result_table male_at_age_prop = male_at_age / number_at_age mature_at_age_prop = mature_at_age / number_at_age

Loop number of resamplings

Step 3

Sort result_table by stratum, age-class and value (e.g. length_at_age, number_at_age)

Step 4

Do

```
Step 4.1
Set counter = 1
Set counter_for_quantile = counter for first quantile
(e.g. 25 for the lower confidence limit with 1000 resamplings and 95%significance)
```

Step 4.1.1

Do

Step 4.1.1.1 Read line from table

Step 4.1.1.2 If counter = counter_for_quantile

Store line for quantile in quantile_table

Set counter_for_quantile = counter for next quantile (e.g. 500 for the mean with 1000 re-samplings)

end if

Step 4.1.1.3 Increment counter

Loop until new stratum

Loop until end of result_table

Step 5

Calculate precisions from quantile_table by the help of a pivot table in EXCEL

Precision_parameter_at_age = (Lower_precission_parameter_at_age + Upper_precision_parameter_at_age)/2

Precision_parameter_at_stratum = average(precision_parameter_at_age)

(for ages contributing 95% to number_at_age and not weighted by number_at_age)

End procedure

Comments on method 2 Precisions were calculated on basis of fleet segments and quarterly.

Re-sampling was done more than thousand times and covered always all samples.

The number of length samples in stratum was frequently below the minimum number said to be required for the method in literature.

The procedure is yet under development and neither thoroughly tested nor optimized to give the best results possible.

Annex 5.1

Fleet segment code for segmentation due to Appendix III of 1639/2001

	German Nomencalture for Fleet Segments				
	Type of Fishing Technique	<12m	Vessel	Length	>=40m
	Group of Gears	< 12111	12 10 \24111	24 (0 <4011	>=40111
	Beam Trawl Dermersal Trawl and Seiners	L1M1 L1M2	L2M1 L2M2	L3M1 L3M2	L4M1 L4M2
Mobile Gears	Pelagic Trawl and Seiners Dredges	L1M3 L1M4	L2M3 L2M4	L3M3 L3M4	L4M3 L4M4
	Polyvalent	L1M5	L2M5	L3M5	L4M5
Passive Gears	Gears using Hooks Drift and Fixed Nets Pots and Traps Polyvalent	L1S1 L1S2 L1S3 L1S4	L2S1 L2S2 L2S3 L2S4	L3S1 L3S2 L3S3 L3S4	L4S1 L4S2 L4S3 L4S4
Polyvalent Gears	Combining Mobile and Passive Gears	L1P0	L2P0	L3P0	L4P0

This segment is aggregated for all passive gears

Note 2 if a vessel spends more than 5% of ist time using a specific type of fishing technique it should be included in the corresponding segment

Note 3 Length is defined as length overall (LOA)

Note 1 if a gear category contains fewer than 10 vessels then the cell can be merged with a neighbouring length category to be specified in the national programmme

Annex 12.1

List of entries (accounting)

0.) General data to the enterprise and the accountancy

Description	Code
accountancy (encoded) internal accountancy number of the enterprise federal state administrative district NUTS Code community currency EU Code of the vessel not relevant for fisheries socio-economic type of enterprise entfällt, da fisheries legal form objective (area) kind of enterprise (conventiell/alternative) date of the statemant of accounts compensation recieved type of the account statement (tax or others) kind of entries (netto, brutto) type of the turnover tax system not relevant for fisheries not relevant for fisheries	0001 0002 0003 0004 0005 0006 0009 0010 0016 0018 0019 0020 0021 0022 0021 0023 0024 0025 0026 0027 0028 0029 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 immatrial assets	1019
II. material assets	
land and properties	1020
land/properties, others	1020
buildings	1023
operating buildings	1025
sum of 1020 - 1025	1029
technical equipment and machineries	1020
machinery	1030
vessel	1035
engine of the vessel	1036
fisheries equipment on board	1037
sum of 1030 - 1039	1039
orrerassers	1040
fleet of lorries	1041
factory equipment	1043
sales equipment	1045
others	1040
inferior economic goods	1048
sum of 1040 - 1048	1049
down payments and installations / plants under construction	
down payments made and installations / plants in progress sum of 1029, 1039, 1049 and 1078	1078 1079
III. financial assets	
financial participations	1087
financial investments	1088
D) Floating assats	1005
L stock in hand	
row material and supplies	1109
products / service in progress	1118
produced products	1120
stock-in-trade down payment made	1121
sum of 1109, 1118, 1121 and 1148	1149
II. debts	
trade accounts receivable	1150
other debtors	1158
III Securities	1159
securities	1168
sum of 1168	1169
IV. unconditional order of pay	
cheques, bills an notes in hand	1168
sum of 1149, 1159, 1169 and 1179	1169
E) deterrat entry	1199
 r) special loss account of reserves (§17 Abs. 4 DMBilG) c) definition account of reserves (§17 Abs. 4 DMBilG) 	1209
G) dencit not covered by equity capital	1219
activa sum of 1000, 1089, 1099	1229

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

2.) <u>F</u>	Profit and loss statement of account (1)						
Desci	ription	Code					
	·						
1. 1	urnover						
g)	turnover of fish and other sea food	0040					
	turnover (domestic) from fish and other sea food	2310					
	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					
1)	impairments	2338					
	sum of 2319, 2337 and 2339	2339					
4. a	ndere aktivierte Eigenleistungen	2349					
5. 0	thers earnings						
a)	grants and subsidies						
	on investments	2357					
	grants for economic plights	2358					
	other grants	2359					
	subsidies for economic nlights	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					
	other subsudies	2447					
	sum of 2357 - 2448	2440					
b)	other operating earnings	2110					
0)	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					
	non paried related carpings	2455					
c)	returns from debits of tangible assets	2460					
	returns from debits of land and buildings	2460					
	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 returns	2495					
	sum of 2460 - 2496	2490					
	sum of 2449, 2459 and 2497	2498					

	2)	Profit and loss statement of account (2)	
1	Des	scription	Code
	6.	operating expenses	
	e)) trade, services and others supplementary enterprises wages and hire on machines tourism charter other services sum of 2758 - 2767	2758 2762 2763 2764 2767 2769
	f)	 other operating expenses heating electricity water, waste, ice fuel and lubrication oil packing other expenses wages and hire on machines charging and recharging other miscellaneous services sum of 2770 - 2784 	2770 2771 2772 2773 2780 2781 2782 2783 2784 2785 2786
	5.) changes of the inventory mon the rew meterial and surlies	2797
	n, 5)	changes of the inventory upon the raw material and suplies	2707
	1)	sum of 2769, 2785, 2786,2787 and 2788	2789
	7.	personnel expenses	2700
		wages and salaries of permantal stuff wages of non-permantal stuff old-age pension social (insurance) costs other allowances accident insurance sum of 2790 - 2798	2790 2791 2792 2793 2794 2798 2799
	8.	depreciation	
		tangible assets (budgedet) impersonal assets (budgeded) tangible assets (unbudgedet) impersonal assets (unbudgeted) floating assets (special effects) floating assets (expected special effects in future) special loss account sum of 2800 - 2809	2800 2801 2802 2803 2805 2806 2808 2808 2809
	9.	other operating expenditure	
	a)) maintenance maintenance buildings maintenance operating devices maintenance machines and technical tools maintenance fishing vessel maintenance fishing vessel engine maintenance fish finding equipment maintenance car	2813 2816 2817 2821 2822 2823 2824
		maintenance fleet of lorries	2825
		sum of 2800 - 2809	2809
	b) working insurance	
	0	building insurance car insurance lorry insurance legal costs insurance third party insurance other insurances sum of 2830 - 2838	2830 2831 2832 2836 2837 2838 2839

2)	Profit and loss statement of account (3)	
De	scription	Code
c) trade, services and others	
	leasing	2841
	reat estate levy	2845
	other levies	2851
	assiciation levies	2852
	presents till 38 € (§4 Art.5 EStG)	2853
	expenses for the tax consultancy, bookkeeping and audit	2855
	economic consultation	2856
	legal consultation	2857
	operating budget	2859
	special transfer to reserves	2861
	transfer to the general reserves	2862
	non deductible working expenses	2863
	telecommunication expenses	2866
	advance tax payments	2867
	other operating expenditure	2868
	sum of 2841 - 2808	2869
G	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
	valuation reserves	2890
	special transfer to reserves	2891
	non - periodical expenses of advance tax payments	2894
	sum of 2870 - 2895	2895
	sum of 2829, 2839, 2869 and 2896	2897
	operating result as balance of 2339, 2347, 2349, 2498, 2789, 2799, 2809, 2897	2899
10.	earings of participations	2900
11.	earings of investments in securities	2902
12.	earings of interest on deposits	2904
13.	earnings of profit sharing participation contracts	2906
14.	earnings of loss takeover	2908
15.	depreciation anowance of financial participations and securities of the	2910
16	expenses of loss takeover	2912
17.	nay over of profit sharing participation contracts	2913
18	loan services and similiar expenses	2914
19	profit premium based on §4 Art. 5 EStG	2916
	financial result 2900, 2902, 2904, 2906, 2908, 2910, 2912, 2913, 2914, 2916	2870
20.	result of the normal acitities as balance of 2899 and 2918	2919
21.	extraordinary earnings	2920
22.	extraordinary expenses	2924
23.	result of all extraordinary events as balance of 2920 and 2924	2929
24.	taxes from incom	
	corporation (income) tax	2930
	tax on capital income local business tax	2931
	sum of 2930 - 2932	2939
24.	taxes from incom	
	real estate tax	2940
	car tax	2941
	local capital business tax	2944
	operating property tax	2945
	other business tax	2948
24	profit and loss as balance of 2919, 2929, 2939, 2949	2959

3.) appendix sheet with assets

code	description	historic value at market	additions	ransfers	retirements	depreciation value (accumulated)	book value (current year)	book value (previous year)	depreciation value (current year)
2044	The second second								
3014	sum of 3014								
	II) tangible asset								
3020 3021 3022 3023 3025 3029	1. Iand and buildings land (§55 Art. 1 EStG) other land / property soil improvement buildings operating buildings sum of 3020 - 3025								
	2. technical equipment and machineries								
3030 3031 3035 3036 3037 3039	facilities machinery vessel engine of the vessel fisheries equipment on board sum of 3030 - 3037								
	3. other assets and furnitures and fixtures								
3040 3041 3043 3045 3046 3047 3048 3049	car lorry fleet factory equipment sales equipment fumiture and fixtures others inferior economic goods / assets sum of 3040 - 3048								
	6. advanced payments and plants in progress								
3078 3079	advanced payments and plants under construction sum of 3029, 3039, 3049, 3078								

4.) Itemized list of liabilities to banks

code	description	nominal value [€]	total term of loan [years]	residual term of loan [years]	loan rate [%]	loan payments [€]	amount (business year) [€]	amount (previous year) [€]	redemption [€]
3920 3921 3922 3923 3924 3925 3926 3926 3927 3928 3929 3930 3930 3931 									
3996 3997 3998 3999	sum of 3920 - 3995 thereunder short-term thereunder medium-term thereunder long-term		\equiv	\equiv	\equiv				\equiv

5.) <u>labour</u>									
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)
7001 7003 7004 7005 7006 7007 7008 7009 7010 7011 7011 7011 7012	I. non - remunerated labour (works manager / ownwer, family members,) sum of 7001 - 7088	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							
7090 7091 7092 7093 7094 7095 7096 7096	II. salaried personnel andwage - earners								_
7099	III. salaried personnel and sum of 7089 - 7098								

Descr	ription	Code
L ve	essel	
	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
l. a	ctivity	
	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. sł	hare of sales	
	shrimps [%]	8117
	salt - water fish [%]	8118
	fresh water fish [%]	8119

Annex 15.1

Minutes of the Meeting

National Co-ordination (German Fisheries Data Collection Program) 2007

Hamburg, BFAFi, 20.11.2007

Teilnehmer:

Cornelia Albrecht (ISH), Dr. Jörg Berkenhagen (IFF), Ulrich Berth (IOR), Michael Ebeling (IFF), Andreas Gebel (IOR), Steffen Hagemann (IOR), Solveig Helmert (FAL), Daniel Krause (BLE/ZADI), Sakis Kroupis (ISH), Kay Panten (ISH), Jürgen Schlickeisen (ISH), Dr. Christoph Stransky (ISH, Vorsitz), Jens Ulleweit (ISH), Dr. Andrés Velasco (IOR), Wolfgang Wern (BLE), Gunnar Wolff (BLE), Dr. Christopher Zimmermann (IOR)

Ablauf und wichtigste Ergebnisse:

Herr Dr. Stransky eröffnete die Sitzung um 10:00 Uhr, die Teilnehmer stellten sich vor, und die Tagesordnung wurde angenommen.

TOP 1: Durchführung des DCR-Programms: Erfolge & Probleme

Pilotstudie Angelfischerei (IOR)

Herr Dr. Zimmermann stellte die Ergebnisse der Pilotstudie zur Angel- und Freizeitfischerei auf Kabeljau/Dorsch, Lachs und Roten Tun gemäß der VO 1581/2004 (Appendix XI) vor, die im Sommer veröffentlicht wurden. Die Definition "Freizeitfischer" bezieht sich auf Angler und Hobbyfischer, die ihre Fänge nicht kommerziell vermarkten. Herr Wolff merkte an, dass in Schleswig-Holstein ein Direktverkauf "am Steg" möglich sei. Insgesamt gibt es nur wenige Hobbyfischer, jedoch zahlreiche Angler. 2004 waren nur wenige Daten und keine Fangstatistik verfügbar, daher war das IOR auf die freiwillige Mitarbeit der Angler über Fangmengen etc. angewiesen. Grundbedingung der Befragungen war, dass die befragten Personen anonym bleiben. Die Angelfischerei ist nicht quotiert und betrifft die deutsche Küste oder Kutter, die aus/in deutsche/n Häfen fahren. In Niedersachsen (Nordseeküste) sind die Angelaktivitäten vernachlässigbar für den Kabeljau (nur 30t Gesamtentnahme), für andere Arten wie Makrele und Wolfsbarsch evtl. wichtiger. Die Angelbeprobungen in der Ostsee wurden entlang der 804 km langen Küste nach 5 Regionen stratifiziert. Es wurden verschiedene Probenahmestrategien verwendet und insgesamt festgestellt, dass die in der Angelfischerei getätigten Fänge und deren Variabilität in den Bestandsberechnungen für den Ostseedorsch berücksichtigt werden müssen. Die Anzahl der Angler wurde über die Angelerlaubnisse ermittelt, der Fangaufwand über Briefumfragen, die Einheitsfänge über Umfragen bei Vereinen. In der Ostsee wurden 113000 bis 147000 Angler ermittelt, die durchschnittlich 6,3 bis 10,2 Angeltage im Jahr aufwenden. Es wurde generell angegeben, ob es sich um Schätzwerte handelt oder die Zahlen durch Aufzeichnungen belegt sind. Der Gesamtaufwand belief sich auf 900000 bis 1,5 Mio. Angeltage pro Jahr, die etwa zu 50% von Land und zu 50% auf See verbracht wurden. Die Einheitsfänge waren auf See deutlich höher als an Land. Zwischen 2 und 5 Millionen Dorsche wurden pro Jahr entnommen (Gewicht: zusätzlich 50-70% der kommerziellen Fischereimengen). Andere Fischarten waren ohne besondere Bedeutung. Die Umfragebeteiligung war gering aber statistisch ausreichend groß.

Wegen der Größenordnung der Fänge ist eine solche Erhebung jedoch nicht vernachlässigbar, sondern jährlich durchzuführen.

Pilotstudien anderer Mitgliedstaaten ergaben deutlich geringere Dorschfänge, jedoch besteht ein Zusammenhang zwischen dem Beprobungsaufwand und den resultierenden abgeschätzten Fangmengen. Dänemark hat nur den Öresund bearbeitet, dort auch nur die kommerzielle Kutterfischerei und nicht die private, wobei erwiesen ist, dass sich zahlreiche deutsche Anglerurlauber in Süddänemark aufhalten. Schweden hat sowohl Befragungen als auch Markierungsexperimente durchgeführt, in letzteren wurden jedoch nur 5 Wiederfänge registriert. Polen hat nur Angelkutter bearbeitet, die insgesamt 225t entnahmen. Eine Empfehlung des RCM Baltic sieht die Fortführung der Beprobung der Angelfischerei und die Standardisierung der Methoden vor. Eine nationale Fortführung der Datenerhebung ist geplant. Trotz des "Herunterspielens" des Problems durch SGRN (Sub-group on Research Needs, Juli 2007) hat das STECF (Plenarsitzung Nov. 2007) festgestellt, dass die Fänge der Angelfischerei in Bestandsberechnungen berücksichtigt werden müssen. Im Sept. 2008 soll die Angel- und Freizeitfischerei in einer "Theme Session" der ICES-Jahrestagung behandelt werden.

Im Anschluss wurden die *Erfolge und Probleme bei der Datenerhebung* in den beteiligten Institutionen erörtert:

IOR:

Im IOR wird z.Zt. eine "Small Scale Study" unter dem Aufruf ("Call") zum Einreichen von Projektanträgen vom August 2006 (Lot 8 "Joint data collection between fishing sector und the scientific community in the Baltic Sea", Koordination IOR, Laufzeit 18 Monate) durchgeführt, die u.a. den Zugang zu den Schiffen (& VMS-Daten) verbessern soll. Insgesamt lief die Kommunikation mit der Fischerei gut. Um die VMS-Daten zu evaluieren, wurden einige Schiffe mit GPS-Geräten ausgestattet. Außerhalb dieser Studie hat sich die Kommunikation, vor allem mit Eignern in Heiligenhafen ("Expansion" nach Osten, Kontakte zu Kutterfisch) und Fehmarn verbessert, während die Mitnahme auf Sassnitzer Kuttern weiterhin schwierig ist. Herr Dr. Velasco und Herr Hagemann fügten an, dass einige Fischereisegmente nun vom IOR beprobt werden könnten, nachdem Herr Dr. Zimmermann persönliche Kontakte zu den relevanten Fischereigenossenschaften aufbauen konnte.

ISH:

Herr Dr. Stransky führte aus, dass unsere Zusammenarbeit mit Fischerei darauf basiert, dass wir biologische (wissenschaftliche) Beobachter an Bord schicken, und nicht Beobachter mit Kontrollfunktion und Weisungsbefugnis von staatlichen Kontrollbehörden (vgl. Probleme in Irland). Ein guter Kontakt zur Fischerei bestehe über den Dialog "Praxis Wissenschaft". Innerhalb der neuen Rahmen-VO (Nachfolge 1543/2000) können nur triftige Gründe (kein Platz, Sicherheitsbedenken) zur Ablehnung der Mitnahme führen. Es folgte eine allgemeine Diskussion über Möglichkeiten der Mitfahrt auf Kuttern, die immer noch unterschiedlich sind und meist von persönlichen Kontakten und der Einstellung einzelner Fischer gegenüber der Fischereiforschung abhängen. Wie Herr Dr. Stransky erläuterte, ergaben sich durch den Anreiz von 3 zusätzlichen Fangtagen im sog. "erweiterten Beprobungsprogramm" (VO 41/2007, Anhang IIA, Absatz 11) weitere Mitfahrten in der Grundschleppnetzfischerei in der Nordsee. Deutschland hatte neben einigen anderen Mitgliedsstaaten (u.a. Niederlande und Vereinigtes Königreich) fristgerecht im April ein entsprechendes Programm vorgelegt und hat Ende Oktober per KOM-Entscheidung 2007/707/EG für Schiffe mit den Fanggeräten OTB, PTB usw. mit Maschenweiten ≥ 100 mm die zusätzlichen Fangtage genehmigt bekommen.

Diese Ausnahmeregelung ist als erster Ansatz der EU-Kommission für ein Belohnungsprinzip zu sehen und wird wahrscheinlich an Bedeutung gewinnen.

Die hohe Dynamik gerade bei der deutschen Hochseeflotte, die von wenigen großen europäischen Firmen betrieben wird, ergibt z.T. eine zwangsweise Abänderung der Beprobungspläne, was dazu führen kann, dass ggf. der Technische Bericht nicht mit dem Programm kongruent sein kann.

Zur Kommunikation mit der BLE wurde ein verbesserter Informationsfluss bezüglich aktueller Veränderungen (z.B. Fangstopps) erwünscht. Herr Wolff wies darauf hin, dass derartige Meldungen relativ aktuell auf der BLE-Internetseite (Bereich "Kontrolle und Zulassung") veröffentlicht werden. Als weitere Verbessung wurde vorgeschlagen, den Verteiler für den Bundesanzeiger mit fischereirelevanten Gesetzen um das IOR- und ISH-Sekretariat zu erweitern.

IFF/ISH/FAL (Ökonomie):

Die Arbeiten über die Ökonomie der fischverarbeitenden Industrie konzentrierten sich auf die Zusammenstellung der Grundgesamtheit. Zurzeit gibt es ca. 160 fischverarbeitende Betriebe in Deutschland, die stratifiziert nach Arbeitsplätzen erfasst werden und etwa zur Hälfte kleine Betriebe (1-10 Arbeitskräfte) sind. Herr Ebeling wies darauf hin, dass zukünftig ein Abgleich mit den Veterinärämtern und Gewerkschaften zur Feststellung der Grundgesamtheit vorgenommen wird. Die Rücklaufqualität der Fragebögen sei z.T. nicht ausreichend, da die Antworten nicht immer klar zu verstehen seien. Für die weitere Vorgehensweise wurden telefonische Nachfragen, eine Präsenz auf der Fachmesse "fish international" in Bremen (10.-12.2.2008) und die Anforderung der Geschäftsberichte erörtert. Letztere sind nicht veröffentlichungspflichtig und daher nicht immer vorhanden. Insgesamt betrug die Rücklaufrate etwa 30%. Auf die Nachfrage von Herrn Wern, in welcher Abdeckung die ökonomischen Daten der Fischereifahrzeuge vorhanden seien, erwiderte Herr Dr. Berkenhagen, dass generell die Fänge gut abgedeckt wären, die Kostenstrukturen jedoch noch unklar seien.

ZADI/BLE:

In der BLE-Neustruktur wurde die ZADI als Dienstleister, auch zur Verfügbarmachung von DCR-Daten, in die BLE-Gruppe 42 integriert. Die alte IT-Gruppe 12 soll zunächst als solche weitergeführt werden. Herr Wern und Herr Wolff sind weiterhin dem Referat 522 zugeteilt. Probleme & Erfolge in der Datenerhebung in der ZADI und BLE wurden unter TOP 1.b und 2 behandelt, s.u.

b. Daten-Aufrufe der EU

Laut den Aussagen der EU-KOM ist Arbeit an Datenaufrufen nicht anrechenbar, sondern im normalen Rahmen des Mindestprogramms abzuwickeln. Da die neuen DCR-Verordnungen die Abdeckung des gesamten Prozesses von der Datensammlung über die Auswertung bis hin zur Teilnahme an wiss. Expertengruppen vorsieht, werden diese Arbeiten evtl. zukünftig bei der Finanzierung berücksichtigt.

i. Ökonomie

Im Januar und Juni 2007 forderte die EU-KOM flottenökonomische Daten ab. Herr Dr. Berkenhagen erläuterte, dass für verschiedene Segmente (vor allem Hochsee) keine ausreichenden Daten vorlägen und z.T. nur Informationen aufgrund persönlicher Kontakte verfügbar wären. Die aktuellsten Daten für die Kleine Küstenfischerei stammen von 2003; eine erneute Umfrage wird zurzeit erstellt. Eine zusätzliche Arbeitsbelastung für die DCR-Ökonomen stellen die Quartalsberichte für das BMELV dar, da noch keine Planstellen-Ökonomen eingestellt wurden. Ein Teil der ökonomischen Daten kann aus dem Testbetriebsnetz bezogen werden, das evtl. für DCR-Zwecke erweitert werden könnte. Zusätzliche Daten stehen über Steuerberater zur Verfügung. Ertragsdaten werden von der BLE geliefert.

ii. Discards

Für den letzten Aufruf zur Lieferung von biologischen und ökonomischen Daten zur Einschätzung der Discardanteile in den europäischen Flotten wurde am 22.10. ein ad-hoc-Treffen im ISH mit Vertretern der beteiligten Institutionen einberufen und die Daten bis zur Einreichfrist (11.11.) zusammengestellt & geliefert. Die ökonomischen Daten beschränkten sich auf die Preise (Erlöse), die von der BLE nachgeliefert wurden.

TOP 2: Datenbanken: Stand & Zukunft

Herr Krause führte aus, dass die Datenkategorien in der VO nicht eindeutig definiert oder zumindest für Informatiker nicht immer verständlich seien. Die Erfahrungen der letzten Datenaufrufe der KOM haben ebenfalls gezeigt, dass bestimmte Parameter oder Gruppierungen nicht klar definiert waren, z.B. die Plattfischfischerei, oder kurz vor Ende der Einreichfrist hinzugefügt wurden (z.B. Maschenweite). Zudem gestaltete sich das Hochladen der Daten problematisch aufgrund unsauberer Programmierung durch das JRC. Die Codification-Seiten des JRC sollen der Vereinheitlichung der Parameter dienen, sind jedoch nicht immer konsistent mit anderen VOn. Für die Artnamen wird auf die ASFIS-Liste der FAO (ftp://ftp.fao.org/FI/stat/data/ASFIS_sp.zip) verwiesen, die jedoch nicht immer mit den Artcodes der TAC- und Quoten-VOn korrespondiert. Herr Krause hat daher entsprechende Übersetzungslisten erstellt.

Bei der Zusammenstellung der Logbuchdaten von der BLE tritt das Problem auf, dass Access keine führende Zahl im Spaltennamen akzeptiert und dass die Verwendung eines Bindestrichs problematisch ist. Herr Krause hat die Spaltennamen bereits geändert, so dass sich für die Fischereistatistik folgende Spaltenüberschriften ergeben:

In den Logbuchscheinen existiert kein Feld "Zielarten", so dass Fischereiaktivitäten für die fischerei-/flottenbasierte Beprobung (Nantes-Matrix) nur aufgrund von Logbuchdaten (Poststratifizierung) den Fischereisegmenten (Metiers) zugewiesen werden können. Anlandedaten kleiner Schiffe (<8m) können unter einer Reisenummer zusammengefasst sein (Monatsmeldungen), woraus sich z.T. hohe Anlandungen in einer Reise ergeben können. In Logbuchscheinen können mehrere Hols zu einer Zeile zusammengefasst sein, wobei alle Hols an einem Tag getätigt sein müssen und in einem Rechteck liegen müssen. Ab 2009 wird das elektronische Logbuch für Schiffe >24m verpflichtend.

Die IOR-Datenbank liegt hinter dem Zeitplan zurück, beinhaltet jedoch schon jetzt 2 Jahre kommerzieller Beprobung (2005-2006). Die Erstellung der Kopfdaten hat die meiste Zeit beansprucht, da diese auch identisch für Surveys und kommerzielle Fischerei sein sollen. Auch die Entwicklung der ressortweiten Datenbank ist aus verschiedenen Gründen (u.a. Weggang Dr. Kafemann) etwas ins Stocken geraten.

TOP 3: Internetportal dcr-germany.de

Herr Dr. Stransky stellte die Struktur und Funktionen des Internetportals für die deutschen DCR-Aktivitäten vor. Zurzeit ist die Portalseite als Vorversion mit einer Dokuwiki-Oberfläche über <u>www.dcr-germany.de</u> (Weiterleitung an <u>https://npf-wiki.zadi.de</u>) nur doppelt gesichert über 2 Benutzernamen/Passwort-Abfragen erreichbar. Möglichkeiten eines direkten Lesezugriffs und eines erweiterten Download-Volumens (zurzeit nur wenige MB) werden von Herrn Krause eruiert. Ebenso wird die Verwendung einer alternativen Oberfläche (Alfresco) getestet. Die Erstellung einer Portalseite erscheint allen Beteiligten sehr sinnvoll, um den Informationsfluss aufrechtzuerhalten und die standortunabhängige Verfügbarkeit gemeinsam genutzter Dokumente zu verbessern. Die EU wird in Zukunft einen webbasierten Zugriff auf die nationalen Datenbanken (Metadaten) und Aktivitäten einfordern, so dass wir als MS damit gut gerüstet wären.

TOP 4: Besetzung von DCR-relevanten Sitzungen und Workshops

Der vorläufige Plan zur Besetzung der DCR-relevanten Sitzungen 2008 wurde vorgestellt und ergänzt. Die aktuelle Planungstabelle wird auf der Portalseite (s. TOP 3) abgelegt. Herr Dr. Stransky zeigte eine Übersicht zum STECF und seinen Untergruppen mit deren Aufgabenbereichen.

TOP 5: Beprobungspläne 2008

Die Liste der für 2008 geplanten Beprobungsreisen wurde vom ISH und IOR vorgestellt und kurz diskutiert. Aufgrund des erweiterten Beproberprogramms (s. TOP 1, ISH) und einer vom ISH durchgeführten Discardstudie können sich noch geringfügige Änderungen ergeben. Die IOR-Liste enthält Seebeprobungen (on-board sampling) und Hafenproben (self-sampling).

TOP 6: Qualitätskontrolle: Beprobungsanleitung, Verfahren zur Fehlerkorrektur & Validierung der erhobenen Daten

Unter der Federführung von Herrn Ulleweit wurde schon im letzten Jahr eine Beprobungsanleitung erstellt und für die Version 2 erweitert. Sie soll auf jeden Fall weitergeführt werden und Veränderungen in der Flottenstruktur berücksichtigen. Vom IOR wird eine Beschreibung der Hafenbeprobungen und Fangreisen auf Hering und Flunder nachgefordert.

Herr Schlickeisen ist kürzlich u.a. für die Mitarbeit in der Pflege der DCR-Datenbanken eingestellt worden und wird sich in Zusammenarbeit mit den involvierten Institutionen in die Erstellung von Fehlerroutinen einarbeiten.

TOP 7: Kommunikation mit Datennutzern

Alle Datennutzer, vor allem Teilnehmer an ICES- oder STECF-Arbeitsgruppen, sind aufgefordert, sich zu erkundigen, wie die Daten erhoben wurden und welche Defizite ggf. existieren, um selbst über die Datenqualität im Klaren zu sein.

TOP 8: Zeiterfassung

Die elektronische Projektzeiterfassung ist nach einigen Anlaufschwierigkeiten und Nachbesserungen durch die Fa. AZS bis Ende des Jahres startklar, so dass ab Anfang 2008 alle DCR-Arbeitszeiten elektronisch erfasst und für die Finanzbericht-Auswertung direkt genutzt werden können.

TOP 9: Zukünftige Datenerhebungsverordnung(en)

Die Grundsätze der neuen DCR's bleiben im Prinzip bestehen. Der Vorschlag zur neuen Rahmen-VO (Nachfolge 1543/2000) soll noch im Fischereirat im Dezember abschließend angenommen werden, nachdem noch div. Vorbehalte der MS berücksichtigt wurden. Die deutschen Vertreter in den Ratsarbeitsgruppen und im Ausschuss der ständigen Vertretungen konnten bewirken, dass die zunächst vorgesehene Einbeziehung von Süßwasserarten der Beschränkung auf die diadromen Arten Lachs und Aal gewichen ist. Die neue Durchführungs-VO soll im Laufe des ersten Halbjahrs 2008 im Entwurf erstellt werden und bis Ende 2008 abgeschlossen sein, um ein Inkrafttreten Anfang 2009 zu realisieren.

TOP 10: Pilotprojekte (Studies)

Die EU-KOM hatte auf den RCMs mitgeteilt, dass bis Ende des Jahres noch 2 Calls folgen, die u.a. Pilotprojekte vorsehen, an denen sich unsere Institutionen beteiligen können, z.B. "Web services for support of Growth and Reproduction Studies (WebGR)" und "Adding value to the international mackerel egg surveys".

TOP 11: Veröffentlichungen

Veröffentlichungen auf der Basis von DCR-Daten und –Erfahrungen sind absolut wünschenswert. Als Anregung wird Herr Dr. Stransky in den nächsten Wochen einige Beispiele für internationale Publikationen aus den letzten 3 Jahren als Verweise auf die Portalseite setzen. Derartige Veröffentlichungen profitieren oft vom Dialog mit Fachkollegen und der Fischerei.

Die Sitzung endete um 16:15 Uhr mit dem Dank an alle Beteiligten für die gute Zusammenarbeit.

Annex 15.3

LIST OF RECOMMENDATIONS

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.	Cod data for 2004-2006 had been uploaded. 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	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.

	agreed by the working group.	
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 accurate 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 fiching activities on the
DOM North Ore	The DOM North See and Sect Autor	survey targets (mostly abundance estimation).
& East Arctic 2006	recommends that harmonisation of sampling and compilation of fishery dependent data should be made.	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.
RCM Baltic 2007	The RCM Baltic recommends that all MS submit data in the agreed format when requested. The compiled regional data should be distributed to the members of RCM Baltic well before the meeting.	The request for national data on landings & effort came relatively late, but were submitted by Germany in time before the meeting.
RCM NS&EA 2007	The RCM NS&EA recommends that all MS submit data in the agreed format when requested. The regional data should be compiled well before the meeting and be distributed to the RCM participants	The request for national data on landings & effort came relatively late, but were submitted by Germany in time before the meeting.
RCM NS&EA 2007	RCM recommends that processing the data should be made in advance of the meeting so that no processing of data should be made during the RCM. The template done this year should be used (see annex of RCM NEA 2007)	Germany will ensure data delivery in time before the next meeting, in order to allow in-depth analysis before the RCM.
RCM Baltic 2007	The RCM is aware of FISH/2007/03 Lot 5: Development of tools for logbook data analysis, but will draw the attention to that some temporary solutions are needed until more permanent solutions are established based on the results of the outcome of this study. Until robust international guidelines for analysis of logbook data is available RCM Baltic recommends that: at a trip level, or at a fishing operation level when possible, the retained part of the catch should be classified by target assemblage (demersal, freshwater, anadromous) and sorted by weight. The target assemblage that comes up at the first position should be considered as the target assemblage to report in the matrix. when logbook data is incomplete regarding the number of rigs for demersal trawls the fishing trips/fishing operations should be allocated to OTB. the selectivity devices Bacoma and T90 should be treated as one strata until	Germany will follow these recommendations in future data handling and data deliveries.

	it is possible to distinguish between them in the logbooks. midwater otter trawls (OTM) are allocated to the OTM fishing activity even if they sometimes are operated very close to the bottom	
RCM NS&EA 2007	The RCM NS&EA recommends that, at a trip level, or at a fishing operation level when possible, the retained part of the catch should be classified by target assemblage (crustaceans, cephalopods, demersal,) and sorted by weight (by total value in the case of valuable crustacean species, e.g. Nephrops). The target assemblage that comes up at the first position should be considered as the target assemblage to report in the matrix. The RCM NS&EA understands that this way of doing does not allocate any information to the métiers targeting mixed target assemblages.	Germany will follow these recommendations in future data handling and data deliveries.
RCM Baltic 2007	The Baltic RCM recommends to further investigate the amount and variability of recreational fisher's catch of Baltic cod, with the aim to include these catches as soon as possible in the assessment and management advice.	Germany continued sampling the recreational cod fisheries in the Baltic Sea, using the methods outlined in the report on the pilot study (Bundesforschungsanstalt für Fischerei, 2007).
RCM NS&EA 2007	The RCM NS&EA recommends that in general 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. Several trips of the high-seas fisheries are conducted over 8-10 weeks, and one trip each covers all fishing activities within a season.
RCM Baltic 2007	The RCM Baltic recommends that all MS upload data (effort, landings-all species, sea-sampling, sampling of landings) for the trawl fisheries targeting cod in the Baltic in order to allow analysis of the fisheries facilitating future task sharing of discard sampling	Data will be uploaded by Germany.
RCM NS&EA 2007	The RCM recommends that Belgium, the Netherlands, the United Kingdom and Germany will act together in compiling the mentioned working document for the demersal beam trawl métier targeting flatfish in the North Sea.	Germany will prepare a joint working document together with B, NL and UK for the next RCM NS&EA, as recommended.
RCM NS&EA 2007	The RCM NS&EA recommends that all MS take part in the case study on spatial aspects on growth patterns for North Sea cod by submitting data to France using the template in Annex 6.	Germany will send those data to France well in advance of the next meeting.
RCM NEA 2007	RCM NEA recommends that all fishing operations sampled on-board research vessels be flagged when the sorting process does not operate on the complete catch (sub-sampling from total catch for species distinction).	Germany generally records this information when storing the data.

Annex 15.4

LIST OF COMMENTS

Source	Comments	Action
SGRN	DEADLINES AND TRANSLATION	Germany respects the deadline set by
Evaluation of	PROBLEMS	SGRN. Latin names are used for all
Tech.Rep. 2005	For the completeness and equitability of	species in the tables of the technical
(July 2006)	its work, SGRN insist that, in future, MS	report.
	scrupulously respect the deadline.	
	SGRN recommends that, in the future,	
	MS use the scientific Latin name for all	
	species in the tables.	
SGRN	ON THE QUALITY OF THE	Germany is trying to layout the
Evaluation of	TECHNICAL REPORTS	technical report as concise as
Tech.Rep. 2005	SGRN re-iterates its standpoint that the	possible while providing all required
(July 2006)	Technical Reports should be as concise	information.
	as possible, while at the same time	
	providing all the information that is	
	necessary for the evaluation of the MS's	
0000		O anno ann às ta às a ta final an
SGRN	ON PRECISION LEVEL AS A DCR	Germany is trying to find an
Evaluation of	CON is of the opinion that a number of	appropriate statistical method to
(huby 2006)	SGRIN IS OF THE OPINION THAT A NUMBER OF	discords but also for other
(July 2000)	stanuaru statistical methous are	narameters Nevertheless Cermany
	procedures to calculate precision levels	is in favour of the development of a
	should not be used as an excuse for not	common tool to estimate precision
	providing estimates in the Technical	that guarantees the international
	Reports.	comparability of precision levels.
SGRN	ON THE DEROGATION RULES	Before sampling programmes are
Evaluation of	REGARDING LOW LEVEL OF	directed in order to reach certain
Tech.Rep. 2005	LANDINGS	precision levels, Germany is in favour
(July 2006)	SGRN proposes that MS should	of the development of a common tool
	undertake to sample to precision levels	to estimate precision that guarantees
	rather than on the basis of historical	the international comparability of
	landings so that the mortality estimates	precision levels.
	derived from catch age and length	
	sampling are accurate and achieve a	
	high precision for the individual species	
	and stocks affected.	• • • • • •
SGRN	ON THE FINAL STATUS OF THE	Germany ensures that the finally
Evaluation of	NATIONAL PROGRAMMES	accepted version of the NP are
1ecn.Rep. 2005	SGRN recommends that the changes to	available to SGRN before the
(July 2006)	the NP Proposals that were agreed	corresponding evaluation meeting.
	down in an addendum to the NP	
	Proposal and that these addenda be	
	made available on the IRC data	
	collection website	
SGRN	ON THE USE OF DCR DATA FOR	Germany does make every effort to
Evaluation of	OTHER THAN SCIENTIFIC PURPOSE	guarantee that collected sensitive
Tech.Rep. 2005	SGRN stresses that sensitive data	data are only used for scientific
(July 2006)	which has been collected only with the	purposes and are dealt with in a
	cooperation of the fishing industry such	confidential way.
	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	

SGRN Evaluation of Nat.Prog. 2007 (Nov. 2006)	confidential way (Article 9, 1639/2001). 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.	
SGRN Evaluation of Tech.Rep. 2006 (August 2007)	DEADLINES AND TRANSLATION PROBLEMS For the completeness and equitability of work, SGRN insist that, in future, MS scrupulously respect the deadline and recommends the Commision to make su that all TR are available at least two wee before the SGRN meeting.	f its ure eks	Germany respects the deadline set by SGRN.	
SGRN Evaluation of Tech.Rep. 2006 (July 2007)	ON THE QUALITY OF THE TECHNICA REPORTS SGRN re-iterates its standpoint that the Technical Reports should be as concise possible, while at the same time providin all the information that is necessary for the evaluation of the MS's achievements.	AL e as ng the	Germany is trying to layout the technical report as concise as possible while providing all required information.	
SGRN Evaluation of Tech.Rep. 2006 (July 2007)	ON THE DANGER AND IMPLICATION OF USING DCR DATA FOR CONTROL AND ENFORCEMENT PURPOSES SGRN stated that the use of DCR data t enforcement purposes had the potential negatively impact on the ability of MS's fulfil their DCR obligations for at sea and market sampling,	l L for l to to d	DCR data are not used for enforcement purposes in Germany. Furthermore, 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 Tech.Rep. 2006 (July 2007)	ON PRECISION LEVEL AS A DCR TARGET SGRN has repeatedly recommend ever MS to estimate the precision o the data obtained by sampling in order to assess the quality of the associated estimates.	у	Germany is still trying to find an appropriate statistical method to calculate precision levels not only for discards but also for other parameters. Following these attempts Germany has calculated precisions levels based on two methods. Nevertheless, Germany is in favour of the development of a common tool to estimate precision that guarantees the international comparability of precision levels. Germany is looking forward to the outcome of the COST project.	
SGRN Evaluation of Tech.Rep. 2006 (July 2007)	ON DATA COLLECTION OBLIGATION Specific data requestssuch as ICCAT ICES, IOTC, GFCM, CECAF, etc., and addressing data collection issues that an within the scope of the DCR but that go further than the requirements laid down the DCR, should become an integral pa of the National Programmes. The NPs of	n S , re in rt	Germany is generally aiming at adjusting the NP according to the requirements of Regional Fisheries Science Organisations such as ICES and NAFO.	

	the MS's concerned should be adjusted	
	accordingly and without delay, even in	
	cases where such new rules are	
	extablished after the submission deadline	
	of the NPs proposals.	
SGRN Evaluation of	ON THE RESULTS OF TUNA TAGGING	Germany has no tuna tagging
Tech Rep. 2006	SGRN is concerned about the	program as there is no tuna
(July 2007)	effectiveness of the bluefin tune pop-up	fishery
(001) 2001 /	tagging programms carried out by several	lionory
	MS	
SGRN Evaluation of	ON THE LEVEL OF SAMPLE RETURN	In Germany, fishermen are not
Tech Rep 2006	AND/OR RESPONSE RATE (Mod. Land	legally obliged to provide data
(July 2007)		and therefore there is no tool to
	SGRN recognises in some	overcome the reluctance in data
	segments/parameters a low sample and/or	provision However it has recently
	response rate. In that case SCPN advises	been made mandatory for all
	the MS to modify the sampling strategy	applicants for EEE fisheries
	and increase their effort to improve the	subsidies to provide required
	return rate in order to enhance the quality	economic data
	and reliability of the data	It is mandatory for enterprises to
		give the requested data to the
		Federal Statistical Office Dut not
		all indicators montioned in
		1620/2001 are collected by the
		Fodoral Statistical Office, For the
		rederal Statistical Office. For the
		segment with less than 10
		by the Federal Statistical Office
		by the Federal Statistical Office.
		For the segment 10-19 only a few
		indicators are collected. To
		improve the information on the
		missing indicators as well as the
		data on the segment of small
		scale enterprises, a questionnaire
		was sent out by the FAL. The
		response rate was much too low,
		while the response rate to the
		questionnaire of the Federal
		Research Institute for Fisheries
		was much better in 2006. So the
		questionnaire strategy of 2006 will
		be prolonged in the following
		years. Every two years a
		questionnaire will be sent out
		asking for the relevant data. This
		strategy is assisted by attendance
		at processor meetings, trade fairs,
		publications and visits of single
		enterprises to enhance
		compliance. But since answering
		the questionnaire is voluntarily,
		the response rate will not reach
		the high level the questionnaires
		ot the Federal Statistical Office
		reach.
SGRN Evaluation of	ON DEFINITION OF EMPLOYMENT	All data have been provided.
Tech.Rep. 2006	(Mod J and K)	For FTE in the Fish Processing
(July 2007)	SGRN advises MS to provide both	Industry sector (Module K) no
	employment and FTE indicators, giving the	segmentation is available by now.
	methodology used to calculate FTE.	For the whole sector the number

		of working hours in enterprises with 10 and more employees is known, so simple mathematical operations deliver ETE
CODN Evaluation of		
Tech.Rep. 2006 (July 2007)	SMALL/LOW TURNOVER VESSELS (Mod J and K)	vessels. (Not relevant for K)
	On several occasions, SGRN has insisted that MSs closely follow the provisions of	
	the DCR with regards to the coverage of the vessel population for economic data	
	collection (Mod J) and that they do not exclude vessels from the sampling	
	population.	
SGRN Evaluation of Tech.Rep. 2006 (July 2007)	ON LEVEL OF DETAIL IN PARAMETER DEFINITION IN THE NP/TR (Mod J and K)	Germany has fulfilled the requirements.
(,	SGRN noticed that many MS failed to give full and meaningful details either in their	
	NP proposal or in the TR on parameter	
	SGRN insists that full details be given on	
	submission in future terms.	
	provide this information of parameter	
	strategy in one document (as a stand-	
	workshops, studies or other documents	
	(e.g. CA documents). SGRN also recommends that copies of the	
	given, preferably in an appendix to the NP	
	proposal.	
SGRN Evaluation of	ON COVERAGE OF PARAMETERS	All parameters have been
Tech.Rep. 2006	(Mod J and K)	provided. For module K all
(July 2007)	the full set of parameter listed in the	13.2, but not for all parameters
	Appendix XVIII. SGRN insists that the MS	Germany has data for (see
	provides all parameters of the Appendix	above).
	XVII parameter of the DCR in Table 12.1	
SCRN Evaluation of	(MP) and 12.2 (EP, if they applied for).	All data have been provided
Tech.Rep. 2006	AND RESPONSE RATE (Mod J and K)	All data have been provided.
(July 2007)	value in case of differences in the rates	
	(sample and/or response) observed for	
	collected Appendix XVII parameters as	
	recommended in the footnote of Table 12.1.	
SGRN Evaluation of	ON SEGMENTATION (Mod J and K)	All data have been provided.
1 ech.Rep. 2006	SGRN is aware that some MS still failed to	
(July 2007)	provide the segmentation in line with the Appendix III demands in Table 12.1, seg	
	SGRN insists that the MS takes the	
	necessary steps to remedy this omission	
	and to make sure that the DCR is correctly implemented.	
SGRN Evaluation of	ON SEGMENTS WITH LESS THAN 10	All data have been provided, not
1 ecn. Rep. 2006	VESSELS (Mod J and K)	applicable for Module K.

(July 2007)	SGRN insists that MS avoids doing aggregation with neighbouring gear type groups, which is not in accordance with the DCR rules.	
SGRN Evaluation of Tech.Rep. 2006 (July 2007)	ON WORDING OF THE SEGMENTS (Mod J and K) SGRN notes that some MS used wordings for the description of the segments in Table 12.1 sqq. as well as in the texts sections that does not fit with the wordings as written in Appendix III and IV of the DCR, e.g. MS used data transmission codification abbreviations. In addition, in some cases different names are used in the text and table parts of the Technical Reports. SGRN insists that the MS is in line with the DCR on this issue in order to avoid confusion and improve clarity. Supplementary information on the segment – if needed – should be enclosed in brackets.	Germany is in line with the requirements of the DCR.