



31 May 2016

Annual Report on fishing fleet capacity 2015 - Denmark

The format of the Danish capacity report concerning 2015 follows the headlines mentioned in article 14 of Commission Regulation (EEC) No. 1013/2010.

Fleet data used in the report are from 2015, whereas data on economic performance is from 2014.

Biological indicators provided by the Commission are from 2012. The interpretation takes into account recent developments in stocks.

Section A

Description of fleets

The statistics of table A.1 include all Danish vessels during the year and not only by the 31st of December as fleet statistics usually do. There was 2,485 vessels registered in the Danish vessel register during 2015, cf. Table A.1.

Out of these 2,485 vessels, 119 of these were not registered at the end of 2015, but had been that during the year. In total, 2,366 vessels were registered the 31st December 2015. Of these, 866 vessels had not been active during the year, i.e. didn't have any registered landings value. A total of 541 vessels are considered as commercial vessels, i.e. their total landings value was above the threshold level of € 36,000 in 2015, while the remaining 959 vessels were non-commercial vessels with landing values below € 36,000 in 2015.

Table A.1. Number of registered Danish fishing vessels in 2015

Length	Gear	Commercial ¹⁾	Non-commercial ²⁾	Inactive ³⁾	Not registered 31 st December ⁴⁾	Total
VL0010m	DTS	4	9	7	1	21
	PGP	81	801	763	67	1,712
	PMP	19	101	62	13	195
	Total	104	911	832	81	1,928
VL1012m	DRB	15	1	4	1	21
	DTS	9	4			13
	PGP	36	14	7	4	61
	PMP	21	13	3	4	41
	Total	81	32	14	9	136
VL1218m	DRB	23	1	2	3	29
	DTS	115	4	7	8	134
	PGP	26	3	2	4	35
	PMP	30	6	6	2	44
	TBB	11	1			12
	TM	11	1			12
	Total	216	16	17	17	266
VL1824m	DTS	49	0	1	4	54
	PMP	10	0			10
	TBB	17	0			17
	Total	76	0	1	4	81

VL2440m	DTS ⁵⁾	30	0	1	4	35
	PMP	5	0		2	7
	Total	35	0	1	6	42
VL40XXm	DTS	14	0		1	15
	PS	2	0			2
	TM	13	0	1	1	15
	Total	29	0	1	2	32
Total		541	959	866	119	2,485

See Annex 1 for explanation of Gear Codes

Source: The Danish AgriFish Agency Vessel Register and Sales Notes Register 5th April 2016.

Notes: ¹⁾ Includes vessels with a yearly catch value above € 36,000.

²⁾ Includes vessels with a yearly catch value below € 36,000 but above € 0.

³⁾ Includes vessels not having any catch value within the year.

⁴⁾ Includes vessels not being active by the end of the year.

⁵⁾ For discretionary purposes VL24XXm TBB has been included in VL2440m DTS.

The distribution of tonnage and engine power is shown in Appendix 2. For both capacity measures, the commercial vessels make up the majority of these with 81% of total GT and 67% of total kW.

Section A

Link with fisheries

The linkages between the different fleet segments and the kind of fisheries they conduct are shown in Table A.2 based on landing value and Table A.3 based on landing whole weight. A detailed overview for the commercial and non-commercial vessels can be found in Annex 3.

The fleet segments below 40 metres are primarily dependent on demersal species, with the exception of VL1218m TM that is mostly dependent on reduction species and pelagic consumption species (mackerel and herring). The fleet segments above 40 metres are solely dependent on mackerel, herring and reduction species. The VL40XXm is also dependent on an entry restricted fishery, but this is attributable to one vessel catching shrimps in the waters around Greenland. The DRBs and TBBs are in entry restricted fisheries for mussels and shrimps.

Table A.2. Distribution landing value in 2015 on overall fisheries in %

Length	Gear	Round fish	Flatfish	Lobster and shrimp	Mackerel and herring	Other species	Reduction species ¹⁾	Entry-restricted ²⁾	Total landings value ⁴⁾	
									€ 1,000	%
VL0010m	DTS	35	46	16	0	2	0	1	868	0.2
	PGP	34	18	8	3	36	0	1	11,970	2.6
	PMP	37	32	20	1	8	0	2	2,619	0.6
VL1012m	DRB	0	0	0	0	0	0	99	6,609	1.4
	DTS	39	18	23	6	0	13	0	1,414	0.3
	PGP	51	36	0	0	11	0	1	4,941	1.1
	PMP	34	45	11	2	2	7	0	3,401	0.7
VL1218m	DRB	0	0	0	0	0	0	100	7,720	1.7
	DTS	28	18	38	2	1	14	0	36,132	7.9
	PGP	44	52	0	0	4	0	0	9,322	2.0
	PMP	41	32	22	0	1	3	0	8,163	1.8
	TBB	0	0	0	0	0	6	94	2,987	0.7
	TM	4	2	8	31	0	55	0	6,099	1.3
VL1824m	DTS	28	30	17	2	1	21	0	45,165	9.9
	PMP	17	39	27	0	1	16	0	11,154	2.4
	TBB	0	16	0	0	0	12	72	5,824	1.3
VL2440m	DTS ³⁾	41	24	15	0	0	19	0	67,570	14.8
	PMP	81	18	0	0	1	0	0	11,100	2.4
VL40XXm	DTS	0	0	0	9	0	64	27	55,743	12.2
	PS	0	0	0	61	0	39	0	24,511	5.4
	TM	0	0	0	59	0	41	0	134,761	29.4

See Annex 1 for explanation of Gear Codes

Source: The Danish AgriFish Agency Vessel Register and Sales Notes Register 5th April 2016.

Notes: ¹⁾ Species such as sand eel, blue whiting, sprat, horse mackerel and Norway pout.

²⁾ Species that can only be caught with a license, i.e. mussels, oysters, brown shrimps and shrimps in the waters around Greenland.

³⁾ For discretionary purposes, VL2440m TBB has been included in VL2440m DTS.

⁴⁾ Based on the average Euro exchange rate for 2015 being 7.4586 DKK / €.

Table A.3. Distribution landing live weight in 2015 on overall fisheries in %

Length	Gear	Round fish	Flatfish	Lobster and shrimp	Mackerel and herring	Other species	Reduction species ¹⁾	Entry-restricted ²⁾	Total landings live weight	
									tonnes	%
VL0010m	DTS	28	67	4	0	1	0	0	380	0.0
	PGP	40	24	2	9	25	0	1	4,349	0.5
	PMP	40	47	5	1	6	0	1	1,026	0.1
VL1012m	DRB	0	0	0	0	2	0	98	19,891	2.3
	DTS	28	13	2	13	0	45	0	1,780	0.2
	PGP	49	43	0	1	6	0	0	2,115	0.2
	PMP	27	35	1	6	1	30	0	2,838	0.3
VL1218m	DRB	0	0	0	0	5	0	95	35,856	4.1
	DTS	20	11	4	4	1	60	0	38,030	4.3
	PGP	38	59	0	0	3	0	0	3,365	0.4
	PMP	43	30	4	0	1	23	0	5,504	0.6
	TBB	0	0	0	0	0	52	48	1,728	0.2
	TM	1	0	0	0	24	74	0	19,189	2.2
VL1824m	DTS	11	12	2	3	2	71	0	60,275	6.9
	PMP	5	16	5	0	0	74	0	11,609	1.3
	TBB	0	11	0	0	0	62	26	4,863	0.6
VL2440m	DTS ³⁾	16	11	3	1	0	70	0	83,822	9.6
	PMP	80	20	0	0	1	0	0	4,717	0.5
VL40XXm	DTS	0	0	0	6	0	92	2	169,344	19.3
	PS	0	0	0	37	0	62	0	64,252	7.3
	TM	0	0	0	36	0	64	0	342,321	39.0

See Annex 1 for explanation of Gear Codes

Source: The Danish AgriFish Agency Vessel Register and Sales Notes Register 5th April 2016.

Notes: ¹⁾ Species such as sand eel, blue whiting, sprat, horse mackerel and Norway pout.

²⁾ Species that can only be caught with a license, i.e. mussels, oysters, brown shrimps and shrimps in the waters around Greenland.

³⁾ For discretionary purposes, VL2440m TBB has been included in VL2440m DTS.

Section A

Developments in fleets

The structure of the Danish fishing fleet has changed considerably since 2003, where the first ITQ regulation was implemented in the herring fishery. Since then, ITQs has gradually been introduced in other pelagic fisheries, and from 2007 demersal fisheries were also managed with vessel quota shares (VQS). These management changes are the major reason for the following reductions in the fishing capacity of the Danish fishing fleet, as displayed in Table A.4.

The number of registered vessels has been reduced with 19% from 2008 to 2015. The capacity of the Danish fishing fleet decreased 9% in GT and 20% in kW in the same period.

Table A.4. Development in the capacity of registered Danish fishing vessels¹⁾

Length	Gear	2008			2011			2015		
		No.	GT	kW	No.	GT	kW	No.	GT	kW
VL0010m	DTS	17	95	1,185	16	91	1,091	21	122	1,698
		2,10			2,01			1.71		
	PGP	8	4,512	50,124	8	4,259	49,744	2	3,964	45,367
	PMP	143	646	7,144	198	831	9,219	195	796	9,201

	Total	2,268	5,253	58,453	2,232	5,181	60,054	1.928	4,882	56,266
VL1012m	DRB	31	422	3,337	31	433	3,375	21	339	2,198
	DTS	14	173	1,747	10	143	1,231	13	175	1,727
	PGP	78	827	6,872	66	716	6,167	61	694	5,927
	PMP	31	361	3,126	33	395	3,346	41	499	4,483
	Total	154	1,783	15,082	140	1,686	14,119	136	1,706	14,335
VL1218m	DRB	35	1,095	5,228	34	1,257	5,326	29	981	4,321
	DTS	209	6,756	37,407	166	5,702	30,228	134	4,615	24,167
	PGP	80	2,378	11,778	57	1,762	8,579	35	1,375	5,395
	PMP	58	1,332	8,801	57	1,382	8,923	44	1,360	7,355
	TBB	18	752	3,231	11	548	2,126	12	548	2,149
	TM							12	721	2,376
	Total	400	12,313	66,445	325	10,650	55,182	266	9,600	45,763
VL1824m	DTS	90	7,634	27,585	68	6,721	21,110	54	6,143	16,176
	PMP	15	1,395	3,895	15	1,517	4,336	10	1,276	3,711
	TBB	13	827	2,393	17	1,137	3,087	17	1,094	3,087
	Total	118	9,856	33,873	100	9,374	28,533	81	8,512	22,974
VL2440m	DTS ²⁾	74	18,578	48,035	46	12,760	28,547	35	10,398	22,444
	PMP	8	1,992	4,124	5	1,140	2,143	7	1,532	3,774
	Total	82	20,569	52,159	51	13,900	30,690	42	11,929	26,218
VL40XXm	DTS	32	22,615	45,932	25	21,189	41,564	15	11,140	20,945
	PS	7	9,911	22,625	4	6,526	16,738	2	5,697	5,998
	TM							15	21,368	43,902
	Total	39	32,526	68,557	29	27,715	58,302	32	38,205	70,845
Total		3,061	82,299	294,569	2,877	68,506	246,880	2,485	74,834	236,401

See Annex 1 for explanation of Gear Codes

Source: The Danish AgriFish Agency Vessel Register and Sales Notes Register 5th April 2016.

Notes: ¹⁾ Covers vessels in the register within a year, but does not include virtual capacity.

²⁾ For discretionary purposes, VL24XXm TBB has been included in VL2440m DTS.

³⁾ From 2008-2011, gear type TM was included in gear type DTS.

Section B

Statement of effort reduction schemes - impact of the cod recovery plans for the North Sea and the Baltic in 2015

An overview of the data with respect to this section is presented in Annex 5. Data includes figures for activity concerning the cod recovery plan for the Baltic and the cod recovery plan for the North Sea.

When describing the effects on the Danish fishing fleet for vessels involved in fishing with gear covered by rules for kilowatt days, it must be borne in mind that there were great variations in effort within each segment which to a large extent is caused by a clash between quota and effort management. The reason for the significant variation was that the Danish regulation with VQS (Vessel Quota Shares) from 2007 allowed vessels to pool their quotas on fewer vessels.

The description is based on the effort register kept by the Danish AgriFish Agency. While reading this presentation, it must be borne in mind that the Danish fleet in general conduct mixed fishery, both with regard to species and geography.

Fleet in cod recovery plan for the North Sea, Skagerrak, Kattegat, Irish Sea and West of Scotland

In 2015, 331 vessels took part in fisheries using gears covered by the regulation, as opposed to 780 vessels in 2003. That corresponds to a reduction of 58%. In 2015, 35,720 days at sea were used as opposed to 86,962 days at sea in 2003, which corresponds to a reduction of 59%. The reduction, in terms of total kilowatt days used was 53%.

From 2014 to 2015 there were less days at sea but an increase in terms of kW days indicating a trend towards larger vessels conducting the fishery.

In the fishery with **trawl \geq 100 mm. (TR1)**, 7,121,732 kilowatt days were used in 2003 compared to 5,020,274 kilowatt days in 2015 – a 30% reduction. The number of vessels fishing in this category fell by 61% to 139 vessels. There was an increase in kilowatt days per vessel by 82%.

In the **trawl** fishery between **70 mm and 99 mm (TR2)**, 3,388,000 kilowatt days were used in 2015 as opposed to 10,808,334 kilowatt days in 2003 – a 69% reduction. The number of vessels was reduced by 61% to 173 vessels. The kilowatt days per vessel were 20% down compared with 2003.

In the **trawl** fishery between **16 mm and 31 mm (TR3)**, 1,873,219 kilowatt days were used in 2015 compared to 3,867,765 kilowatt days in 2003 – a reduction of 52%. The number of vessels in this fishery fell by 84% to 27 vessels. The kilowatt days per vessel were increased by 212%.

In the fishery with **beam trawl \geq 120 mm (BT1)**, 408,206 kilowatt days were used in 2015 as opposed to 1,342,965 kilowatt days in 2003 – a 70% reduction. The number of vessels fishing in this segment fell 83% to 2 vessels. The increase in kilowatt days per vessel was 82%.

In the fishery with **beam trawl** between **80 mm and 119 mm (BT2)**, 0 kilowatt days were used in 2015 compared to 98,897 kilowatt days in 2003.

In the fishery with **nets (GN1)**, 874,577 kilowatt days were used in 2015 as opposed to 2,456,364 kilowatt days in 2003, which was a 64% reduction. The number of vessels fell by 71% to 68 vessels. There was an increase in kilowatt days per vessel by 23%.

In the fishery with **trammel nets (GT1)**, 551,159 kilowatt days were used in 2015 as opposed to 170,865 kilowatt days in 2003, which was a 223% increase. The number of vessels was reduced by 71%. There was an increase in kilowatt days per vessel by 298%.

In the segment **liners (LL1)**, there was no activity in 2015.

In summary, a substantial decrease of effort overall and for all types of gear, except trammel nets, has taken place since the cod recovery plan was adopted. The situation has "stabilized" in recent years with a tendency of fewer vessels conducting a more efficient fishery.

Fleet in cod recovery plan for the Baltic

In 2015, 247 vessels took part in fisheries using gears covered by the regulation, as opposed to 479 vessels in 2003. That corresponds to a reduction of 48%. In 2014 18,226 days at sea were used as opposed to 35,571 days at sea in 2003, which corresponds to a reduction of 49%. The reduction in terms of total kilowatt days used was 56%.

From 2003 to 2015, the number of kilowatt days per vessel fell by 14%.

In the **Western Baltic**, 1,672,699 kilowatt days were used in 2015 compared to 4,375,698 kilowatt days in 2003 – a reduction of 62%. The number of vessels in this fishery fell by 50% to 234 vessels. The kilowatt days per vessel fell by 24%.

In the **Eastern Baltic**, 897,483 kilowatt days were used in 2015 compared to 1,438,671 kilowatt days in 2003 – a reduction of 38%. The number of vessels in this fishery fell by 65% to 66 vessels. Kilowatt days per vessel increased by 78%.

In summary, a substantial decrease of effort over all in the period. The situation for the recent years indicates a tendency of further reduction in the fishing effort for the entire Baltic.

Section B

Impact on fishing capacity of effort reduction schemes

An overview of the data with respect to this section is given in Annex 6. Data includes figures for activity concerning the cod recovery plan for the Baltic and the cod recovery plan for the North Sea.

Fleet in cod recovery plan for the North Sea, Skagerrak, Kattegat, Irish Sea and West of Scotland

Vessels that took part in fisheries using gears covered by the regulation represented 33,992 GT and 99,794 kW in 2015 as opposed to 63,225 GT and 204,356 kW in 2003. That corresponds to a reduction of 46% in GT and a reduction of 51% in kW. There was a reduction in all gear segments except for GT1 where the increase in GT was 3% although there was a reduction in kW by 5%. *The situation has "stabilized" in recent years, although a minor tendency of increasing capacity in the trawl segment can be observed. However, the fleet capacity has been reduced with more than 50% in kW and nearly 50 % in GT since 2003.*

Fleet in cod recovery plan for the Baltic

Vessels that took part in fisheries using gears covered by the regulation represented 6,874 GT and 33,958 kW in 2015 as opposed to 18,165 GT and 83,748 kW in 2003. That corresponds to a reduction of 62% in GT and 59% kW respectively. There was a reduction in both the Western and Eastern Baltic. The situation for the recent years indicates a tendency of minor reductions. The fleet capacity for the vessels has been reduced with nearly 60 % in terms of both GT and kW.

Section C

Statement of compliance with entry / exit scheme

The present fleet capacity is below the entry-exit ceiling as laid down in annex II of regulation 1380/2013. The margin in terms of tonnage is 22,768 GT and 92,518 kW. In percentage the capacity in GT and kW is more than 25% in GT and 30% kW below the ceiling. Denmark is in compliance with the entry-exit levels for tonnage as well as engine power.

Since Regulation 1013/2010 is still in force, the capacity calculation according to this regulation is presented in table C2.

Table C1. Management of capacity according to Regulation 1380/2013

		National register	
		GT	kW
1	Fleet ceiling according to annex II	88,762	313,333
2	Capacity of the fleet on 31 December 2015	65,994	220,815
3	Capacity ceiling minus actual capacity	22,768	92,518

Source: The Danish AgriFish Agency Vessel Register

Note 1: For National Register: Virtual capacity is not included in 2 and 3. Virtual capacity per 31st December 2015 is 19,569 GT og 83,557 kW.

Note 2: No exits financed with public aid in 2015.

Table C2. Management of capacity according to Regulation 2371/2002 and Regulation 1013/2010

		National register			
		GT		kW	
1	Capacity of the fleet on 1 January 2003	GT _{fr}	103,356	kW _{fr}	369,234
2	Capacity level for the application of the entry-exit regime	GT ₀₃	103,356	kW ₀₃	369,234
3	Entries of vessels of more than 100 GT financed with public aid	GT ₁₀₀	0	kW ₁₀₀	0
4	Other entries or capacity increases (not included in 3 & 5).			kW _r	1,762

5	Increases in tonnage GT for reasons of safety	GT _s	0		
6	Total entries (3 + 4 + 5)		0		1,762
7	Exits financed with public aid 2003-2006	GT _{a1}	9,255	kW _a	50,021
7a	Exits financed with public aid 2007-2015	GT _{a2}	4,568		-
8	Other exits (not included in 7)				
9	Total exits (7 + 8)		13,823		50,021
10	Capacity of the fleet on 31 December 2015		65,994		220,815
11	Fleet ceiling 31 December 2015 GTt=GT03-(0.99*GTa1)-(0.96*GTa2)- (0.35*GT100)+GTs+Δ(GT-GRT) kWt=kW03-kWa-(0.2*kWr)-(0.35*kW100)	GT	93,368	kW	318,860

Source: The Danish AgriFish Agency Vessel Register

Note 1: A capacity of 2,379 GT and 10,302 kW was granted aid for decommissioning in 2002, but is provisionally not included in exits with public aid.

Note 2: GTa1 is not multiplied with 0.99 in point 7, but in point 11 GTa1 has been multiplied by 0.99.

Note 3: Re-measurement from GRT to GT is included in 11 with 3,560 GT.

Note 4: Aid for new construction was granted in 2004 and some of the new vessels have entered the fleet in 2005. However, a reduction of 4.1% (tonnage) and 5.6% (power) has already been realized, so no further reduction is required.

Note 5: For National register: Virtual capacity is included neither in baseline 2003 nor in fleet ceiling 2015.

Virtual capacity per 31st December 2015 is 19,569 GT og 83,557 kW.

Section D

Summary of weaknesses and strengths of the management system

a. Fisheries management system

The fisheries management underwent a change from a regime based on rations per period (individual non-transferable rations) to a regime based on primarily Individual Transferable Quotas (ITQ) and Vessel Quota Shares (VQS). This change caused a fall in the number of vessels as well as tonnage and engine power.

The purpose of the "New management" system was to create a new regulation of the Danish fishery to:

- initiate and develop a regulatory system (management model) that promotes a more sustainable exploitation of fish stocks, primarily by adapting the fishing capacity to fishing opportunities and reduce discards of fish.
- give the individual fishermen better opportunity to plan and run a fishery that fits his vessel and fishing activities,
- ensure basis for the fishery's total earnings,

The New management system divided the Danish fishing fleet into three segments:

- VQS – vessels that in the reference period 2003 - 2005 had been fishing for over 224,000 DKK, and landing one or more selected species included in the "New management". The vessels were assigned a Vessel Quota Share that can be transferred along with the vessel. Annual quotas based on Vessel Quota Shares can be transferred to other VQS vessels.
- LAV vessels - Less Active Vessels that in the reference period 2003 - 2005 had been fishing for under 224,000 DKK, and landing one or more of the VQS species included in the new management system. The vessels may enter the fishery of VQS species on ration terms.

- OV – Other vessels that in the reference period 2003-2005 did not land VQS species. The vessels may not land VQS species, unless that species is covered by the landing obligation.

The possibility to transfer quotas has resulted in a decrease in the number of vessels and in the capacity of the fleet.

b. Fleet management system

The fleet management system in Denmark is based on an entry-exit regime.

All fishing vessels have to be registered in the vessel register of The Danish Maritime Authority as well as the vessel register of the Danish AgriFish Agency (Order no. 124 of 27th of February 2004 on vessels used for commercial fishery, § 3).

A vessel is only allowed to enter the fishing fleet if one or more other vessels have been removed from the above mentioned registers. It is a precondition that tonnage and engine power of the vessel used for fishery does not exceed the tonnage and engine power from that or those vessels, which were or are to be cancelled (§ 7).

It is not allowed to increase tonnage, size or engine power of a vessel without the permission of the Danish AgriFish Agency (§ 10). The Danish AgriFish Agency can only allow the increase in tonnage or engine power of a vessel if the owner of the vessel also withdraws the same quantity in the form of virtual capacity or as physical capacity from the fleet (§ 9).

Virtual capacity is defined as tonnage and engine power (measured in kW), which used to be connected to vessels now erased from the above mentioned registers (§ 2) and as such virtual capacity is held by persons as a legal right and not in physical vessels. It is allowed to sell virtual capacity. There is no virtual capacity on vessels which have received any subsidy regarding final exit of the fleet (§ 11).

The concept of virtual capacity means that the entitlement to capacity can be kept even when a vessel is scrapped (without economic aid) or sold outside the EU. So it works as an incentive to keep unnecessary capacity out of the physical fleet. On the other hand, the possibility to increase the fleet is limited by the market based system of fishing rights to the effect that holders of virtual capacity will only enter new capacity into the fleet if they have the fishing rights to keep the vessel active.

The vessel owners have to be able to forward documentation concerning the capacity involved in replacements and modernizations. This documentation is verified in the Danish AgriFish Agency's database for fleet management.

A general weakness concerning all EU fleets in the EU fleet management system is the verification of engine power. In the Danish management system the definition of engine power of Regulation 2930/86 is implemented and derating of engine power is not allowed.

The regulation of capacity ensures that capacity can never increase over the level at the starting point. The administrative system as such, concerning the administration of the entries and exits in the fleet works satisfactorily.

c. kW-days – effort regulation

KW-days are defined as the number of days a vessel is at sea times the efficiency in kW of the vessel engine. In the kW-days regulation the Member States are allocated an effort ceiling for the involved gear categories, afterwards the kW regulation is administered nationally. A model for allocation to the fishermen was decided upon in 2009. The rules are currently stated in national order no. 278 of 24th March 2015. The allocation was based on vessels effort in 2008 within the different gear segments. The regulation covers vessels over 10 meters in Kattegat and North Sea/Skagerrak.

Section D

Plan for improvement in fleet management system

The current Danish management system is at the moment considered to be well functioning in order to secure a balance between fishing opportunities and capacity. Therefore, there are no current plans for changing this.

Section D

Information on general level of compliance with fleet policy instruments

Respect of reference level and entry-exit level is ensured by the fleet management. Since permits for new capacity are only issued if there is a previous withdrawal of capacity, total physical capacity will never be higher than the ceilings. And since the system works with individual permits which can be kept as virtual capacity, physical capacity tends to be well below the ceilings.

Unused capacity, including safety capacity and the capacity premium for decommissioning, is not reallocated. In combination with the market based regulation of a substantial part of the fishery the fleet management will tend to create a long term balance between fishing capacity and fishing possibilities.

Compliance is ensured by an active fisheries inspection by control vessels, control units in the fishing port as well as administrative checks and control activity.

Below is a table showing information on infringements and inspections on the main management measures in 2015.

Table D1. Number of infringements and accomplished inspections in 2015

Number of infringement cases	Administrative controls	Inspections in port	Inspections at sea	Total
1.1. Registration – license, authorisation etc.	2	3	2	7
1.2.1. Capacity	6	7	1	14
1.2.2 Illegal marking and identification of vessel			1	1
1.3. Quotas and quantitative rationing	1	5		6
1.4. Limitations relating to gear and catch method		6	10	16
1.5. Area restrictions	5	1	5	11
2.1 Refusal of control				0
3.1 Other information obligations	1		1	2
3.5 Lacking or incorrect operation and maintenance of VMS equipment				0
4. Illegal catch composition, undersized	1	21	3	25
5.1 Logbook Order and other matters	33	56	4	93
5.2. Control Order and other matters	6	1		7
5.3. Notifications	78	15	0	93
6.1. Infringements at the landing and marketing of fish	1	15		16
10.1 Illegal participation				0
10.3 Falsification of reports				0
Total	135	131	27	293
Number of inspections	481	2,626	623	3,730

Section E

Information on changes of the administrative procedures relevant to fleet management

Since the current fleet management system is deemed adequate, no relevant administrative changes were introduced in 2015.

Section F

Estimation and discussion of balance indicators

The technical, biological and economic indicators are calculated in accordance with the guidelines issued by the Commission, taking into account that data is available at fleet segment level. The results are presented for 19 fleet segments, according to the Data Collection Regulation. The fleets VL1218 TBB and VL1824 TBB that is fishing for brown shrimp in the Wadden Sea, and the VL1012m DRB and VL1218m DRB that is fishing mussels are included, but they are not subject to quotas set at the EU level. These four fleet segments are subject to specific entry restrictions. It should also be noted that the DTS gear type from 2008 to 2011 also included TM, while separate specification of TMs are included from 2012. Comparison of fleet performance between years should therefore be done with caution.

i) Technical indicator(s)

The two technical indicators recommended in the EC guidelines: 1) The inactive fleet indicator and 2) The vessel utilisation indicator are presented in the following.

The Inactive fleet indicator

The number (No.), gross tonnage (GT) and engine power (kW) of inactive vessels, total vessels and share of inactive vessels within each length group are presented in Table F.1. By taking the share between the inactive vessels and the total vessels, the inactive fleet indicator is calculated. The length group VL0010m has a relative high percentage of inactivity, regardless if measured in number of vessels (45%), gross tonnage (32%) or engine power (33%). According to the EC guidelines, an inactivity level more than 20% indicates technical inefficiency. If this measure is used, the VL0010m is technical inefficient. The other length groups do have a lower share of inactivity than 10%, regardless of the measurement. Although the total Danish fleet has a high amount of inactive vessels (38%), the total inactivity of physical capacity is rather low (7% of GT and 12% of KW).

Table F.1. Ratios between inactive number of vessels and total number of vessels, 2015

Length	Inactive ¹⁾			Total ²⁾			Share of inactivity (%)		
	No.	GT	kW	No.	GT	kW	No.	GT	kW
VL0010m	832	1,425	17,842	1,847	4,462	54,005	45	32	33
VL1012m	14	145	1,331	127	1,596	13,418	11	9	10
VL1218m	17	352	2,408	249	8,779	43,303	7	4	6
VL1824m	1	92	214	77	7,763	21,907	1	1	1
VL2440m	1	182	810	36	10,770	23,367	3	2	3
VL40XXm	1	2,150	4,800	30	32,623	64,815	3	7	7
Total	866	4,345	27,405	2,366	65,993	220,815	37	7	12

Source: The Danish AgriFish Agency Vessel Register and Logbook Register 5th April 2016.

1) Includes vessels not having any catch value within the year.

2) Includes vessels in the Vessel Register per 31 December 2015.

The vessel utilisation indicator

The ratio between days at sea and maximum days at sea for each length group and gear type is presented in Table F.2. By taking the ratio between average and maximum number of sea days, an expression for technical capacity utilisation is calculated. The maximum number days at sea within a fleet segment has been set equal to the most active vessel within each year. This method is chosen, because there is a large variation in the maximum possible of days at

sea between the fleet segments and within fleet segments. For example, the larger vessels will usually have more days at sea per year than the smaller vessels, operated only by one fisherman. By using the maximum observed days at sea for each fleet segment, this will be taken into account. At the same time, it ensures that the ratio between average days at sea and maximum days at sea does not exceed a value of 1.

Table F.2. Ratios between average days at sea and maximum days at sea^{1) 2)}

Length	Gear	2008	2009	2010	2011	2012	2013	2014
VL0010	DTS	0.42	0.59	0.34	0.30	0.54	0.46	0.38
	PGP	0.17	0.17	0.17	0.19	0.15	0.16	0.16
	PMP	-	-	-	-	0.25	0.23	0.22
VL1012	DRB	0.51	0.43	0.50	0.65	0.75	0.53	0.57
	DTS	0.45	0.53	0.83	-	0.81	0.73	0.55
	PGP	0.45	0.44	0.43	0.42	0.43	0.47	0.43
	PMP	0.54	0.49	0.58	0.56	0.48	0.56	0.46
VL1218	DRB	0.35	0.45	0.38	0.52	0.49	0.39	0.39
	DTS	0.50	0.44	0.42	0.45	0.47	0.47	0.48
	PGP	0.47	0.48	0.61	0.45	0.51	0.48	0.44
	PMP	0.54	0.55	0.48	0.52	0.37	0.35	0.42
	TBB	0.69	0.70	0.79	0.66	0.76	0.78	0.70
	TM	-	-	-	-	0.53	0.49	0.57
VL1824	DTS	0.47	0.52	0.50	0.47	0.48	0.47	0.51
	PMP	0.43	0.60	0.62	0.62	0.66	0.77	0.68
	TBB	0.87	0.85	0.79	0.66	0.76	0.72	0.70
VL2440	DTS	0.66	0.67	0.64	0.62	0.67	0.69	0.70
VL40XX	DTS	0.46	0.51	0.60	0.52	0.39	0.48	0.65
	TM	-	-	-	-	0.67	0.66	0.65

Source: The Danish AgriFish Agency Vessel Register and Logbook Register 5th April 2016

Notes: ¹⁾ Covers only active vessels

²⁾ See Appendix 4 for the figures used for the calculations

From Table F.2, it is observed that both ratios are generally increasing with the vessel length. The major part of the vessels in the fleet segments above 24 meters has been managed with Individual Transferable Quotas (ITQ) since 2003, and a relative high ratio is observed for these vessels. All other fleets (except DRBs and TBBs) has since 2007 been managed with transferable Vessel Quota Shares (VQS), and an increasing ratio is expected in the coming years, and to some extent partly already reflected in the figures.

Making strong conclusions about presence of technical overcapacity are difficult, because each fleet segment is not very homogeneous, thereby having a large variation in the maximum observed days at sea. A value below 0.7 is in the Commission guidelines considered to indicate the presence of technical overcapacity, and if this is applied to the above figures, technical overcapacity is present in 16 of the 19 fleet segments in 2014. The 3 fleets that do not indicate technical overcapacity in 2014 include two entry restricted fisheries for mussels and shrimps (VL1218m TBB, and VL1824 TBB) as well VL2440m DTS. The low technical utilisation rate of the smaller fleet segments generally below 12 metres, but specifically VL0010m PGP and VL0010m PMP is due to the presence of a relatively large amount of non-commercial vessels in these groups. A more appropriate way of estimating the technical efficiency of these segments will be to calculate the technical indicator based on only commercial vessels, which also have the largest impact on the stocks fished on. Especially for the fleet segments below 12 metres, this will lead to an improvement of the vessel utilisation indicator.

ii) Biological indicators

The Sustainable Harvest Indicator (SHI) and Stock-at-risk Indicator (SAR) presented in this report are copied from the balance indicators for key fleet segments, reviewed by STECF in October 2015 (STECF-15-15).

The SHI values for the individual segments in 2013 are mainly determined by the proportion of landings value from the North Sea and Western Baltic cod stocks (overfished), the flatfish (mainly North Sea plaice, fished around F_{MSY}) and the pelagic stocks (mainly North Sea, and Western Baltic herring, North Sea sprat fished at F_{MSY} , plus mackerel and sprat in the Baltic fished above F_{MSY}). Fishing mortalities have in general decreased slightly for the individual stocks since 2013 and will probably decrease SHI slightly for most segments in most recent years.

Table F.3. Sustainable Harvest Indicator (SHI)

	2008	2009	2010	2011	2012	2013
DTS VL0010	2.0	1.5	1.2	0.9	1.3	1.1
DTS VL1012	1.6	2.3	2.2	-	1.7	1.4
DTS VL1218	-	-	-	-	1.5	1.2
DTS VL1824	1.6	1.4	1.2	1.1	1.3	1.1
DTS VL2440	1.3	1.4	1.2	1.1	1.1	1.1
DTS VL40XX	-	-	-	-	0.8	0.8
PGP VL1012	2.8	2.6	2.5	2.5	2.5	2.5
PGP VL1218	2.1	1.9	1.6	1.6	1.5	1.3
PMP VL0010	2.5	2.2	-	-	2.0	1.8
PMP VL1012	2.1	2.1	2.1	-	1.6	1.4
PMP VL1218	2.0	1.8	1.6	1.4	1.8	1.5
PMP VL1824	1.9	1.8	1.6	1.3	1.3	1.1
TM VL1218	-	-	-	-	1.0	1.1
TM VL40XX	-	-	-	-	0.8	0.9

SHI for Danish fleet segment where on average more than 40% of the landings value are from stocks with estimated F and F_{MSY} and with SHI for 2013.

Twelve out of fourteen segments may not be in balance ($SHI > 1$) with their fishing opportunities in 2013 (Table F3). The two segments with SHI index less than 1 ("in balance") are the largest vessels fishing mainly for pelagic stocks. Within each gear groups, larger vessels have generally a smaller SHI. The SHI has generally a decreasing trend over the full time period and a decreasing or unchanged SHI between 2012 and 2013. The smallest vessels of the PGP and PMP segments have the highest SHI, which is due to a high proportion of Western Baltic and Kattegat cod.

The SAR indicator (Table F4) for the Danish segments is mainly determined by landings of 6 stocks (North Sea, Western Baltic and Kattegat cod, sandeel ns1, sandeel ns2 and sandeel ns3-ns4 combined). Sandeel in the North Sea was first divided into 6 stocks in 2011 which explains the increase in SAR from this year. Compared to the 2012 SAR indices the 2013 indices are generally lower or unchanged. Only two segments have an increase in SAR. In 2012, SAR values of 1 were obtained for some segments from sandeel ns2 and ns3, for which a monitoring fishery (to obtain biological samples) was established. It can be discussed if a monitoring fishery for scientific purposes should be included in the SAR at all.

Table F.4. Stocks-at-risk indicator (SAR)

	2008	2009	2010	2011	2012	2013
DRB VL1012	0	-	0	0	0	0
DRB VL1218	-	0	-	0	0	-
DTS VL0010	0	0	0	0	3	1
DTS VL1012	0	0	0		0	0
DTS VL1218	-	-	-	-	3	3
DTS VL1218	1	2	2	3	-	-
DTS VL1824	2	2	2	4	4	3
DTS VL2440	2	1	2	2	3	3

DTS VL40XX	-	-	-	-	1	1
DTS VL40XX	1	1	1	1	-	-
PGP VL0010	3	1	-	-	2	1
PGP VL0010	-	-	2	3	-	-
PGP VL1012	1	1	1	0	0	1
PGP VL1218	1	1	1	1	2	0
PMP VL0010	1	1	-	-	1	0
PMP VL1012	0	0	0		0	1
PMP VL1012	-	-	-	0	-	-
PMP VL1218	1	0	1	2	1	1
PMP VL1824	1	1	2	2	1	0
TBB VL1218	0	-	0	1	1	1
TBB VL1824	-	-	0	1	1	1
TM VL1218	-	-	-	-	1	1
TM VL40XX	-	-	-	-	1	1

iii) Economic indicators

The two indicators recommended in the EC guidelines: 1) Return on investment (ROI) per fleet segment and 2) Current revenue in proportion to break-even revenue per fleet segment are presented in the following.

Return on investment (ROI)

Return on investment (ROI) is defined as net profit, which is profit after capital stock depreciation, divided by the capital asset value, which consists of the vessel replacement value and the estimated value of fishing rights (net profit/capital asset value), according to EC guidelines. The ROI for the Danish fleet for the years 2008-2014 is shown in Table F.5.A.-F.5.D below for various approaches.

Table F.5.A. Return on investments excl. income and costs from fishing rights

Length	Gear	2008	2009	2010	2011	2012	2013	2014
VL0010	DTS	-0.49	-0.12	-0.06	-0.09	-0.10	-0.05	-0.02
	PGP	-0.25	-0.13	-0.10	-0.10	-0.09	-0.07	-0.11
	PMP	-0.22	-0.20	.	.	-0.08	-0.10	-0.12
VL1012	DRB	-0.03	0.00	-0.03	-0.01	-0.01	0.07	0.15
	DTS	-0.05	-0.10	-0.05	.	-0.05	-0.05	-0.04
	PGP	-0.16	-0.08	-0.09	-0.06	-0.04	-0.04	-0.06
	PMP	-0.26	-0.15	-0.05	-0.07	-0.06	-0.07	-0.07
VL1218	DRB	-0.03	-0.09	-0.07	-0.04	-0.03	-0.01	0.14
	DTS	-0.03	-0.03	0.01	0.00	-0.01	0.00	-0.01
	PGP	-0.09	-0.03	0.00	0.00	-0.02	-0.01	-0.04
	PMP	-0.04	-0.03	0.00	-0.03	-0.01	-0.01	-0.01
	TBB	0.10	-0.15	-0.05	-0.11	0.06	0.06	0.01
	TM	.	.	.	.	0.00	0.04	0.05
VL1824	DTS	0.01	-0.01	0.01	0.02	0.00	0.00	0.02
	PMP	-0.02	-0.03	0.02	0.02	0.01	0.03	0.03
	TBB	0.06	-0.09	-0.10	-0.09	0.05	0.04	0.01
VL2440	DTS	-0.02	0.00	0.03	0.01	0.00	0.02	0.03
VL40XX	DTS	0.01	0.01	0.12	0.12	0.08	0.05	0.03

	TM	0.10	0.08	0.04
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Source: Call for fleet economic scientific data concerning 2008-2015, EC, Ref. Ares(2016)439081 - 27/01/2016

Table F.5.B. Return on investments incl. income and costs from fishing rights

Length	Gear	2008	2009	2010	2011	2012	2013	2014
VL0010	DTS	-0.49	-0.12	-0.06	-0.09	-0.11	-0.03	-0.01
	PGP	-0.26	-0.14	-0.11	-0.08	-0.09	-0.06	-0.11
	PMP	-0.23	-0.21	.	.	-0.09	-0.10	-0.12
VL1012	DRB	-0.03	0.00	-0.03	-0.01	-0.01	0.07	0.15
	DTS	-0.05	-0.10	-0.06	.	-0.06	-0.05	-0.05
	PGP	-0.18	-0.08	-0.10	-0.05	-0.05	-0.03	-0.06
	PMP	-0.26	-0.15	-0.05	-0.06	-0.07	-0.08	-0.08
VL1218	DRB	-0.03	-0.09	-0.07	-0.04	-0.03	-0.01	0.13
	DTS	-0.03	-0.04	0.00	-0.02	-0.02	-0.01	-0.01
	PGP	-0.12	-0.05	-0.01	-0.01	-0.03	-0.01	-0.04
	PMP	-0.04	-0.05	-0.02	-0.02	-0.02	-0.01	-0.02
	TBB	0.10	-0.15	-0.05	-0.10	0.05	0.05	0.04
	TM	.	.	.	.	0.01	0.04	0.04
VL1824	DTS	-0.01	-0.02	-0.01	0.01	-0.01	-0.01	0.02
	PMP	-0.05	-0.04	0.00	0.00	0.00	0.01	0.00
	TBB	0.06	-0.09	-0.10	-0.08	0.04	0.03	0.01
VL2440	DTS	-0.04	0.00	0.03	0.00	-0.01	0.01	0.03
VL40XX	DTS	0.01	0.01	0.11	0.11	0.09	0.08	0.03
	TM	.	.	.	.	0.09	0.08	0.05

Source: Call for fleet economic scientific data concerning 2008-2015, EC, Ref. Ares(2016)439081 - 27/01/2016

According to the Commission guidelines the indicator should be adjusted for the current long term interest rate. This is done in Table F.5.C. and Table F.5.D. below.

Table F.5.C. Return on investments (ROI) adjusted with long term interest rate* and excl. income and costs from fishing rights

Interest rate		4.29	3.59	2.93	2.73	1.40	1.75	1.33
Length	Gear	2008	2009	2010	2011	2012	2013	2014
VL0010	DTS	-0.54	-0.15	-0.09	-0.12	-0.11	-0.06	-0.03
	PGP	-0.30	-0.17	-0.13	-0.13	-0.10	-0.09	-0.12
	PMP	-0.26	-0.23	.	.	-0.10	-0.12	-0.14
VL1012	DRB	-0.07	-0.04	-0.06	-0.04	-0.02	0.05	0.14
	DTS	-0.09	-0.13	-0.08	.	-0.07	-0.07	-0.06
	PGP	-0.21	-0.11	-0.12	-0.09	-0.05	-0.06	-0.07
	PMP	-0.31	-0.18	-0.08	-0.09	-0.07	-0.08	-0.08
VL1218	DRB	-0.08	-0.13	-0.10	-0.07	-0.04	-0.03	0.13
	DTS	-0.07	-0.07	-0.02	-0.03	-0.02	-0.02	-0.02
	PGP	-0.13	-0.07	-0.03	-0.03	-0.03	-0.03	-0.05
	PMP	-0.08	-0.07	-0.03	-0.05	-0.03	-0.03	-0.03

	TBB	0.06	-0.19	-0.08	-0.13	0.04	0.04	0.00
	TM	.	.	.	.	-0.02	0.02	0.04
VL1824	DTS	-0.03	-0.04	-0.02	-0.01	-0.02	-0.01	0.01
	PMP	-0.06	-0.06	-0.01	-0.01	0.00	0.01	0.02
	TBB	0.02	-0.13	-0.13	-0.11	0.03	0.02	0.00
VL2440	DTS	-0.06	-0.03	0.01	-0.02	-0.02	0.00	0.02
VL40XX	DTS	-0.03	-0.03	0.09	0.09	0.07	0.03	0.02
	TM	.	.	.	.	0.09	0.06	0.03

Source: Call for fleet economic scientific data concerning 2008-2015, EC, Ref. Ares(2016)439081 - 27/01/2016

* The long term interest rate for convergence purposes, European Central Bank

Table F.5.D. Return on investments (ROI) adjusted with long term interest rate* and incl. income and costs from fishing rights

Interest rate		4.29	3.59	2.93	2.73	1.40	1.75	1.33
Length	Gear	2008	2009	2010	2011	2012	2013	2014
VL0010	DTS	-0.54	-0.15	-0.09	-0.12	-0.13	-0.05	-0.03
	PGP	-0.31	-0.17	-0.14	-0.11	-0.10	-0.08	-0.12
	PMP	-0.27	-0.25	.	.	-0.10	-0.12	-0.13
VL1012	DRB	-0.07	-0.04	-0.06	-0.04	-0.02	0.05	0.13
	DTS	-0.09	-0.13	-0.09	.	-0.08	-0.06	-0.07
	PGP	-0.22	-0.12	-0.13	-0.08	-0.06	-0.05	-0.07
	PMP	-0.31	-0.19	-0.08	-0.09	-0.08	-0.10	-0.09
VL1218	DRB	-0.08	-0.13	-0.10	-0.07	-0.04	-0.03	0.12
	DTS	-0.08	-0.08	-0.03	-0.04	-0.03	-0.03	-0.02
	PGP	-0.16	-0.08	-0.04	-0.04	-0.04	-0.03	-0.05
	PMP	-0.09	-0.08	-0.05	-0.05	-0.03	-0.02	-0.03
	TBB	0.06	-0.19	-0.08	-0.13	0.04	0.03	0.03
	TM	.	.	.	.	-0.01	0.02	0.02
VL1824	DTS	-0.06	-0.06	-0.04	-0.02	-0.03	-0.03	0.00
	PMP	-0.09	-0.08	-0.03	-0.03	-0.01	-0.01	-0.01
	TBB	0.02	-0.13	-0.13	-0.11	0.02	0.01	0.00
VL2440	DTS	-0.08	-0.04	0.00	-0.03	-0.02	-0.01	0.02
VL40XX	DTS	-0.03	-0.03	0.08	0.08	0.07	0.07	0.01
	TM	.	.	.	.	0.08	0.07	0.03

Source: Call for fleet economic scientific data concerning 2008-2015, EC, Ref. Ares(2016)439081 - 27/01/2016

* The long term interest rate for convergence purposes, European Central Bank

When the long term interest rate is included there is a stronger trend over time towards higher or more positive values. Including any income or costs from renting fishing quantities within a year does not change the overall picture. This income or cost may vary from year to year.

Especially the fleets below 12 meters are seen to consistently have negative ROIs, thus indicating economic over-capitalisation. The dredgers (DRB) are an entry restricted fishery, but negative ROIs are observed during almost the entire period from 2008 to 2012, but in 2013 and 2014 it becomes positive. The other entry restricted fisheries, the TBBs, did also experience negative ROIs from 2009-2011, while positive ROI was observed for 2008, 2012 and 2013. The

remaining fleet segments between 12 and 24 meters has ROIs varying around zero, thus indicating a reasonable balance. The fleets above 40 meters, which for many years have been managed with ITQs, are having positive ROIs, thus indicating economic under-capitalisation.

It should be noted that vessels below 24 metres are operated by 1-3 crew members including the owner. The standard salary is often higher than the realistic income for fishermen working in the small scale fishery. Moreover, in many cases the owner does not have capital costs. The market value of the vessel is often lower than assumed in the calculation and the owner does not expect a return on his investment in fishing rights.

Ratio between current revenue and break-even revenue

The ratio between current revenue and break-even revenue (CR/BER) is estimated as the current revenue divided by break-even revenue (fixed costs / 1 - (variable costs/current revenue)), according to the EC guidelines. Current revenue consists of income from fishing and other income while excluding any subsidies. The break-even revenue shows the level of revenue needed to cover all costs, thereby having a net profit of zero. Two versions of CR/BER are estimated. The first version includes opportunity cost of capital in the fixed costs (see Table F.6., right side), whereas the second version excludes the opportunity cost of capital (see Table F.6., left side). The opportunity cost of capital is calculated by the capital asset value and the long-term interest rate for Denmark. Both measures of CR/BER are good measures of economic sustainability. When the ratio is below 1, the current cash flow is not sufficient to cover the current costs, and so the activity is not economically balanced and sustainable.

Table F.6. Ratio between current revenue and break-even revenue (CR/BER)

Length	Gear	CR/BER. incl. opportunity cost of capital*							CR/BER. excl. opportunity cost of capital						
		2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014
VL0010	DTS	-1.47	-1.48	0.47	0.31	0.22	-0.02	0.33	-1.84	-3.57	0.57	0.37	0.24	-0.03	0.47
	PGP	-0.20	-0.20	0.11	0.08	0.26	0.27	-0.14	-0.25	-0.26	0.14	0.11	0.29	0.32	-0.16
	PMP	0.13	-0.32	.	.	0.24	0.03	0.02	0.15	-0.40	.	.	0.27	0.04	0.02
VL1012	DRB	0.59	0.64	0.59	0.74	0.77	1.44	2.22	0.78	0.99	0.74	0.90	0.89	1.71	2.52
	DTS	0.67	0.14	-0.38	.	0.39	0.31	0.38	0.79	0.18	-0.73	.	0.44	0.38	0.45
	PGP	0.32	0.16	0.28	0.31	0.44	0.39	0.22	0.37	0.22	0.34	0.39	0.52	0.47	0.26
	PMP	-0.26	-0.19	0.44	0.30	0.34	0.16	0.27	-0.32	-0.25	0.55	0.38	0.39	0.19	0.31
VL1218	DRB	0.54	0.43	0.45	0.68	0.62	0.78	2.00	0.73	0.51	0.54	0.77	0.70	0.90	2.22
	DTS	0.67	0.40	0.86	0.70	0.64	0.73	0.75	0.84	0.57	1.13	0.95	0.81	0.96	0.91
	PGP	0.53	0.44	0.73	0.70	0.63	0.79	0.53	0.63	0.61	1.00	0.98	0.74	0.92	0.60
	PMP	0.39	0.34	0.75	0.50	0.59	0.68	0.61	0.59	0.52	0.98	0.68	0.74	0.85	0.77
	TBB	1.28	-0.10	0.54	0.28	1.26	1.23	0.99	1.60	-0.13	0.65	0.33	1.38	1.37	1.09
	TM	.	.	.	.	0.79	1.32	1.56	.	.	.	.	0.96	1.69	1.92
VL1824	DTS	0.82	0.62	0.85	0.94	0.78	0.81	1.13	1.06	0.89	1.11	1.26	0.94	1.04	1.36
	PMP	0.66	0.42	0.92	0.87	0.95	1.14	1.19	0.87	0.62	1.29	1.22	1.12	1.41	1.40
	TBB	1.11	0.32	0.36	0.34	1.23	1.14	0.96	1.43	0.40	0.42	0.40	1.37	1.30	1.08
VL2440	DTS	0.72	0.70	1.05	0.81	0.82	1.01	1.21	0.90	1.06	1.46	1.10	0.95	1.23	1.43
VL40XX	DTS	0.82	0.76	1.76	1.63	1.96	1.42	1.22	1.11	1.10	2.35	2.02	2.42	1.92	1.50
	TM	.	.	.	.	1.77	1.62	1.40	.	.	.	.	2.03	1.96	1.67

Source: Call for fleet economic scientific data concerning 2008-2015, EC, Ref. Ares(2016)439081 - 27/01/2016

*Interest rate used to calculate the opportunity cost of capital is the long term interest rate for convergence purposes, European Central Bank

There is a tendency that the CR/BER values increase with vessel size within each gear type, indicating that the larger vessels generally have better economic performance. This tendency is not observed for the entry restricted fisheries, DRB and TBB. The TBBs had values below 1 for 2009-2011, but values around or above 1 for 2008, 2012, 2013 and 2014, indicating that the economic performance of these fisheries has a large variation. The DRBs, fishing for mussels, below 12 metres have values below 1 for the first five years, but then becomes above 1 in 2013 and onwards. The DRBs between 12 and 18 metres have values below 1 until 2014.

A more unclear picture is seen for remaining fleet segments. The only fishery that is economically viable through the entire period and thus able to cover current costs is the VL40XX DTS, and that is only when looking at the CR/BER method that includes opportunity cost of capital. The VL10-12 DTS has a negative value in 2010, indicating that the variable costs are higher than the revenue. In 2012, 2013 and 2014, the CR/BER indicator was positive, indicating that the fleet has improved. Several other fisheries have experienced a negative CR/BER in some years, but in 2014 it was only VL0010 PGP. It can also be observed that a total of ten fleet segments had a CR/BER above 1 in 2014, which is the highest number looking at the period from 2008-2014.

iv) Summary and evaluation

According to Regulation 1380/2013, the report should include the annual assessment of fleet capacity and identify structural over-capacity for each segment. This assessment should be based on the balance between capacity and fishing possibilities.

According to the common guidelines as presented in a communication from the Commission (COM (2014) 545 final), the report should use a set of economic and biological indicators in combination to draw conclusions on imbalance for each fleet segment separately. The indicators are presented for the Danish fleet in section F, i-iii. A summary of the most recent indicators are presented in Table F.7. below.

The table includes indicators for 19 segments. The segments are numbered 1-19 to facilitate the understanding.

The segments 4, 8, 12, 16 are segments specialised in mussels and shrimps fisheries. These fisheries are restricted access and closely regulated and monitored. Furthermore, these segments show good economic results.

The remaining segments are statistical categories defined by JRC. In this context, they are addressed in 4 groups which reflect the size and type of fishery as well as the mix of stocks fished by the statistically defined segments within the group. Over 24 metres, 12-24 metres and 0-12 metres. Within the group of small scale vessels is a subgroup consisting of non-commercial and inactive vessels.

So for the purpose of assessment of the balance the fleet is divided in the following fisheries relevant segments or groups:

- 1) Mussels
- 2) Brown shrimps
- 3) >24 metres
- 4) 12-24 metres
- 5) <12 metres
- 6) Inactive and non-commercial vessels

Explanations given for each group applies to all statistical segments within the group.

1) Mussels fishery (4, 8)

This fishery is restricted access and ITQ managed. Fisheries are limited to specific areas and quotas are set according to assessment of the local stock. Earnings may vary but are generally good. **The situation is stable and there is no need for action.**

2) *Brown shrimps fishery (12, 16)*

This fishery is limited to vessels on the list of beam trawlers specialised in shrimp fishery in the Wadden Sea area. Restricted access fishery. **The situation is stable and there is no need for action.**

3) *Vessels over 24 metres (17, 18 and 19)*

The vessels fish for pelagic and industrial species. The smaller ones also take some codfish, flatfish and prawn. Most of those stocks are in good condition which is also reflected in the SHI indicator for which is close to 1 for vessels over 24 metres. The SAR indicator is between 1 and 5, but this is due to stocks which are not critical to the performance of the fleet and some of the SAR values are based on non-commercial monitoring fisheries. In conclusion, there is a good balance for these segments.

Economic indicators are also positive and have improved over time.

There is a good balance for this group which is indicated by a green colour in the traffic lights table.

4) *Vessels 12-24 metres (9, 10, 11, 13, 14, 15, 16)*

These vessels fish for a variety of species including cod fish, flat fish, prawn and industrial species. The SHI indicator is higher than 1 which shows that the vessels fish on stocks with fishing mortality somewhat higher than the MSY based assessment.

The SHI indicator is based on data from 2013 and for some stocks the situation has improved somewhat since then. Management of stocks is in transition to MSY based management and for this reason the SHI indicator exaggerates the imbalance. The SHI indicator only covers part of the fishery. It should also be taken into consideration that the capacity of this group of vessels has already been reduced considerably.

The economic indicators are acceptable. ROI minus current interest rate is close to zero for all statistical segments, but slightly better for the bigger vessels.

In assessing the economic indicators it should be taken into account that these vessels are operated by 1-3 crew members including the owner. The owner's remuneration is set at a standard salary which in many cases is higher than the real and realistic income for fishermen operating small vessels. At a more realistic pay to the owner the economic result would be higher. The earnings of these vessels are also strongly influenced by short term economic developments in prices and costs. It seems that prices are improving from late 2014 and fuel costs have fallen sharply in 2014.

In conclusion, there is considered to be an acceptable balance between capacity and fishing possibilities as well as unexploited fishing opportunities, and accordingly this group of vessels is marked as green in the traffic lights table.

5) *Vessels 0-12 metres including inactive and non-commercial vessels (1, 2, 3, 5, 6, 7)*

These vessels fish on demersal stocks for flatfish, codfish, and Norway lobster. The biological indicators reflect a negative situation for some of the stocks fished by these vessels, mainly for cod stocks in the North Sea and the Kattegat. However, fishing possibilities remain for cod stocks in the Baltic, as well as for flat fish stocks and for Norway lobster. The distribution of landings values show that a variety of species are fished by the small scale vessels. Most of these stocks are in a biological good state:

As shown above unfished quotas are available for flat fish and Norway lobster. The small vessels also have the possibility of fishing non quota species such as some flatfish and crab species. Although return on investment is negative, it must be kept in mind, that this is based on a high standard salary which is higher than the realistic income for fishermen operating small vessels.

The economic indicators cover active vessels with commercial earnings. Despite the modest earnings and dependency of some stock under rebuilding the balance between capacity and fishing possibilities, it cannot be clearly demonstrated that there is an imbalance between capacity of the active commercial vessels and fishing possibilities. The situation for the commercial vessels is shown by yellow in the traffic lights system.

As part of the new EMFF programme for Denmark, a number of measures are under way to improve the situation for small vessels. These include port facilities, innovative project in the value chain (including for new species) and market promotion measures. In the regulatory system, coastal vessels are given special consideration and these vessels also receive special treatment in the aid scheme for fishing ports as well as article 38 and 42 investments.

The remaining non-commercial vessels less than 12 metres include about 1,800 vessels and many of these have no registered activity. Although the number of vessels is high they are not involved in fishery of any importance.

Almost all the non-commercial and inactive vessels are less than 10 metres and the quantities fished are so small that they are not important for the stocks.

A great share of the small vessels is owned by part-time fishermen. Part time fishermen are allowed to continue their activity at a low level provided they can keep an income of 5 % from fishery. They are important in order to keep some activity in small ports and coastal communities. But their activity is low and has no significant impact on the stocks.

It is believed that many owners of small non-commercial vessels keep their boat for social and recreational purposes. Although they have the status of a fisherman or a part-time fisherman they are not economically dependent on the fishery. This is confirmed by a big number of inactive vessels under 10 metres and the inferior quantities landed by the non-commercial part of the small scale fleet (less than 1% of Danish landings). The potential capacity of the small scale fleet is more than 1,900 vessels, almost 5,000 GT and more than 50,000 kW. In reality, in 2015 only 104 vessels in the small scale fleet were active at a commercial level. All the 1,928 vessels under 10 m, including the less active ones, fished around 5,700 tonnes of fish.

Despite the apparent overcapacity in terms of passive vessels it is concluded that **the capacity of these vessels is not directly associated with commercial over-capacity and that they do not represent a real fishing capacity** which could lead to increased fishery.

For the **fleet in general** it is concluded that despite weaknesses in some segments, in general there is **an acceptable balance between capacity and fishing possibilities. The traffic lights show the interpretation for each segment.**

Annex 7 explains the situation in more detail for two areas where there is a risk of imbalance.

Table F. 7. Overview and traffic lights

No.	Length	Gear code	Number of vessels			Landings 1,000 tonnes		ROI-indicator	Current/Break-even		Sustainable Harvest Indicator	Stocks at Risk indicator	Technical indicators		Main Charac- teristics	
			ITQ man- aged	Not ITQ man- aged	Inac- tive	Com- mercial	Non- com- mercial		Incl. opp.	Excl. opp.			Inac- tivity	Utili- sation		
1	VLOO10	DTS	10	8	1	0.2	0.0	-0.03	0.33	0.47	1.1	1(3)	45	0.38	Mainly in- active og less vessels	
2	VL0010	PGP	316	719	667	2.5	2.5	-0.12	-0.14	-0.16	2.5	1(2)				
3	VL0010	PMP	80	72	34	0.7	0.4	-0.14	0.02	0.02	1.8	0(1)				
4	VL1012	DRB		21	0	14.9	0.0	0.14	2.22	2.52		0(0)	11	0.57	Mussels	
5	VL1012	DTS	11	1	0	1.9	0.0	-0.06	0.38	0.45	1.4	0(0)			0.55	Demersal Small scale
6	VL1012	PGP	54	4	0	2.3	0.1	-0.07	0.22	0.26	1(0)	0.43				
7	VL1012	PMP	35	5	0	2.6	0.1	-0.08	0.27	0.31	1(0)	0.46				
8	VL1218	DRB		33	3	32.9		0.13	2.00	2.22		-(0)	7	0.39	Mussels	
9	VL1218	DTS	122	3	2	33.9	0.1	-0.02	0.75	0.91	1.2	3(3)			0.48	Mixed Demersal
10	VL1218	PGP	38	0	1	4.7	0.0	-0.05	0.53	0.60	1.3	0(2)			0.44	
11	VL1218	PMP	37	1	0	7.5	0.1	-0.03	0.61	0.77	1.5	1(1)			0.42	
12	VL1218	TBB	9	2	0	1.2		0.00	0.99	1.09		1(1)			0.70	Brown shrimps
13	VL1218	TM	14	0	0	31.4		0.04	1.56	1.92	1.1	1(1)			0.57	Pelagic
14	VL1824	DTS	54	1	0	64.1		0.01	1.13	1.36	1.1	3(4)			1	0.51	Mixed
15	VL1824	PMP	10	0	0	3.4		0.02	1.16	1.36	1.1	0(1)	0.68			
16	VL1824	TBB	14	2	0	1.9		0.00	0.99	1.11		1(1)	0.70	Brown shrimps		
17	VL2440	DTS	41	0	0	81.6		0.02	1.21	1.43	1.1	3(3)	3	0.70	Mixed	
18	VL40XX	DTS	14	1	0	122.6		0.02	1.57	1.96	0.8	1(1)	3	0.65	Pelagic +	
19	VL40XX	TM	15	0	0	334.2		0.03	1.33	1.59	0.9	1(1)			0.65	Industrial

Note: Data on type of management and landings are from 2014

No.	Length	Gear code	ROI	Current/Break-even		Sustainable Harvest Indicator	Stocks at Risk indicator	Technical indicators		Over all
				Incl. opp.	Excl. opp.			Inactivity	Utilisation	
1	VLOO10	DTS	-0.03	0.33	0.47	1.1	1(3)	45	0.38	Mainly inactive or less active vessels
2	VL0010	PGP	-0.12	-0.14	-0.16	2.5	1(2)		0.16	
3	VL0010	PMP	-0.14	0.02	0.02	1.8	0(1)		0.22	
4	VL1012	DRB	0.14	2.22	2.52		0(0)	11	0.57	Mussels
5	VL1012	DTS	-0.06	0.38	0.45	1.4	0(0)		0.55	Mixed Demersal
6	VL1012	PGP	-0.07	0.22	0.26		1(0)		0.43	
7	VL1012	PMP	-0.08	0.27	0.31	1.4	1(0)		0.46	
8	VL1218	DRB	0.13	2.00	2.22		-(0)	7	0.39	Mussels
9	VL1218	DTS	-0.02	0.75	0.91	1.2	3(3)		0.48	Mixed Demersal
10	VL1218	PGP	-0.05	0.53	0.60	1.3	0(2)		0.44	
11	VL1218	PMP	-0.03	0.61	0.77	1.5	1(1)		0.42	
12	VL1218	TBB	0.00	0.99	1.09		1(1)		0.70	Brown Shrimps
13	VL1218	TM	0.04	1.56	1.92	1.1	1(1)		0.57	Pelagic
14	VL1824	DTS	0.01	1.13	1.36	1.1	3(4)		1	0.51	Mixed
15	VL1824	PMP	0.02	1.16	1.36	1.1	0(1)	0.68		
16	VL1824	TBB	0.00	0.99	1.11		1(1)	0.70		Brown Shrimps
17	VL2440	DTS	0.02	1.21	1.43	1.1	3(3)	3	0.70	Mixed
18	VL40XX	DTS	0.02	1.57	1.96	0.8	1(1)	3	0.65	Pelagic + Industrial
19	VL40XX	TM	0.03	1.33	1.59	0.9	1(1)		0.65	
	COM guideline		>0	>1	>1	<1	0	< 10	>0,9	
				>0<1	>0<1		>0			
				<0	<0	<0	>40% from assessed stocks >1 for 3 years	>10% from SAR	>20	<0,7

Annex 1. Gear Codes and length classes

FISHING TECHNIQUE (Gear Codes)

DFN	=	Drift and/or fixed netters
DRB	=	Dredgers
DTS	=	Demersal trawlers and/or demersal seiners
PTS	=	Pelagic trawl and/or pelagic seiners
FPO	=	Vessels using pots and/or traps
HOK	=	Vessels using hooks
MGO	=	Vessel using other active gears
MGP	=	Vessels using polyvalent active gears only
PG	=	Vessels using passive gears only for vessels < 12m
PGO	=	Vessels using other passive gears
PGP	=	Vessels using polyvalent passive gears only
PMP	=	Vessels using active and passive gears
PS	=	Purse seiners
TM	=	Pelagic trawlers
TBB	=	Beam trawlers

VESSEL LENGTH classes

VL0006	=	Vessel less than 6 meters in length. *For Supra region 2 only.
VL0010	=	Vessel between 0 meters and 10 meters in length. **For Supra region 1 and 3 only.
VL0612	=	Vessel between 6 meters and 12 meters in length. *For Supra region 2 only.
VL1012	=	Vessel between 10 meters and 12 meters in length. **For Supra region 1 and 3 only.
VL1218	=	Vessel between 10 meters and 18 meters in length. All regions.
VL1824	=	Vessel between 18 meters and 24 meters in length. All regions.
VL2440	=	Vessel between 24 meters and 40 meters in length. All regions.
VL40XX	=	Vessel greater than 40 meters in length. All regions.

Annex 2. Capacity of registered Danish fishing vessels, 2015

Tonnage in GT, 2015

Length	Gear	Commercial ¹⁾	Non-commercial ²⁾	Inactive ³⁾	Not registered 31 st December ⁴⁾	Total
VL0010m	DTS	41	42	35	10	127
	PGP	475	1,919	1,221	115	3,730
	PMP	161	399	170	48	777
	Total	676	2,361	1,425	172	4,635
VL1012m	DRB	267	15	34	13	329
	DTS	145	44			189
	PGP	422	139	74	49	684
	PMP	266	153	37	53	509
	Total	1,100	352	145	115	1,711
VL1218m	DRB	876	12	30	72	991
	DTS	4,289	34	139	241	4,703
	PGP	959	45	38	110	1,151
	PMP	991	139	144	42	1,317
	TBB	548	1			549
	TM	508	25			533
	Total	8,172	256	352	465	9,244
VL1824m	DTS	5,289		92	247	5,627
	PMP	1,246				1,246
	TBB	1,137				1,137
	Total	7,671		92	247	8,009
VL2440m	DTS ⁵⁾	9,160		182	786	10,128
	PMP	1,429			323	1,751
	Total	10,588		182	1,108	11,879
VL40XXm	DTS	10,546			594	11,140
	PS	3,689				3,689
	TM	16,238		2,150	4,138	22,526
	Total	30,473		2,150	4,732	37,355
Total		58,680	2,968	4,345	6,839	72,832

See Annex 1 for explanation of Gear Codes

Source: The Danish AgriFish Agency Vessel Register and Sales Notes Register 5th April 2016.

Notes: ¹⁾ Includes vessels with a yearly catch value above € 36,000.

²⁾ Includes vessels with a yearly catch value below € 36,000 but above € 0.

³⁾ Includes vessels not having any catch value within the year.

⁴⁾ Includes vessels not being active by the end of the year.

⁵⁾ For discretionary purposes VL24XXm TBB has been included in VL2440m DTS.

Engine power in kW, 2015

Length	Gear	Commercial ¹⁾	Non-commercial ²⁾	Inactive ³⁾	Not registered 31 st December ⁴⁾	Total
VL0010m	DTS	420	673	524	81	1,698
	PGP	5,107	23,582	15,210	1,468	45,367
	PMP	1,631	4,750	2,108	712	9,201
	Total	7,158	29,005	17,842	2,261	56,266
VL1012m	DRB	1,678	53	382	85	2,198
	DTS	1,298	429			1,727
	PGP	3,623	1,272	591	441	5,927
	PMP	2,465	1,269	358	391	4,483
	Total	9,064	3,023	1,331	917	14,335
VL1218m	DRB	3,617	128	204	372	4,321
	DTS	21,909	257	789	1,212	24,167
	PGP	4,194	323	286	592	5,395
	PMP	4,933	1,009	1,129	284	7,355

	TBB	2,126	23			2,149
	TM	2,250	126			2,376
	Total	39,029	1,866	2,408	2,460	45,763
VL1824m	DTS	14,895		214	1,067	16,176
	PMP	3,711				3,711
	TBB	3,087				3,087
	Total	21,693		214	1,067	22,974
VL2440m	DTS ⁵⁾	19,659		810	1,975	22,444
	PMP	2,898			876	3,774
	Total	22,557		810	2,851	26,218
VL40XXm	DTS	20,135			810	20,945
	PS	5,998				5,998
	TM	33,882		4,800	5,220	43,902
	Total	60,015		4,800	6,030	70,845
Total		159,516	33,894	27,405	15,586	236,401

See Annex 1 for explanation of Gear Codes

Source: The Danish AgriFish Agency Vessel Register and Sales Notes Register 5th April 2016.

Notes: ¹⁾ Includes vessels with a yearly catch value above € 36,000.

²⁾ Includes vessels with a yearly catch value below € 36,000 but above € 0.

³⁾ Includes vessels not having any catch value within the year.

⁴⁾ Includes vessels not being active by the end of the year.

⁵⁾ For discretionary purposes VL24XXm TBB has been included in VL2440m DTS.

Annex 3. Link with fisheries for commercial and non-commercial vessels

Distribution landing value in 2015 (%)

Group	Length	Gear	Roundfish	Flatfish	Lobster and shrimp	Mackerel and herring	Other species	Reduction species ¹⁾	Entry-restricted ²⁾	Total landing value (€ 1,000) ⁴⁾
Commercial	VL0010m	DTS	37	48	14	0	1	0	0	799
		PGP	44	15	7	3	31	0	1	6,555
		PMP	39	29	28	0	4	0	0	1,793
	VL1012m	DRB	0	0	0	0	0	0	99	6,602
		DTS	40	17	23	6	0	14	0	1,377
		PGP	52	36	0	0	11	0	1	4,636
		PMP	34	45	10	2	2	7	0	3,161
	VL1218m	DRB	0	0	0	0	0	0	100	7,669
		DTS	28	18	38	2	1	14	0	36,113
		PGP	44	52	0	0	4	0	0	9,277
		PMP	41	32	22	0	1	3	0	8,019
		TBB	0	0	0	0	0	6	94	2,987
		TM	4	2	8	31	0	55	0	6,093
	VL1824m	DTS	28	30	17	2	1	21	0	45,139
		PMP	17	39	27	0	1	16	0	11,154
		TBB	0	16	0	0	0	12	72	5,824
	VL2440m	DTS ³⁾	41	24	15	0	0	19	0	67,569
		PMP	81	18	0	0	1	0	0	11,100
	VL40XXm	DTS	0	0	0	9	0	64	27	55,743
		PS	0	0	0	61	0	39	0	24,511
TM		0	0	0	59	0	41	0	134,761	
Non-commercial	VL0010m	DTS	22	17	34	0	14	0	12	70
		PGP	22	21	10	2	42	0	2	5,415
		PMP	33	39	2	2	19	0	6	826
	VL1012m	DRB	0	0	0	0	0	0	100	7
		DTS	8	59	31	0	2	0	0	37
		PGP	46	33	2	0	15	0	4	305
		PMP	31	43	23	0	3	0	0	240
	1218m	DRB	0	0	0	0	9	0	91	51
		DTS	22	36	2	0	0	41	0	18
		PGP	50	41	0	0	9	0	0	45
		PMP	28	39	22	0	9	3	0	144
TM		85	12	1	0	1	0	0	6	
1824m	DTS	99	1	0	0	0	0	0	25	

See Annex 1 for explanation of Gear Codes

Source: The Danish AgriFish Agency Vessel Register and Sales Notes Register 5th April 2016.

Notes: ¹⁾ Species such as sand eel, blue whiting, sprat, horse mackerel and Norway pout.

²⁾ Species that can only be caught with a license, i.e. mussels, oysters, brown shrimps and shrimps in the waters around Greenland.

³⁾ For discretionary purposes, VL2440m TBB has been included in VL2440m DTS.

⁴⁾ Based on the average Euro exchange rate for 2015 being 7.4586 DKK / €.

Distribution landing whole weight in 2015 (%)

Group	Length	Gear	Roundfish	Flatfish	Lobster and shrimp	Mackerel and herring	Other species	Reduction species ¹⁾	Entry-restricted ²⁾	Total landing whole weight (tonnes)
Commercial	VL0010m	DTS	27	69	3	0	1	0	0	365
		PGP	49	19	1	10	21	0	0	2,169
		PMP	44	46	8	0	2	0	0	655
	VL1012m	DRB	0	0	0	0	2	0	98	19,861
		DTS	29	12	2	13	0	45	0	1,764
		PGP	48	44	0	1	6	0	0	1,982
		PMP	27	33	1	6	1	32	0	2,656
	VL1218m	DRB	0	0	0	0	5	0	95	35,634
		DTS	20	11	4	4	1	60	0	37,986
		PGP	38	59	0	0	3	0	0	3,350
		PMP	43	30	4	0	1	23	0	5,404
		TBB	0	0	0	0	0	52	48	1,728
		TM	1	0	0	24	0	74	0	19,183
	VL1824m	DTS	11	12	2	3	2	71	0	60,252
		PMP	5	16	5	0	0	74	0	11,609
		TBB	0	11	0	0	0	62	26	4,863
	VL2440m	DTS ³⁾	16	11	3	1	0	70	0	83,822
		PMP	80	20	0	0	1	0	0	4,717
	VL40XXm	DTS	0	0	0	6	0	92	2	169,344
		PS	0	0	0	37	0	62	0	64,252
		TM	0	0	0	36	0	64	0	342,321
Non-commercial	VL0010m	DTS	35	27	14	0	16	0	8	16
		PGP	30	30	2	9	28	0	1	2,179
		PMP	34	49	0	2	12	0	2	371
	VL1012m	DRB	0	0	0	0	0	0	100	30
		DTS	8	80	7	0	5	0	0	16
		PGP	59	32	0	0	7	0	1	133
		PMP	29	67	3	0	1	0	0	182
	1218m	DRB	0	0	0	0	32	0	68	222
		DTS	4	11	0	0	0	85	0	43
		PGP	52	35	0	0	13	0	0	15
		PMP	43	45	3	0	1	8	0	100
		TM	81	18	0	0	0	0	0	6
	1824m	DTS	99	1	0	0	0	0	0	24

See Annex 1 for explanation of Gear Codes

Source: The Danish AgriFish Agency Vessel Register and Sales Notes Register 5th April 2016.

Notes: ¹⁾ Species such as sand eel, blue whiting, sprat, horse mackerel and Norway pout.

²⁾ Species that can only be caught with a license, i.e. mussels, oysters, brown shrimps and shrimps in the waters around Greenland.

³⁾ For discretionary purposes, VL2440m TBB has been included in VL2440m DTS.

Annex 4. Figures used to calculate the technical indicator

Length	Gear	Days at sea ¹⁾							Number of vessels ²⁾							Maximum obs. days at sea ³⁾						
		2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014
VL0010	DTS	770	478	400	594	580	654	693	12	10	12	14	10	11	12	154	81	97	140	108	130	154
	PGP	40,776	38,072	39,457	41,032	30,245	28,903	29,105	1,041	1,000	1,024	1,012	855	824	809	231	223	221	214	229	225	220
	PMP	-	-	-	-	6,060	5,557	4,891	-	-	-	-	126	116	111	215	190	178	183	189	210	202
VL1012	DRB	1,645	1,781	1,183	1,702	1,640	1,317	1,133	30	32	24	25	21	24	19	107	130	99	105	104	103	105
	DTS	889	1,108	950	-	1,070	1,042	914	10	13	8	-	9	9	10	198	162	143	149	147	158	165
	PGP	7,640	7,738	7,026	6,492	5,903	6,388	5,749	66	67	65	56	50	56	53	257	264	253	275	273	242	251
	PMP	2,681	2,703	2,808	3,121	3,415	2,691	2,776	30	31	29	34	44	30	34	166	178	166	163	162	161	178
VL1218	DRB	1,628	1,608	1,441	2,086	2,543	2,017	2,095	33	34	30	27	27	25	25	140	106	126	149	193	206	215
	DTS	21,510	21,827	21,010	19,677	16,829	16,606	15,936	184	177	168	156	127	128	119	234	280	298	278	282	276	280
	PGP	6,646	6,322	6,412	5,818	4,682	4,669	4,198	59	57	45	48	35	37	33	242	230	235	270	261	265	286
	PMP	5,004	4,947	4,775	4,796	5,009	4,280	4,172	47	46	51	47	46	38	34	199	195	196	196	291	321	294
	TBB	2,309	2,463	1,748	1,185	1,731	1,662	1,852	16	14	11	11	11	11	12	210	253	200	164	207	194	222
	TM	-	-	-	-	1,506	1,326	1,900	-	-	-	-	16	14	18	0	0	0	0	177	194	186
VL1824	DTS	11,783	12,250	11,741	11,123	10,554	9,693	9,659	79	77	68	70	64	61	55	320	306	345	340	345	339	347
	PMP	1,789	2,027	2,300	2,348	2,281	3,363	3,358	16	15	16	15	12	16	17	263	225	232	254	287	272	292
	TBB	2,314	2,417	2,546	2,105	2,788	2,772	2,661	13	13	17	18	17	18	17	204	218	190	176	217	213	224
VL2440	DTS	11,198	11,128	9,550	8,564	8,664	7,851	7,617	51	46	42	39	38	34	33	333	363	353	356	340	336	328
VL40XX	DTS	5,483	5,628	6,025	5,321	1,440	2,762	2,201	32	32	29	31	12	17	14	369	347	349	333	310	340	241
	TM	-	-	-	-	2,496	2,607	2,852	-	-	-	-	17	13	17	-	-	-	-	219	303	259

Source: The Danish AgriFish Agency Vessel Register and Logbook Register 5th April 2016.

Call for fleet economic scientific data concerning 2008-2014, EC, Ref. Ares(2015)421690 - 03/02/2015.

Notes: ¹⁾ The days at sea is based on the Calendar Days method.

²⁾ Covers only active vessels.

³⁾ Based on the vessel with most observed days at sea within each year and fleet segment, using the 24 hours method.

Annex 5. Development in effort in relation to cod recovery plan in the North Sea and the Baltic 2003, 2014 and 2015

North Sea, Skagerrak, Kattegat, Irish Sea and West of Scotland:

Number of days at sea and kilowatt days for Danish vessels 10 metres and above in the regulated area 2003, 2014 and 2015.

	Kattegat									North Sea									Irish Sea		
	Days at sea			kW-days			No. Vessels			Days at sea			kW-days			No. Vessels			Days at sea	kW-days	No. Vessels
	2003	2014	2015	2003	2014	2015	2003	2014	2015	2003	2014	2015	2003	2014	2015	2003	2014	2015	2003	2003	2003
Total	19.652	8.253	7.786	3.969.539	1.557.495	1.481.356	366	160	152	67.172	29.937	27.934	21.830.602	9.884.820	10.634.078	690	282	280	2	915	1
TR1	809	349	184	132.857	52.561	28.195	96	20	30	17.394	10.737	12.035	6.988.875	4.295.080	4.992.079	296	108	125	.	.	.
TR2	14.957	7.426	7.300	3.020.289	1.434.271	1.414.599	253	143	132	26.292	9.168	7.438	7.788.045	2.507.386	1.973.401	369	123	125	.	.	.
TR3	2.049	218	84	629.240	39.783	17.696	71	9	7	5.276	1.294	1.381	3.089.609	991.131	1.855.524	135	26	24	2	915	1
BT1	.	.	.	.	.	.	.	.	.	1.371	256	332	1.342.965	376.576	408.206	12	1	2	.	.	.
BT2	.	.	.	.	.	.	.	.	.	114	.	.	98.897	.	.	11	.	.	.	.	.
GN1	1.675	230	185	169.471	26.499	15.735	75	10	8	15.276	6.046	4.538	2.286.893	1.164.989	858.842	213	75	64	.	.	.
GT1	150	31	34	14.713	4.382	5.132	9	3	4	957	2.436	2.209	156.152	549.658	546.027	32	35	27	.	.	.
LL1	13	.	.	2.968	.	.	2	.	.	492	.	.	79.166	.	.	31	.	.	.	.	.

	West of Scotland			Total									Change (%) in kW-days 2003-2015								
	Days at sea	kW-days	No. Vessels	Days at sea			kW-days			No. Vessels			Days at sea			kW-days			No. Vessels		
	2003	2003	2003	2003	2014	2015	2003	2014	2015	2003	2014	2015	Kattegat	North Sea	Total	Kattegat	North Sea	Total	Kattegat	North Sea	Total
Total	136	148.001	5	86.962	38.190	35.720	25.949.057	11.442.315	12.115.434	780	337	331	-60	-58	-59	-63	-51	-53	-58	-59	-58
TR1	.	.	.	18.203	11.086	12.219	7.121.732	4.347.640	5.020.274	358	124	139	-77	-31	-33	-79	-29	-30	-69	-58	-61
TR2	.	.	.	41.249	16.594	14.739	10.808.334	3.941.657	3.388.000	429	173	169	-51	-72	-64	-53	-75	-69	-48	-66	-61
TR3	136	148.001	5	7.463	1.511	1.465	3.867.765	1.030.914	1.873.219	174	31	27	-96	-74	-80	-97	-40	-52	-90	-82	-84
BT1	.	.	.	1.371	256	332	1.342.965	376.576	408.206	12	1	2	.	-76	-76	.	-70	-70	.	-83	-83
BT2	.	.	.	114	.	.	98.897	.	.	11	.	.	.	.	.	.	.	.	.	.	.
GN1	.	.	.	16.951	6.276	4.723	2.456.364	1.191.488	874.577	235	79	68	-89	-70	-72	-91	-62	-64	-89	-70	-71
GT1	.	.	.	1.107	2.467	2.243	170.865	554.040	551.159	37	37	30	-77	131	103	-65	250	223	-56	-16	-19
LL1	.	.	.	504	.	.	82.134	.	.	32	.	.	.	.	.	.	.	.	.	.	.

Note: The total is the actual number of vessels.

Source: The Danish AgriFish Agency Effort Register

Annex 5. Continued...

	Kattegat						North Sea						Irish Sea	
	Days/Vessel			Kw-days/vessel			Days/Vessel			Kw-days/vessel			Days/Vessel	Kw-days/vessel
	2003	2014	2015	2003	2014	2015	2003	2014	2015	2003	2014	2015	2003	2003
Total	53,7	51,6	51,2	10.846	9.734	9.746	97,4	106,2	99,8	31.639	35.053	37.979	1,7	915
TR1	8,4	17,4	6,1	1.384	2.628	940	58,8	99,4	96,3	23.611	39.769	39.937	.	.
TR2	59,1	51,9	55,3	11.938	10.030	10.717	71,3	74,5	59,5	21.106	20.385	15.787	.	.
TR3	28,9	24,2	11,9	8.863	4.420	2.528	39,1	49,8	57,6	22.886	38.120	77.313	1,7	915
BT1	.	.	.	.	.	.	114,3	256,0	166,0	111.914	376.576	204.103	.	.
BT2	.	.	.	.	.	.	10,4	.	.	8.991	.	.	.	.
GN1	22,3	23,0	23,1	2.260	2.650	1.967	71,7	80,6	70,9	10.737	15.533	13.419	.	.
GT1	16,7	10,3	8,5	1.635	1.461	1.283	29,9	69,6	81,8	4.880	15.705	20.223	.	.
LL1	6,3	.	.	1.484	.	.	15,9	.	.	2.554	.	.	.	.

	West of Scotland		Total						Change (%) in 2003-2015	
	Days/Vessel	Kw-days/vessel	Days/Vessel			Kw-days/vessel			Days/Vessel	Kw-days/vessel
	2003	2003	2003	2014	2015	2003	2014	2015		
Total	27,2	29.600	111,5	113,3	107,9	33.268	33.953	36.603	-3	10
TR1	.	.	50,9	89,4	87,9	19.893	35.062	36.117	73	82
TR2	.	.	96,2	95,9	87,2	25.194	22.784	20.047	-9	-20
TR3	27,2	29.600	42,9	48,7	54,3	22.229	33.255	69.378	27	212
BT1	.	.	114,3	256,0	166,0	111.914	376.576	204.103	45	82
BT2	.	.	10,4	.	.	8.991	.	.	.	.
GN1	.	.	72,1	79,4	69,5	10.453	15.082	12.861	-4	23
GT1	.	.	29,9	66,7	74,8	4.618	14.974	18.372	150	298
LL1	.	.	15,8	.	.	2.567	.	.	.	.

Note: The total is the actual number of vessels.
Source: The Danish Agrifish Agency Effort Register.

Annex 5. Continued...

The Baltic:

Number of days at sea and kilowatt days for Danish vessels 8 metres and above in the regulated area 2003, 2014 and 2015.

	Days at sea			kW-days			No. Vessels			Change (%) in 2003-2015		
	2003	2014	2015	2003	2014	2015	2003	2014	2015	Days at sea	kW-days	No. Vessels
Total	35.571	19.295	18.226	5.814.369	2.688.200	2.570.182	479	258	247	-48,8	-55,8	-48,4
Western Baltic	27.535	15.537	14.234	4.375.698	1.867.427	1.672.699	464	256	234	-48,3	-61,8	-49,6
Eastern Baltic	8.036	3.758	3.992	1.438.671	820.774	897.483	188	69	66	-50,3	-37,6	-64,9

	Days/Vessel			Kw-days/vessel			Change (%) in 2003-2015	
	2003	2014	2015	2003	2014	2015	Days/Vessel	kW-days/Vessel
Total	74,3	74,8	73,8	12.139	10.419	10.406	-0,6	-14,3
Western Baltic	59,3	60,7	60,8	9.430	7.295	7.148	2,5	-24,2
Eastern Baltic	42,7	54,5	60,5	7.653	11.895	13.598	41,5	77,7

Note: The total is the actual number of vessels.

Source: The Danish AgriFish Agency Effort Register.

Annex 6. Development in capacity in relation to cod recovery plan in the North Sea and the Baltic 2003, 2014 and 2015

North Sea, Skagerrak, Kattegat, Irish Sea and West of Scotland:

Capacity fluctuations for Danish vessels 10 metres and above in the regulated area 2003, 2014 and 2015.

	Total									Change (%) in 2003-2015	
	GT			kW			No. Vessels			GT	kW
	2003	2014	2015	2003	2014	2015	2003	2014	2015		
Total	63.255	28.527	33.992	204.356	85.869	99.794	780	337	331	-46	-51
TR1	29.117	12.423	14.177	99.810	34.481	41.366	358	124	139	-51	-59
TR2	39.461	14.814	13.544	159.359	58.178	55.177	429	173	169	-66	-65
TR3	34.513	8.094	13.283	88.264	16.791	29.459	174	31	27	-62	-67
BT1	2.488	498	597	7.891	1.471	1.649	12	1	2	-76	-79
BT2	2.434	.	.	7.672	.	.	11	.	.	.	.
GN1	7.763	3.428	2.810	37.615	13.453	11.301	235	79	68	-64	-70
GT1	1.707	2.034	1.753	6.264	6.848	5.958	37	37	30	3	-5
LL1	1.128	.	.	5.433	.	.	32	.	.	.	.

The Baltic:

Capacity fluctuations for Danish vessels 8 metres and above in the regulated area 2003, 2014 and 2015.

	GT			kW			No. Vessels			Change (%) in 2003-2015	
	2003	2014	2015	2003	2014	2015	2003	2014	2015	GT	kW
Total	18.165	7.319	6.874	83.748	34.625	33.958	479	258	247	-62	-59
Western Baltic	16.986	7.302	5.943	79.553	34.450	31.019	464	256	234	-65	-61
Eastern Baltic	8.505	3.818	3.634	38.447	13.849	13.724	188	69	66	-57	-64

Note: The total is the actual number of vessels.

Source: The Danish AgriFish Agency Vessel Register

Annex 7. Action in response to situations of imbalance

The data presented in this report indicates two areas where there could be some imbalance between fleet capacity and fishing resources. This annex explains how this is dealt with in the management system.

1. Less active and inactive vessels under 10 metres

A number of vessels with low activity or even no activity may represent a potential fishing capacity. If this capacity is used for fishing, it could represent an imbalance between available resources and the size of the fleet. However, this is mitigated by the fact that:

- A great number of these vessels is permanently inactive or used by part-time fishermen who do not depend on fishery as their main source of income. Moreover, some vessels are not used for fishery, but are used for technical purposes in the pound net fishery.
- The less-active vessels also constitute an important social value for the coastal community and for the owners, who are often retired fishermen. A committee set up in the fisheries legislation can approve people with relevant experience as part time fishermen.

At the time of the introduction of the ITQ-management system in Denmark these vessels had a history of low activity at a level which was less than the commercial minimum (230.000 DKK in annual landing value). They were not allocated transferable fishing rights, but are only allowed to fish on non-quota species or on rations allocated to vessels outside the ITQ-management system. The rations are set according to a defined share of the quota allocated to Denmark. Monitoring and control ensures that the activity is kept strictly in line within fishing opportunities.

2. ITQ-managed vessels including medium sized vessels 12-18 metres

The biological and economic indicators show sign of some imbalance between capacity and fishing opportunities. However, in terms of interpretation, it is important to bear in mind that:

- Capacity of this part of the fleet has already been reduced substantially, especially after the introduction of ITQ-based management system in Denmark and which covers almost all these vessels.
- By including a rather high standard salary for the owner when calculating the indicator, the economic results appear worse than those experienced by the owner.
- The economic indicators for these vessels have been improving over time.

The ITQ-management system has contributed to a reduction in capacity and ensures that the fishing activity is automatically adjusted according to the fishing possibilities. Any reduction made to Danish quotas is immediately transferred to reduced quota shares for each individual vessel. Moreover, the possibility to permanently or temporarily sell quota shares means that less effective vessels will fish less and over time will be removed from the fleet.

3. Action to be considered

The situation is being followed very carefully in order to assess whether there is a need for further action. So far, no significant change to the capacity situation has been noted. If anything, there is an indication of some improvement compared to the 2014-report from June 2015. In conclusion there is no need for further immediate action.