ANNUAL REPORT LITHUANIA

Annual report 2013 to achieve a sustainable balance Between fishing capacity and fishing opportunities

11 July 2014

Introduction

Report is composed pursuant to REGULATION (EU) No 1380/2013 OF THE PARLIAMENT AND OF THE COUNCIL of 11 December 2013 on the Common Fisheries Policy, amending Council Regulations (EC) No 1954/2003 and (EC) No 1224/2009 and repealing Council Regulations (EC) No 2371/2002 and (EC) No 639/2004 and Council Decision 2004/585/EC Part IV and COMMISSION REGULATION (EU) No 1013/2010 of 10 November 2010 laying down implementing rules on the Union Fleet Policy as defined in Chapter III of Council Regulation (EC) No 2371/2002 Articles 12 and 13. It summaries the current state of national fisheries fleet management measures and efforts to achieve a sustainable balance between fishing capacity and fishing opportunities.

1. Capacity

1.1 Description of fleet

Lithuanian fisheries fleet is divided in three segments according to their technical characteristics (overall length and engine power).

First fisheries fleet segment (s1) composes of coastal fishing vessels <12 m and main engine power ≤ 110 kW. Fisheries conduct in the coastal zone of the Baltic Sea. Mostly perch, bream, roach, salmon, pike, cod, flat fish, smelt, pike perch and eels were fished.

Second fisheries fleet segment (s2) – Baltic Sea fishing vessels (mostly >12 meters and main engine power 165 – 220 kW metere700 kW. Fisheries were conducted in the Baltic Sea and North Sea. Main targeted species – cod (catch 1 742 tonnes), herring (catch 2 475 tonnes), sprat (catch 10353 tonnes), place (1 002 tonnes)

The third fisheries fleet segment (s3) – rest of the fleet mainly high seas fishing vessels. The main pelagic species caught in the High Sea waters: mackerel, horse mackerel and sardines, round sardinella. The High Sea vessels operated mainly in the areas managed in waters under the jurisdiction of the Islamic Republic of Mauritania. Vessels fishing in this area under the Protocol

(Fisheries Partnership Agreement) for two years between European Union and Third Countries. Lithuanian vessels fishing under the Lithuanian flag have been operating in the North East Atlantic Fisheries Commission (NEAFC), the North West Atlantic Fisheries Commission (NAFO) regulated waters. Also areas managed by the South Pacific Regional Fisheries Management Organization (South Pacific RFMO), and also in the North Sea area and in Norwegian waters.

Three Lithuanian vessels were involved in pelagic fishery in Mauritanian EEZ in 2013. The catches in this area – 57 042 tonnes pelagic species (mackerel, horse mackerel, sardines). The Lithuanian fishing vessels since 2010 were fishing by commercial fishing licenses in Guinea and Senegal EEZ. During 2013 Lithuanian vessels in Guinea area caught 5 000 tons various kinds of fishes, mostly mackerel, horse mackerel.

Annual quotas allocated to Lithuania to the are allocated by Lithuanian Fisheries Service to the individual industry groups within the interest of each fishery.

In 2013 quota allocation in NAFO for Lithuania were: 96 tonnes shrimp, 157 tons of cod, 1893 tonnes redfish, 128 tonnes squid, 23 tonnes Greenland halibut and 62 tonnes skate. Duering 2013 no Lithuanian vessels were involved to fisheries in this region and all allocated quotas were exchanged to quotas in NEAFC Regulatory area..

Quota allocation in NEAFC Regulatory area for Lithuania in 2013 was: 95 tonnes mackerel, 16 tonnes Greenland halibut, 86 tonnes round nose grenadier, 8 tonnes blue ling and 19 tonnes skate. After exchanges of fishing quotas with other European Union countries Lithuanian vessels caught 1 425 tonnes of redfish in 2013.

There was only one vessel involved in the shrimp fishery in Svalbard area (Norwegian Exclusive Economic Zone). Lithuania had 647 shrimp fishing days during the year 2013 and catches were 437 tons of shrimp.

In South Pacific (SPRFMO regulatory area) waters it was allocated 12 223 tonnes of Pacific jack mackerel quota. The catches of Lithuanian vessels were 10 391 tonnes and mackerel mostly (10 102 tonnes).

Lithuanian fisheries fleet uses electronic logbooks so all the catches are monitored almost in a real time.

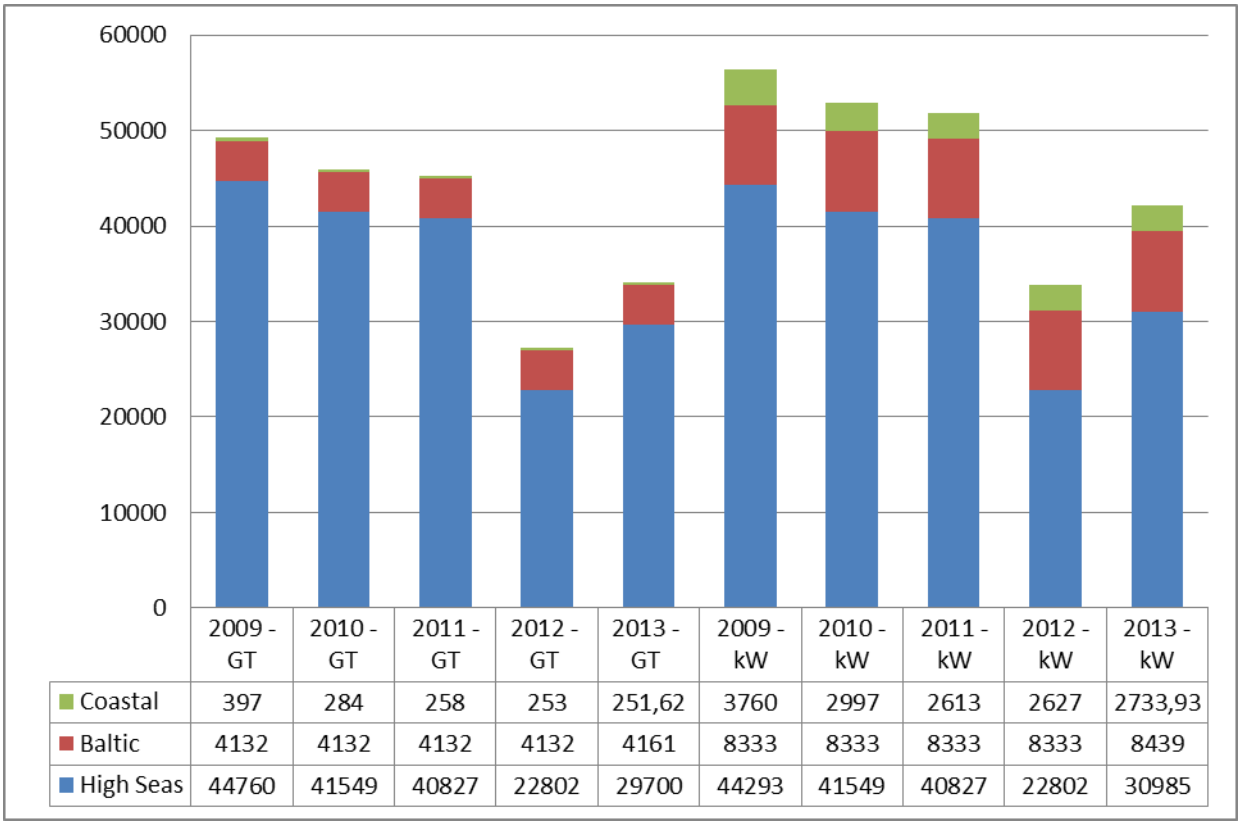
1.2 Development of fishing capacity

2012-12-31 fleet consisted on 148 fishing vessels. 2013-12-13 fleet reduced by 2 vessels (overall 146 vessels) and fishing capacities were: 34 113 gross tonnage GT and 42 158 kW of engine power. Comparing to 2012 the capacity enlarged by 6 950 gross tonnage GT (20,4 %) and 7769 kW (18,4 %).of engine power. The enlarging occured because of large vessel returning to fleet of high seas

(Figure 1).

Most of the vessels (108) operate in Baltic Sea coastal area. The bigest share of them (76 vessels) less than 10 meters. In the length interval of 20-40 meters – 30 vessels are registered. High sea fleet consists only of 8 vessels.

Figure 1. Fishing fleet capacity by the segments 2009 - 2013



	2009 - GT	2010 - GT	2011 - GT	2012 - GT	2013 - GT	2009 - kW	2010 - kW	2011 - kW	2012 - kW	2013 - kW
Coastal	397	284	258	253	251,62	3760	2997	2613	2627	2733,93
Baltic	4132	4132	4132	4132	4161	8333	8333	8333	8333	8439
High Seas	44760	41549	40827	22802	29700	44293	41549	40827	22802	30985

1.3 Compliance with entry/exit scheme and with level of reference

Lithuania is one of the countries which entered the Europe Union 2004 May 1 and uses Entry/Exit scheme as defined in Council Regulation (EC) No 1380/2013 Article 23. For 2013 the same like for previous recent years no public aid was granted and the entry of new capacity into the fleet is compensated by the previous withdrawal of the same amount of capacity. For the 2013 Lithuania is compliant to capacity fleet ceiling. Changes in the data are presented in the table 1. In the reporting period no vessels with a capacity of over 100 GT entered the fishing industry with public support, also no engines of any fishing vessels of a length of 12 meters or more have been replaced with public support.

Table 1. Entry/Exit regime 2013-12-31

	Lithuania	GT		kW	
1	Capac ity of the fleet on 01/05/2004	**GTFR**	76 738	**kWFR**	80 702
2	Capacity level for the application of the entry-exit regime	**GT 04**	77 282	**kW 04**	82 102
3	Entries of vessels of more than 100 GT financed with public aid	**GT100**	0	**kW 100**	0
4	Other entries or capacity increases (not included in 3 & 5)		82 976		87 006
5	Increases in tonnage GT for reasons of safety	**GTS**	0		
6	**Total entries (3 + 4 + 5)**		82 976		87 006
7	Exits before 1/1/2007 financed with public aid	**GTa1**	1 576	**kWa**	3 104
8	Exits after 1/1/2007 financed with public aid	**GTa2**	2 334		5 482
9	Other exits (not included in 7 and 8)		121 691		116 964
10	**Total exits (7 + 8 + 9)**		125 601		125 5507
11	Power of engines replaced with public aid conditional to power reduction		0	**kWr**	0
12	**Capacity of the fleet on 31/12/2013 (1+6-10)**	**GTt**	34 113	**kWt**	42 158
13	**Fleet ceiling on 31/12/2013**		73 489		73 516

1.4 Impact of fishing effort reduction schemes.

Lithuania's fishing fleet in the Baltic sea was significantly reduced before the multiannual cod management plan for the Baltic came into force (Council Regulation (EC) No 1098/2007 of 18 September 2007 establishing a multiannual plan for the cod stocks in the Baltic Sea and the fisheries exploiting those stocks, amending Regulation (EEC) No 2847/93 and repealing Regulation (EC) No 779/97), therefore this plan had not much impact on fleet reduction. From 2005 to 2007 the capacity of Baltic Sea fleet was reduced by 2 711 GT and 4821 kW and by 37,5 % and 35,3 %

respectively. The main operating fleet in the Baltic is 24-40 m length vessels targeting cod with bottom trawls.

2. Biological indicators

Biological indicators of exploitation of stocks (cod, herring, sprat) in the Baltic Sea

Lithuanian Baltic cod quota consists of two parts: Eastern cod (25-32 ICES Subdivisions) and Western cod (22-24 ICES Subdivisions). Every year Lithuania swaps Western cod quota to Eastern cod quota therefore western cod not included in analyses for biological indicators.

Analysis of the national current (F) and targeted (Ft) fishing mortality has shown that the ratio was less than 1 for all three stocks (cod, herring sprat) in 2012 (Table 2, figure 2):

- total F/Ft for Eastern cod - 0,504654328,
- total F/Ft for herring - 0,370693496,
- total F/Ft for sprat - 0,972706201.

Thus, the biological indicators have revealed that the capacity of the Lithuanian Baltic fishing fleet is in balance for the three Baltic stocks but theoretical risk of imbalance can be seen for sprat (F/Ft value close to 1). The distribution of mortality rates by all Lithuanian cod fishing segments (Table 2, Figure 2) showed that cod fishing with bottom trawls, herring and sprat fishing with pelagic trawls had the biggest impact on mortality rate.

Biological indicators (based on 2012 ICES and national data) shows that the Lithuanian Baltic Sea fishing fleet engaged in the Baltic fishery especially cod, herring, sprat is in balance with the fish stocks. Due to unexpected sprat quota decrease theoretical risk of imbalance can be seen for sprat fishing fleet.

Conclusions

Analysis showed that Lithuanian fishing fleet engaged in the Baltic is in balance with current stock size. Theoretical risk of imbalance can be seen for sprat fishing fleet.

Table 2. Analysis of the national current (F) and targeted (Ft) fishing mortality for cod, herring and sprat

Based on 2012 data	**Baltic Sea**		
	Cod 25-32	**Herring 25-32**	**Sprat**
Catch per segment (100 tonnes):			
Bottom trawlers	20,66		
Coastal segment	1,67	1,1	
Gil-neters	2,5		
Pelagic trawlers		21,66	112,4
Total EU catch (100 tonnes)			
Total EU catch acc. To ICES stock assessments (100 tc	512,25	977,73	2309
Curent F (ICES stock assessments)	0,328	0,1331	0,29
Curent F applied per fleet segment			
Bottom trawlers	0,013228853		
Coastal segment	0,001069322	0,000149745	
Gil-neters	0,001600781		
Pelagic trawlers		0,002948612	0,014116934
Target F	0,46	0,26	0,29
Lithuania's quota (100 tonnes)	43,17	22,89	11,272
Lithuania's quota (%)	4,842	2,919	5,0045
Target F in relation to Lithuania's quota	0,0222732	0,0075894	0,01451305
F/Ft by species in the fleet segment			
Bottom trawlers	0,593935901		
Coastal segment	0,048009339	0,019730785	
Gil-neters	0,071870269		
Pelagic trawlers		0,388517087	0,972706201
Catch composition in the segment (%)			
Bottom trawlers	83,20579944		
Coastal segment	6,725734998	4,833040422	
Gil-neters	10,06846557		
Pelagic trawlers		95,16695958	100
F/Ft weighted by catche composition for segment			
Bottom trawlers	0,494189114	0	0
Coastal segment	0,003228981	0,000953597	0
Gil-neters	0,007236233	0	0
Pelagic trawlers	0	0,369739899	0,972706201
Total of all weighted F/Ft	0,504654328	0,370693496	0,972706201
Percentage of fleet segment catch used for F/Fcalc	100	100	100

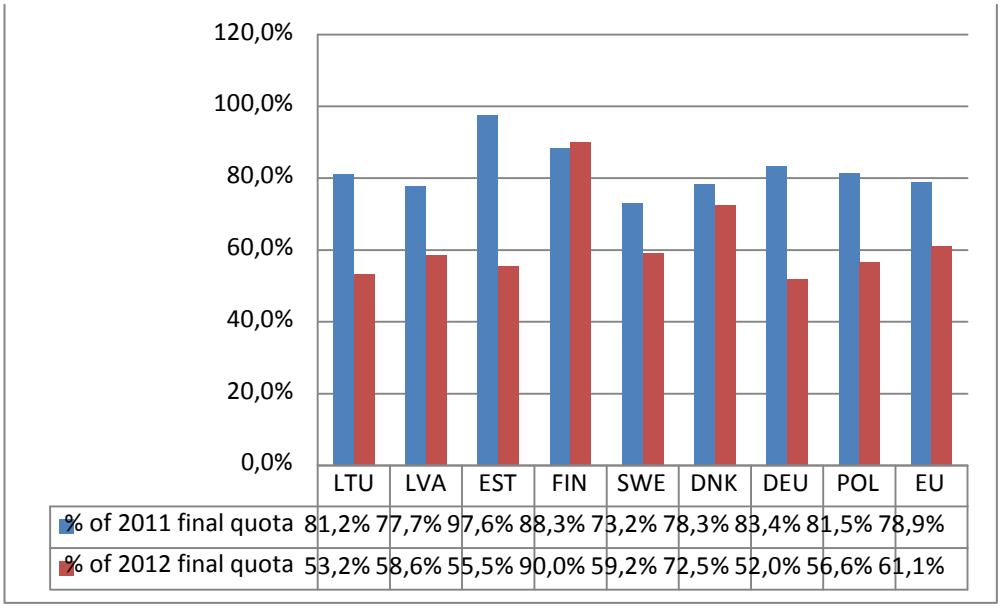


Figure 2. The utilisation of Eastern cod quota by member states.

Analysis showed that Lithuanian fishing fleet engaged in the Baltic Sea is in balance with current stock size.

1. Economic indicators

The economic indicators showing the extent of economic over or under capitalization in Lithuanian fleet were prepared according to Revised Guidelines for an improved analysis of the balance between fishing capacity and fishing opportunities (with changes proposed by STECF plenary July 2012). Return on investments (ROI) and ratio between current revenue (CR) and break even revenue (BER) were analyzed per fleet segment (in the case of data confidentiality, particular segments were clustered) for the period of 2010-2012.

1.1 Return on investments (ROI)

The return on investments (ROI) for a fleet was calculated as a sum of net profit and opportunity cost of capital of the fleet divided by total investments which according to guidelines is equal to the capital asset value of the fleet. Net profit consisted form total revenue minus all cost items including depreciation cost of capital and estimated opportunity cost of capital. Data on direct income subsidies were excluded from calculation. Income and expenditure from lease of fishing rights were not included because it is prohibited by national law. Return on investments for Lithuanian fleet for 2010-2012 is shown in table 1.

1 table. Return on investments (ROI) of Lithuanian fleet during 2010-2012

Supra region	**Vessel length**	**Gear Code**	**2010**	**2011**	**2012**
Area 27	VL0010m	PG	-5,85	28,69	76,64
Area 27	VL1012m[1]	DFN	28,68	-3,39	5,68
Area 27	VL2440m	DTS	8,75	7,38	0,87
Area 27	VL2440m[1]	TM	2,82	35,42	45,59
Other fishing regions	VL40XXm[1]	TM	-10,94	8,06	10,22

1 – Clustered segments.

In general, negative value of ROI indicates economic over-capitalization if such values are observed for a long term period whereas short term negative ROI is explained as economic loss for the segment in relation to the total capital asset value. During 2010-2012 period only in 2012 for all segments positive value of ROI indicating under-capitalization were observed. Short term negative ROI during 2010 – 2011 for particular segments is not considered as under-capitalization, because negative value was observed for only one year within entire 2010-2012 period and it was mostly related to obtained annual net loss. In 2012 as well as during 2010-2012 period, the highest ROI value was assessed in VL2440m pelagic trawler segment, fishing In Baltic Sea, mostly sprat and Baltic herring. Long term high level of ROI indicates that invested capital generates stable positive returns and segment specificity implies that small pelagic species recently generated best returns on investments compare to other segments. Moreover, one of the most important segments in Lithuanian fleet, VL2440m DTS, targeting cod in Baltic Sea, demonstrated steady decline of ROI during 2010-2012 years with the highest drop in 2012. The highest annual increase in ROI was observed in small scale fishery operating in coastal area of Baltic Sea with passive gear. This segment, compare to large scale vessels is not demanding big investments and stable income with increasing trend generates high ROI value.

1.2 Ratio between current revenue and break even revenue

The break even revenue (BER) is considered as a threshold level which indicates the required income to cover all costs so that no losses are incurred and no profits a generated. While current revenue (CR) is total income, consisting from income from landings and other non fishing income, excluding direct subsidies. CR/BER is short term profitability indicator showing how current revenue of fleet is close to revenue, required for the fleet to break even from economic point of view.

3 table. CR/BER of Lithuanian fleet during 2010-2012

Supra region	Vessel length	Gear Code	2010	2011	2012
Area 27	VL0010m	PG	0,91	2,21	4,15
Area 27	VL1012m[1]	DFN	3,23	0,65	1,54
Area 27	VL2440m	DTS	1,29	1,29	1,16
Area 27	VL2440m[1]	TM	1,40	4,69	3,59
Other fishing regions	VL40XXm[1]	TM	0,36	2,01	2,65

1 – Clustered segments.

As it is shown in table 3, in 2012 CR/BER for all fleet segments was higher than 1 indicating that sufficient amount of revenues with a balanced level of costs was generated from fisheries. Concerning current revenue in 2012, almost 98,5 % of Lithuanian fleet income came from landings and only 1,5 % from other fishing income. Small scale fishery segment of coastal area and pelagic trawlers operating in Baltic Sea had the highest CR/BER values in 2012 – 4,15 and 3,59 respectively. The lowest performance was in segment targeting demersal species in Baltic Sea. Particular obligations of landings and realization in local auction, increased variable operative costs as for fuel and maintenance turn the performance of this segment to lower value of CR/BER. Concerning long term period, no segments were observed to have consistently lower than 0 CR/BER value thus current fleet have no signs of over-capitalization. According to the data provided in table 3, the highest undercapitalization is considered to be in 24-40 m pelagic segment of Baltic Sea.

2. Social indicators

The social indicators in this chapter are proposed in Revised Guidelines for an improved analysis of the balance between fishing capacity and fishing opportunities (with changes proposed by STECF plenary July 2012). To illustrate how balance between capacity and fishing opportunities affect employees and society, indicators as average personal cost (PC) per full-time equivalent (FTE), Gross value added (GVA), GVA/FTE and GVA/vessel will be assessed as well as comparison with minimal and average wage in Lithuania will be presented.

2.1 Average personal cost per full-time equivalent (FTE)

In 2012 the lowest PC/FTE was in small scale fishery segment, operating in coastal area, whereas highest wages were paid in pelagic trawler segment (TM VL2440m), fishing in Baltic Sea. It is quite typical situation to have relatively low PC/FTE in small scale fishery, where is not necessary to

employ a crew as it use passive gears for fishing. Majority of enterprises are individual companies, which employs one or two assisting persons, working mainly onshore. Many enterprises employ personnel only for part time or seasonal job, especially for vessels targeting European smelt and the main beneficiary are the owners of vessels.

4 table. Average personal cost per full-time equivalent (FTE) of Lithuanian fleet during 2010-2012

Supra region	**Vessel length**	**Gear Code**	**2010**	**2011**	**2012**
Area 27	VL0010m	PG	2909,8	4962,4	3119,4
Area 27	VL1012m[1]	DFN	3181,4	7373,1	5126,1
Area 27	VL2440m	DTS	6397,2	5733,2	5633,3
Area 27	VL2440m[1]	TM	6340,5	9367,1	11568,1
Other fishing regions	VL40XXm[1]	TM	10775,3	11157,0	8845,3

1 – Clustered segments.

In the segment DTS VL2440m which is dependant from Baltic cod stocks comparatively low wages were also observed. Only pelagic trawler segment, operating in Baltic Sea has annual increase in average wages per FTE, contrary to the rest part of fleet where decline was seen.

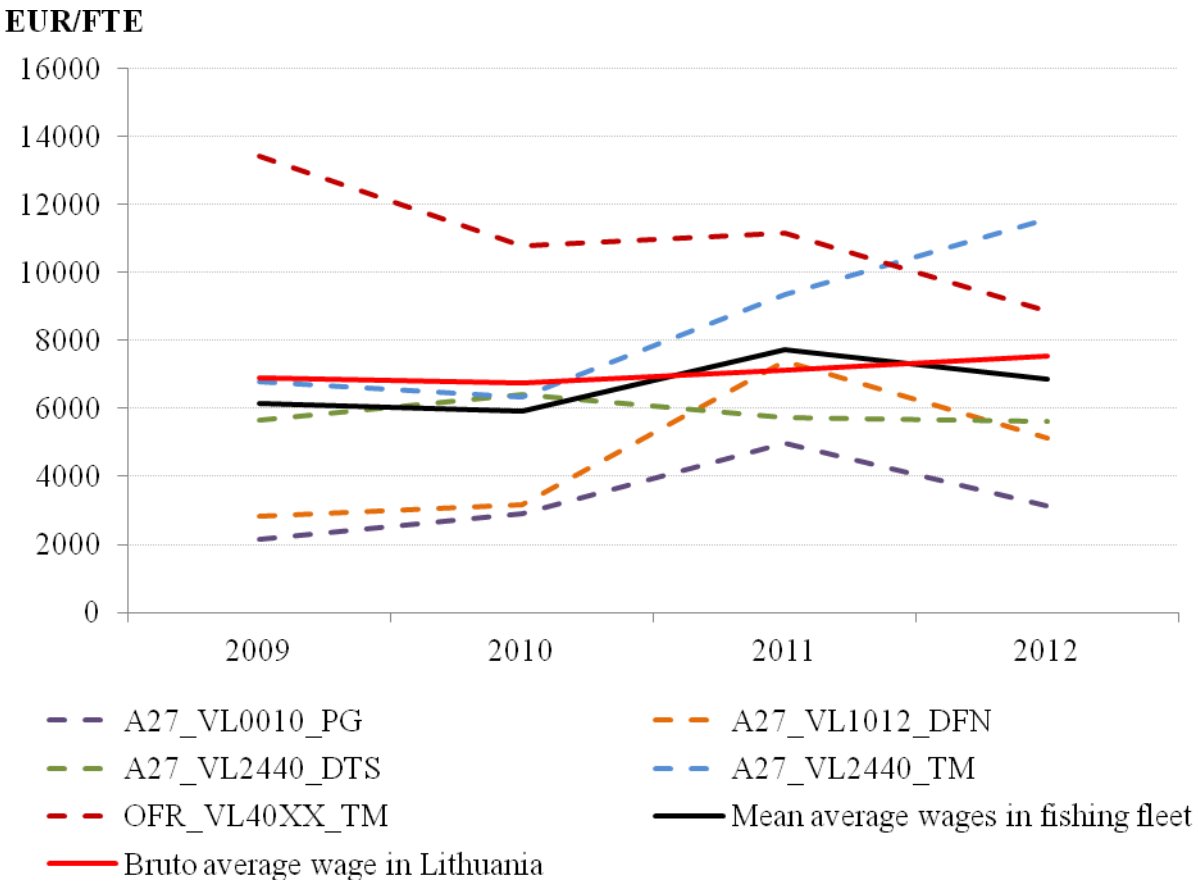


Figure 1. Average personal cost per full-time equivalent (FTE) and bruto average wage in Lithuania 2009-2012

The mean wages in Lithuanian fleet were almost at the national level of average bruto wage. Comparing national bruto average wage in Lithuania to wages paid in fishing fleet, different trend was observed in particular segments. In 2012 the average PC/FTE in segments TM VL40XXm (long distance fisheries) and TM VL2440m (fishing in Baltic Sea) were significantly higher than bruto average wage in Lithuania, whereas small scale vessels demersal trawlers and large scale vessels using drift and fixed netters were significantly below the average level.

The reasons for this situation in small scale fishery are explained in the text above. In terms of economic performance, Baltic Sea demersal trawlers are very close to unprofitable activity and as it is shown by the data, segment is characterized with insufficient wages.

2.2 Gross value added (GVA)

Gross value added, generated from Lithuanian fishing fleet, is defined as depreciation cost plus opportunity cost of capital plus crew costs plus unpaid labour plus net profit. According to guidelines,

GVA expresses the added value that fishing activity contributes to the national economy it also highlights the socio-economic importance of the fishermen, as economically important stocks are represented by high revenues whereas associated costs are measure of the level applied.

5 table. Gross value added of Lithuanian fleet during 2010-2012

Supra region	**Vessel length**	**Gear Code**	**2010**	**2011**	**2012**
Area 27	VL0010m	PG	60908	138392	228802,4
Area 27	VL1012m[1]	DFN	270677	144334	133834
Area 27	VL2440m	DTS	1337793	1288841	1062993
Area 27	VL2440m[1]	TM	475545	1316809	1586017
Other fishing regions	VL40XXm[1]	TM	2562865	9995944	9903680

1 – Clustered segments.

The largest share of generated GVA in over all fishing fleet is attributed to long distance fishery segment (78%). Second largest segment in terms of generating value added, was pelagic trawlers of Baltic Sea (Figure 2).

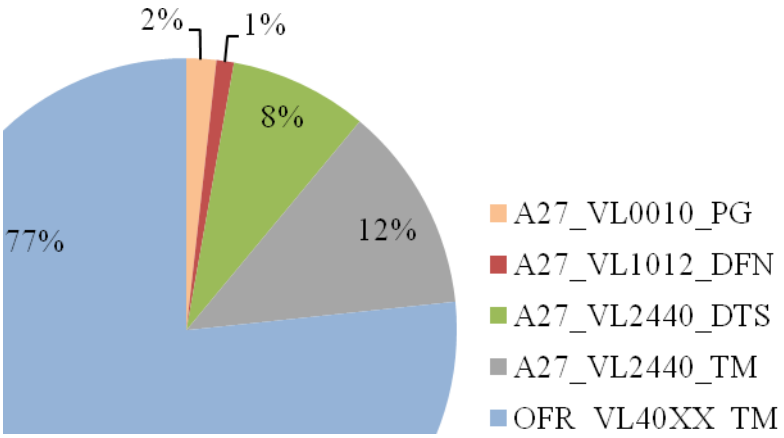


Figure 2. Gross value added for Lithuanian fleet segments in 2012

2.3 GVA/FTE and GVA/vessel

Gross value added per FTE and per vessel indicates whether capital costs, labour costs and profits are covered at vessel level for each segment. During years 2011 and 2012 GVA/FTE has an increase in three segments out of five. As it should be expected significant positive change was in Baltic Sea pelagic trawler segment and modest increase in long distance and small scale fisheries.

Capacity reduction policy by supporting permanent cessation of fishing business had a positive influence to small scale capacity and opportunities balance. Reduced number of vessels with low economic activity and increased revenues for active ones resulted in constant rise of GVA/vessel as it shown in table 7.

6 table. GVA/FTE of Lithuanian fleet during 2010-2012

Supra region	**Vessel length**	**Gear Code**	**2010**	**2011**	**2012**
Area 27	VL0010m	PG	3423,7	7480,6	7548,7
Area 27	VL1012m[1]	DFN	8759,8	7930,5	7353,5
Area 27	VL2440m	DTS	10876,4	9272,2	7721,3
Area 27	VL2440m[1]	TM	14768,5	43747,8	63440,7
Other fishing regions	VL40XXm[1]	TM	8326,4	27133,4	27897,7

1 – Clustered segments.

7table. GVA/vessel of Lithuanian fleet during 2010-2012

Supra region	**Vessel length**	**Gear Code**	**2010**	**2011**	**2012**
Area 27	VL0010m	PG	966,8	2306,5	3750,9
Area 27	VL1012m[1]	DFN	24607,0	16037,1	16729,2
Area 27	VL2440m	DTS	74321,8	64442,1	50618,7
Area 27	VL2440m[1]	TM	118886,3	329202,3	396504,2
Other fishing regions	VL40XXm[1]	TM	320358,2	999594,4	990368,0

1 – Clustered segments.

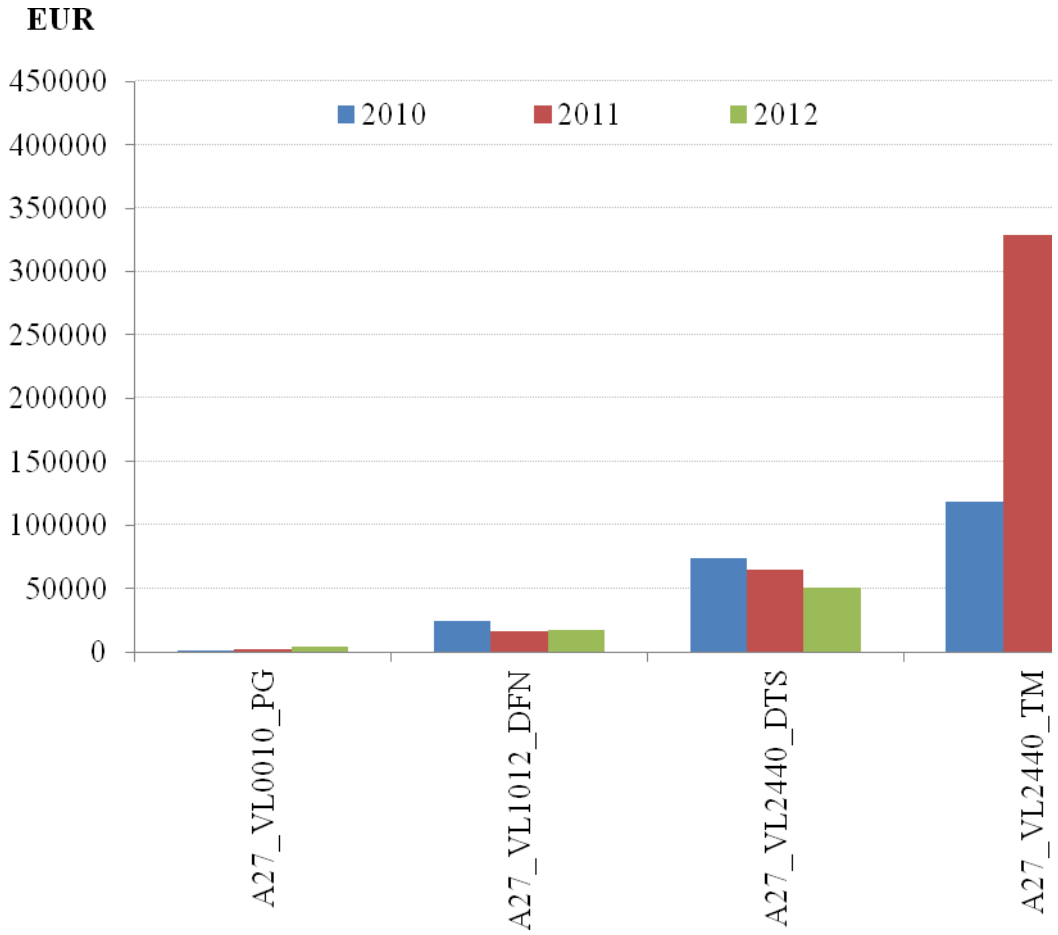


Figure 3. GVA/vessel in segments operating in Baltic Sea and it coastal area

3. "Traffic light" summary

The "Traffic light" system is designed to show at a glance whether balance between fleet capacity and opportunity is considered satisfactory (green), potentially or somehow unsatisfactory (yellow) or very unsatisfactory (red). From the economic point of view, regarding ROI and CR/BER indicators, all Lithuanian fleet segments had a good, balanced, in terms of capacity and opportunities economic performance in 2012 and was marked in green color with a exception of DTS VL2440m segment, which was marked in yellow, as far as it ROI was between 0 and TRP. Demersal trawlers segment had ROI at satisfactory level, but relatively good performance (despite constant decrease) in terms of CR/BER. PC/FTE indicator demonstrated relatively weaker socio-economic perform ace, due to passive gear and demersal trawler segments. Coastal fisheries with lower PC/FTE is justifiable with it specifics, when small enterprises do not employ crew as far as it has passive gears, exploit small boats and mainly owner of company benefit from fisheries. It is characterized with relatively high unpaid labor, therefore personnel costs is under lower importance in this segment.

8 table. “Traffic lights” system for economic and social indicators in 2012

Supra region	Vessel length	Gear Code	ROI	CR/BER	PC/FTE
Area 27	VL0010m	PG			
Area 27	VL1012m[1]	DFN			
Area 27	VL2440m	DTS			
Area 27	VL2440m[1]	TM			
Other fishing regions	VL40XXm[1]	TM			

1 – Clustered segments.

9 table. Threshold values for indicator classification

Return on investments (ROI)		Ratio between current revenue and break even revenue (CR/BER)		Average personal cost per full-time equivalent (PC/FTE)	
ROI>TRP		CR/BER>1		PC/FTE>W_{avg}	
0<ROI<TRP		CR/BER = 1 and at least 1 in previous years		W_{avg} < PC/FTE > W_m	
ROI<0		CR/BER<1		PC/FTE<W_m	

Notes:

TRP – target reference point (government bond interest rate (five year average – 4,6%);

W_{avg} – Lithuanian average bruto wage;

W_m – Lithuanian minimum wage.

5. Summary report on the weaknesses and strengths of the fleet management system and general level of compliance with fleet policy instruments

At 31 December 2013, Lithuanian fishing fleet comprised of 146 vessels. Fleet is broken in three segments: High Sea, Baltic and Coastal. The main species caught by in the Baltic Sea include: cod, herring, sprat, flat fish. In High Seas pelagic fishes are main targets. In 2013 only one vessel was scrapped (without public aid).

IT systems are widely used in fleet management. The main IT system we use is IZDIS (integrated fisheries data information system). System manages fleet register, administration of fishing authorizations, first sales information, crosschecks on various data with information from VMS (vessels monitoring system) enabling efficient fisheries control and fleet management.

The main strength of fleet management is constant monitoring of fleet capacity ceiling by the segment (using IT system). On the contrary the capacity left from the withdraw of the fishing vessels from the fleet (without public aid) cannot be used for registering new vessels which could carry out fisheries in another segment. This situation is showed in biological indicator F/Ft analysis which states that additional fleet capacity could be used for Eastern cod quota utilisation taking in account constant balance of the stock size.

6. Changes to the administrative procedures relevant to the management of the fleet.

There were no changes in the administrative structure in 2013. However some national legal acts regarding the management and allocation of fishing quotas have been revised. It should be mentioned that Lithuanian Fisheries Law is changed. Changes included the recent EU provisions on control, IUU, sanctioning etc.