2017 ANNUAL REPORT LITHUANIA

On sustainable balance
between fishing capacity and fishing opportunities

31 May 2019

Introduction

This Report is prepared in accordance with Regulation (EU) No 1380/2013 of the Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy (hereinafter – Regulation (EC) No 1380/2013) and with 2014 Guidelines for the analysis of the balance between fishing capacity and fishing opportunities according to Art 22 of Regulation (EU) No 1380/2013 of the European Parliament and the Council on the Common Fisheries Policy.
It summarizes the current state of Lithuanian national fisheries fleet management measures and efforts to achieve sustainable balance between fishing capacity and fishing opportunities.

1. General information

1.1 Description of fishing fleet

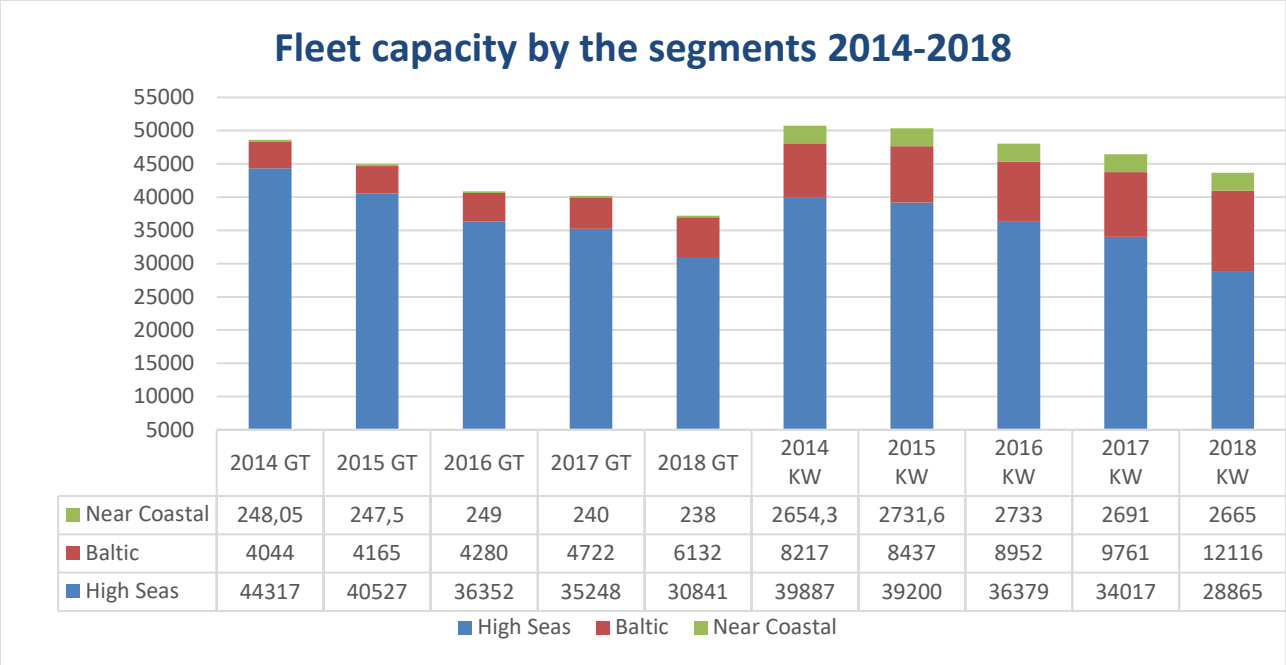
Lithuanian fisheries fleet is divided in three basic segments based on fishing grounds. The first part of Lithuanian fishing fleet operates in the near coastal zone of the Baltic Sea (Near coastal fleet). Near coastal fleet is composed of coastal fishing vessels with the length <12 m and the main engine power ≤ 110 kW. Perch, bream, roach, salmon, pike, cod, flat fish, smelt and pike are fished mostly.
The second part of Lithuanian fishing fleet operates in the Baltic Sea and is more than 12 meters in length (Baltic fleet) and main engine power of 165 – 220 kW, where main targeted species are cod, herring, sprat and salmon.
The third fisheries fleet part operates mainly in waters of NAFO, NEAFC, SPRFMO, Mauritanian EEZ, and Moroccan EEZ as well as in the Norwegian waters and the North Sea (High Seas fleet). This segment is composed of fishing vessels with length >40 meters. Mostly mackerel, horse mackerel, sardines and round sardinella are fished. The dynamic of total capacity of Lithuanian fishing fleet is presented in Figure 1.

1.2 Development of fishing capacity

By the end of the year 2018 (31-12-2018) Lithuanian fishing fleet consisted of 143 vessels with total capacity of 37 587 GT and 43 428 kW.
Comparing to 2017 the total capacity declined by 2 999 GT (8 %) and 2 823 kW (6,5 %). Since 2014 the total capacity dropped by 11398 GT or 23% and by 7112 kW or 14%. This substantial fishing fleet reduction caused mainly by withdrawal of fishing vessels from High Seas fleet segment.
It is estimated that throughout the year 2018 there were 147 fishing vessels with the total capacity of 41622 GT and 48904 kW and therefore this figures is utilized for the purposes of calculation of Biological, Economic and Vessel use indicators.
The distribution of total fleet capacity by the three basic segments is shown in Figure 1.

1.3 Impact of fishing effort reduction schemes

No direct impact of fishing effort reduction schemes on reduction of Lithuanian fishing fleet is envisaged.



	2014 GT	2015 GT	2016 GT	2017 GT	2018 GT	2014 KW	2015 KW	2016 KW	2017 KW	2018 KW
Near Coastal	248,05	247,5	249	240	238	2654,3	2731,6	2733	2691	2665
Baltic	4044	4165	4280	4722	6132	8217	8437	8952	9761	12116
High Seas	44317	40527	36352	35248	30841	39887	39200	36379	34017	28865

Figure 1. Fishing fleet capacity by segments 2014 – 2018.

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

Lithuania applies Entry/Exit scheme as defined in Regulation (EC) No 1380/2013 Article 23. For 2018 the same like for the previous recent years, no public aid was granted and the entry of new capacity into the fleet is compensated by the withdrawal of existing capacity.

In the reporting period no vessels with a capacity of over 100 GT entered the fishing fleet or no engines of fishing vessels of a length of 12 meters or more have been replaced with public support.

2. Biological Indicators

Sustainable harvest indicator (SHI)

Lithuanian Baltic cod quota consists of two parts: Eastern cod stock (25-32 ICES Subdivisions) and Western cod stock (22-24 ICES Subdivisions). Every year Lithuania swaps Western cod quota to Eastern cod quota. Lithuanian fleet segments are not associated with the Western cod landings therefore Western cod not included in analysis for biological indicators calculations

F/F_{msy} indicators have not been calculated for high seas fleet segment because the areas (FAO 34) where this fishery has been carried out are outside ICES areas (FAO 27). Also there are not any assessment reports for CECAF pelagic stocks F/F_{msy} that could fully substitute ICES advice with relevance for annual report between fishing capacity and fishing opportunities requirements.

The SHI (sustainable harvest indicator) was used to assess whether vessels are relying on overfished stocks.

The SHI indicator, Festimated/Ftarget, is measure of whether the economic activity of a fleet segment is, on average, less or more dependent on overfished stocks. A value less than one is usually considered as indicating a sustainable exploitation of the stock and a value higher than one is usually considered as a sign of overfishing of the stock.

The age-based Eastern Baltic (subdivisions 24-32) cod stock assessment could no longer be accepted by ICES WGBFAS in 2014 mainly because of age reading problems as well as changes in growth rates leading to unknown changes in catchability. From 2014 onwards the stock has been assessed as a category 3 stock and an FMSY value has no longer been provided by ICES. Therefore, the last F and FMSY value available is the one from the 2014 assessment. As consequence, the EWG 17-08 Preparational meeting decided to withdraw Eastern Baltic cod

completely from the SHI index calculations as there is currently no basis to determine the status of the stock.
SHI values that were calculated and observed for all stocks with assessment data, even if the proportion of landings value of the assessed stocks made up less than 40% of the total landings value of the fleet segment. In such cases, the indicator is considered as unrepresentative/unreliable and SHI indicator values cannot be used meaningfully to assess the balance or imbalance.
SHI values calculated only for those fleet segments where the coverage ratio of the assessed stocks targeted by Lithuanian fleet was greater than 40%.
Lithuanian fishing fleet in 2017 consisted of 8 segments as defined in the Fleet economic data call as follow: PG VL00-10, DFN VL00-12, DTS VL18-24, TM VL18-24, DFN VL24-40, DTS VL24-40, TM VL24-40, TM VL40-XX. Two segments PG VL00-10 and DFN VL00-12 are exclusively operating in the coastal area. The most recent ICES stocks assessment parameters for fleet segment operating in the Baltic Sea were used as data sources. Cod has been removed from the SHI calculations and SHI values were computed only for TM VL1824, TM VL24-40, TM VL40-XX in 2017 (Table 1). Due to eastern cod values removing from SHI indicator calculation, SHI values have been unlike since 2016. Dynamics of SHI values provided in Figure 2.

Table 1. Calculated SHI values for Baltic Sea segments in 2017.

Fleet segment	SHI value
TM VL18-24	1.145
TM VL24-40	1.125
TM VL40XX	1.116

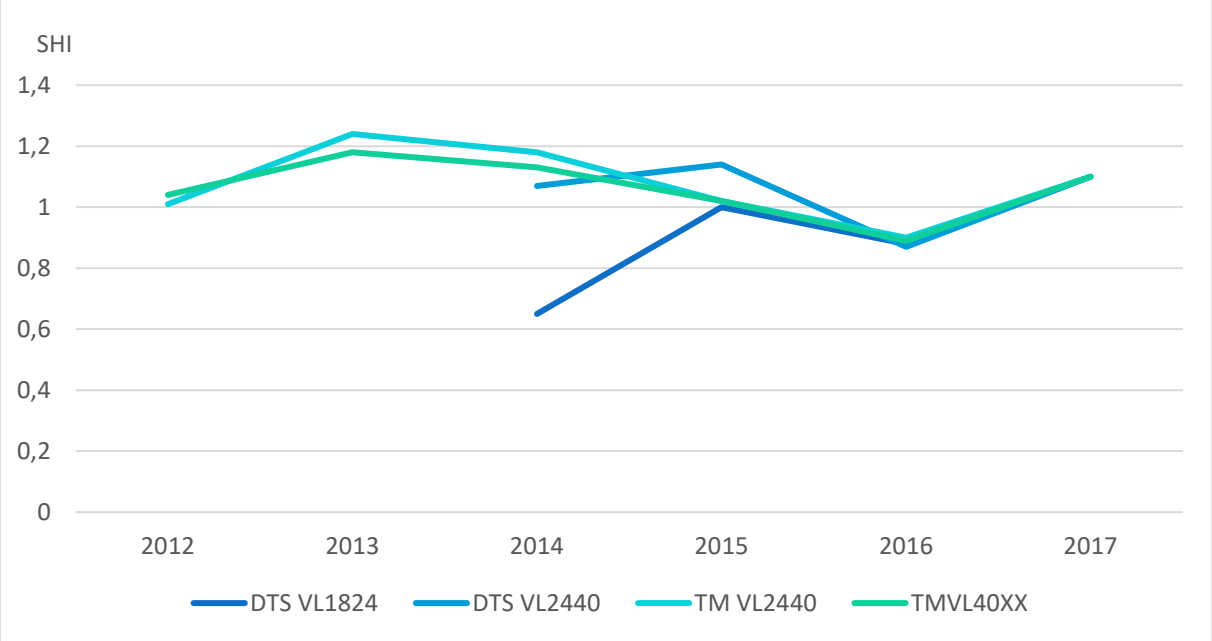


Figure 2. Dynamics of SHI values in 2012-2017.

Dynamics of SHI values show slightly increasing trend for segments TM VL40-XX, TM VL18-24 and TM VL24-40.
It should be highlighted that Baltic eastern cod stock is in a poor state. Lithuanian fishing quota for the Baltic eastern cod decreased from 3710 tonnes to 1597 tonnes from 2014 to 2018 respectively. Supposedly that fleet segments targeting the eastern cod might be soon out of balance. Lithuanian

fleet segments strongly (more than 50 percent of income is gaining from the cod fisheries) depending on cod landings are DFN VL10-12, DFN VL24-40, DTS VL24-40 and DTS VL18-24.

3. Economic indicators

3.1. Fleet segment description

Lithuanian fishing fleet is subdivided by fleet segments based on Commission implementing decision (EU) 2016/1251 adopting a multiannual Union programme for the collection, management and use of data in the fisheries and aquaculture sectors for the period 2017-2019. Segmentation is used to specify distinct types of fisheries as well as to avoid reporting of confidential data, where insufficient number of enterprises compose particular segment. Fleet segments are as follows:

OFR TM-40XX – segment consists of long distance fishery vessels operating predominantly in CECAF and also in SPRFMO, NAFO and NEAFC. Landings are composed mainly from small pelagic species, such as HMZ, MAS, JAX and PIL, as well as PRA and PCR. Due to confidentiality reasons, segments are not detailed by fishing techniques. This clustered segment contains vessels using TM, DTS and FPO techniques. Almost all vessels are larger than 40m.

NAO TM 24-40 – includes pelagic trawlers 24-40 m and over 40 m, which are operating in Baltic Sea. Target species for the main gear are SPR and HER. Segment also includes vessels using demersal trawler as second gear as but with less effort than pelagic trawler.

NAO DTS 24-40 – segment consist of 24-40 m demersal trawlers, fishing in Baltic Sea. Fleet is mainly targeting COD and FLE with demersal trawler as the main gear. Segment also includes vessels using pelagic trawler as second gear as but with less effort than demersal trawler.

NAO DFN 10-12 – Due to confidentiality reasons this segment is clustered from passive gear coastal vessels from 10-12 m length and 24-40 m. length vessels fishing in Baltic sea with drift netters.

NAO PG 00-10 – small scale fishery segment under 10 m in length which operates only in coastal area of Baltic Sea. Main species are European smelt and Baltic cod.

3.2 Return on Fixed Tangible Assets (ROFTA)

Return on Fixed Tangible Assets (ROFTA) is estimated instead of Return on Investment (ROI) as value of fishing rights is not available and intangible assets are not included in calculations. If ROFTA is smaller than the low-risk long term interest rates available elsewhere, then this suggests that the fleet segment may be overcapitalized and if less than zero and less than the best available long-term risk-free interest rate, this is an indication of long-term economic inefficiency that could indicate the existence of an imbalance.

3.2.1. ROFTA for the fleet segment OFR TM VL40XX (High Seas fleet)

Values for calendar year (thousand €)	2013	2014	2015	2016	2017
Net profit	10101,9	1320,3	-21365,1	-1911,9	-11510,4
Fleet tangible asset value (replacement)	29210,9	86300,5	124804,7	104240,3	84231,6
ROFTA= Net profit / tangible asset value (%)	34,58	1,53	-17,12	-1,83	-13,7
ROFTA – risk free long-term interest rate*	27,90	-2,91	-20,72	-4,58	-15,54

Data source: AIRBC, JRC, ECB

* - average of long-term interest rate for the previous 5 years in relation to reference year.

Compare to 2016, Lithuanian companies, fishing in the outermost regions had a significant decline in weight and value of landings, corresponding to 19.4% and 18% respectively. Furthermore, with such decrease of revenues, some operational costs improved, turning results to negative profitability. Considerably increase in personnel and energy costs – 7.3% and 9.5% was expected in 2017 as a general trend for overall industry, whereas repair and maintenance costs, which jumped by 28% was not foreseen. In 2017 average operating costs per vessel was 8.7% higher compare to average revenue per vessel, resulting even in gross losses. Continuous negative returns on the investments indicate overcapitalization in this fleet segment.

3.2.2 ROFTA for the fleet segment NAO TM VL24-40 (Baltic Sea)

Values for calendar year (thousand €)	**2013**	**2014**	**2015**	**2016**	**2017**
Net profit	846,4	60,6	163,4	456,1	-651,9
Fleet tangible asset value (replacement)	2640,2	1895,7	2496,9	4405,6	4504,1
ROFTA= Net profit / tangible asset value (%)	32,06	3,20	6,55	10,35	-14,5
ROFTA – risk free long-term interest rate*	25,38	-1,24	2,95	7,61	-16,34

Data source: AIRBC, JRC, ECB

* - average of long-term interest rate for the previous 5 years in relation to reference year.

According to the historic data, from 2013 till 2016 pelagic trawlers, which operate in Baltic Sea, were generating profits with average of 10.3% of net profit margin and multiannual average of ROFTA around 13%. However, Net profit in 2017 dropped to the negative value. Incurred net losses in 2017 resulted also in negative ROFTA. Decreased profitability results were driven by the decline in revenues and significantly increased operating costs for crew wages, expenditures on energy products and repair/maintenance costs. Mixed fisheries vessels which were allocated to TM 24-40 segment due to the high effort for pelagic species, but still had a share of highly unprofitable cod fisheries, also influenced the drop of profitability results for this segment. Although in 2017 ROFTA was negative, reasons for decline of profitability and return on the investments is not necessarily related to an imbalance between capacity and available resources and should not be interpreted as overcapitalization.

3.2.3. ROFTA for the fleet segment NAO DTS VL24-40 (Baltic Sea)

Values for calendar year (thousand €)	**2013**	**2014**	**2015**	**2016**	**2017**
Net profit	-746,6	-960,1	58,6	-55,5	-381,3
Fleet tangible asset value (replacement)	4241,4	3198,5	2224,2	2431,6	2246,7
ROFTA= Net profit / tangible asset value (%)	-17,60	-30,02	2,64	-2,28	-17,0
ROFTA – risk free long-term interest rate*	-24,28	-34,45	-0,96	-5,03	-18,84

Data source: AIRBC, JRC, ECB

* - average of long-term interest rate for the previous 5 years in relation to reference year.

Large scale fleet segment, operating in Baltic Sea with the demersal trawlers as a main gear had a multiannual negative ROFTA and in 2017 fleet segment generated 381.3 thousand EURO net loss

and further decreased ROFTA to negative -17% value. Fleet management measures taking place in 2015 with the amendment of quota allocation rules allowing better share of quota of profitably exploited pelagic species to the total fleet, improved profitability results for short term (2.64% ROFTA in 2015) but constant and steep decline of eastern cod stocks in Baltic Sea, and increase the costs per effort unit, reversed profitability indicators to negative ROFTA values. Therefore, indicating demersal trawler fleet segment unbalanced.

3.2.4. ROFTA for the fleet segment NAO DFN VL10-12 (Near coastal area)

Values for calendar year (thousand €)	2013	2014	2015	2016	2017
Net profit	76,4	69,1	-117,7	-103,4	-128,5
Fleet tangible asset value (replacement)	233,6	237,4	365,8	338,3	181,6
ROFTA= Net profit / tangible asset value (%)	32,72	29,08	-32,19	-30,56	-70,8
ROFTA – risk free long-term interest rate*	26,05	24,65	-35,79	-33,31	-71,84

Data source: AIRBC, JRC, ECB

* - average of long-term interest rate for the previous 5 years in relation to reference year.

For calculation of economic indicators for DFN 10-12 fleet segment data is taken from DFN 10-12 small scale vessels targeting mixed type of species in coastal area and DFN 24-40 large scale vessels, targeting cod in Baltic Sea. In 2017 this clustered segment had the lowest ROFTA compare to other national fleet segments and decreased to record low -70%. Decline was driven by the poor economic results of DFN 24-40 vessels with huge operating costs and insufficient income generated by cod fisheries. Constant decline of net profits and ROFTA from 2015 onwards, indicates highly unbalanced DFN 24-40 m vessels.

3.2.5. ROFTA for the fleet segment NAO PG VL00-10 (Near coastal area)

Values for calendar year (thousand €)	2013	2014	2015	2016	2017
Net profit	105,2	10,8	90,0	101,0	72,2
Fleet tangible asset value (replacement)	83,7	78,7	90,3	120,4	263,8
ROFTA= Net profit / tangible asset value (%)	125,63	13,71	99,67	83,87	27,4
ROFTA – risk free long-term interest rate*	118,95	9,27	96,07	81,13	25,56

Data source: AIRBC, JRC, ECB

* - average of long-term interest rate for the previous 5 years in relation to reference year.

Small scale fleet, 00-10 m overall length, fishing with passive gears in coastal area of Baltic Sea generated 72.2 thousand Euro net profit in 2017, corresponding to 27.4% ROFTA. Small scale coastal fisheries do not require high value of capital to be used for fishing operations, therefore tangible asset value of this segment is relatively low compare to the national fleet. As a result, low value of tangible assets and positive returns generate sufficiently high ROFTA with annual average of 71.6% during period of 2013-2017. Therefore, PG VL00-10 segment is considered as balanced.

3.3. The ratio between a fleets current revenue (CR) and break-even revenue (BER)

The ratio between CR and BER shows a financial viability of particular fleet segment and how close the current revenue is to the income required to break even in the short term. According to the methodology, if the ratio is greater than 1, then enough income is generated to cover variable, fixed and capital costs, indicating that the segment is profitable, with potential undercapitalization. Conversely, if the ratio is less than 1, insufficient income is generated to cover variable, fixed and capital costs, indicating that the segment is unprofitable, with potential overcapitalization. If the CR/BER result is negative, this means that variable costs alone exceed current revenue, indicating that the more revenue is generated, the greater the losses will be.

3.3.1. Ratio between CR and BER for the segment OFR TM VL40XX (High seas fleet)

Values for a calendar year (thousand €)	**2013**	**2014**	**2015**	**2016**	**2017**
Current revenue (CR)	59114,1	95828,5	53583,2	64024,2	52169,1
Break-even revenue (BER)	30137,9	100415,8	264434,6	72798,2	172619,0
CR/BER	1,96	0,95	0,20	0,88	0,3

Data source: AIRBC, JRC

Long distance fleet since 2014 were constantly generating CR/BER indicator between 0 and 1, indicating a potential overcapitalization.

3.3.2. Ratio between CR and BER for the segment NAO VLTM 24-40 (Baltic Sea)

Values for a calendar year (thousand €)	**2013**	**2014**	**2015**	**2016**	**2017**
Current revenue (CR)	3272,2	2346,0	2930,8	3354,5	3028,6
Break-even revenue (BER)	1109,7	2239,1	2392,9	1983,5	10448,9
CR/BER	2,95	1,05	1,22	1,69	0,29

Data source: AIRBC, JRC

For pelagic trawlers, operating in Baltic Sea CR/BER ratio in 0-1 interval was observed only in 2017, however potential overcapitalization could be indicated with continuous development as seen in long distance fleet.

3.3.3. Ratio between CR and BER for the segment NAO DTS VL24-40 (Baltic Sea)

Values for a calendar year (thousand €)	**2013**	**2014**	**2015**	**2016**	**2017**
Current revenue (CR)	3450,7	1633,1	1702,8	1836,3	1637,7
Break-even revenue (BER)	98810,6	-4357,1	1656,1	2081,7	2830,5
CR/BER	0,03	-0,37	1,03	0,88	0,58

Data source: AIRBC, JRC

Compare to 2016, CR/BER ratio in demersal trawler segment decreased to 0.58. Value of this indicator in the 0-1 interval was recorded three times within 5 year period and one year was below 0, indicating overcapitalization of this segment.

3.3.4. Ratio between CR and BER for the segment NAO DFN VL10-12 (Near coastal area)

Values for a calendar year (thousand €)	**2013**	**2014**	**2015**	**2016**	**2017**
Current revenue (CR)	258,0	278,0	255,0	237,9	184,3
Break-even revenue (BER)	82,5	102,8	-152,8	-186,8	-152,5
CR/BER	3,13	2,70	-1,67	-1,27	-1,21

Data source: AIRBC, JRC

Among national fleet segments, the lowest CR/BER ratio with the clear indication of overcapitalization was observed in DFN 10-12 segment. Income generated from large scale netters did not cover variable costs and even increased volume of catches will result in higher losses.

3.3.5. Ratio between CR and BER for the segment NAO PG VL00-10 (Near coastal area)

Values for a calendar year (thousand €)	**2013**	**2014**	**2015**	**2016**	**2017**
Current revenue (CR)	321,7	257,6	359,7	447,2	465,6
Break-even revenue (BER)	85,8	214,3	106,2	191,7	273,5
CR/BER	3,75	1,20	3,39	2,33	1,70

Data source: AIRBC, JRC

Small scale fleet segment PG 00-10 operating in coastal area generated sufficient amount of revenues to cover costs and to earn profits. CR/BER ratio was higher than 1 in the whole 2013-2017 period.

3.4. Methodology

Calculations of balance indicators are based on DCF data and presented at fleet segment level. Primary data are collected by annual census survey, for this purpose Questionnaires (code DR-1) are approved by the Order of the Lithuanian Minister of Agriculture No 3D-707 on 4-th August of 2010. Institution, responsible for economic and social data collection, processing and dissemination is State enterprise Agricultural Information and Rural Business Centre (AIRBC). Data collection quality is ensured by application of principles of European Code of Practice. The data collection processes in AIRBC complies the ISO 9001 requirements for data quality and ISO 27001 requirements for data security.

The economic indicators for the purpose to evaluate the extent of economic over or under capitalisation in a fleet taking into account return on fixed tangible assets (ROFTA) and CR/BER were analyzed in report. Data are presented in tables is according to the guidelines. Both indicators require the use of the interest rate in each MS of a low risk long term investment for comparison purposes. According to The Commission recommendation, harmonized 5 year average long-term interest rates for convergence assessment calculated by the European Central Bank, were used. Long term interest rate data for Lithuania was downloaded from European Central Bank data base

and is defined as: “Long-term interest rate for convergence purposes - Unspecified rate type, Debt security issued, and 10 years maturity, new business coverage, denominated in Euro. Average long-term interest rates for 5-year period are provided in the table below:

Period	Average interest rate %
2008-2012	7,03
2009-2013	6,68
2010-2014	4,44
2011-2015	3,60
2012-2016	2,75
2013-2017	1,84

Data source: ECB

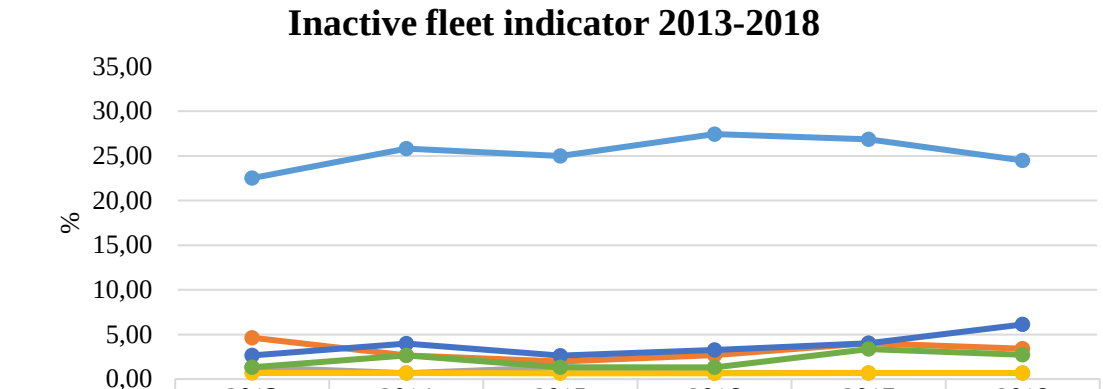
ROFTA was calculated as follows:
ROFTA = Net profit / Capital asset value
Where: *Net profit = (Income from landings + other income) – (crew costs + unpaid labour + energy costs + repair and maintenance costs + other variable costs + non variable costs + depreciation)*
And where: *Capital asset value = Vessel replacement value*
Data on direct income subsidies was excluded from the calculation.
For the estimation of total value of tangible assets, Perpetual Inventory Method (PIM) was used according to the advice from the PGECON[1] working group on best practices for calculating fleet depreciated replacement values.
Data for the breakeven revenue (BER) and current revenue (CR) calculation was calculated as follows:
An Opportunity cost of capital was used from JRC calculations. As required in guidelines, data on direct income subsidies was excluded from the calculation.
The formula for calculating the BER is as follows:
BER = (Fixed Costs) / (1- [Variable costs / Current Revenue])
Where: *Variable costs = Crew costs + Unpaid labour + Energy costs + Repair and Maintenance costs + other variable costs*
And where: *Fixed costs = Non variable costs + depreciation+ opportunity cost of capital.*
*Opportunity cost of capital = capital asset value * low risk long term interest rate.*
And *Current Revenue = income from landings + other income*
The ratio is calculated by dividing the current revenue by the BER i.e.
Ratio = Current Revenue (CR) / BER
In ROFTA and CR/BER calculations all monetary values were adjusted for inflation and were taken from JRC calculations.

4. Vessel Use Indicators

4.1 Inactive fleet indicator

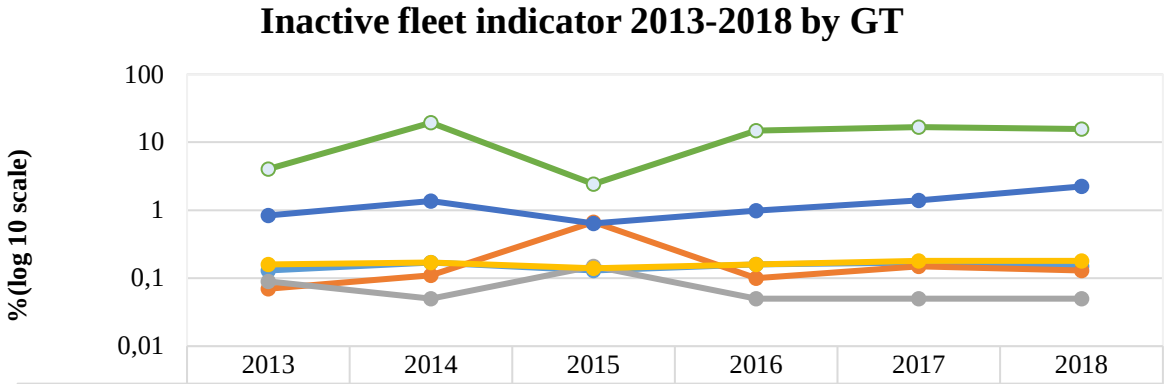
The vessel “Inactive fleet” indicator was calculated for the period 2013-2018 aggregated by vessel length segments. Figure 3 shows the proportion of inactive vessels aggregated by year and lenght segments of the total fleet (%). Data for calculation is taken from date collection programme (economic scientific data). Figure 4 and Figure 5 demonstrates of inactive fleet share of specific segment by GT and kW respectively.

[1] Planning Group on Economic Issues (PGECON), 16th – 19th April 2012, Salerno (Italy)



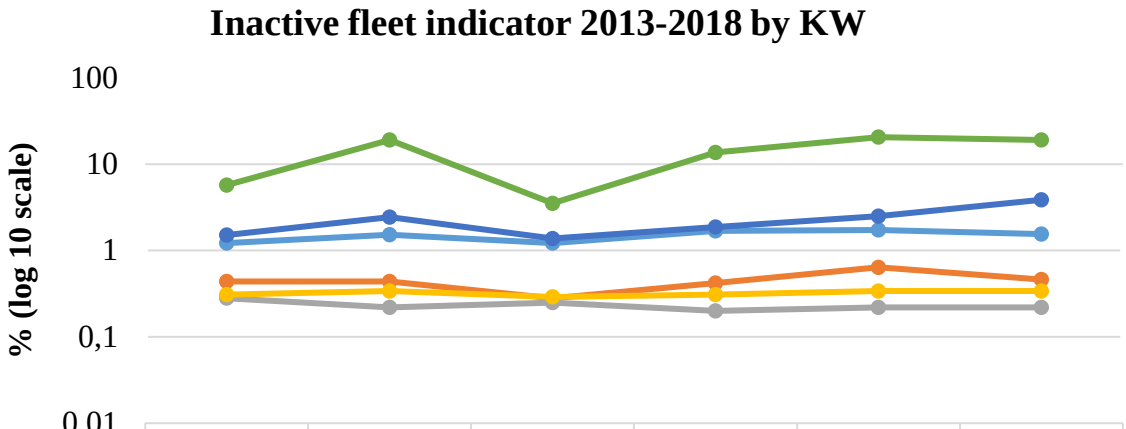
	2013	2014	2015	2016	2017	2018
VL00-10	22,52	25,83	25,00	27,45	26,85	24,49
VL10-12	4,64	2,65	1,97	2,67	4,03	3,40
VL12-18	1,32	0,66	1,32	0,67	0,67	0,68
VL18-24	0,66	0,66	0,66	0,65	0,67	0,68
VL24-40	2,65	3,97	2,63	3,27	4,03	6,12
VL>40	1,32	2,65	1,32	1,31	3,36	2,72

Figure 3. Inactive fleet indicator 2013-2018 by vessels number share from all fleet.



	2013	2014	2015	2016	2017	2018
VL00-10	0,13	0,17	0,13	0,16	0,17	0,15
VL10-12	0,07	0,11	0,67	0,1	0,15	0,13
VL12-18	0,09	0,05	0,15	0,05	0,05	0,05
VL18-24	0,16	0,17	0,14	0,16	0,18	0,18
VL24-40	0,84	1,36	0,64	0,99	1,4	2,24
VL>40	4,05	19,4	2,43	14,93	16,8	15,61

Figure 4. Inactive fleet indicator 2013-2018 by vessels GT share from all fleet.



	2013	2014	2015	2016	2017	2018
VL00-10	1,22	1,52	1,22	1,69	1,73	1,55
VL10-12	0,44	0,44	0,28	0,42	0,64	0,46
VL12-18	0,28	0,22	0,25	0,2	0,22	0,22
VL18-24	0,31	0,34	0,29	0,31	0,34	0,34
VL24-40	1,51	2,43	1,38	1,87	2,51	3,87
VL>40	5,71	19,14	3,53	13,66	20,58	19,11

Figure 5. Inactive fleet indicator 2013-2018 by vessels kW share from all fleet.

Inactive fleet indicator analysis shows that indicators of some segments of the fleet have slightly dropped in values, some remain stable, some of them have increased, however data not shows any tangible or substantive trends.

4.2. The vessel utilization indicator

In the Table 2 the vessel utilisation fleet indicator was calculated for each fleet segment for the period 2015-2018 aggregated by year and fishing gear. The calculated technical indicator is based on observed technical activity.

Vessel lengh	Gear	2015	2016	2017	2018
VL0-10	PG	0,34	0,29	0,25	0,37
VL10-12	DFN	0,49	0,44	0,34	0,54
VL24-40	DFN	0,91	0,85	0,84	0,86
VL18-24	DTS	0,77	1	0,97	0,83
VL18-24	TM		0,98	1	1
VL24-40	DTS	0,81	0,77	0,64	0,74
	TM	0,55	0,58	0,69	0,66
VL40XX	TM	0,55	0,63	0,71	0,77

Table 2. Vessel utilisation indicator 2015-2018

Calculation methodology where used as follows:
"The ratio between the average effort per vessel in a fleet segment and the observed maximum effort actually expended by a vessel in the segment (in kWdays or GT-days) in the reference year."

Table 3 dynamics do not reveal any significant trends in all fleet segment and majority seem to be within balance limits (0,7 and more), except small near coastal fleet segments and TM VL24-40.

VL00-10 and VL10-12 fall under polyvalent passive gear segments. Major part of these vessels is not full-time engaged in the fishery. However it could be noted that for vessel utilisation indicator calculated for 2018 has improvement trend.

4.3. Stocks-at-risk indicator

Stocks-at-risk indicator has not been calculated as Lithuanian fleet catches do not meet requirements (high biological risk) which are set out in the guidelines for this indicator calculation.

5. Traffic light

No.	Length	Gear code	ROFTA	Current/ Break even Incl. opp. costs	Sustainable Harvest Indicator	Stocks at Risk indicator	Technical indicators		Over all Conclusion on balance
							Inactiv-ity	Utilisa-tion	
1.	<10 m	PG	27,4	1,7	-	-	26,85	0,25	
2.	10-12 m	DFN	-70,8	-1,21	-	-	4,03	0,34	
3.	18-24 m	-	-	-	1,145	-	0,67	0,84	
4.	24-40 m	DTS	-17,0	0,58	-	-	4,03	0,64	
5.	24-40 m	TM	-14,5	0,29	1,125	-		0,69	
6.	>40 m (OFR)	TM	-13,7	0,3		-	3,36	0,71	
	COM guideline		>0	>1	<0,95	-	0-1	>0,9	
				>0<1	0,95-1,05	-	1-10	0,7-0,9	
			<0	<0	>1,05	-	10-20	<0,7	

Table 3. Traffic light data for the year 2017.

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

As was mentioned Lithuanian fishing fleet in 2017 consisted of 8 segments as defined in the Fleet economic data call as follow: PG VL00-10, DFN VL00-12, DTS VL18-24, TM VL18-24, DFN VL24-40, DTS VL24-40, TM VL24-40, TM VL40-XX.

Multiannual management plan for cod, herring and sprat in Baltic Sea affects all national fleet segments except long distance OFR TM VL40-XX fleet segment, which not operates in Baltic Sea. Economic balance indicators for Baltic Sea fleet were different depending on the target species. In general, fleet targeting Baltic cod (DTS VL24-40 and DFN VL10-12) had a more expressed overcapitalization in terms of ROFTA and CR/BER. Data shows that current situation with decreasing eastern cod stocks in Baltic Sea as well as excessive operating costs for aged fleet turned demersal trawlers and large scale netters to unprofitable fisheries with overcapitalization. Therefore, fleet management measures were applied in 2015 with the amendment of quota allocation rules allowing better share of quota of profitably exploited pelagic species to the total fleet, improved profitability results for short term (2.64% ROFTA in 2015). However, further decline of cod stocks with undersized production and recently increased personnel costs and energy expenditures, reversed profitability indicators to negative ROFTA values. Pelagic species in Baltic Sea are exploited at MSY levels. In 2017 pelagic trawler segment (TM VL24-40) generated net losses from fisheries turning ROFTA to negative vale first time in analyzed five years period. However, fleet segments with poor economic performance which are fishing healthy stocks may face low profitability related to other factors, which are not necessarily related to an imbalance between capacity and available resources. Current decline of ROFTA and CR/BER do not indicate overcapacity for pelagic fisheries unless it will occur with continuously negative ROFTA and

CR/BER at low levels. Long distance fleet indicates a potential overcapitalization with three years in row negative ROFTA.
Dinamics of Vessel utilisation indicators do not reveal any significant trends in all fleet segment and majority seem to be within balance limits (0,7 and more), except small near coastal fleet segments and TM VL24-40. VL00-10 and VL10-12 fall under polyvalent passive gear segments. Major part of these vessels is not full-time engaged in the fishery. However it could be noted that for vessel utilisation indicator calculated for 2018 has improvement trend.
Dynamics of SHI values show slightly increasing trend for segments TM VL40-XX, TM VL18-24 and TM VL24-40.
Once again it should be stressed that Baltic eastern cod stock is in a poor state. Lithuanian fishing quota for the Baltic eastern cod decreased from 3710 tonnes to 1597 tonnes from 2014 to 2018. Most likely that those fleet segments which are targeting the eastern cod might be soon out of balance. Lithuanian fleet segments which strongly (more than 50 percent of income is gaining from the cod fisheries) depending on cod landings are DFN VL10-12, DFN VL24-40, DTS VL24-40 and DTS VL18-24.

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

No changes in administrative procedures relevant to the management of the fleet are observed.