

Ministry of the Flemish Community



Sea Fisheries Service (Oostende, Belgium)
ILVO - Fisheries (Oostende, Belgium)
ILVO- Social Sciences Unit (Merelbeke, Belgium)
BMM-MUMM- Research Institute (Brussels, Belgium)

National Data Gathering Programme
under EC Regulation 199/2008

Belgium

2009 - 2010 - Programme proposal

Oostende – October 2008

Contents

Provided in separate documents:	5
I. General framework	6
❖ Structure of the proposal	6
❖ Description of the transmission to the new DCR.....	6
II.A.1 National correspondent	7
II.A.2 Participating institutes	7
II.A.2 National co-ordination	8
II.B International co-ordination	9
III. Module of Evaluation of the fishing sector	11
III.1 General description of the fisheries	11
❖ Fleet size and fleet segments.....	11
❖ Areas fished	13
❖ Species landed.....	13
❖ Landing and auctioning practices	13
III.B Economic variables	17
❖ Baltic Sea, North Sea and Eastern Arctic and North Atlantic	17
III.B.2 Data quality	17
III.B.3 Regional coordination	18
III.B.4 Derogations and non-conformities	18
III.C BIOLOGICAL-METIER RELATED VARIABLES	19

❖	Baltic Sea, North Sea and Eastern Arctic and North Atlantic.....	19
III.C.1	Selection of metiers to sample.....	19
III.C.2.	Data acquisition.....	25
III.C.2.a	Precision levels.....	25
III.C.2.b.	Proposed sampling regimes for length.....	25
III.C.2.c	Sampling of landings abroad and of landings by foreign vessels	28
III.C.3	Data quality	29
III.C.4	Regional co-ordination	29
III.C.5	Derogations and non-conformities	29
III.D	BIOLOGICAL RECREATIONAL FISHERIES.....	30
III.D.1	Data acquisition.....	30
❖	Recreational fisheries for cod, <i>Gadus morhua</i>	30
❖	Recreational fisheries for eel or sea bass or salmon	30
III.D.2	Data quality	30
III.D.3.	Regional co-ordination	30
III.D.4.	Derogations and non-conformities	30
III.E	BIOLOGICAL – STOCK RELATED VARIABLES	31
III.E.1	Selection of stocks to sample.....	31
III.E.2	Data acquisition	31
	Prime data source: at-sea sampling.....	32
III.E.3.	Data quality	32
III.E.4.	regional co-ordination	32
III.E.5	Derogations and non-conformities	33

III.F.1 Capacity	34
III.F.1.2 Data quality	34
III.F.1.3 Regional Co-ordination	34
III.F.1.4 Derogations and non-conformities	34
III.F.2 Effort	34
III.F.2.2 Data quality	35
III.F.2.3 Regional Co-ordination	36
III.F.2.4 Derogations and non-conformities	36
III.F.3 Landings	36
III.F.3.1 Data acquisition	36
III.F.2.2 Data quality	37
III.F.2.3 Regional Co-ordination	37
III.F.2.4 Non-conformities.....	37
❖ The problem of the 'restricted' list.....	37
❖ The problem of 'mixed' landings.....	38
III.F.2.3 Regional Co-ordination	38
III.F.2.4 Derogations and non-conformities	39
III.G SURVEYS AT SEA	40
1. III.G.1 Planned surveys	40
❖ Demersal Young Fish (and Brown Shrimp) Survey (DYFS)	40
❖ North Sea Beam Trawl Survey (BTS)	41
2. III.G.2. Modifications in the surveys	41

IV	MODULE OF THE EVALUATION OF THE ECONOMIC SITUATION OF THE AQUACULTURE AND PROCESSING INDUSTRY.....	44
IV.A	Collection of data concerning the aquaculture.....	44
IV.A.1.	General description of the sector	44
IV.A.2.	Data acquisition.....	44
IV.A.3.	Data quality	44
IV.A.4.	Regional co-ordination	44
IV.A.5.	Derogations and non-conformities.....	44
IV.B.	Collection of data concerning the processing industry	45
IV.B.1.	Data acquisition.....	45
IV.B.2.	Data quality	45
IV.B.3.	Regional Coordination.....	45
IV.B.4.	Derogations and non-conformities	45
V.	MODULE OF THE EFFECTS OF THE FISHING SECTOR ON THE MARINE ECOSYSTEM	47
VI.	MODULE FOR MANAGEMENT AND USE OF THE DATA.....	48
VI.A	Management of the data	48
VI.B.	Use of data -.....	49
VII.	Follow up of STECF-recommendations	50
VIII.	LIST OF DEROGATIONS	55
	List of acronyms and abbreviations	56
IX.	COMMENTS, SUGGESTIONS AND REFLECTIONS	61

Provided in separate documents:

Belgium_NP-Proposal_2009-2010_Tables_15-Oct-08

Standard tables II.B.1 to VI.B.1

Belgium_Budget-Proposal_2009-2010_15-Oct-08

Financial Forms (Commission only)

I. General framework

The present document contains the Belgian National Programme proposal for the year 2009-2010, in fulfilment of the requirements of the Council Regulation (EC) No. 199/2008.

❖ Structure of the proposal

The National Programme Proposal 2009-2010 (NP 2009-2010), is structured following the SGRN_guidelines_version_2008 and contains the Text called Belgium_NP-Proposal_2009-2010_Text_15-Oct-08 and Standard Tables, called Belgium_NP-Proposal_2009-2010_Tables_15-oct-2008 in separate documents. Annexes, which are referred to, are added to the Text.

The Budget Proposal are the Financial Forms provided the Commission and are delivered in a separate document.

❖ Description of the transmission to the new DCR

As the requirements for the new DCR are extended towards the fields of f.i. aquaculture, Eel etc., the partnership has been extended with the two institutes, being:

- The *ILVO-Social Science Unit* for data concerning the Fish processing industry and aquaculture; and
- the *Research Institute for Nature and Forest* dealing with the Eel related topics.

For the new Partners within the NDGP, a brief description of their fields of expertise and their contributions to the NDGP are provided in Annex 1

The implications by the new DCR are that drastic that no overall and short description can be given. After the RCM's, Belgium will state the differences in full detail by chapter/section and provide a complete overview in an overview Table . Hereby, Belgium hopes to facilitate the comprehensiveness of its NP in light of the continuity within its NDGPs.

II. ORGANISATION OF THE NATIONAL PROGRAMME

II.A National organisation and co-ordination

II.A.1 National correspondent

Dr. Kris Cooreman

Scientific Director

Instituut voor Landbouw en Visserij Onderzoek (ILVO) - Visserij
Ankerstraat 1, B-8400 Oostende, Belgium

Phone: + 32 (0)59 56.98.20 (direct) or + 32 (0)59 34.22.50 (operator)

Fax: + 32 (0)59 33.06.29

E-mail: kris.cooreman@ilvo.vlaanderen.be

II.A.2 Participating institutes

❖ Ministry of the Flemish Community - Policy Domain Agriculture & Fisheries

Dienst Zeevisserij - Sea Fisheries Service

Administratief Centrum

Vrijhavenstraat 5, B-8400 Oostende, Belgium

Phone: + 32 (0)59 43.19.20

Fax: + 32 (0)59 80.76.93

URL: www2.vlaanderen.be/ned/sites/landbouw/visserij/index.html

Instituut voor Landbouw en Visserij Onderzoek (ILVO) - Institute for Agriculture and Fisheries Research

ILVO-Fisheries

Ankerstraat 1, B-8400 Oostende, Belgium

Phone: + 32 (0)59 34 22 50

Fax: + 32 (0)59 33 06 29

URL: www.ilvo.vlaanderen.be/Animal/Fisheries.htm

Instituut voor Landbouw en Visserij Onderzoek (ILVO) - Institute for Agriculture and Fisheries Research

ILVO-Social Science Unit

Burg. van Gansberghelaan 115 box 2, 9820 Merelbeke, Belgium

Phone: +32 (0)9 272 23 40,

Fax: +32 (0)9 272 23 41

URL: www.ilvo.vlaanderen.be/Social_sciences/

❖ **Ministry of the Flemish Community - Policy Domain Environment, Nature & Energy**

Instituut voor Natuur- en Bosonderzoek (INBO) - Research Institute for Nature and Forest

Duboislaan 14, B-1560 Hoeilaart-Groenendaal, Belgium

Phone: + 32 (0)2 658.04.11

Fax: + 32 (0)2 657.96.82

URL: www.inbo.be

❖ **Federal Research Institute**

Management Unit of the North Sea Mathematical Models and the Scheldt Estuary

Since January 2008 onwards, the Management Unit of the North Sea Mathematical Models and the Scheldt Estuary (acronym MUMM) joins the Belgian National Data Gathering Programme (NDGP). MUMM is a federal research institute with extensive responsibilities in the fields of marine modelling, monitoring and management. MUMM also runs the 'Belgica', the research vessel that is used in the North Sea Beam Trawl Survey. It is in this capacity that MUMM is joining the NDGP. MUMM's contact details are:

BMM-MUMM

Gulledelle 100, B-1200 Brussel (St Lambrechts-Woluwe)

Head: Dr. Georges Pichot

Phone: + 32 (0)2 773 21 22

Fax: + 32 (0)2 770 69 72

URL: www.mumm.ac.be/EN/index.php

II.A.2 National co-ordination

National co-ordination of the Belgian NDGP will be organised twofold, being:

- Two official co-ordination meetings, one prior to the NP and one prior to the TR; and
- Informal contacts between the section heads of the participating institutes, one after the final completion of the NP (including modifications after RCMs, expert evaluations and Communications with the EC) and one after the final completion of the TR (like NP). Furthermore quarterly contacts will be maintained to ensure that the targets defined are being met.

II.B International co-ordination

International co-ordination and co-operation will be achieved at different levels:

- Through direct contacts with colleagues from other institutes (particularly around the North Sea, the Irish Sea and the Celtic Sea), who are responsible for sea surveys, stock sampling programmes and biological updates that are also part of the Belgian NDGP.
- Through the activities of the Regional Co-ordination Meetings for the North Sea and East Arctic (RCM-NS&EA) and the North-East Atlantic (RCM-NEA).
- Through the activities of ICES Working, Study and Planning Groups on data gathering and sea surveys, such as the Working Group on Beam Trawl Surveys (WGBEAM), the Planning Group on Commercial Catch, Discards and Biological Sampling (PGCCDBS), and the Workshops organised by PGCCDBS.
- Through the activities of other ICES Working and Study Groups, in as much as these activities cover issues that are directly related to data gathering, biological sampling or sea surveys. Following the Commission's guidelines on the eligibility of costs for meetings however, the costs for attending these Working and Study Groups are not included in the budget proposal.
- Through the activities of the STECF Sub-Groups on data gathering, precision levels, databases, etc., such as the Sub-Group on Research Needs (SGRN), and the workshops organised under the umbrella of the Commission, STECF or JRC.

A provisional list of international co-ordination meetings, workshops, ring-tests, etc. that will be attended in 2009-2010, is given in Table II.B.1. After the RCM's, this list will be completed with the relevant information.

II.C Regional co-ordination

Belgium will attend the relevant RCM being NS&EA and NEA.

For Belgium, over the past years, the RCMs have resulted, next to the more general decisions, in:

- Bilateral agreements with the UK and The Netherlands for sampling of their foreign flag vessels,
- Co-ordination of age sampling of *solea solea* in VIId, started in 2007 and executed in NDGP 2008 and onwards, between Belgium, UK and France.
- Co-ordination of age sampling of *solea solea* in VIIa, started in 2008 to be executed in NDGP 2009 and onwards, between Belgium, UK and Ireland.

- Co-ordination of beam trawlers in IV, started in 2008, between Belgium, UK and The Netherlands.
- Co-ordination towards the use of the regional database for the North Sea.

With the former and the new DCR, Belgium has stated and has been approved to resolve several issues under the umbrella of the RCMs. These action plans are listed below but will be discussed in detail in the relevant sections.

Crangon fishery

Concerning the Crangon fishery, it will be necessary that MS involved in the Crangon fishery in the North Sea (BE, DK, GE, ND and UK) elaborate together a data collection framework based on previous studies. This can be undertaken in the framework of the RCM North Sea and East Artic.

Rajidae

The Belgian sampling strategy when sampling Rajidae for maturity has always been approved and appreciated. The strategy is also a reflection of what is feasible within Belgium, being sampling on surveys. In light of the increased international co-operation, improving the sampling for maturity of Rajidae should indeed be elaborated at the regional level rather than changing the national strategy on its one. This comment should be reflected in the TORs of the upcoming RCM NEA.

III. Module of Evaluation of the fishing sector

III.1 General description of the fisheries

This section contains a brief description of the Belgian sea fisheries and its most important features. The intention of this summary is not to be comprehensive, but to provide the (external) evaluators with the essential elements that might help them in their appreciation and assessment of the Belgian programme proposal. A synoptic overview of the Belgian sea fisheries by area is given in Table 1.1.

❖ Fleet size and fleet segments

At the 1st of January 2008, the Belgian sea-going fishing fleet comprised 102 registered units with a total of 19292 GT and 60620 kW.(see text table below). The average age of the Belgian vessels is 22,5 yrs. At the end of the reference year 2007 there were NO inactive vessels.

Table 1.1: Overview Belgian sea fisheries fleet

Composition of the Belgian sea-going fishing fleet on January 1st, 2007				
Fleet segment	Mid class & large	Small	Coastal	Total
Horse power	301-900 & < 900	< 300	< 300	82364
2007	54	44	4	102

Broadly speaking, the Belgian sea-going fishing fleet can be sub-divided into the following fleet segments:

- Mid-class (301-900 Hp) and large (> 900 Hp) beam trawlers. These vessels are mostly flatfish directed (particularly towards plaice and sole, together with the associated by-catch species such as turbot, brill, dab, lemon sole, anglerfish and some roundfish), and usually operate in the central and southern North Sea (ICES Sub-areas IVb and IVc), the English Channel (VIIId and VIIe), the Irish Sea (VIIa), the Celtic Sea (VIIfg) and the inner part of the Bay of Biscay (VIIIab).
- Small beamers with engine powers ≤ 300 Hp. Part of these primarily target flatfish, mostly in the southern North Sea and the eastern English Channel. Others shift between flatfish, brown shrimp (*Crangon crangon*) (in the coastal waters) and Norway lobster (*Nephrops norvegicus*), depending on catch opportunities and market prices.

- A small number of otter trawlers in the strict sense of the word, targeting roundfish (primarily cod, haddock and whiting) and flatfish during part of the year and *Nephrops* during the main *Nephrops* season (3rd and beginning of 4th quarter).
- A small number of shrimp trawlers, targeting brown shrimp in the Belgian and Dutch coastal waters. Sometimes, these vessels land their catches directly into the Netherlands.
- A small number of catamarans and other vessel types, using different kinds of static gear

Table 1.2 Overview of the Belgian sea fisheries fleet according to App.III of Decision(xxx/2008)
Situation on 1/1/2008 ; at the end of the reference year 2007 there were NO inactive vessels.

		Length classes (LOA)			
active vessels		10-12m	12-18m	18-24m	24-40m
active gears	beam trawlers	0	5	38	51
	demersal trawlers	0	0	0	2
passive gears	drift and/or fixed netters	1	3	2	0

In the course of 2006 and 2007, and as well during 2008, there have been several, major structural changes in the Belgian fishing fleet, all of which were driven by the worsening economic situation of the fishing sector. High fuel prices on the one hand, and tightening quota on the other, pushed many ship owners to the verge of bankruptcy. The gravity of the situation inspired the Flemish Government (who is responsible over fisheries management in Belgium) to organise a major decommissioning round, aiming at the removal of around 10 % of the fleet's overall capacity in terms of engine power and gross tonnage, without however losing any of their quota opportunities ⁽¹⁾. The undertaking was very successful and resulted in the decommissioning of three smaller and six larger vessels, equivalent to ≈ 2200 GRT on a total of ≈ 22600 . The economic situation also forced fishermen to look for less energy consuming fishing

⁽¹⁾ As a result, total landings by the Belgian fishing fleet are not expected to decrease at the same pace as the overall decrease in fishing capacity.

techniques, and several of the beam trawlers are now using outrigger gear (one or more otter trawls that are fished from the outrigger booms) and other energy saving devices during at least part of the year.

Apart from the registered vessels, there is a relatively small number (allegedly < 50) of **non-registered recreational fishing boats**. Most of these target brown shrimp in the shallow near-shore waters, close to their homeports. Recreational fishing for brown shrimp is strongly weather dependent and is usually restricted to the summer months.

❖ **Areas fished**

Landings by the Belgian sea-going fishing fleet are primarily from the North Sea (33 % of the total landings in 2007) and the English Channel (37 %), the Celtic Sea (18 %), the Irish Sea (7 %) and the Bay of Biscay (3 %). Landings from other areas (South of Ireland, West of Scotland, etc.) are small to negligible (see table on page 11).

❖ **Species landed**

Belgium has no industrial and no pelagic fisheries. All fish and shellfish landed by Belgian vessels are for human consumption. The consequence being, that the quantities landed are relatively small (20.8 10³ t in 2007) compared to the size of the fleet, but also that their value per kg is relatively high (approx. 4.19 Euro/kg, sales in Belgian auctions only).

In 2007, the top 10 of the most important species landed (by weight) consisted of plaice (25 % of the total landings), sole (17 %), rays (8 %), sepia (11 %), anglerfish. (6 %), cod (5 %), lemon, Tub gurnard, scallop and bib.

❖ **Landing and auctioning practices**

Fish and shellfish landed into Belgium are landed fresh and chilled (kept on ice but not frozen). At sea, fish and shellfish are commonly sorted by species or species groupings (e.g. cod, haddock, whiting, sole, plaice, rays, small sharks, *Nephrops*, mixed other flatfish and mixed other roundfish), but not by size. Size grading is done in the auction, either by hand or by automated grading machines.

If the quantities are sufficiently large, then individual species are auctioned separately (and for most species also by market category). Marginal by-catches of whatever species are often auctioned as 'mixed assortments'. Mixed sales are also the rule for most species of ray, for megrim, anglerfish, squid and octopus, and, depending on the quantities landed, for gurnard

Landings by Belgian vessels in foreign harbours

Roughly one fifth of all fish and shellfish taken by Belgian vessels in the southern and central North Sea are auctioned in foreign harbours, mostly in the Netherlands.

Vessels fishing in the northern North Sea, the Irish Sea, the Celtic Sea or the Bay of Biscay often make several consecutive fishing trips in the same or in neighbouring areas before returning to

their homeport. Between voyages, these vessels make stop-overs in the UK or France, where they transfer their landings to refrigerated lorries for transportation to and first sale in a Belgian auction. On these occasions, the vessels may sell part of their catches abroad (depending on quantities landed and market situation).

Belgian landings by species and area in 2007 - All landing ports combined
Figures in t landed weight, rounded to the nearest 5 t

Species or species group	ICES Sub-area or Division							Total
	IV	VIIa	VIIde	VIIIfg	VIIhjk	VIIIab	other	
<i>Anarhichas lupus</i>	65	--	--	--	--	--	<5	65
<i>Aspitrigla cuculus</i>	5	5	250	30	--	<5	--	290
<i>Buccinum undatum</i>	45	<5	40	5	--	--	--	90
<i>Cancer pagurus</i>	40	5	30	25	--	<5	--	100
<i>Clupea harengus</i>	<5	--	--	--	--	--	--	0
<i>Conger conger</i>	<5	10	45	25	--	<5	--	80
<i>Crangon crangon</i>	255	--	--	--	--	--	--	255
<i>Dicentrarchus labrax</i>	20	<5	25	15	--	--	--	60
<i>Eutrigla gurnardus</i>	10	--	--	<5	--	<5	--	10
<i>Gadus morhua</i>	810	65	85	100	<5	--	45	1105
<i>Hippoglossus hippoglossus</i>	<5	--	--	--	--	--	--	0
<i>Homarus gammarus</i>	<5	--	<5	--	--	--	--	0
<i>Lepidorhombus whiffiagonis</i>	--	<5	<5	190	<5	<5	--	190
<i>Limanda limanda</i>	235	5	135	30	--	--	10	415
<i>Loligo spp.</i>	20	<5	105	10	--	<5	<5	135
<i>Lophius spp.</i>	145	75	285	670	<5	130	10	1315
<i>Melanogrammus aeglefinus</i>	145	30	<5	115	--	--	10	300
<i>Merlangius merlangus</i>	35	<5	75	120	--	<5	--	230
<i>Merluccius merluccius</i>	45	<5	<5	10	--	<5	5	60
<i>Microstomus kitt</i>	375	10	75	250	--	--	30	740
<i>Molva molva</i>	25	<5	15	25	--	--	<5	65
<i>Mullus surmeletus</i>	<5	--	40	15	--	<5	--	55
<i>Mustelus spp.</i>	<5	<5	<5	<5	--	--	--	0
<i>Nephrops norvegicus</i>	75	<5	--	5	--	<5	--	80
<i>Octopus vulgaris</i>	<5	--	5	25	<5	15	--	45
<i>Pecten maximus</i>	10	5	470	120	--	--	--	605
<i>Platichthys flesus</i>	145	10	30	<5	--	--	--	185
<i>Pleuronectes platessa</i>	2840	195	1405	195	5	<5	125	4765
<i>Pollachius pollachius</i>	15	5	45	35	--	--	<5	100
<i>Pollachius virens</i>	15	--	--	<5	--	--	--	15
<i>Psetta maxima</i>	115	30	115	70	--	<5	<5	330
<i>Rajidae</i>	250	650	175	725	<5	10	<5	1810
<i>Scomber scombrus</i>	<5	--	--	--	--	--	--	0
<i>Scophthalmus rhombus</i>	85	30	195	65	--	<5	<5	375
<i>Scyliorhinus canicula</i>	100	65	185	110	--	15	--	475
<i>Sebastes marinus</i>	--	--	--	--	--	--	--	0
<i>Sepia officinalis</i>	35	--	1335	10	<5	15	--	1395
<i>Solea solea</i>	775	305	1495	565	25	345	--	3510
<i>Sprattus sprattus</i>	--	--	--	--	--	--	--	0
<i>Squalus acanthias</i>	<5	<5	--	5	--	--	--	5
<i>Trachurus trachurus</i>	<5	--	--	--	--	--	--	0
<i>Trigla lucerna</i>	65	20	540	35	--	5	--	665
<i>Trisopterus luscus</i>	25	<5	465	50	--	10	--	550
Other bivalves	--	--	--	--	--	--	--	0

Other crustaceans	--	--	--	<5	<5	--	--	0
Other demersal	25	--	15	180	90	--	15	325
Other pelagic	--	--	--	--	--	--	--	0
Total	6850	1520	7680	3830	120	545	250	20795
% of Total	33	7	37	18	1	3	1	100

III.B Economic variables

❖ Baltic Sea, North Sea and Eastern Arctic and North Atlantic

III.B.1 Data acquisition

The NDGP covers all Belgian vessels in the EU Fleet Register.

Parameters that will be recorded include:

- **Fuel consumption:** Data will be collected through partial sampling of the fleet, by means of financial questionnaires that are filled out by the ship owners on a voluntary basis and returned to the Sea Fisheries Service for analysis. Average fuel consumption per vessel will be calculated for all fleet segments defined under the DCR Regulation.
- **Fishing effort by technique:** Effort data (hours fishing, kW and GT) are collected by fishing voyage, as part of the routine effort, landings and revenue data collection system (for details, see Section 5.1, para. Landings and effort data collection system).
- **Specific fishing effort** is derived from the voyage-wise landings and effort data. The threshold levels, as defined in new the DCR Regulation, are calculated from the relative proportions (by weight) of the key species in the total landings of all individual fishing trips. Species-specific effort is readily available for all species relevant for the Belgian landings. If required, the existing database of landings and effort data allows for the retrieval of specific fishing efforts for other species as well.

Economic data by group of vessels are collected through questionnaires that are filled in by the ship owners on a voluntary basis (see Table III.B.1 for details on fleet segments covered and numbers of vessels involved), and then returned to the Sea Fisheries Service. In the past, fleet coverage has varied slightly from year to year, depending on the number of questionnaires returned. In 2007, the response rates were as follows:

- 56% (24 out of 43 beamers of 12-24m;
- 69% (35 out of 51 beamers of 24-40m;
- No response from demersal trawlers (2) or fixed gears (6).

The data are stored in a database, and can be retrieved according to any level

III.B.2 Data quality

The NDGP will cover all Belgian vessels in the EU Fleet Register, the population of which is fully known and well documented. Fleet segments that will be distinguished are:

Type of fishing technique	Vessel LOA
Beam trawlers	12-24 m
	24-40 m
Demersal trawlers (a)	12-40 m
Static gear (b)	12-24 m
(a) There are < 10 vessels for the two LOA segments (12-24 and 24-40 m) combined	
(b) There are < 10 vessels in this fleet segment	

With respect to this, it is worth emphasising that Belgium has no registered fishing vessels of < 10 m LOA (also see Section ,III.1 para. Fleet size and fleet segments).

Parameters recorded will include: gross and net tonnage, maximum continuous power (kW) of the main engine, and vessel age based on the hull (years). Fleet segmentation will be as required by Appendix III of the DCR.

All data required by the DCR are available from the official vessel register. The precision of these data is assumed to be 100 %.

Decision XXX/2008 will be used on a strict national level to (try to) introduce national legislation to impose the obligation to provide the data requested under Appendix VI. Since this involves mainly a political decision, it is difficult to predict the outcome nor the timing. However, Belgium will collect all parameters according to Appendix VI of the Decision XXX/2008. As data are collected within each population, there is no clustering of fleet segments done before data gathering (exhaustive or 100%). (see Table II.B.2 and Table III.B.3)

III.B.3 Regional coordination

The regional coordination and cooperation between Member States within the same marine region have been developed during former period of DCR and is now fully integrated in the general framework (Art. 5, EC 199/2008). As part of this objective, the Regional Co-ordination Meetings (RCM's) are established to improve the overall quality of the data collected in support of the CFP. Belgium participates in the following Regional Co-ordination Meetings:

- North Sea & East Arctic
- North Atlantic

As the RCM's will take place respectively from the 17th of November until the 21st of November, and from the 8th of December until the 12th, there are no recommendations available yet regarding the new DCR and its NP Proposals.

III.B.4 Derogations and non-conformities

None

III.C BIOLOGICAL-METIER RELATED VARIABLES

❖ Baltic Sea, North Sea and Eastern Arctic and North Atlantic

III.C.1 Selection of metiers to sample

Belgium used its Belsamp-database to provide the percentages of total landing, effort and value for all its metiers based on the years 2006-2007. Weights and sales values of the landings and the associated effort are routinely collected from both logbook data and sales notes. The data cover all landings by Belgian vessels in both Belgian and foreign harbours, and are exhaustive (100%). To provide an entire view of the Belgian fishing activities, the complete list of metiers is provided in the Text Table below.

Metiers percentage of annual effort, landings and value by detailed area 2006-2007

Year	Region	Gear	Target assemblage	Mesh size	Detailed area	Length-class	% effort	% weight	% value
2006	NEA	Neph	Mixed cru & dem	unknown	VIIg	[24-40[	0.001	0.020	0.023
2006	NEA	OTX	Mixed cru & dem	unknown	VIa	[24-40[	0.011	0.004	0.002
2006	NEA	OTX	Mixed cru & dem	unknown	VIIa	[18-24[	0.001	0.026	0.010
2006	NEA	OTX	Mixed cru & dem	unknown	VIIa	[24-40[	0.471	0.858	0.616
2006	NEA	OTX	Mixed cru & dem	unknown	VIIe	[24-40[	0.026	0.025	0.013
2006	NEA	OTX	Mixed cru & dem	unknown	VIIIf	[18-24[	0.256	0.826	0.464
2006	NEA	OTX	Mixed cru & dem	unknown	VIIIf	[24-40[	0.514	0.664	0.430
2006	NEA	OTX	Mixed cru & dem	unknown	VIIg	[18-24[	0.080	0.209	0.111
2006	NEA	OTX	Mixed cru & dem	unknown	VIIg	[24-40[	5.566	6.297	4.314
2006	NEA	OTX	Mixed cru & dem	unknown	VIIh	[24-40[	0.058	0.242	0.130
2006	NEA	TBB	Mixed cru & dem	70-79	VIIIa	[24-40[	2.544	1.493	2.619
2006	NEA	TBB	Mixed cru & dem	70-79	VIIIb	[24-40[	14.010	7.907	13.648
2006	NEA	TBB	Mixed cru & dem	70-79	VIIIb	[40-80[	0.286	0.174	0.272
2006	NEA	TBB	Mixed cru & dem	80-89	VIa	[24-40[	0.067	0.085	0.078
2006	NEA	TBB	Mixed cru & dem	80-89	VIIa	[24-40[	21.124	24.897	20.367
2006	NEA	TBB	Mixed cru & dem	80-89	VIIa	[40-80[	1.226	1.134	1.162
2006	NEA	TBB	Mixed cru & dem	80-89	VIIe	[18-24[	0.000	0.006	0.002
2006	NEA	TBB	Mixed cru & dem	80-89	VIIe	[24-40[	8.309	11.117	9.573
2006	NEA	TBB	Mixed cru & dem	80-89	VIIIf	[18-24[	0.369	0.698	0.807
2006	NEA	TBB	Mixed cru & dem	80-89	VIIIf	[24-40[	17.910	18.064	20.030
2006	NEA	TBB	Mixed cru & dem	80-89	VIIIf	[40-80[	0.022	0.011	0.016
2006	NEA	TBB	Mixed cru & dem	80-89	VIIg	[18-24[	0.152	0.199	0.205
2006	NEA	TBB	Mixed cru & dem	80-89	VIIg	[24-40[	25.969	23.702	23.292
2006	NEA	TBB	Mixed cru & dem	80-89	VIIg	[40-80[	0.582	0.422	0.471
2006	NEA	TBB	Mixed cru & dem	80-89	VIIh	[24-40[	0.445	0.922	1.344
2006	NS	Static	Demersal fish	unknown	IVc	[12-15[	0.643	0.310	0.398
2006	NS	Static	Demersal fish	unknown	IVc	[18-24[	0.144	0.221	0.320
2006	NS	Static	Demersal fish	unknown	VIIId	[18-24[	0.184	0.377	0.634
2006	NS	Neph	Mixed cru & dem	unknown	IVb	[18-24[	0.732	1.647	1.845
2006	NS	Neph	Mixed cru & dem	unknown	IVb	[24-40[	0.456	0.625	0.674

2006	NS	Neph	Mixed cru & dem	unknown	IVc	[24-40[	0.045	0.026	0.020
2006	NS	OTX	Mixed cru & dem	unknown	IVb	[18-24[	0.028	0.075	0.048
2006	NS	OTX	Mixed cru & dem	unknown	IVb	[24-40[	0.977	1.154	0.737
2006	NS	OTX	Mixed cru & dem	unknown	IVc	[12-15[	0.005	0.005	0.004
2006	NS	OTX	Mixed cru & dem	unknown	IVc	[15-18[	0.001	0.002	0.000
2006	NS	OTX	Mixed cru & dem	unknown	IVc	[18-24[	0.123	0.144	0.109
2006	NS	OTX	Mixed cru & dem	unknown	IVc	[24-40[	1.796	1.016	1.033
2006	NS	OTX	Mixed cru & dem	unknown	VIIId	[18-24[	0.052	0.125	0.125
2006	NS	OTX	Mixed cru & dem	unknown	VIIId	[24-40[	0.062	0.079	0.163
2006	NS	TBB	Crustaceans	16-31	IVb	[18-24[	0.230	0.408	0.391
2006	NS	TBB	Crustaceans	16-31	IVc	[12-15[	0.039	0.070	0.055
2006	NS	TBB	Crustaceans	16-31	IVc	[15-18[	0.965	1.214	1.087
2006	NS	TBB	Crustaceans	16-31	IVc	[18-24[	3.162	4.456	3.992
2006	NS	TBB	Crustaceans	16-31	IVc	[24-40[	0.203	0.264	0.241
2006	NS	TBB	Mixed cru & dem	>=120	IVb	[18-24[	0.045	0.205	0.106
2006	NS	TBB	Mixed cru & dem	>=120	IVb	[24-40[	14.535	19.989	13.988
2006	NS	TBB	Mixed cru & dem	100-119	IVb	[24-40[	0.013	0.007	0.006
2006	NS	TBB	Mixed cru & dem	80-89	IIIa	[24-40[	1.624	2.296	1.662
2006	NS	TBB	Mixed cru & dem	80-89	IVa	[24-40[	1.276	1.533	1.141
2006	NS	TBB	Mixed cru & dem	80-89	IVb	[18-24[	0.257	0.666	0.488
2006	NS	TBB	Mixed cru & dem	80-89	IVb	[24-40[	8.661	7.642	6.578
2006	NS	TBB	Mixed cru & dem	80-89	IVc	[12-15[	0.008	0.007	0.006
2006	NS	TBB	Mixed cru & dem	80-89	IVc	[15-18[	0.139	0.077	0.093
2006	NS	TBB	Mixed cru & dem	80-89	IVc	[18-24[	4.828	5.117	5.840
2006	NS	TBB	Mixed cru & dem	80-89	IVc	[24-40[	23.507	13.477	16.217
2006	NS	TBB	Mixed cru & dem	80-89	VIIId	[18-24[	5.063	9.014	12.273
2006	NS	TBB	Mixed cru & dem	80-89	VIIId	[24-40[	30.200	27.752	29.726
2007	NEA	OTX	Mixed cru & dem	unknown	VIa	[24-40[	0.007	0.001	0.001
2007	NEA	OTX	Mixed cru & dem	unknown	VIIa	[24-40[	1.628	2.415	1.785
2007	NEA	OTX	Mixed cru & dem	unknown	VIIb	[24-40[	0.053	0.024	0.023
2007	NEA	OTX	Mixed cru & dem	unknown	VIIe	[24-40[	0.053	0.014	0.009
2007	NEA	OTX	Mixed cru & dem	unknown	VIIIf	[18-24[	0.273	0.643	0.376
2007	NEA	OTX	Mixed cru & dem	unknown	VIIIf	[24-40[	1.810	1.847	1.357
2007	NEA	OTX	Mixed cru & dem	unknown	VIIg	[18-24[	0.185	0.449	0.256
2007	NEA	OTX	Mixed cru & dem	unknown	VIIg	[24-40[	5.736	6.198	4.176
2007	NEA	OTX	Mixed cru & dem	unknown	VIIh	[24-40[	0.015	0.012	0.012
2007	NEA	OTX	Mixed cru & dem	unknown	VIIj	[24-40[	0.017	0.002	0.003
2007	NEA	TBB	Mixed cru & dem	70-79	VIIIa	[24-40[	1.351	0.749	1.385
2007	NEA	TBB	Mixed cru & dem	70-79	VIIIb	[24-40[	14.897	7.652	13.541
2007	NEA	TBB	Mixed cru & dem	80-89	VIa	[24-40[	0.034	0.009	0.010
2007	NEA	TBB	Mixed cru & dem	80-89	VIIa	[24-40[	18.608	19.698	16.628
2007	NEA	TBB	Mixed cru & dem	80-89	VIIe	[18-24[	0.058	0.053	0.048
2007	NEA	TBB	Mixed cru & dem	80-89	VIIe	[24-40[	11.873	15.402	12.462
2007	NEA	TBB	Mixed cru & dem	80-89	VIIIf	[18-24[	0.585	1.122	1.433
2007	NEA	TBB	Mixed cru & dem	80-89	VIIIf	[24-40[	22.210	23.700	26.777
2007	NEA	TBB	Mixed cru & dem	80-89	VIIg	[18-24[	0.308	0.400	0.363
2007	NEA	TBB	Mixed cru & dem	80-89	VIIg	[24-40[	20.119	19.063	18.492
2007	NEA	TBB	Mixed cru & dem	80-89	VIIh	[24-40[	0.178	0.546	0.864

2007	NS	Static	Demersal fish	unknown	IVc	[10-12[	0.042	0.018	0.016
2007	NS	Static	Demersal fish	unknown	IVc	[12-15[	0.682	0.446	0.624
2007	NS	Static	Demersal fish	unknown	IVc	[18-24[	0.197	0.198	0.378
2007	NS	Static	Demersal fish	unknown	VIIId	[18-24[	0.232	0.300	0.695
2007	NS	Neph	Mixed cru & dem	unknown	IVb	[24-40[	0.109	0.056	0.056
2007	NS	Neph	Mixed cru & dem	unknown	IVc	[24-40[	0.011	0.002	0.001
2007	NS	OTX	Mixed cru & dem	unknown	IVa	[24-40[	0.349	0.447	0.343
2007	NS	OTX	Mixed cru & dem	unknown	IVb	[18-24[	0.258	0.483	0.647
2007	NS	OTX	Mixed cru & dem	unknown	IVb	[24-40[	0.891	0.730	0.682
2007	NS	OTX	Mixed cru & dem	unknown	IVc	[18-24[	0.394	0.386	0.342
2007	NS	OTX	Mixed cru & dem	unknown	IVc	[24-40[	1.602	0.828	0.885
2007	NS	OTX	Mixed cru & dem	unknown	VIIId	[18-24[	0.001	0.006	0.003
2007	NS	OTX	Mixed cru & dem	unknown	VIIId	[24-40[	0.026	0.186	0.204
2007	NS	TBB	Crustaceans	16-31	IVc	[15-18[	0.902	0.826	0.891
2007	NS	TBB	Crustaceans	16-31	IVc	[18-24[	1.549	1.218	1.317
2007	NS	TBB	Crustaceans	16-31	IVc	[24-40[	0.378	0.240	0.265
2007	NS	TBB	Mixed cru & dem	>=120	IVb	[24-40[	13.315	18.832	13.785
2007	NS	TBB	Mixed cru & dem	100-119	IVb	[24-40[	0.020	0.010	0.008
2007	NS	TBB	Mixed cru & dem	80-89	IIIa	[24-40[	1.276	1.808	1.377
2007	NS	TBB	Mixed cru & dem	80-89	IVa	[24-40[	1.998	2.276	1.715
2007	NS	TBB	Mixed cru & dem	80-89	IVb	[18-24[	0.002	0.004	0.005
2007	NS	TBB	Mixed cru & dem	80-89	IVb	[24-40[	8.437	7.268	6.098
2007	NS	TBB	Mixed cru & dem	80-89	IVc	[15-18[	0.368	0.507	0.482
2007	NS	TBB	Mixed cru & dem	80-89	IVc	[18-24[	4.132	4.973	6.118
2007	NS	TBB	Mixed cru & dem	80-89	IVc	[24-40[	15.692	9.688	12.643
2007	NS	TBB	Mixed cru & dem	80-89	VIIId	[18-24[	4.744	9.298	12.041
2007	NS	TBB	Mixed cru & dem	80-89	VIIId	[24-40[	42.388	38.962	38.379

All metiers that are comprised by the three different 90 % cut-off level are to be found in the Table III.C.1.

The selected metiers that are to be sampled under the new DCR are thus, in essence, identical to the metiers in the NDGPs from previous years under the former DCR, except for Beamtrawling for MCD in IV where the former metiers is split according to the different mesh sizes. To ease the understanding of the selected metiers, with the transition to the new DCR, the “former Belgian metiers 2008 to be sampled” are provided in the table below.

Flatfish directed beam trawl fishery	IV	97	5150	Days fishing	Yes (c)	Annual
Flatfish directed beam trawl fishery	VIIa	38	1230	Days fishing	Yes (c)	Annual
Flatfish directed beam trawl fishery	VIIId	79	4100	Days fishing	Yes (c)	Annual
Flatfish directed beam trawl fishery	VIIe	40	460	Days fishing	Yes (c)	Annual
Flatfish directed beam trawl fishery	VIIIfg	56	2510	Days fishing	Yes (c)	Annual
Flatfish directed beam trawl fishery	VIIIab	19	840	Days fishing	Yes / No (c) (d)	No (f)
Demersal trawl fishery	IV	18	340	Days fishing	Presumably yes	No (f)
Demersal trawl fishery	VIIId	11	< 50	Days fishing	Presumably yes	No (f)
Demersal trawl fishery	VIIIfg	< 10	470	Days fishing	Presumably yes	No (f)
Nephrops fishery	IVbc - FU 5	< 10	180	Days fishing	Yes (c)	No (f)
Nephrops fishery	IVb - FU 33	< 10	180	Days fishing	Presumably yes	No (f)
Brown shrimp fishery	IVc	28	1450	Days fishing	Yes (e)	No (f)

Because the Belgian vessels operate in different areas, stocks and also different regions during the same fishing trip, merging of the metiers is logical and essential, see Table III.C.2. When taken into account the practical and necessary merging of the metiers, defined at the lowest scale, the final metiers for the different region, see Table III.C.3, are discussed below.

❖ North Sea and Eastern Arctic region:

The metiers within the NS & EA area, that are confined by the 90 % cut-off level and after necessary merging, are:

1. TBB_MCD_80-89_0_0, the flatfish directed beam trawl fishery in IV, mesh size 80-89.
2. TBB_MCD_>=120_0_0, the flatfish directed beam trawl fishery in IV, mesh size >=120.
3. TBB_MCD_80-89_0_0, the flatfish directed beam trawl fishery in VIIId, mesh size 80-89.
4. OTX_MCD_XX_XX_XX, the demersal trawl fishery in IV and VIIId. The Belgian whitefish directed bottom trawl fisheries are of marginal importance (in terms of number of vessels involved and days fished – see Table 5.2 for details) compared to the bottom trawl fisheries by other EU Member States, such as France, Ireland and the UK, in the same areas. The cost for setting up sampling programmes on the Belgian whitefish fisheries would be disproportionate compared to the added value to the international data collection system. Therefore, **Belgium requests derogation for sampling its whitefish directed bottom trawl fisheries in IV and VIIId**. This is the identical rationale as in former years NDGPs, which has always been approved.
5. Neph_MCD_XX_XX_XX, the nephrops fishery in IV.
 - a. The Belgian nephrops fishery in FU33 has never been sampled before. The

rational for this, which still stands today, is that the landings are too marginal and compared to the total international landings from this stock, the quantities taken by the Belgian fleet are too small. Therefore, **Belgium requests derogation for sampling this fishery.**

- b. The Belgian nephrops fishery in FU 5. Belgium stopped sampling this metier since 2006. The rationale for this is that landings from FU 5 dropped well below the 100 t threshold since 2006 and to less than 10 % of the total international Nephrops landings from this stock. **Belgium requests derogation for sampling this fishery.**
6. TBB_CRU_16-31_XX_XX, the brown shrimp fishery in IVc. Belgium does not envisage to set up a discard sampling programme for its brown shrimp (Crangon crangon) fishery. This is conform previous NDGPs. The rationale was and still holds today, being:

In the past, this fishery used to be concentrated in the Belgian and the southernmost part of the Dutch coastal waters, but in recent years, it has spread into more northern waters, such as the German Bight and off the Danish North Sea coast. First sale landings from the latter are mostly made into the Netherlands.

Extensive studies on the discards in the European brown shrimp fisheries, carried out in the mid-1990s as part of the EU projects RESCUE and ECODISC, have shown that:

- Discards levels vary widely between areas, seasons, voyages and hauls.
- The finfish discards in the Belgian shrimp fishery primarily consist of 0 and 1 year old whiting, plaice, dab and sole. The discards of 2 year old fish and of juvenile cod (all ages) are marginal.
- Overall, the discards by the Belgian shrimper fleet represent less than 1.0 % of the total discards of 0 year old fish and less than 2.5 % of the total discards of 1 year old fish by the European brown shrimp fisheries (i.e. for all relevant North Sea countries combined).

In view of the above, it can be argued that setting up a discard sampling programme for the Belgian brown shrimp fishery would:

- Be very laborious and time-consuming, since it would require very large numbers of observer trips in order to adequately cope with the different sources of variability.

- Add little to the improvement of the stock assessments of the fish species concerned (primarily plaice and sole), since most fish discarded by the shrimp trawlers belong to age classes that are below the age at first recruitment.
- Give a highly incomplete picture of the impact of the shrimp fisheries on the round and flatfish stocks in the North Sea, unless the Belgian data are complemented by similar data sets on the discards in the Danish, Dutch, German and UK shrimp fisheries.

The usefulness of discard sampling programmes on the brown shrimp fisheries was also discussed during the RCM North Sea in Bergen (September 2005). At this meeting, it was suggested that the UK (the only MS proposing a discard sampling programme on its brown shrimp fishery for 2006) should be allowed to re-allocate its discard sampling effort from its brown shrimp fishery to fisheries with a higher priority in terms of data needs, until agreement is reached on a comprehensive discard sampling programme for all brown shrimp fisheries around the North Sea. Unfortunately however, this recommendation was omitted from the RCM report. A similar standpoint was taken by the RCM a year later (October 2006) with regards to the German plans to unilaterally set up discard sampling on their brown shrimp fishery in the south-eastern North Sea.

In light of the above, and stressing the fact that a discard sampling programme on the Belgian brown shrimp fishery would have very little added value when performed in isolation, **Belgium requests derogation for discard sampling on its brown shrimp fishery.**

❖ **North East Atlantic region:**

1. TBB_MCD_80-89_0_0, the flatfish directed beam trawl fishery in VIIa.
2. TBB_MCD_80-89_0_0, the flatfish directed beam trawl fishery in VIIfg.
3. TBB_MCD_80-89_0_0, the flatfish directed beam trawl fishery in VIIe. The allocation of trips can not be done by trip but as opportunities arise, i.e. every time a sea-going observer trip in a neighbouring area extends into ICES Sub-area VIIe by an ad hoc decision of the skipper. This rationale is identical as former years NDGPs and still holds today.
4. TBB_MCD_70-79_0_0, the flatfish directed beam trawl fishery in VIIIab. Sampling this metiers stopped in 2007 and the rationale then and now remains identical, being: in view of (i) the relatively minor importance of this fishery (the Bay of Biscay beam trawl fishery accounts for only 2-3 % of the total Belgian fish and shellfish landings, and for < 10 % of the total international flatfish landings from the area), and (ii) the relatively low discard levels in this fishery (see 2007 NP proposal, Annex 1), it was decided to

discontinue the discard sampling programme in question. **Therefore Belgium requests derogation for sampling this fishery.**

5. OTX_MCD_XX_XX_XX, the demersal trawl fishery in VIId, VIIfg. The Belgian whitefish directed bottom trawl fisheries is of marginal importance compared to the bottom trawl fisheries by other EU Member States, such as France, Ireland and the UK, in the same areas. The cost for setting up sampling programmes on the Belgian whitefish fisheries would be disproportionate compared to the added value to the international data collection system. Therefore, **Belgium requests derogation for sampling its whitefish directed bottom trawl fisheries in IV and VIId.** This is the identical rationale as in former years NDGPs, which has always been approved

III.C.2. Data acquisition

III.C.2.a Precision levels

Belgium never calculated precision levels in the previous NP's under the old DCR. For the period 2009-2010, Belgium will calculate the precision levels from 2009 and gradually incorporate the required numbers based on precision estimates, using international standards such COST, etc.

Up to 2008, the different numbers of individuals to be sampled were based on the Minimum Required and its additional national goals. Therefore, Belgium has no other alternative than applying the highest number of individuals for all biological variables to be collected., **as such assuring not to weaken the quality of the collected data.**

This applies particularly for 2009 as Belgium plans to gradually incorporate the required numbers based on precision estimates.

Based on the precision calculation during 2009, the numbers of the individuals for all biological variables will be modified accordingly.

III.C.2.b. Proposed sampling regimes for length

Details on the required and planned sampling for length (where applicable), are given in Table III.C.4), for those species that are not subject to derogation (see Table III.E.1).

Details on the length and age sampling programmes for all species in and Table III.C.4, are given in the sections below. For the detailed description of the sampling strategies, see section III.E.1.

Gadus morhua - ICES Sub-areas IV + VIIId and VIIa

Sampling strategy: Market sampling, at-sea sampling.

The cod stocks in ICES Sub-areas IIIa+IV+VIIId (Skagerrak, North Sea and eastern Channel) and VIIa (Irish Sea) are currently under a Recovery Plan and therefore, ILVO-Fisheries will sample these stocks for both length and age in 2009 and 2010.

Cod landed by the flatfish directed beam trawlers operating in ICES Sub-areas IV+VIIId will be sampled for length ⁽²⁾. At the market, length sampling will be by market category, from randomly chosen boxes of fish. In addition, length sampling of the retained portions of the cod catches is foreseen during all sea-going observer trips in the North Sea and the Eastern English Channel (for details, see Section III.E.1).

In ICES Sub-area VIIa, length sampling of the retained catches of cod will be done as part of the at-sea sampling programme in the area (for details, see Section III.E.1).

Lophiidae - ICES Sub-area VII

Sampling strategy: At-sea sampling.

From the 2002 pilot study set up for *Lophiidae* in ICES Sub-area VII, it appeared that this species group is best sampled on-board during sea-going observer trips. At-sea sampling of anglerfish was initiated in 2003 and will be carried on in 2008 as part of the sea-going observer programmes in the area (for details, see Section III.E.1).

Merluccius merluccius - Northern stock

Sampling strategy: At-sea sampling.

Belgium will help monitor the northern hake stock, which is currently subject to a Recovery Plan. To that aim, retained and discarded portions of the catch will be sampled for length and age during all sea-going observer trips in all relevant sea areas (for details, see Section III.E.1).

Microstomus kitt - ICES Sub-area IV

Sampling strategy: Market sampling.

Length sampling of lemon sole will be done at the market, on a quarterly basis.

Pleuronectes platessa - ICES Sub-areas IV and VII, and Solea solea - ICES Sub-areas IV, VII and VIII

Sampling strategy: Market sampling, at-sea sampling.

⁽²⁾ Unless stated otherwise, all length measurements of fish are by total length, to the cm below.

In the 1990s and early 2000s, plaice and sole were primarily sampled at the market, on a quarterly basis. From each market category, one box was randomly chosen for length measurements (stratified sampling, to the cm below). This allowed the calculation of the overall length distribution of the landings by Belgian fishing vessels for each species and TAC area. In addition, length-stratified samples were taken for age determination. By applying the appropriate ALKs, the length distributions of the two species were then converted into age compositions by quarter and by TAC area.

Over the past years however, Belgium has experienced increasing difficulties to maintain its market sampling schemes for plaice and sole, with ship owners refusing to have their landings sampled, with vessels fishing in several ICES Sub-areas during the same trip and landing 'blended' catches, etc. Therefore, ILVO-Fisheries has been looking for alternative sampling strategies.

At-sea sampling for length and age of the retained fractions of the plaice and sole catches (amongst several other species) was introduced in 2003 as part of the sea-going observer programmes, and since then, it has become an increasingly important and valuable source of information. It is the intention to put even more emphasis on the sea-going observer trips in the years to come, and to use this system as the main data source for length and age. At-sea sampling for length and age comprises two complementary approaches:

- On-board length measurements on the retained (and discarded) catch fractions by the sea-going observers.
- The collection of samples for subsequent length and age measurement by the technical staff of ILVO-Fisheries. To that aim, the observers tag several boxes with fish of known origin, which are then bought from the vessel owner by ILVO-Fisheries. This approach has proven to be very efficient and has successfully been applied in 2006 - 2008.

Over the past years, sampling effort for plaice and sole has increasingly been shifted from market sampling to at-sea sampling. In 2008, at-sea sampling will be the major source for obtaining plaice and sole samples, while market sampling will mainly be used as a fallback option when sampling levels risk falling short of the targets.

***Psetta maxima - ICES Sub-area IV, and
Scophthalmus rhombus - ICES Sub-area IV***

Sampling strategy: Market sampling, at sea sampling.

Sampling for length for both species will be done at the market, on a quarterly basis, with samples taken from randomly chosen boxes per market category. In addition, lengths of turbot and brill will also be measured during the observer trips.

Rajidae - ICES Sub-areas IV and VII (except VIId)

Sampling strategy: Market sampling.

The outcome of the 2002 pilot study on the Belgian ray landings from ICES Sub-area IV showed that *Raja clavata* and *R. montagui* (and to a lesser extent *R. brachyura*) are the commonest species taken in the area. All three species will continue to be sampled in 2009-2010

Five species of ray are regularly landed by Belgian trawlers from Sub-area VII (except VIIId), viz. *Leucoraja circularis*, *L. naevus*, *Raja brachyura*, *R. clavata* and *R. montagui*. In 2009-2010, all species will be sampled through market sampling..

III.C.2.c Sampling of landings abroad and of landings by foreign vessels

With respect to the landings by Belgian flag vessels into other MS, a distinction must be made between (i) vessels transiting their catches in a foreign harbour (mostly in the UK, occasionally in the Netherlands and France) for transportation to and first sale in a Belgian auction, and (ii) vessels actually landing and selling their catches abroad (mostly in the Netherlands, occasionally in other countries).

In general, landings by foreign flag vessels for first sale in a Belgian auction are marginal compared to the landings into these vessels' home countries.

Belgian landings into the UK, and UK landings into Belgium

Sampling of the landings by Belgian vessels into the UK (mostly for transportation to a Belgian auction, rarely for first sale in the UK) and by UK vessels into Belgium, is subject to a bilateral agreement between ILVO-Fisheries on the Belgian side and CEFAS (Lowestoft) on the UK side. This agreement has been in place since several years.

Belgian landings into the Netherlands, and Dutch landings into Belgium

Landings by Belgian vessels into the Netherlands for first sale in a Dutch auction will be sampled by IMARES (IJmuiden). Landings by Belgian vessels into the Netherlands for transportation to and first sale in a Belgian auction will be sampled by ILVO-Fisheries upon arrival of the landings in Belgium. Sampling of these landings was taken into account when calculating the sampling levels in Table III.C.4.

Landings by Dutch vessels into Belgium for first sale in a Belgian auction are negligible (293.5 t landed weight in 2006, of which 27 t horse mackerel, 36 t whiting, 27 t bib, 32 t gurnard and 27 t of 'mixed' demersals) compared to the total landings by the Dutch fishing fleet and do not justify a dedicated sampling programme.

Belgian landings into France, and French landings into Belgium

Landings by Belgian vessels into France for transportation to and first sale in a Belgian auction will be sampled by ILVO-Fisheries upon arrival of the landings in the auction. Sampling of these landings was taken into account when calculating the sampling levels in Table.III.C.4.

Landings by French vessels into Belgium for first sale in a Belgian auction are negligible (75 t landed weight in 2007, of which 50 t sole) compared to the total landings by the French fishing fleet and do not justify a dedicated sampling programme.

Other

Belgian landings for first sale (and for transshipment, for the matter) into other countries than the UK, the Netherlands and France are negligible: 44.5 t (landed weight) into Denmark (mostly plaice, brown shrimp and cod) and 1.5 t into Ireland (figures for 2007).

Landings by 'other' foreign flag vessels (that is, other than UK, Dutch and French vessels) into Belgium are marginal: 18.5 t landed weight in 2007 by German vessels and 2.5 t by Danish vessels.

In view of their minor importance, it was decided not to set up special arrangements for the length and age sampling of these landings.

III.C.3 Data quality

The remaining métiers after selection, merging and derogation, are all beam trawl related. Therefore, it is not relevant to present a detailed table 'métiers/stocks'.

All stocks sampling will be based on **quarterly** estimates.

III.C.4 Regional co-ordination

Not applicable.

III.C.5 Derogations and non-conformities

The typical/dominant Belgian Fishing métiers are beam trawling for flatfish (sole and plaice) where eel is caught very rarely. Consequently, this results in zero catches for eel. Also no valid marine sampling strategy for length or age can be set up by Belgium. Therefore, Belgium requests derogation to sample eel length and age for both the NS&EA and NEA region.

III.D BIOLOGICAL RECREATIONAL FISHERIES

❖ Baltic Sea, North Sea and Eastern Arctic, and North Atlantic

III.D.1 Data acquisition

❖ Recreational fisheries for cod, *Gadus morhua*

In 2006, a pilot study was performed on the recreational fisheries for cod in the Belgian coastal waters. The pilot study report (*Resultaten van een pilootstudie over de recreatieve visserij op kabeljauw in de Belgische wateren - Results of a pilot study on the recreational cod fisheries in the waters under Belgian jurisdiction*) was transmitted to the Commission in February 2007.

Based on the SGRN's advice no sampling activities on the recreational fisheries for cod are foreseen so far for the year 2009-2010.

❖ Recreational fisheries for eel or sea bass or salmon

Belgium has no recreational fisheries for eel, sea bass and salmon.

III.D.2 Data quality

Not applicable

III.D.3. Regional co-ordination

Not applicable

III.D.4. Derogations and non-conformities

Not applicable

III.E BIOLOGICAL – STOCK RELATED VARIABLES

❖ Baltic Sea, North Sea and Eastern Arctic, and North Atlantic

III.E.1 Selection of stocks to sample

An overview of all species for which biological parameters sampling in the areas actually fished by the Belgian fleet (see Table 1.2 for a synoptic overview), together with the exemption rules applied (if any), is given in Table III.E.1.

The tables on the long term strategy are given Table III.E.2.

The overview of the planned sampling for age, weight, sex ratio, maturity and fecundity is given in Table III.E.3.

III.E.2 Data acquisition

Sampling strategy: At-sea sampling by sea-going observers.- concurrent sampling

Details on the numbers of observer trips planned in each fishery and the seasonal distribution of sampling effort are given in Table C.III.3. In most areas, fishing by the Belgian beam trawler fleet is concentrated in certain quarters of the year (depending on catch rates and quota availability), and the observer trips are scheduled accordingly. The proposed sampling scheme may however be adjusted in the course of the year, depending on changes in fleet behaviour, temporal closures of TAC areas, etc.

Sampling is done according the concurrent sampling scheme 1, scheme 2 or scheme 3 is selected according the opportunity during the trips.

A multi-annual sampling scheme for biological parameters (2008 - 2013) is given in Table III.E.2.

Pleuronectes platessa - ICES Sub-areas VIIa, VIId and VIIfg, and Solea solea - ICES Sub-areas VIIa, VIId and VIIfg

Prime data source: Market sampling, at-sea sampling.

At present, ***sex ratio*** and ***growth data*** (age-length and age-weight data) for both plaice and sole are gathered on a yearly basis. This will continue to be the case, since all necessary data are collected as part of the ongoing market and discard sampling programmes

As in previous years, ***sexual maturity*** will routinely be investigated for all plaice and sole stocks listed in Table III.E.2, as part of the routine market sampling programmes on these species and stocks (for details, see Section III.E.2).

Rajidae - ICES Sub-areas IV and VII (except VIIId)

Prime data source: Market sampling, scientific evaluation surveys.

Sex ratios will be calculated on a yearly basis, as part of the routine market sampling programmes for rays (for details, see Table III.E.2).

Sexual maturity data for rays in Sub-area IV will be collected during the BTS survey in August (see Section 7.1 for details on this survey). Typically, between 100 and 200 rays (mostly *Raja clavata* and *R. montagui*) are caught during this survey. ILVO-Fisheries has no surveys in Sub-area VII and therefore, is not in a position to undertake maturity studies in this area.

Growth of rays can be investigated through ageing or tagging. At present however, there is no generally approved and workable method to determine age for most ray species, and tagging is expensive. Therefore, the time schedule of any future growth studies on rays will depend on the progress that is made in developing a generally accepted technique for age determination.

Gadus morhua, Psetta maxima, Scophthalmus rhombus –Ices sub-areas IIa, IV, VIIId

Prime data source: Market sampling, at-sea sampling

Length and age are mainly sampled during at-sea sampling and supplemented for weight at the market.

Merluccius merluccius - Ices sub-areas IIa, IV and Vb, VI, VII, XII, XIV

Prime data source: at-sea sampling

Length and age are sampled during at-sea sampling.

Lophius budegassa and Lophius piscatorius - Ices sub-areas VII

Prime data source: at-sea sampling

Length and age are sampled during at-sea sampling.

III.E.3. Data quality

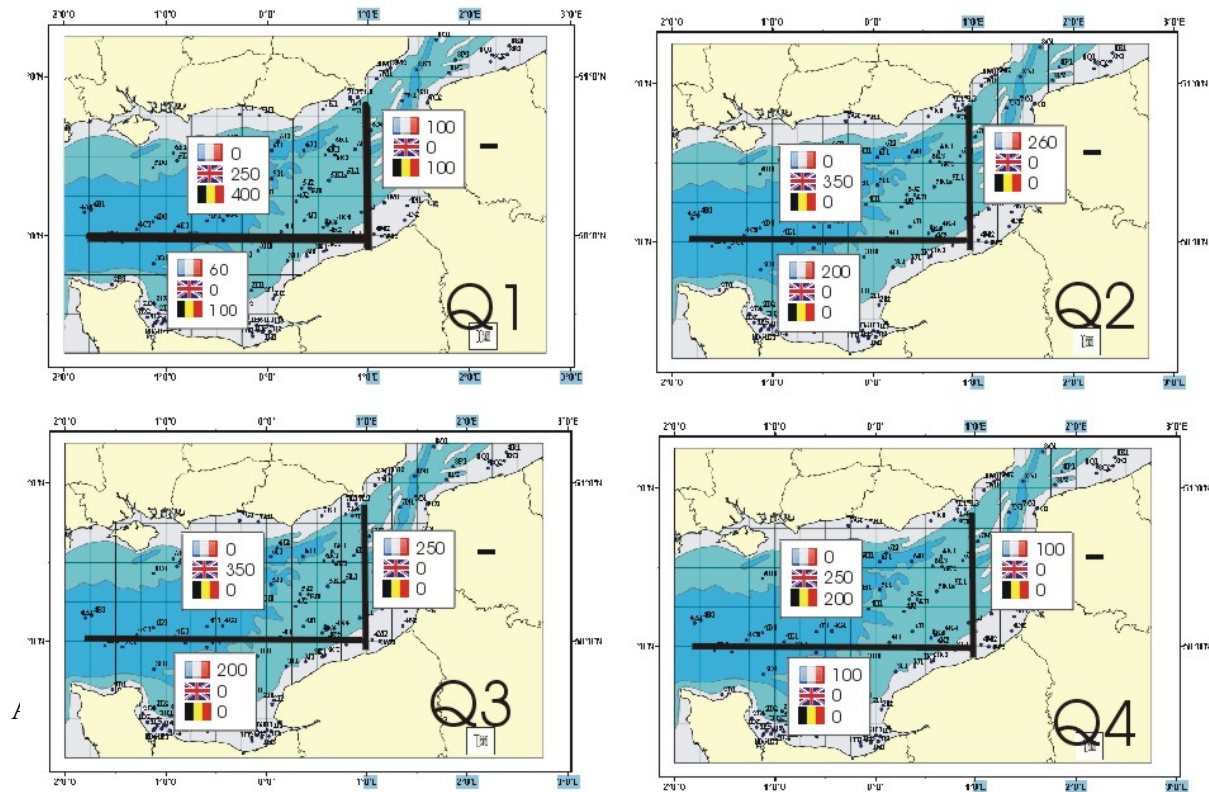
See section III.C.2.a

III.E.4. regional co-ordination

For international co-operation, the sampling intensities are listed for all stocks where Belgium plans sampling in 2009-2010, see Table III.E.3.

Stocks for which international co-ordination is already started are grey shaded (2 stocks of solea solea) are discussed below, being:

Age sampling of Solea solea in VIId. Belgium, the UK and France started co-operating in 2008, based on the Working Document concerning age sampling for VIId sole, presented at the 2007 RCM NS&EA. Accordingly, Belgium needs to sample 600 individuals in Q1 and 200 individuals in Q4. Sub-areas and numbers can be found below.



Document for age sampling of solea solea in VIIa at the 2008 RCM NEA. Therefore Belgium still maintains its national numbers at present but will adopt the newly agreed scheme for 2009-2010.

III.E.5 Derogations and non-conformities

The typical/dominant Belgian Fishing métiers are beam trawling for flatfish (sole and plaice) where eel is caught very rarely. Consequently, this results in zero catches for eel. Also no valid marine sampling strategy for length or age can be set up by Belgium. Therefore, Belgium requests derogation to sample eel length and age for both the NS&EA and NEA region.

III.F TRANSVERSAL VARIABLES

III.F.1 Capacity

See section III.A; and section III.B.

III.F.1.2 Data quality

See section III.A; and section III.B.

III.F.1.3 Regional Co-ordination

Not applicable

III.F.1.4 Derogations and non-conformities

Not applicable

III.F.2 Effort

III.F.2.1 Data acquisition

The NDGP covers all Belgian vessels in the EU Fleet Register. Parameters that will be recorded include:

- ***Fishing effort by technique***: Effort data (hours fishing, kW and GT) are collected by fishing voyage, as part of the routine effort, landings and revenue data collection system
- ***Specific fishing effort*** is derived from the voyage-wise landings and effort data. Species-specific effort is readily available for all species. If required, the existing database of landings and effort data allows for the retrieval of specific fishing efforts for other species as well.

Aggregated data on fishing effort and specific fishing effort will be reported by fleet segment, gear type and ICES Sub-area, as requested by the DCR (see text table below), but can equally be provided by any other type of spatial or temporal aggregation – using the Belsamp database.

Further details are described in section III.B

III.F.2.2 Data quality

Methods used to assure quality

In Belgium, effort and landings data are collected in two ways: from logbooks and from sales notes. The logbooks contain extensive information on the retained catches and their species composition by haul (albeit with certain restrictions – see bullet point 2 underneath), but they do not contain information on the size composition (in terms of market categories) of the retained catches. The sales notes on the other hand, contain information on the quantities auctioned by market category for all species landed (and not just for the species recorded in the logbooks – again see bullet point 2), but they do not provide information on the exact origin (in terms of statistical rectangles) of the landings. The two systems are equally important to the Belgian data collection system, they are complementary, and the combination of the two has clear advantages:

- (1) The two approaches yield independent estimates of the retained and landed portions of the catches, and can thus be used for quality control and validation purposes. This helps improving the reliability of the landings figures.
- (2) In the Logbook Regulation, it is stipulated that "*only catches of an amount greater than 50 kg of live-weight equivalent of any species retained on board must be recorded in the logbook*" (Article 2.4.2. of Annex V of Commission Regulation (EEC) No. 2807/83), the consequence being that small by-catches of fish and shellfish often remain unrecorded in the logbooks. These quantities however, are picked up in the sales notes, which helps improving the species coverage and hence the comprehensiveness of the landings statistics.
- (3) As already mentioned in Section III.C. (see para. Landings by Belgian vessels in foreign harbours), roughly one fifth of all fish and shellfish taken by Belgian vessels in the southern and central North Sea are auctioned abroad, mostly in the Netherlands. Also, vessels making consecutive fishing trips in distant waters before returning to their homeport in Belgium, may sell part of their catches during their stop-overs in a foreign harbour. Data on the sales abroad are collected by local authorities from sales notes and submitted to the Sea Fisheries Service for incorporation in the Belgian national fishstats database. This requires additional quality checks and codification, to ensure that the imported data are compatible with the recipient database.
- (4) Last but not least, the landings data by market category are of critical importance to the biological data collection programme on the landings which heavily relies on stratified sampling by market category

The dual approach (logbooks and sales notes) is advocated by the ICES Planning Group on Commercial Catch, Discards and Biological Sampling (PGCCDBS) as a means to validate the different sources of information on catches and landings. In its 2007 report ⁽³⁾, the PGCCDBS states that "*In order to establish quality indicators that can be used to evaluate / estimate the*

⁽³⁾ ICES (2007): Report of the Planning Group on Commercial Catch, Discards and Biological Sampling, ICES Advisory Committee on Fisheries Management, ICES CM 2007/ACFM:09, page 68.

accuracy of the fishery statistics and biological information about the catches, it is necessary to make use of different sources of information and analyse the consistency between them with regards to the relevant parameters. Such a quality control thus needs to check different sources for the same information, e.g. logbooks compared with sale slips from the same vessel and/or trip". This is exactly what has been done for several years now in Belgium.

Further details are described in section III.B

❖ Conversion factors

The conversion factors used to convert landed weights (gutted for most round- and flatfish species, gutted and without head for anglerfish, tails only for *Nephrops*, etc.) to live weights are given in Table III.F.3.

III.F.2.3 Regional Co-ordination

Not applicable

III.F.2.4 Derogations and non-conformities

Not applicable

III.F.3 Landings

III.F.3.1 Data acquisition

❖ Data collected

Weights (and sales values) of the landings are routinely collected for all species listed in the text table below, from both logbook data and sales notes. The data cover all landings by Belgian vessels in both Belgian and foreign harbours, and are exhaustive.

Species for which species-wise landings and revenue data will be collected in 2009-2010	
Demersal fish species	<i>Rajidae</i> (a)
<i>Anarhichas lupus</i>	<i>Scophthalmus rhombus</i>
<i>Anguilla anguilla</i>	<i>Scylliorhinus canicula</i>
<i>Aspitrigla cuculus</i>	<i>Sebastes</i> spp.
<i>Conger conger</i>	<i>Solea solea</i>
<i>Dicentrarchus labrax</i>	<i>Squalus acanthias</i>
<i>Eutrigla gurnardus</i>	<i>Trigla lucerna</i>
<i>Gadus morhua</i>	<i>Trisopterus luscus</i>

<i>Hippoglossus hippoglossus</i>	Pelagic fish species
<i>Lepidorhombus spp.</i>	<i>Clupea harengus</i>
<i>Limanda limanda</i>	<i>Scomber scombrus</i>
<i>Lophius spp. (a)</i>	<i>Sprattus sprattus</i>
<i>Melanogrammus aeglefinus</i>	<i>Trachurus trachurus</i>
<i>Merlangius merlangus</i>	Crustaceans
<i>Merluccius merluccius</i>	<i>Cancer pagurus</i>
<i>Microstomus kitt</i>	<i>Crangon crangon</i>
<i>Molva molva</i>	<i>Homarus gammarus</i>
<i>Mullus surmuletus</i>	<i>Nephrops norvegicus</i>
<i>Mustelus mustelus</i>	Molluscs
<i>Platichthys flesus</i>	<i>Buccinum undatum</i>
<i>Pleuronectes platessa</i>	<i>Loligo spp.</i>
<i>Pollachius pollachius</i>	<i>Octopus spp.</i>
<i>Pollachius virens</i>	<i>Pecten maximus</i>
<i>Psetta maxima</i>	<i>Sepia officinalis</i>
(a) Species segregation performed as part of the market sampling programmes	

III.F.2.2 Data quality

See section III.A; and section III.B.

III.F.2.3 Regional Co-ordination

Not applicable

III.F.2.4 Non-conformities

❖ The problem of the 'restricted' list

In the past, the idea of having a 'restricted' list of species for which landings data are recorded (see text table on page 11), has been labelled as a 'non-conformity' by the External Evaluators. There is, however, a rationale behind the idea of the restricted list. Species that do not figure in the restricted list are not deliberately omitted from the data recording system – ***they are simply not landed by the Belgian fleet in quantities of any importance***. As such, the list should not be seen as an attempt 'to get away with the minimum', but rather as a reflection of the actual composition of the Belgian fish and shellfish landings. There is a historical background to the restricted list, which is based on the peculiarities of the Belgian sea fisheries

- The geographical distribution of Belgian fishing effort is limited to the North Sea, the English Channel, the Irish Sea, the Celtic Sea, South of Ireland and the inner part of the Bay of Biscay. The consequence being, that all typically boreal and Lusitanian species are absent from the landings.
- Belgium has no industrial, no distant and no deep-water fisheries. Again, this implies that all species which are typical to such fisheries are absent from the landings.

In its evaluation of the former NP proposals (the issue was not raised by the External Evaluators in relation to the 2006 and 2007 NP proposals), SGRN stated that it saw no contradiction between the requirements of the DCR and the use of a restricted list, "*as long as the 'restricted list' is a correct reflection of the species composition of the landings*". Belgium has repeatedly confirmed that this is the case.

❖ **The problem of 'mixed' landings**

Belgium has taken notice of SGRN's recommendation that "*pilot studies shall be implemented, where relevant, to obtain a better understanding of the composition of mixed species categories*".

In the Belgian fish and shellfish landings, a distinction must be made between two categories of mixed landings:

- Mixed landings of (relatively) large quantities of fish *pertaining to the same group of species*, such as *Lepidorhombus spp.*, *Lophius spp.* and *Raja spp.*

For *Lophius* and the *Rajidae*, partitioning of the landings by species is done as part of the routine length and age sampling programmes

The landings of *Lepidorhombus spp.* are too small (≈ 160 t live weight annually for all areas combined) to justify dedicated sampling for species segregation purposes.

- Mixed landings and sales of fish and shellfish in *quantities that are too small to be auctioned separately*.

These mixed sales are of an extremely variegated and variable nature, and they never represent more than a few kilograms per voyage. The cost for setting up a system to disaggregate such mixed landings would be disproportionate compared to the increase in precision that might be achieved.

In the current data system collection, this category of mixed landings is recorded as 'Other demersals', 'Other pelagics', etc., together with the landings of species that are not in the restricted list. It is worth noticing that the 'Other' categories are marginal compared to the total Belgian landings (see table on page 11). In view of this, the omission of the quantities that end up in the 'Other' categories from the species-wise totals, hardly affects the reliability of the latter, and the final figures remain well within the margins of the precision levels required by the DCR.

III.F.2.3 Regional Co-ordination

Not applicable

III.F.2.4 Derogations and non-conformities

Not applicable

III.G SURVEYS AT SEA

1. III.G.1 Planned surveys

Belgium is expected to take part in two Priority 1 surveys, viz. the Demersal Young Fish Survey (DYFS) and the North Sea Beam Trawl Survey (BTS)..

❖ **Demersal Young Fish (and Brown Shrimp) Survey (DYFS)**

As part of the international Demersal Young Fish (and Brown Shrimp) Survey, an annual autumn sampling survey will be carried out in the Belgian coastal waters, to collect data on the abundance of juvenile flatfish (primarily plaice, *Pleuronectes platessa*, dab, *Limanda limanda*, and sole, *Solea solea*) and brown shrimp (*Crangon crangon*). The vessel used is the RV O.29 'Broodwinner' (LOA 27.2 m; engine power 221 kW). Overall, about 35 fixed sampling stations will be fished (see Table III.G.1). The location of the sampling area corresponds to the main flatfish nursery grounds along the Belgian coast (see Figure III.G.a).

Following the DCR Regulation, the DYFS is also an ecosystem survey. Belgium will incorporate the ecosystem approach for this survey from 2009 onwards, but details are not available yet. In the course of 2009, a detailed sampling strategy will be set up in order to collect the data for calculating the ecosystem indicators.

Previous followed methodology

All DYFS sampling stations are fished for approx. 15 min, with a standard shrimp beam trawl (beam length 6 m; codend mesh size 22 mm). Commercial fish are hand-picked from the catches, sorted by species and measured to the cm below.

Brown shrimp are first graded into 'small' and 'large' by means of a rotating shrimp riddle of the type that is also used on commercial shrimpers. From these two fractions, samples are taken of 1-2 litre each (depending on the proportions of shrimp and other organisms in the catch fractions). Samples are further sub-sampled in the lab (by weight) to an equivalent of approx. 250 shrimps, which are then measured in 5 mm size classes.

All data are stored in Excel spreadsheets at ILVO-Fisheries, but will soon be entered in the sea surveys module of the Belsamp database (the main national depository for NDGP data (Data is upload to the WGBEAM database and trial upload in DATRAS database was successfull. From 2009 onwards, the data will be uploaded in DATRAS, also for the previous years.

❖ North Sea Beam Trawl Survey (BTS)

In August 2009-2010, the adult flatfish stocks (primarily plaice and sole) in the south-western part of the North Sea will be sampled with the RV '*Belgica*' (LOA 50 m), as part of the annual international North Sea Beam Trawl Survey. Samples will be taken on about 60 fixed stations in BTS Areas 2, 3 and 4 (Table III.G.1, Figure III.G.b) The position of the sampling stations and the methodology used to collect and analyse the samples are the same as in previous surveys.

Methodology

All BTS stations are fished for 20-30 min (depending on quantities to be expected and the likely presence of potentially damaging obstructions such as rocks, boulders, etc.) with a 4 m beam trawl. All commercial fish are hand-picked from the catches, sorted by species and measured to the cm below. For plaice and sole, otoliths are taken from 10 fish per cm class per BTS sub-area, to establish species- and area-specific age-length keys (ALKs).

In addition, semi-quantitative data are collected on the abundance of the most important by-catch species (both invertebrates and fish), and on the size composition of the *Cancer pagurus* by-catches.

All data are stored in Excel spreadsheets at ILVO-Fisheries, but will soon be entered in the sea surveys module of the Belsamp Database. Data is uploaded to the WGBEAM database and trial upload in DATRAS database was successful. From 2009 onwards, the data will be uploaded in DATRAS, also for the previous years.

2. III.G.2. Modifications in the surveys

None.

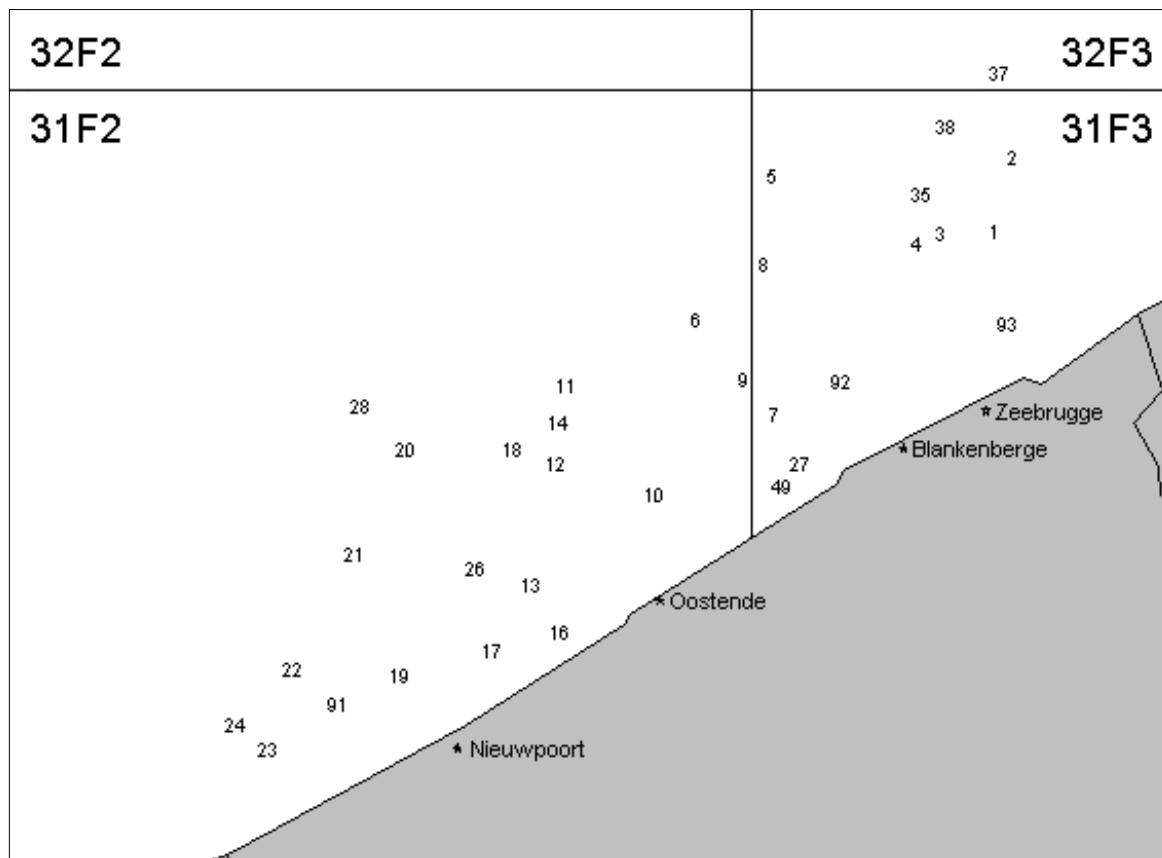


Figure G.1.a - DYFS sampling stations in the Belgian coastal waters and location of the GERS monitoring station (near the city of Nieuwpoort).

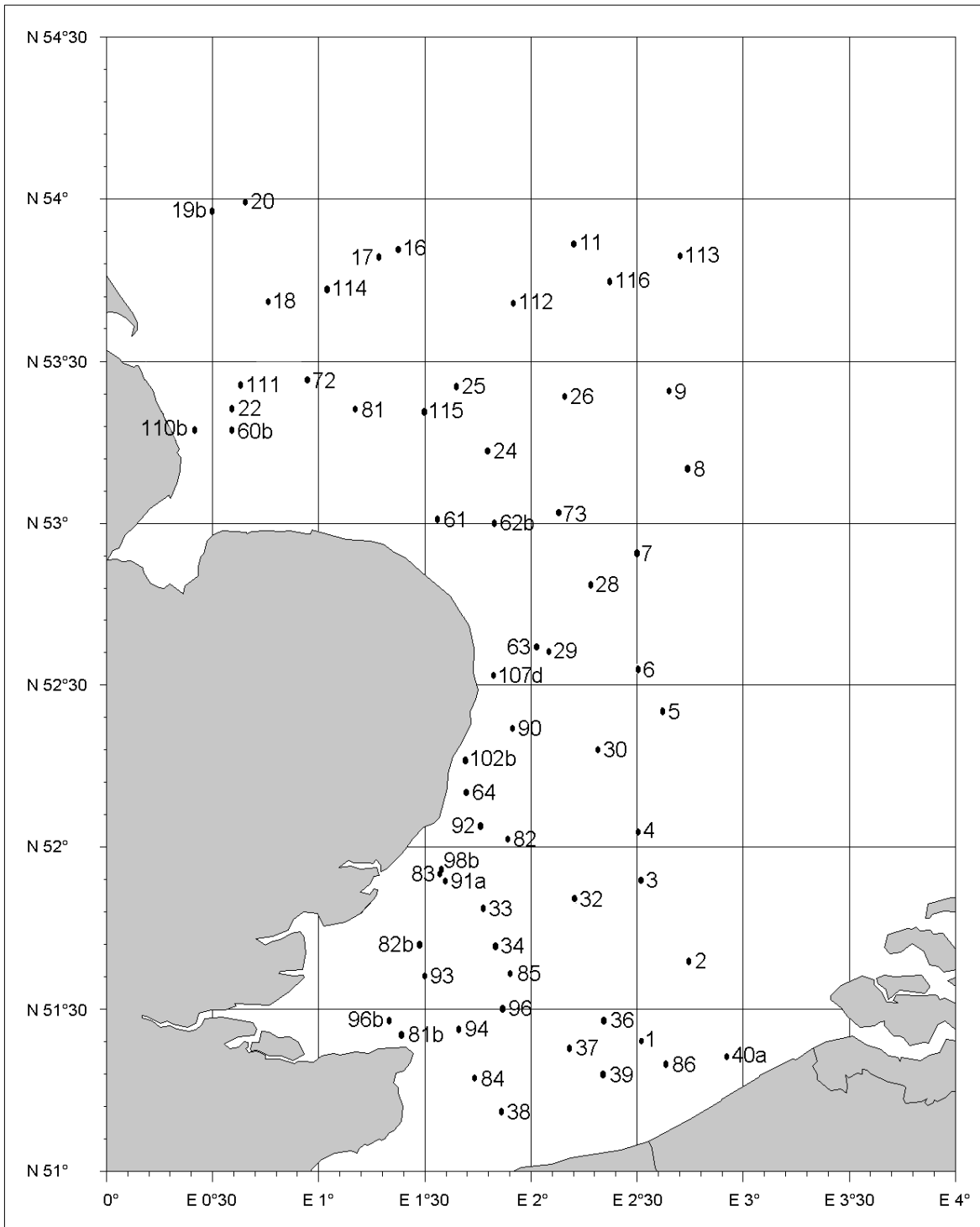


Figure G.1.b - BTS sampling stations in the south-western part of the North Sea.

IV MODULE OF THE EVALUATION OF THE ECONOMIC SITUATION OF THE AQUACULTURE AND PROCESSING INDUSTRY

IV.A Collection of data concerning the aquaculture

IV.A.1. General description of the sector

A new regulation on aquaculture (EC) No 762/2008 of the European Parliament and of the Council has come into force, since 9th of July 2008. In respect of this regulation, the Federal Department of Economics has carried out research that demonstrates that the aquaculture sector is in a difficult position in Belgium.

The sector never really gained in importance and many enterprises have ceased their activities for financial reasons over the last years. Strong dependency on environment, disease sensitivity and important competition from imported products rapidly discourage starting enterprises. Experts expect this downward trend to continue in the coming years. A more detailed survey as prescribed by the new regulation doesn't seem to commensurate with the small scale of aquaculture in Belgium. In 2007, the total annual production amounted to 128 tons .

Therefore the department of economics applied for derogation to submit annual statistics on aquaculture for 2008.

In respect of this, Belgium to request derogation as well regarding submitting Belgian data for the evaluation of the economic situation of the aquaculture sector under the new DCR Regulation.

IV.A.2. Data acquisition

Not applicable

IV.A.3. Data quality

Not applicable

IV.A.4. Regional co-ordination

Not applicable

IV.A.5. Derogations and non-conformities

Not applicable

IV.B. Collection of data concerning the processing industry

IV.B.1. Data acquisition

Not applicable - under construction

IV.B.2. Data quality

Not applicable - under construction

IV.B.3. Regional Coordination

Not applicable - under construction

IV.B.4. Derogations and non-conformities

Belgium has experienced several difficulties over the past years (2006-2008) regarding Module K (old DCR) - Data concerning fish processing industry (see NPs, TRs and Reply-to-the-Commission's 2006-2007). Albeit its strategy was clear and found correct, the data and its results were not up to standard, mainly due to the low overall response rate and the impossibility of the companies to answer to the questionnaire in full detail. This hampered seriously the quality of the collected and aggregated data, which has been the major comment by SGRN's evaluations regarding this Module. Therefore the straightforward continuation of the used strategy is no longer desirable.

As already stated in its Reply-to-the-Commission-on-TR-2007, Belgium will extend the partnership for the execution of the NDGP with the ILVO-Social Sciences Unit (ILVO-Landbouw & Maatschappij). The Social Sciences Unit studies the social and economic aspects of production and processing of (sub)sectors of the agro-industrial complex. As such it holds experience, among others, in the study of vegetable marketing, energy and material flows, and the green house sector. The development of monitoring instruments and the analysis of actor-network interactions, are key elements of the activities of the Social Sciences Unit (see Annex for a detailed description of the new partner)

The partnership with the Social Sciences Unit has only been finalised shortly prior to the compilation of the NP 2009-2010. The Unit is hence in full progress of establishing and describing the best strategy to comply with the requirements of the DCR, incorporating the comments made by the different expert groups and bodies over the past years regarding its encountered difficulties. Unfortunately, the complete and detailed description for Module 3.B (new DCR) could not be finalised before the official deadline deadline of 15th October 2008, neither before the extended deadline of 31st October 2008.

With the implementation of the new DCR, Belgium wants to construct a solid and stable sampling strategy for 2009 and onwards. The sampling of the economic data for the processing industry has been identified to be very difficult by the expert groups and

bodies. Also the interaction between the NDGPs and the fish processing industry is a growing process and care should be taken not to head into strategies and objectives that seem feasible but fail to comply adequately. Therefore, Belgium apologizes for not being able to incorporate Mod 3.B (previously referred to as Mod K) in its NP 2009-2010 proposal. Nevertheless, it will assure that the full description will be made available as soon as possible, being as an addendum to its NP or in its Reply-to-the-Commission-NP-2009-2010.

In 2006, 2007 and 2008, economic data on the fish processing industry were collected through questionnaires that were sent to all medium-sized and large (fish) processing companies in Belgium, and that were returned to ILVO-Fisheries for subsequent analysis (see 2006, 2007 & 2008 Technical Report for details on parameter definitions and a copy of the questionnaire). The experience gained in 2006, 2007 and 2008 with the voluntary response system will be used by the Social Science Unit to refine the data collection system, with a view to increase the overall response rate and the quality of the responses (also see 2006 Technical Report, Section 13.5).

For obvious reasons, the proposed data collection system will show a time-lag of at least one year, since the data collected in 2009 at the best will refer to the financial situation of the processing companies in 2008.

With respect to this Module of the DCR, it should be emphasised that Belgium has very few processing companies that are entirely committed to fishery products. Most companies do have different types of processing activities, of which fish and shellfish may be one, but not necessarily the most important one.

V. MODULE OF THE EFFECTS OF THE FISHING SECTOR ON THE MARINE ECOSYSTEM

Data for calculating ecosystem indicators are collected through surveys (see Table III.G.1), During the BTS data for the ecosystem indicators 1,2 and 3 will be collected from 2009 onwards.

As stipulated under section III.G.1, following the DCR Regulation, the DYFS is also an ecosystem survey. Belgium will incorporate the ecosystem approach for this survey from 2009 onwards, but details are not available yet. In the course of 2009, a detailed sampling strategy will be set up in order to collect the data for calculating the ecosystem indicators. During the previous NP year, it was not possible to incorporate the data regarding ecosystem indicators, as the vessel used, 'De Broodwinner' is a training vessel for young fishermen as well. As a result, there is not enough space available on the vessel to extensively collect all needed data for the relevant ecosystem indicators.

In addition, through the sampling by metier of biological variables, the ecosystem indicators 4, 5, 6, 7 and 8 will be collected. From 2009 onwards, Belgium will incorporate the collecting of this data and a detailed sampling strategy will be set up (See Table III.C.3).

Through collecting of data for economic variables (see Section III.B.1, Table III.B.3), the ecosystem indicator 9 will be calculated. In addition, VMS data collected by the Sea Fisheries Department will be used from 2009 onwards. These data are already available, but the procedure for data aggregation is not established yet. Based on the current VMS data collection, the VMS data are registered every two hrs during the trip of the vessel.

During 2009, a detailed calculation of the ecosystem indicators will be developed.

VI. MODULE FOR MANAGEMENT AND USE OF THE DATA

VI.A Management of the data

❖ Sea Fisheries Service

The Sea Fisheries Service has extensive databases with landings, effort and economic data on the Belgian sea-going fishing fleet that will be complemented with the information gathered during the 2007 and 2008 NDGPs.

❖ ILVO-Fisheries

The results from the North Sea Beam Trawl Survey are currently stored in a central WGBEAM database, held by IMARES on behalf of ICES.

Development of new databases

❖ ILVO-Fisheries

In April 2003, ILVO-Fisheries started with the development of a central depository for NDGP-data (the so-called Belsamp database), in co-operation with a sub-contracted software developer. The Belsamp database has a modular structure, with (i) separate modules for the quality control, storage, partial treatment and retrieval of fisheries statistics, data from market and discard samplings, survey data, etc., and (ii) peripheral modules with vessel registers, taxonomic information on the most important fish and shellfish species, area and stock descriptions (in terms of statistical rectangles), etc.

The database is developed in such a way that it is:

- Error-proof, in the sense that it has all the necessary internal validation routines and redundancy checks to make sure that the quality of the data is guaranteed.
- Flexible, so that it can easily be appended with user-defined new modules (e.g. for new surveys).
- Transferable to portable computers, so that it can be taken to meetings outside the institute.
- Compatible with other applications, in the sense that it is able to produce outputs that can easily be imported into other applications in a Windows environment.
- Easy to maintain, so that it can easily be maintained by the institute's staff, without costly, long-lasting support contracts with third parties.
- Compatible with the Commission's requirements on data communication and data exchange formats.

A copy of the framework contract with the software developer, in Dutch, was provided as an Annex to the 2005 NP proposal.

VI.B. Use of data -

The Belsamp database is now mostly completed and will be used shortly as a depository for all historical and new NDGP data.

Regional database for the North Sea

In 2006, the North Sea countries have started exploring the potential of a regional database for the North Sea, with a view to its future use as a regional depository for fisheries statistics (primarily landings and effort data) and biological data.

Such a move implies that large amounts of data will need to be uploaded from Belsamp to this regional database. This can best be done by means of automated exchange protocols, to make sure that data transmission is flawless and in the proper format. In the budget proposals for 2007, 2008 and 2009-2010, a *pro memore* cost was/is foreseen for the development of such protocols.

As last year, it is proposed to only use this sum if the RCM North Sea & East Arctic actually decides to start using the regional database as a common data warehouse for all North Sea fish and shellfish data.

VII. Follow up of STECF-recommendations

For the previous NP-proposals, SGRN gave their recommendations to the MS. An overview of the follow-up of SGRN recommendations for Belgium is given below:

❖ SGRN - July 2004

There were no recommendations that affected the 2008 NP proposal.

❖ SGRN - December 2004

SGRN: General comment on Precision levels for discard estimates

SGRN notes that several countries have reported difficulties in reaching the precision levels established in the DCR for discard sampling, and for this reason they have requested for derogation. SGRN acknowledges the fact that due to the variable nature of discards, as shown by several studies [...], the precision levels required by the DCR are in many fisheries excessive and thus only achievable at great economic expense.

[...]

SGRN has reservations about obtaining derogation purely on the grounds of the inability to reach the required precision level, since this might be seen as a permission to stop discard sampling. SGRN concluded that the problem of excessive precision under the MP cannot be resolved in a simple way. It suggests that MS attempt to achieve the highest precision possible within the constraints of excessive cost, and that this problem will need to be considered again in the revision of the DCR.

Responsive action taken: Over the past four years, Belgium has made serious efforts to extend its discard sampling programme and to direct sampling effort primarily to those fisheries where the Belgian fleet is assumed to contribute most to discarding. These efforts have resulted in the hiring of three sea-going observers (on a total NP-staff of 12) and in the number of planned observer trips having gone up from six in one fishery (flatfish directed beam trawl fishery in the Irish Sea) in 2002, to around 30 in five fisheries (flatfish directed beam trawl fisheries in the North Sea, the Eastern and Western Channel, the Irish Sea and the Celtic Sea) in 2008 (for details, see Section 5.5 and Table 5.3). For the moment, however, ILVO-Fisheries is on the limit of its carrying capacity with regards to at-sea sampling, and any further improvement of the quality of discard data will have to be realised through international co-operation.

SGRN: General comment on CPUE series for tuning purposes and associated length and age sampling

SGRN noted that in many cases, fleet CPUE series which are used for tuning assessments under the MP also include length and age compositions associated with the fleets. In cases where a fleet has declined over time and no longer supports sufficient landings to justify the collection of

length and age data, SGRN accepts that these fleets are eligible for derogation and should be moved out of the MP. However, if the changes appear to be only a temporary switch in activity of the fleet such as might occur following quota restrictions, then MS should be encouraged to maintain the time series by including the length and age samples under the EP.

Responsive action taken: There is one Belgian CPUE data series that falls into this category, viz. the one for FU 5 *Nephrops*. Over the past years, the Belgian *Nephrops* directed fishery in FU 5 has constantly been on the decline, and the number of specialised *Nephrops* trawlers has fallen to such a low number that the CPUE data are no longer fit for tuning purposes. Nevertheless, Belgium will continue collecting CPUEs on this fishery, as the basic data to the series (landings and effort by fishing trip) are collected anyhow as part of the routine landings and effort data recording system (also see Section 6.5).

❖ **SGRN - June-July 2005**

There were no recommendations that affected the 2008 NP proposal.

❖ **SGRN - December 2005**

SGRN: General comment on Reporting of landings abroad

The Evaluators commented that several MS did not provide text on the landings of fish either in other MS or in countries outside the EU. SGRN reminds MS of the following articles in Council Regulation (EC) 2847/1993:

Article 9.1

Auction centres or other bodies or persons authorised by Member States, which are responsible for the first marketing of fishery products landed in a Member State shall submit, upon the first sale, a sales note to the competent authorities of the Member State in whose territory the first marketing takes place.

Article 11.1

Without prejudice to Articles 7, 8 and 9, the master of a Community fishing vessel who:

- *tranships to another vessel, hereinafter referred to as "the receiving vessel", any quantities of catches of a stock or a group of stocks subject to a TAC or quota irrespective of the place of transshipment, or*

- *directly lands such quantities outside Community territory,*

shall at the time of the transshipment or of the landing, inform the Member State whose flag is flying, or in which his vessel is registered, of the species and quantities involved and of the date of transshipment or of landing and of the location of catches by reference to the smallest zone for which a TAC or quota has been fixed.

Article 15.1

Before the 15th of each month, each Member State shall notify the Commission by computer transmission of the quantities of each stock or group of stocks subject to TACs or quotas.

Article 15.2

The Commission shall keep available to Member States on computer the notifications received pursuant to this Article.

SGRN regards these articles as fully covering the requirement to report landings abroad and expects that MS comply to this requirement, regardless as to whether this is explicitly mentioned in their NP Proposals or not.

Responsive action taken: Belgium has a well-established data recording and exchange system for landings by foreign vessels for either first sale in a Belgian auction or transshipment to the flag country of the vessels concerned. Conversely, Belgium is receiving full information from the relevant MS (there are no Belgian landings outside the EU) on the landings by its flag vessels into other countries. We therefore can conclude that the Belgian data collection system for landings and effort is in full compliance with the above recommendation (also see Section, 5.1, para. International data exchange).

SGRN: General comment on the Interpretation of biological sampling requirements

2006 is the first year when NP Proposals should reflect the amended version of the DCR (EC Regulation 1581/2004). In the new version of the DCR, it is stipulated that MS must apply a sampling strategy targeting the precision levels specified in para. 3,a,i,b for the biological sampling (length and age) of their catches. The sampling intensities defined in Appendix XV of the revised version of the DCR and calculated from the quantities landed, have since then become a "fallback option", in case the target precision level cannot be achieved.

According to the provisions of the new DCR, sampling intensities of the mandatory stocks must be set at least at the sampling levels of the "fallback option" and preferably at levels that allow reaching precision level 1, which is the lowest precision level defined in the DCR. SGRN is of the opinion that, for each sampled mandatory stock, MS should ensure a sampling design – either on their own or in co-operation with other MS – that covers the main fishing activities and the seasonality of the fisheries. Moreover, if the stock is under a Commission Recovery Plan, the sampling design should target precision level 2 instead of level 1.

In the light of the revised approach, a mandatory stock for which the exemption rules do not apply, must be sampled for length and, where appropriate age, according to the general principles set out in the previous paragraphs, and the low levels of sampling of the "fallback option" can never be used as an argument not to sample the stock.

Responsive action taken: Belgium has never used the low sampling levels of the "fallback option" as an argument for not sampling a particular species or stock. Instead, target sampling levels have always been adjusted upwards (in a number of cases at national expense) to guarantee at least some degree of spatial and temporal coverage (for details on planned and achieved sampling levels, see Table 8.1 in this or in previous years' NP proposals, and Table 10.1 in the 2005 or 2006 Technical Reports).

SGRN: General comment on Accessibility and compensation of commercial fishing vessels

SGRN reminds MS that they have the obligation to provide access for sea-going observers to any fishing vessel. SGRN recommends, however, that this should, if possible, be done through cooperation with the fishing industry, which has proven its effectiveness in many MS.

In relation to payments, SGRN distinguishes two situations in which ship owners and/or skippers may be paid by MS under the DCR:

- Ship owners and/or skippers receive a payment for assistance put into the sampling operations, and/or costs induced by the observers (safety equipment, food, etc.) or the sampling process (loss of value of landed fish owing to removal of otoliths, etc.) (= compensation); and
- A payment for having the observers on board (= reward).

SGRN recommends that the DCR should provide the opportunity for paying skippers compensations, because these can be considered as normal sampling costs. SGRN further recommends that the DCR should provide the opportunity for paying rewards by individual MS only if paying rewards serves the purpose of increasing the quality of the data collection through increasing the pool from which vessels can be randomly selected. SGRN recognizes, however, that this does not relieve MS from their tasks of providing access to any fishing vessel as is laid down in the DCR.

Responsive action taken: In Belgium, observer access to fishing vessels is on a voluntary basis. So far, the system has worked satisfactorily, although it must be admitted that the number of accessible vessels is relatively small. The problem has recently (April 2007) been discussed with the (new) director of the Belgian fishermen's organisation, and it was agreed that a joint initiative (ILVO-Fisheries - PO) would be taken to increase the pool of accessible vessels.

In Belgium, vessels are ***not*** being paid rewards for taking observers and it is the intention to hold on to this approach.

SGRN: General comment on Sampling information and precision levels for economic data (under Module J)

SGRN recognises the difficulty of achieving standard precision levels for fleet economic data. SGRN also notes that the calculation of precision levels requires that samples are random or at least, reflect some degree of randomisation. SGRN urges MS to provide full and clear information in their NP Proposals concerning sampling and survey procedures in order that the likely quality and reliability of the data can be assessed.

Responsive action taken: Details on the sampling methodology under Module J are given in Section 10.1 of the present document. Belgium recognises that a data collection system based on voluntary responses does not necessarily yield a random(ised) picture. There are, however, administrative and political constraints that prevent the introduction of other approaches (see document *Reply to the request by the European Commission for further information on the 2005 Technical Report*, September 2006).

❖ **SGRN - July 2006**

SGRN: General comment on Derogation rules regarding low level of landings

In the case of decreasing landings of a species, for instance from stocks under recovery plans or stocks below standard biological limits, the strict application of DCR rules can result in a decrease in the number of samples carried out and in the quality of the estimates. Even in the case of achieving a specific precision target, the market length and age sampling could be less accurate and the fishing mortality estimates could be unreliable, e.g. such as in the case of a species not being landed but catches continue to be discarded.

SGRN proposes that MS should undertake to sample to precision levels rather than on the basis of historical landings so that the mortality estimates derived from catch age and length sampling are accurate and achieve a high precision for the individual species and stocks affected.

Responsive action taken: In as much as possible, Belgium has always tried to sample at levels that guarantee sufficient spatial and temporal coverage, also for species where the formal sampling requirements are very low in view of the small quantities landed from a particular species or stock (see Table 8.1 in this or in previous years' NP proposals for details on national sampling targets compared to the MP-requirements).

❖ **SGRN - December 2006**

SGRN: General comment on Parameter definitions for the processing industry

Firstly, SGRN recommends that MS should comply with the provisions of the DCR. Nevertheless, SGRN recognises the difficulty of collecting economic data for the processing industry, also considering that the definition of several parameters in Appendix XIX of the DCR is not clear. SGRN is aware that a Workshop on the Processing Industry was held early in 2006 to propose precise definitions of the economic parameters to be adopted for the fish processing industry in the new DCR. In the meantime, SGRN suggests that MS consider the outcomes of the WS, particularly concerning the definition of the parameters and recommends 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.

Responsive action taken: The recommendations of the Workshop on the Processing Industry, mentioned in SGRN's comment, were taken into account when putting together the questionnaires that were sent to (fish) processing companies as part of the 2006 NP and that will be used again as part of the 2007 and 2008 NPs (for details, see 2006 Technical Report, Section 13.1).

VIII. LIST OF DEROGATIONS

List of request of derogations:

Short title of derogation	NP Proposal section	Derogation approved or rejected ¹	Year of approval or rejection of past requests for derogations
sampling of whitefish directed bottom trawl fisheries in IV	II.C.1	In previous years apporved	
Belgian nephrops fishery in FU33	II.C.1	Requested	
Belgian nephrops fishery in FU5	II.C.1	Requested	
Discard sampling on brown shrimp fishery	II.C.1	Requested	
Evaluation of the economic situation of the aquaculture	IV.A	Requested	
sampling the whitefish directed bottom trawl fisheries in IV and VIId.	II.C.1	Requested	

List of acronyms and abbreviations

ALK	Age-length key
BTS	North Sea Beam Trawl Survey
CEFAS	Centre for Environment, Fisheries and Aquaculture Science (England)
CL	Carapace length (standard measure for whole <i>Nephrops</i>)
CPUE	Catch per unit effort
DCR	Data Collection Regulation
DYFS	Demersal Young Fish (and Brown Shrimp) Survey
EC	European Commission
EIFAC	European Inland Fisheries Advisory Commission
EP	Extended Programme under the requirements of the DCR
FU	Functional Unit (geographical definition of <i>Nephrops</i> stocks)
GERS	Glass Eel Recruitment Survey
GT	Gross tonnage
ICES	International Council for the Exploration of the Sea (Denmark)
ILVO	Institute for Agriculture and Fisheries Research (Belgium) (formerly Centre for Agricultural Research, CLO)
INBO	Research Institute for Nature and Forest (Belgium)
IMARES	Institute for Marine Resources & Ecosystem Studies (Netherlands)
JRC	Joint Research Center (Italy)
LOA	Length over all
LPUE	Landings per unit effort
MP	Minimum Programme under the requirements of the DCR
MS	EU Member State(s)
NDGP	(Belgian) National Data Gathering Programme
NP	National Programme
PGCCDBS	ICES Planning Group on Commercial Catch, Discards and Biological Sampling
RAC	Regional Advisory Council
RCM	Regional Co-ordination Meeting
RCM NEA	Regional Co-ordination Meeting for the North-East Atlantic
RCM NS&EA	Regional Co-ordination Meeting for the North Sea & the East Arctic
RFO	Regional Fisheries Organisation
SGRN	STECF Sub-group on Research Needs
STECF	Scientific, Technical and Economic Committee on Fisheries
TAC	Total allowable catch
VIS	Vis Informatie Systeem (regional database with all information related to fresh water fish in Flanders)

IX. COMMENTS, SUGGESTIONS AND REFLECTIONS

As in the previous NP yeas, Belgium notices that there is a persistent lack of clarity with regards to the sampling programmes for eel.

Although there is general agreement within the scientific community on the need for long-term monitoring programmes for glass eel, yellow eel and silver eel, and for data on the total removals from the eel stock, including eel taken in river basins by recreational fishers, the decision on how to (co)finance the eel-related sampling programmes keeps dragging on. For reasons which are far from being clear to us, all recommendations made by the relevant expert groups to include eel in the (new) DCR, are still flatly being disregarded by the Commission. Belgium urges the Commission to finally make up their mind, and to give the MS clear and definite guidance under which framework (Water Framework Directive, DCR, other) they should seek financial support for their eel-related sampling and monitoring activities, other than the collection of landings and effort data on the eel fisheries in their coastal waters.

