İMEAK DENİZ TİCARET ODASI
TURKISH CHAMBER OF SHIPPING

MARITIME SECTOR REPORT






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TURKISH CHAMBER OF SHIPPING

ISTANBUL & MARMARA, AEGEAN, MEDITERRANEAN, BLACKSEA REGIONS

MARITIME SECTOR REPORT

İ S T A N B U L – 2019

FOREWORD

The "TURKISH SHIPPING SECTOR REPORT 2018" has been prepared within the framework of authority and responsibility granted by paragraphs No.12 and No.19 of Law No. 5174. The report covers quantitative facts and their analysis as of 31.12.2018 and is presented to our members, Turkish and foreign institutions.

The Report contains eight chapters:
First chapter is about the Turkish Merchant Fleet and its yearly developments. The fleet has been analyzed with respect to registry, building, tonnage and age. The status of the Turkish Merchant Fleet within the world fleet and among the fleets of neighboring countries has also been examined.
Second chapter includes the cargoes transported by the Merchant Fleet in 2018. The developments of cabotage and foreign trade cargoes, the progress of seaborne trade by flags have been explained in detail. Within this chapter, transported cargoes by types, seaborne trade to OECD countries, BSEC and EU countries have been taken into consideration.
Third chapter covers the developments in the shipbuilding industry and provides data about Turkish shipyards, including the recent developments in the field of yacht building industry in Turkey.
Fourth chapter covers Turkish Ports and the amount of cargo handled in 2018 and previous years.
Fifth chapter includes data about the passages through the Turkish Straits and the marine traffic systems.
Sixth chapter deals with marine tourism and yacht tourism in Turkey.
Seventh chapter is about the fishing sector and its latest developments.
Eighth chapter discusses maritime training in Turkey.
The Report gives concrete and concise information about the current situation of Turkish Shipping. We believe that it will be a useful source of information for public and private institutions, for all researchers and interested agencies.

Tamer KIRAN
Chairman of the Executive Committee

TURKISH CHAMBER OF SHIPPING

İstanbul & Marmara, Aegean, The Mediterranean, Black Sea Regions Chamber of Shipping, briefly called Turkish Chamber of Shipping (TCS), is an important professional organization of the Turkish Maritime Sector, with its headquarters in İstanbul and main branch offices in Izmir, Bodrum, Marmaris, Aliağa, Antalya, İskenderun, Fethiye, Karadeniz Ereğli and Kocaeli. Turkish Chamber of Shipping which has 15 Representations in Turkey was first established as İstanbul Chamber of Shipping in 1982 and afterwards, its area of activities has been expanded gradually so as to cover the regions of the Sea of Marmara, the Aegean Sea coast, the Mediterranean coast the Black Sea coast and finally the inland waters of Turkey.

OBJECTIVES AND ACTIVITIES

The most important goal of the Turkish Chamber of Shipping is to develop shipping in accordance with the national transportation and shipping policy and public interest. Its other major objectives are to promote the interests and provide the common requirements of its members, to arrange the development of the profession, to guide and facilitate the professional activities, to establish common rules and to inform the authorities on shipping matters and also to keep the discipline, morals, and solidarity of the shipping profession.

The major activities of the Turkish Chamber of Shipping include establishing rules and practices in shipping, conducting research and collecting information on shipping, ensuring that sea trade is developing in accordance with the national policy of transportation, providing information to foreign organizations on the possibilities and tariffs of the Turkish ports, becoming a member and following the activities of international organizations concerned with shipping and performing other functions defined by the law.

MEMBERS

Turkish Chamber of Shipping has more than 9521 Members. In accordance with the Law No: 5174 concerning The Union of Chambers and Commodity Exchanges of Turkey (TOBB) every Company performing activities in the field of Maritime Shipping has to become a Member of the Turkish Chamber of Shipping. Among the members of the Turkish Chamber of Shipping are; ship-owners, ship operators, ship agents, ship sale and purchase brokers, forwarders, stevedores, tally firms, classification societies, marine insurance companies, underwriters, marine surveyors and experts, auxiliary services such as salvage, rescue, pilotage, dredging and yachting and also ship chandlers and suppliers, port and marina operators, ship-yacht builders and shipyards, ship-yacht equipment and repair services, maritime training companies, sand extractors, and fishermen. The Members of The Turkish

Chamber of Shipping have been gathered in 48 Professional Committees, according to their fields of occupation.

CHAMBER MEMBERSHIP IN NATIONAL AND INTERNATIONAL ORGANIZATIONS

National Organizations:

The Union of Chambers and Commodity Exchanges of Turkey (TOBB) and International Chamber of Commerce (ICC)-The Turkish National Committee.

International Organizations:

The International Chamber of Shipping (ICS), The International Chamber of Commerce – International Maritime Bureau (ICC-IMB), The Federation of National Associations of Ship Brokers and Agents (FONASBA), The European Community Association of Ship Brokers and Agents (ECASBA), The Baltic and International Maritime Council (BIMCO), The Turkish American Chamber of Commerce and Industry (TACCI), The Yacht Harbour Association (TYHA), The European Boating Association (EBA), The International Bunker Industry Association (IBIA), The European Shortsea Network (ESN) and The Turkish - German Chamber of Commerce and Industry (TD-IHK).

PUBLICATIONS

Turkish Chamber of Shipping publishes many studies on shipping, including the regularly published annual “MARITIME SECTOR REPORT” in Turkish and in English and a monthly published shipping magazine: “TURKISH SHIPPING WORLD MAGAZINE”.

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CHAPTER I

THE DEVELOPMENT OF TURKISH SHIPPING

1. THE DEVELOPMENT OF TURKISH SHIPPING

1.1.The Turkish Merchant Fleet

A detailed analysis of the Turkish merchant fleet has been made under the Turkish National Ship Registry and Turkish International Ship Registry. The values which were established for individual ship groups have been evaluated by number, tonnage and also by being imported or built in Turkey.

In the analysis, ships of size 1000GT or higher have been taken into consideration. Age and tonnage ranges have also been evaluated in their respective tables.

Number and tonnage values are as of 31 December 2018.

1.2.The Analysis of the Turkish Merchant Fleet by Number and Tonnage

A general analysis of the merchant fleet has been made according to number, tonnage, and place of build. Table 1 shows that Turkish merchant fleet consists of 544 ships of which 282 (5.8 million DWT) have been imported and 262 (1.4 million DWT) have been built in Turkey.

544 ships are distributed by type as follows; 29,79% dry cargo ships, 11,40% bulk carriers, 10,48% containers, 9,93% chemical tankers and 7,17% service ships, 31,23% other types.

By DWT the fleet consists of; 38,21% bulk carriers, 19,44% oil tankers, 16,49% containers, 11,65% dry cargo ships, 6,22% chemical tankers and 7,99% other types.

By DWT, 6,53% of our fleet is registered in the National Ship Registry, 93,47% of thefleet is registered in the International Ship Registry. By GT, 10,91% of our fleet is registered in the National Ship Registry, 89,09% of the fleet is registered in the International Ship Registry. (Table 2)

The fleet registered in the International Ship Registry (6.8 Million DWT) is composed of; bulk carriers (38,43%), oil tankers (20,63%), container ships (14,80%), dry cargo vessels (11,95%), chemical tankers (6,52%) and other types (7,67%). (Table 2)

Table 2 shows Turkish merchant fleet which consists of 544 ships. 14,52% of the total fleet (79 ships) is registered in the National Ship Registry and 85,48% of the total fleet (465 ships) is registered in the International Ship Registry.

The majority of the fleet registered in the National Ship Registry (479.863 DWT) is composed of container ships (40,55%), bulk carrier ships (35,28%), dry cargo ships (7,32%), service ships (4,12%), Ro-Ro Ferry-Passenger (2,49%) and other types (10,24%).

Table 1: The General Examination of The Turkish Merchant Fleet By Number and Tonnage According to Import and Build (1000 GT and Over)

SHIP TYPES	COUNT				DWT				GT			
	Import	Build	Total	%	Import	Build	Total	%	Import	Build	Total	%
DRY CARGO	47	115	162	29,79	324.091	532.229	856.320	11,65	229.481	335.372	564.853	9,83
BULK CARRIER	57	5	62	11,40	2.657.980	150.971	2.808.951	38,21	1.522.046	94.380	1.616.426	28,15
CONTAINER	44	13	57	10,48	1.006.004	205.310	1.211.314	16,49	814.713	157.092	971.805	16,92
DRY CARGO/CONTAINER	4	9	13	2,39	12.369	87.416	99.785	1,36	8.066	60.475	68.541	1,19
CHEMICAL TANKERS	24	30	54	9,93	260.024	197.372	457.396	6,22	166.304	130.519	296.823	5,17
LPG TANKERS	7	0	7	1,29	38.247	0	38.247	0,52	36.086	0	36.086	0,63
ASPHALT TANKERS	1	2	3	0,55	2.770	39.896	42.666	0,58	1.900	31.348	33.248	0,58
RO-RO SHIPS	22	0	22	4,04	242.010	0	242.010	3,29	579.825	0	579.825	10,09
RO-RO FERRY/PASSENGER	9	5	14	2,57	25.132	0	25.132	0,34	59.704	20.906	80.610	1,40
FERRY BOATS	8	25	33	6,07	2.538	22.413	24.951	0,34	34.702	32.766	67.468	1,17
TRAIN FERRIES	0	6	6	1,10	0	2.960	2.960	0,04	0	9.835	9.835	0,17
PASSENGER AND CARGO SHIPS	1	7	8	1,47	1.540	3.447	4.987	0,07	4.701	23.353	28.054	0,49
FISHING BOATS	2	0	2	0,37	3.456	0	3.456	0,05	3.299	0	3.299	0,06
SCIENTIFIC RESEARCH VESSEL	4	2	6	1,10	3.580	4.200	7.780	0,11	28.474	7.358	35.832	0,62
HARBOUR FERRIES	1	0	1	0,18	0	0	0	0	1.043	0	1.043	0,02
HARBOUR CAR FERRIES	0	6	6	1,10	0	1.974	1.974	0,03	0	7.547	7.547	0,13
TUGS	1	0	1	0,18	0	0	0	0	1.565	0	1.565	0,03
SERVICE SHIPS	25	14	39	7,17	37.416	34.250	71.666	0,98	196.133	124.415	320.548	5,58
OIL TANKERS	11	12	23	4,23	1.234.361	193.923	1.428.284	19,44	660.284	103.682	763.966	13,3
TRAIN FERRIES/RO-RO	1	0	1	0,18	6.266	0	6.266	0,09	15.195	0	15.195	0,26
MARINE VEHICLES	13	11	24	4,41	8.000	5.686	13.686	0,19	201.400	40.266	241.666	4,21
TOTAL	282	262	544	100%	5.865.784	1.482.047	7.347.831	100%	4.564.921	1.179.314	5.744.235	100%

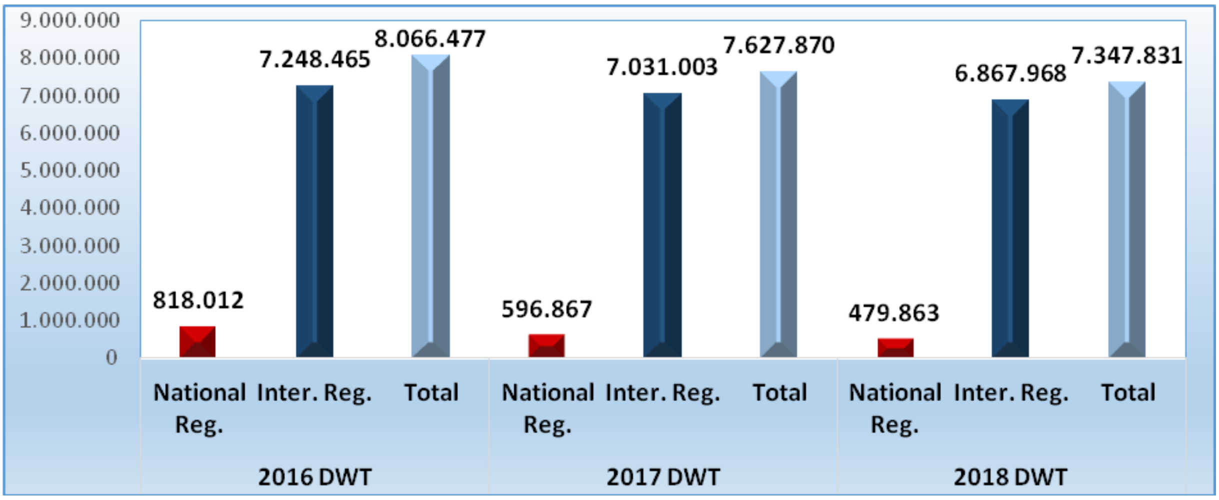
Source : Turkish Chamber of Shipping

Table 2: The General Examination of The Turkish Merchant Fleet By National and International Registries (1000 GT and Over)

SHIP TYPES	COUNT				DWT				GT			
	National Reg.	Inter. Reg.	Total	%	National Reg.	Inter. Reg.	Total	%	National Reg.	Inter. Reg.	Total	%
DRY CARGO	9	153	162	29,79	35.162	821.158	856.320	11,65	24.314	540.539	564.853	9,83
BULK CARRIER	7	55	62	11,40	169.296	2.639.655	2.808.951	38,21	107.000	1.509.426	1.616.426	28,15
CONTAINER	8	49	57	10,48	194.610	1.016.704	1.211.314	16,49	154.602	817.203	971.805	16,92
DRY CARGO/CONTAINER	1	12	13	2,39	2.356	97.429	99.785	1,36	1.720	66.821	68.541	1,19
CHEMICAL TANKERS	2	52	54	9,93	9.497	447.899	457.396	6,22	6.441	290.382	296.823	5,17
LPG TANKERS	1	6	7	1,29	4.444	33.803	38.247	0,52	3.983	32.103	36.086	0,63
ASPHALT TANKERS	1	2	3	0,55	2.770	39.896	42.666	0,58	1.900	31.348	33.248	0,58
RO-RO SHIPS	1	21	22	4,04	11.978	230.032	242.010	3,29	32.770	547.055	579.825	10,09
RO-RO FERRY/PASSENGER	3	11	14	2,57	1.500	23.632	25.132	0,34	30.319	50.291	80.610	1,40
FERRY BOATS	1	32	33	6,07	2.314	22.637	24.951	0,34	1.596	65.872	67.468	1,17
TRAIN FERRIES	6	0	6	1,10	2.960	0	2.960	0,04	9.835	0	9.835	0,17
PASSENGER AND CARGO SHIPS	3	5	8	1,47	3.761	1.226	4.987	0,07	17.189	10.865	28.054	0,49
FISHING BOATS	1	1	2	0,37	2.887	569	3.456	0,05	1.892	1.407	3.299	0,06
SCIENTIFIC RESEARCH VESSEL	0	6	6	1,10	0	7.780	7.780	0,11	0	35.832	35.832	0,62
HARBOUR FERRIES	0	1	1	0,18	0	0	0	0	0	1.043	1.043	0,02
HARBOUR CAR FERRIES	0	6	6	1,10	0	1.974	1.974	0,03	0	7.547	7.547	0,13
TUGS	1	0	1	0,18	0	0	0	0	1.565	0	1.565	0,03
SERVICE SHIPS	22	17	39	7,17	19.774	51.892	71.666	0,98	192.039	128.509	320.548	5,58
OIL TANKERS	3	20	23	4,23	10.868	1.417.416	1.428.284	19,44	5.940	758.026	763.966	13,3
TRAIN FERRIES/RO-RO	0	1	1	0,18	0	6.266	6.266	0,09	0	15.195	15.195	0,26
MARINE VEHICLES	9	15	24	4,41	5.686	8.000	13.686	0,19	33.662	208.004	241.666	4,21
TOTAL	79	465	544	100%	479.863	6.867.968	7.347.831	100%	626.767	5.117.468	5.744.235	100%

Source : Turkish Chamber of Shipping

Graph 1 : DWT Change of Vessels Registered to National and International Registration (2016-2017-2018)



Source : Turkish Chamber of Shipping

Table 3: Examination of Registries (DWT) 2016-2017-2018 (1000 GT and Over)

SHIP TYPES	2016 DWT			2017 DWT			2018 DWT			Years 2017-2018 % Change
	National Reg.	Inter. Reg.	Total	National Reg.	Inter. Reg.	Total	National Reg.	Inter. Reg.	Total	
DRY CARGO	52.735	978.412	1.031.147	52.735	918.077	970.812	35.162	821.158	856.320	-11,8%
BULK CARRIER	456.118	3.457.058	3.913.176	169.296	2.671.378	2.840.674	169.296	2.639.655	2.808.951	-1,1%
CONTAINER	263.540	712.954	976.494	302.781	765.393	1.068.174	194.610	1.016.704	1.211.314	13,4%
DRY CARGO/CONTAINER	2.356	120.967	123.323	2.356	101.916	104.272	2.356	97.429	99.785	-4,3%
CHEMICAL TANKERS	1.638	463.289	464.927	9.497	439.043	448.540	9.497	447.899	457.396	2,0%
LPG TANKERS	0	39.389	39.389	0	33.803	33.803	4.444	33.803	38.247	13,1%
ASPHALT TANKERS	2.770	39.896	42.666	2.770	39.896	42.666	2.770	39.896	42.666	0,0%
RO-RO SHIPS	0	232.089	232.089	0	230.032	230.032	11.978	230.032	242.010	5,2%
RO-RO FERRY/PASSENGER	0	25.197	25.197	13.478	25.232	38.710	1.500	23.632	25.132	-35,1%
FERRY BOATS	2.314	24.428	26.742	2.314	22.638	24.952	2.314	22.637	24.951	0,0%
TRAIN FERRIES	1.660	0	1.660	2.960	0	2.960	2.960	0	2.960	0,0%
PASSENGER AND CARGO SHIPS	3.761	1.226	4.987	3.761	1.226	4.987	3.761	1.226	4.987	0,0%
FISHING BOATS	0	569	569	0	569	569	2.887	569	3.456	507,4%
SCIENTIFIC RESEARCH VESSEL	0	5.990	5.990	0	7.780	7.780	0	7.780	7.780	0,0%
HARBOUR FERRIES	0	0	0	0	0	0	0	0	0	0,0%
HARBOUR CAR FERRIES	0	3.536	3.536	0	1.974	1.974	0	1.974	1.974	0,0%
TUGS	0	979	979	0	0	0	0	0	0	0,0%
SERVICE SHIPS	24.051	7.970	32.021	24.051	13.365	37.416	19.774	51.892	71.666	91,5%
OIL TANKERS	7.069	1.128.250	1.135.319	10.868	1.744.415	1.755.283	10.868	1.417.416	1.428.284	-18,6%
TRAIN FERRIES/RO-RO	0	6.266	6.266	0	6.266	6.266	0	6.266	6.266	0,0%
MARINE VEHICLES	0	0	0	0	8.000	8.000	5.686	8.000	13.686	71,1%
TOTAL	818.012	7.248.465	8.066.477	596.867	7.031.003	7.627.870	479.863	6.867.968	7.347.831	-3,7%

Source : Turkish Chamber of Shipping

1.3.The Age Profile of the Turkish Merchant Fleet

Table 4 shows the age profile of the Turkish Merchant Fleet with respect to different ship types. The Merchant Fleet of ships with size 1.000 GT and above consists of 544 ships. The average age of these ships is 22,29 as of 31.12.2018.

The average age of dry cargo ships is 27 which makes 29,79% of the fleet. The average age of bulk carriers is 17 and makes up 11,39% of the total fleet. The average age of containers is 14 which is 9,9% of the fleet. The average age of chemical tankers is 17 which is 9,9% of the fleet. The average age of oil tankers is 15 which is 4,2% of the fleet.

Table 4: The Average Profile of The Turkish Merchant Fleet (1000 GT and Over)

SHIP TYPES	Number	Tonnage (DWT)	Tonnage (GT)	Average Age
DRY CARGO	162	856.320	564.853	27
BULK CARRIER	62	2.808.951	1.616.426	17
CONTAINER	57	1.211.314	971.805	14
DRY CARGO/CONTAINER	13	99.785	68.541	20
CHEMICAL TANKERS	54	457.396	296.823	17
LPG TANKERS	7	38.247	36.086	24
ASPHALT TANKERS	3	42.666	33.248	15
RO-RO SHIPS	22	242.010	579.825	14
RO-RO FERRY/PASSENGER	14	25.132	80.610	23
FERRY BOATS	33	24.952	67.468	21
TRAIN FERRIES	6	2.960	9.835	45
PASSENGER AND CARGO SHIPS	8	4.987	28.054	26
FISHING BOATS	2	3.456	3.299	38
SCIENTIFIC RESEARCH VESSEL	6	7.780	35.832	21
HARBOUR FERRIES	1	0	1.043	66
HARBOUR CAR FERRIES	6	1.974	7.547	25
TUGS	1	0	1.565	34
SERVICE SHIPS	39	71.666	320.548	34
OIL TANKERS	23	1.428.285	763.966	15
TRAIN FERRIES/RO-RO	1	6.266	15.195	39
MARINE VEHICLES	24	13.686	241.666	25
TOTAL	544	7.347.832	5.744.235	22,29

Source : Turkey Chamber of Shipping

Table 5 shows the Turkish Merchant Fleet grouped by different age and tonnage ranges. Turkish Merchant Fleet consists of 544 ships with a total of 7.347.831 DWT.

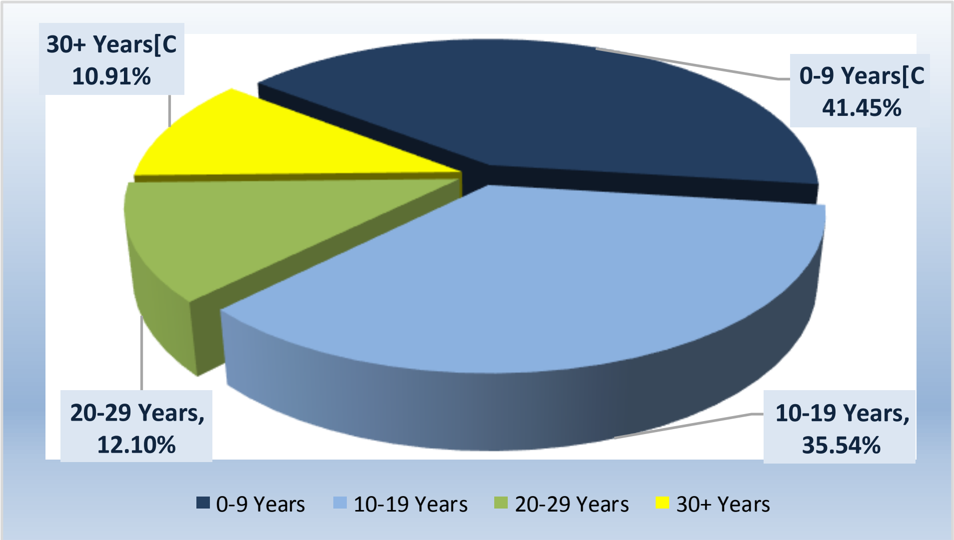
- 103 ships with total size 3.045.730 DWT are in the 0-9 age range,
- 160 ships with total size 2.611.583 DWT are in the 10-19 age range,
- 97 ships with total size 888.887 DWT are in the 20-29 age range,
- 184 ships with total size 801.630 DWT are of age30 or older.

Table 5: Turkish Merchant Fleet Distribution by Tonnage and Age Groups (1000 GT and Over)

DIVISIONS OF TONNAGE	0-9 AGE			10-19 AGE			20-29 AGE			30+ AGE			TOTAL	
	PCS	DWT	%	PCS	DWT	%	PCS	DWT	%	PCS	DWT	%	PCS	DWT
150-1499	28	1.223	6,17%	18	5.560	28,04%	14	3.691	18,61%	53	9.357	47,18%	113	19.831
1500-5999	12	49.695	6,91%	48	190.036	26,41%	43	154.959	21,53%	96	324.894	45,15%	199	719.584
6000-9999	8	57.462	11,43%	23	171.883	34,19%	18	143.651	28,57%	18	129.794	25,81%	67	502.790
10000-34999	26	529.777	26,40%	50	895.003	44,60%	15	244.419	12,18%	17	337.585	16,82%	108	2.006.784
35000-52999	7	270.131	24,20%	13	576.040	51,61%	6	269.997	24,19%	0	0	0,00%	26	1.116.168
53000-79999	10	618.665	61,96%	5	307.658	30,81%	1	72.171	7,23%	0	0	0,00%	16	998.494
80000-119999	5	434.611	100,00%	0	0	0,00%	0	0	0,00%	0	0	0,00%	5	434.611
120000+	7	1.084.165	69,97%	3	465.403	30,03%	0	0	0,00%	0	0	0,00%	10	1.549.568
TOTAL	103	3.045.730	41,45%	160	2.611.583	35,54%	97	888.887	12,10%	184	801.630	10,91%	544	7.347.831

Source : Turkish Chamber of Shipping

Graph 2 : Turkish Merchant Fleet Distribution by Age Groups (DWT)



Source : Turkish Chamber of Shipping

The graph shows the age groups of the Turkish merchant fleet. 41,45% of the fleet is in the 0-9 age range, 35,54% of the fleet is in the 10-19 age range, 12,10% of the fleet is in the 20-29 age range and 10,91% is 30 years old or over.

The tables of different ship types below show the age profile of the Turkish merchant fleet and are organized according to size and age.

Table 6 shows the Dry Cargo segment (162 ships) which has a total size of 856.320 DWT.

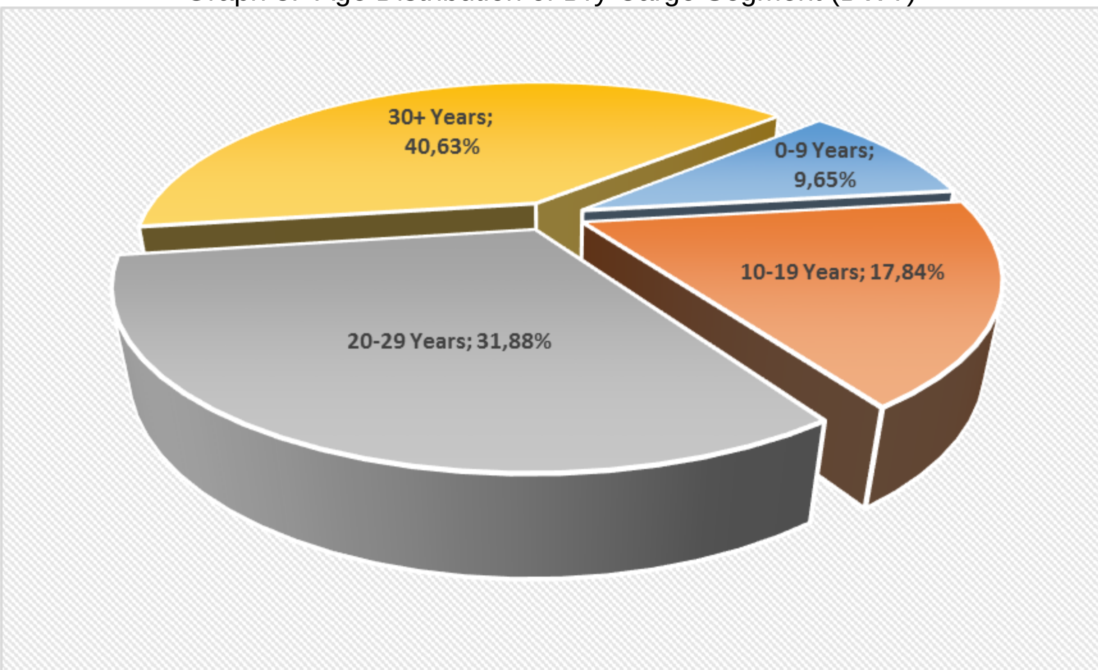
- 13 ships of size 82.608 DWT are in the 0-9 age range,
- 27 ships of size 152.799 DWT are in the 10-19 age range,
- 42 ships of size 273.005 DWT are in the 20-29 age range,
- 80 ships of size 347.908 DWT are 30 years or older.

Table 6: Dry Cargo Ships by Tonnage and Age Groups (1000 GT and Over)

DIVISIONS OF TONNAGE	0-9 YEARS			10-19 YEARS			20-29 YEARS			30+ YEARS			TOTAL	
	PCS	DWT	%	PCS	DWT	%	PCS	DWT	%	PCS	DWT	%	PCS	DWT
150-1499	0	0	0%	0	0	0%	0	0	0%	1	0	0%	1	0
1500-5999	8	38.419	47%	18	75.148	49%	33	119.393	44%	64	219.033	63%	123	451.993
6000-9999	3	21.445	26%	7	45.672	30%	6	46.361	17%	11	79.095	23%	27	192.573
10000-34999	2	22.744	28%	2	31.980	21%	1	10.560	4%	4	49.780	14%	9	115.064
35000-52999	0	0	0%	0	0	0%	2	96.691	35%	0	0	0%	2	96.691
53000-79999	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
80000-119999	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
120000+	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
TOTAL	13	82.608	100%	27	152.799	100%	42	273.005	100%	80	347.908	100%	162	856.320

Source : Turkish Chamber of Shipping

Graph 3: Age Distribution of Dry Cargo Segment (DWT)



Source : Turkish Chamber of Shipping

9,65% of Dry Cargo Ships are in the 0-9 age range; 17.84% are in the 10-19 age range; 31.88% are in the 20-29 age range and 40.63% are 30 years or older.

Table 7 shows the Bulk Carrier Segment (62 ships) with a total size of 2.808.951 DWT.

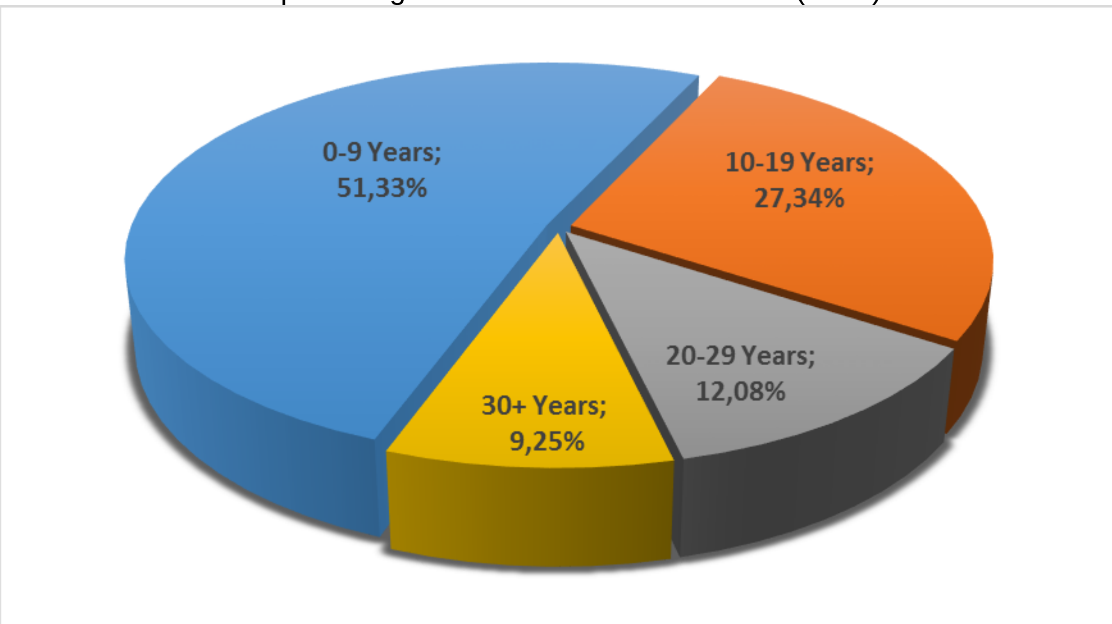
- 24 ships of size 1.441.838 DWT are in the 0-9 age range,
- 17 ships of size 767.840 DWT are in the 10-19 age range,
- 10 ships of size 339.500 DWT are in the 20-29 age range,
- 11 ships of size 259.773 DWT are 30 years or older.

Table 7: Bulk Carrier Ships by Tonnage and Age Groups(1000 GT and Over)

DIVISIONS OF TONNAGE	0-9 YEARS			10-19 YEARS			20-29 YEARS			30+ YEARS			Total	
	PCS	DWT	%	PCS	DWT	%	PCS	DWT	%	PCS	DWT	%	PCS	DWT
150-1499	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
1500-5999	0	0	0%	0	0	0%	1	4.468	1%	0	0	0%	1	4.468
6000-9999	1	6.635	0%	0	0	0%	0	0	0%	0	0	0%	1	6.635
10000-34999 (HandySize)	5	142.061	10%	5	112.291	15%	4	89.555	26%	11	259.773	100%	25	603.680
35000-52999 (HandyMax)	2	70.603	5%	7	347.891	45%	4	173.306	51%	0	0	0%	13	591.800
53000-79999 (Panamax)	10	618.665	43%	5	307.658	40%	1	72.171	21%	0	0	0%	16	998.494
80000-119999 (Capesize)	5	434.611	30%	0	0	0%	0	0	0%	0	0	0%	5	434.611
120000+ (LargeSize)	1	169.263	12%	0	0	0%	0	0	0%	0	0	0%	1	169.263
TOTAL	24	1.441.838	100%	17	767.840	100%	10	339.500	100%	11	259.773	100%	62	2.808.951

Source: Turkish Chamber of Shipping

Graph 4 : Age Distribution of Bulk Carriers (DWT)



Source: Turkish Chamber of Shipping

51,33% of the bulk carriers are in the 0-9 age range; 27,34% are in the 10-19 age range; 12,08% are in the 20-29 age range and 9,25% are 30 years or older.

Table 8 shows Oil Tankers Segment (23 ships) with a total size of 1.428.284 DWT

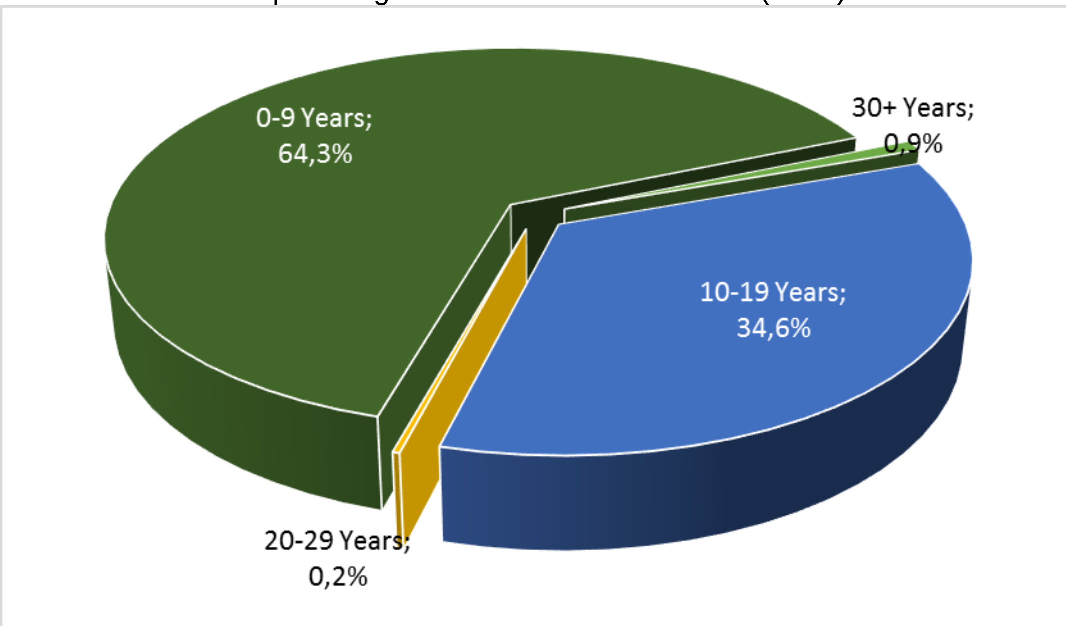
- 8 ships of size 918.498 DWT are in the 0-9 age range,
-10 ships of size 493.797 DWT are in the 10-19 age range,
- 1 ship of size 3.384 DWT are in the 20-29 age range,
- 4 ships of size 12.605 DWT are 30 years or older.

Table 8: Oil Tankers by Tonnage and Age Groups (1000 GT and Over)

DIVISIONS OF TONNAGE	0-9 YEARS			10-19 YEARS			20-29 YEARS			30+ YEARS			TOTAL	
	PCS	DWT	%	PCS	DWT	%	PCS	DWT	%	PCS	DWT	%	PCS	DWT
150-1499	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
1500-5999	2	3.596	0%	7	28.394	6%	1	3.384	100%	4	12.605	100%	14	47.979
6000-19999	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
20000-49999 (Product Tanker)	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
50000-79999 (Panamax)	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
80000-109999 (Aframax)	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
110000-164999 (Suezmax)	6	914.902	100%	3	465.403	94%	0	0	0%	0	0	0%	9	1.380.305
165000-299999 (VLCC)	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
300000+ (ULCC)	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
TOTAL	8	918.498	100%	10	493.797	100%	1	3.384	100%	4	12.605	100%	23	1.428.284

Source : Turkish Chamber of Shipping

Graph 5: Age Distribution of Oil Tankers (DWT)



Source : Turkish Chamber of Shipping

64,31% of the oil tankers are in the 0-9 age range; 34,57% are in the 10-19 age range; 0,24% are in the 20-29 age range and 0,88% are 30 years old or older.

Table 9 shows the average age of the chemical tankers (54 ships) with a total size of 457.396 DWT.

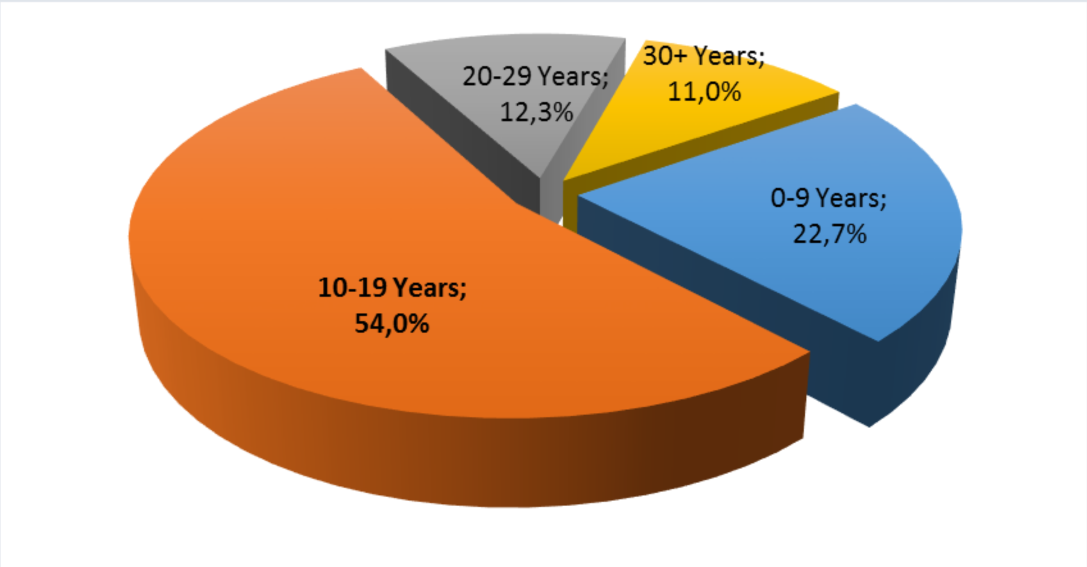
- 6 ships of size 104.015 DWT are in the 0-9 age range,
- 30 ships of size 247.023 DWT are in the 10-19 age range,
- 9 ships of size 56.185 DWT are in the 20-29 age range,
- 9 ships of size 50.173 DWT are 30 years or older.

Table 9: Chemical Tankers by Tonnage and Age Groups (1000 GT and Over)

DIVISIONS OF TONNAGE	0-9 YEARS			10-19 YEARS			20-29 YEARS			30+ YEARS			TOTAL	
	PCS	DWT	%	PCS	DWT	%	PCS	DWT	%	PCS	DWT	%	PCS	DWT
150-1499	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
1500-5999	0	0	0%	15	59.480	24%	3	13.305	24%	5	18.716	37%	23	91.501
6000-19999	5	52.483	50%	14	147.544	60%	6	42.880	76%	4	31.457	63%	29	274.364
20000-49999 (Product Tanker)	0	0	0%	1	39.999	16%	0	0	0%	0	0	0%	1	39.999
50000-79999 (Panamax)	1	51.532	50%	0	0	0%	0	0	0%	0	0	0%	1	51.532
80000-10999 (Aframax)	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
110000-164999 (Suezmax)	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
165000-299999 (VLCC)	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
300000+ (ULCC)	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
TOTAL	6	104.015	100%	30	247.023	100%	9	56.185	100%	9	50.173	100%	54	457.396

Source : Turkish Chamber of Shipping

Graph 6: Age Distribution of Chemical Tankers (DWT)



Source : Turkish Chamber of Shipping

22,74% of chemical tankers are in the 0-9 age range; 54,01% are in the 10-19 age range; 12,28% are in the 20-29 age range and 10,97% are 30 years or older.

Table 10 shows the average age of the Container Ships (57 ships) with a total size of 1.211.314 DWT.

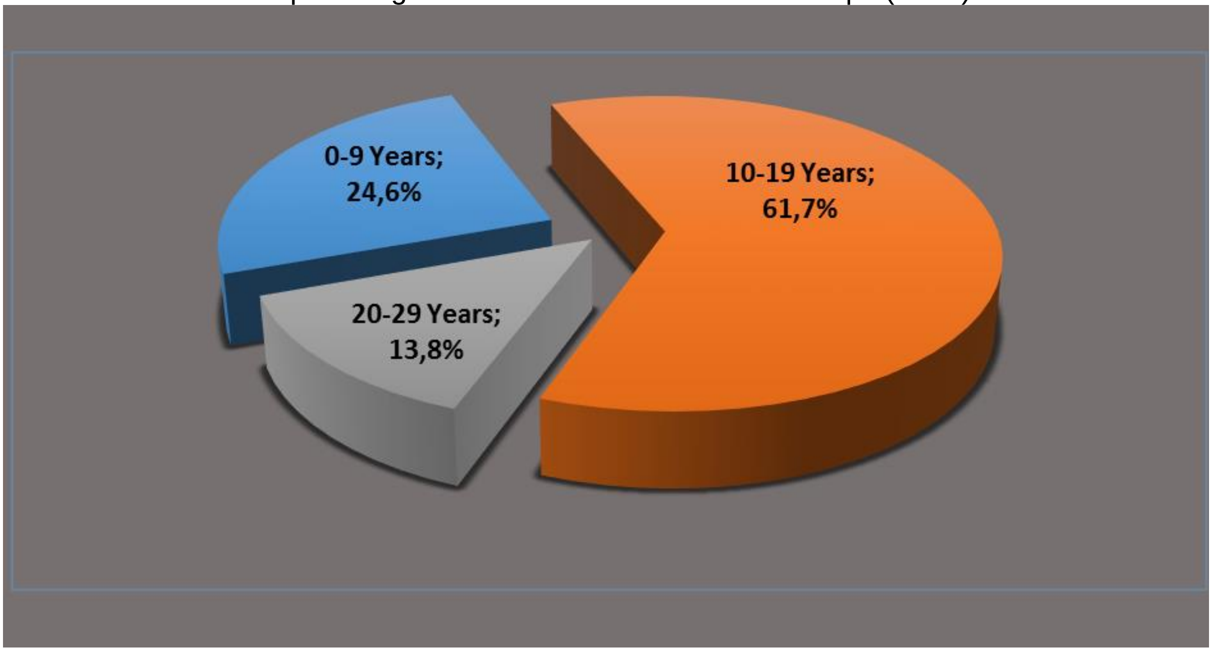
- 9 ships of size 297.875 DWT are in the 0-9 age range,
- 35 ships of size 746.730 DWT are in the 10-19 age range,
- 13 ships of size 166.709 DWT are in the 20-29 age range,

Table 10: Container Ships by Tonnage and Age Groups (1000 GT and Over)

TONNAGE	0-9 YEARS			10-19 YEARS			20-29 YEARS			30+ YEARS			TOTAL	
	PCS	DWT	%	PCS	DWT	%	PCS	DWT	%	PCS	DWT	%	PCS	DWT
150-1499	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
1500-5999	0	0	0%	1	3.301	0%	0	0	0%	0	0	0%	1	3.301
6000-9999	0	0	0%	3	21.330	3%	4	34.636	21%	0	0	0%	7	55.966
10000-34999	5	149.879	50%	26	533.949	72%	9	132.073	79%	0	0	0%	40	815.901
35000-52999	4	147.996	50%	5	188.150	25%	0	0	0%	0	0	0%	9	336.146
53000-79999	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
80000-119999	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
120000+	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
TOTAL	9	297.875	100%	35	746.730	100%	13	166.709	100%	0	0	0%	57	1.211.314

Source : Turkish Chamber of Shipping

Graph 7: Age Distribution of the Container Ships (DWT)



Source : Turkish Chamber of Shipping

24,59% of Container ships are in the 0-9 age range; 61,65% are in the 10-19 age range and 13,76% are in the 20-29 age range.

Table 11 shows the average age of the Ro-Ro Ships, (22 ships) with a total size of 242.010 DWT.

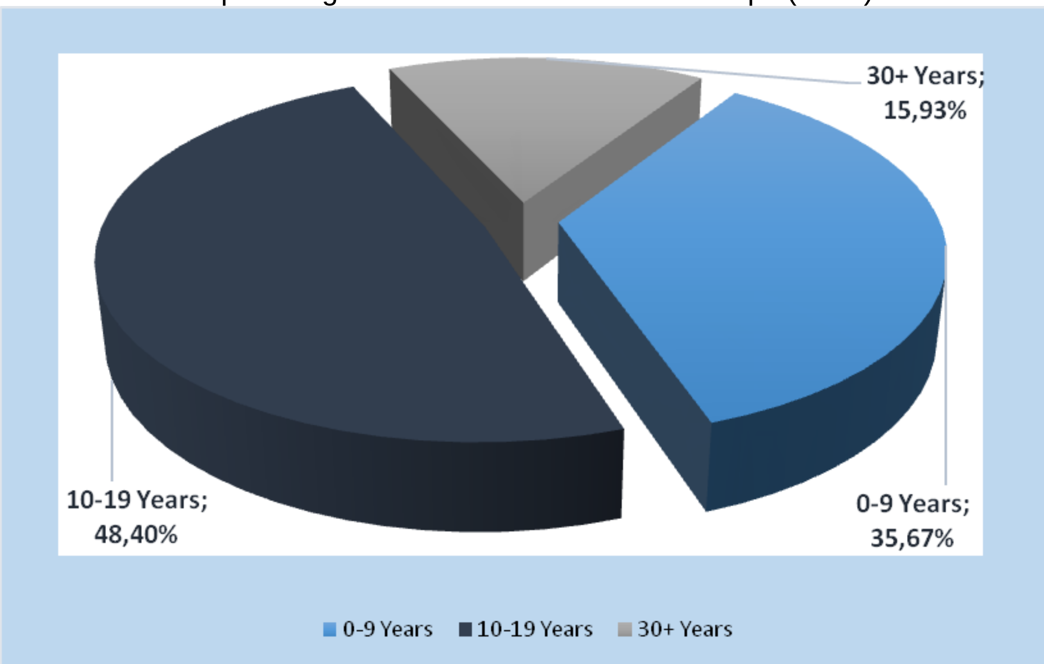
- 7 ships of size 86.341 DWT are in the 0-9 age range,
- 11 ships of size 117.124 DWT are in the 10-19 age range,
- 4 ships of size 38.545 DWT are 30 years or older.

Table 11: RO-RO Ships by Tonnage and Age Groups (1000 GT and Over)

DIVISIONS OF TONNAGE	0-9 YEARS			10-19 YEARS			20-29 YEARS			30+ YEARS			TOTAL	
	NO	DWT	%	NO	DWT	%	NO	DWT	%	NO	DWT	%	NO	DWT
1500-5999	0	0	0%	0	0	0%	0	0	0%	1	4.538	12%	1	4.538
6000-9999	0	0	0%	0	0	0%	0	0	0%	1	5.975	16%	1	5.975
10000-34999	7	86.341	100%	11	117.124	100%	0	0	0%	2	28.032	73%	20	231.497
35000-52999	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
53000-79999	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
80000-119999	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
120000+	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0
TOTAL	7	86.341	100%	11	117.124	100%	0	0	0%	4	38.545	100%	22	242.010

Source: Turkish Chamber of Shipping

Graph 8: Age Distribution of the RO-RO Ships (DWT)



Source: Turkish Chamber of Shipping

35,67% of Ro-Ro Ships are in the 0-9 age range; 48,40% are in the 10-19 age range and 15,93% are 30 years old or older.

1.4.Turkish Merchant Fleet by Number and Tonnage (1000 DWT and Over)
(Accepted International Seaborne Transportation Tonnage)

Table 12 shows the numerical and tonnage values of ships which are 1000 DWT and over and are suitable for international transportation.

Table 13 shows that the Turkish merchant fleet consists of 537 ships. 15% of the total fleet (80 ships) is registered in National Ship Registry and 85% of the total fleet (457 ships) in the International Ship Registry. The total DWT and GT values of the ships over 1000 DWT are 7.510.500 DWT and 5.226.744 GT respectively. 6 classes make up the majority of this capacity. Bulk carriers lead with 37%, oil tankers follow with 19%, containers with 16%, dry cargo with 12%, chemical tankers with 6% and Ro-Ro's with3%. These 6 classes make up 93% of the total fleet based on DWT.

6,03% of the bulk carrier ships are registered in the National Ship Registry, and the rest 93,97% are registered in the International Ship Registry with a total weight of 2.808.951 DWT for the bulk carrier segment.

1,48% of the oil tankers are registered in the National Ship Registry, and the rest 98,52% are registered in the International Ship Registry with a total weight of 1.462.257 DWT for the oil tankers segment.

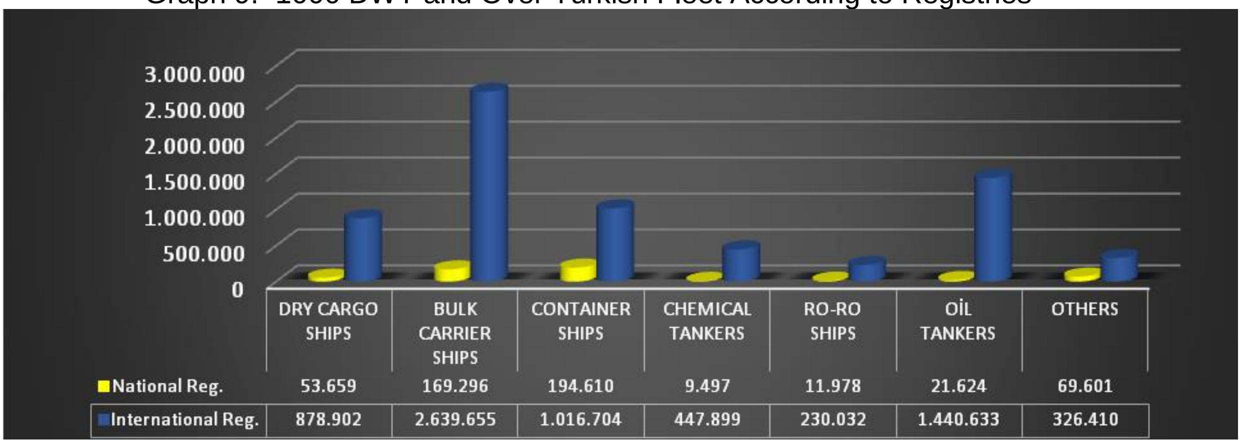
16,07% of the container ships are registered in the National Ship Registry, and the rest 83,93% are registered in the International Ship Registry with a total weight of 1.211.314 DWT for the container ship segment.

5,75% of the dry cargo ships are registered in the National Ship Registry, and the rest 94,25% are registered in the International Ship Registry with a total weight of 932.561 DWT for the dry cargo ship segment.

2,08% of the chemical tankers are registered in the National Ship Registry, and the rest 97,92% are registered in the International Ship Registry with a total weight of 457.396 DWT for the chemical tankers segment.

4,95% of the Ro/Ro ships are registered in the National Ship Registry, and the rest 95,05% are registered in the International Ship Registry with a total weight of 242.010 DWT for the Ro/Ro segment.

Graph 9: 1000 DWT and Over Turkish Fleet According to Registries



Source: Turkish Chamber of Shipping

Table 12: The General Examination of The Turkish Merchant Fleet By Number and Tonnage According To Import and Build (1000 DWT and Over)

SHIP TYPES	PCS				DWT				GT			
	Import	Build	Total	%	Import	Build	Total	%	Import	Build	Total	%
DRY CARGO	54	157	211	39,27	334.607	597.954	932.561	12,42	235.640	369.729	605.369	11,58
BULK CARRIER	57	5	62	11,55	2.657.980	150.971	2.808.951	37,42	1.522.046	94.380	1.616.426	30,92
CONTAINERS	44	13	57	10,61	1.006.004	205.310	1.211.314	16,13	814.713	157.092	971.805	18,59
DRY CARGO-CONTAINER	4	9	13	2,42	12.369	87.416	99.785	1,33	8.066	60.475	68.541	1,31
CHEMICAL TANKERS	24	30	54	10,06	260.024	197.372	457.396	6,09	166.304	130.519	296.823	5,68
LPG TANKERS	7	0	7	1,30	38.247	0	38.247	0,51	36.086	0	36.086	0,69
ASPHALT TANKERS	1	2	3	0,56	2.770	39.896	42.666	0,57	1.900	31.348	33.248	0,64
WATER BARGES	0	1	1	0,19	0	1.027	1.027	0,01	0	488	488	0,01
RO-RO SHIPS	22	0	22	4,1	242.010	0	242.010	3,22	579.825	0	579.825	11,09
RO-RO FERRY/PASSENGER	6	2	8	1,49	24.675	2.727	27.402	0,36	51.339	1.974	53.313	1,02
FERRY BOATS	0	9	9	1,68	0	17.168	17.168	0,23	0	13.281	13.281	0,25
TRAIN FERRIES	0	2	2	0,37	0	2.600	2.600	0,03	0	2.466	2.466	0,05
PASSENGER AND CARGO SHIPS	1	1	2	0,37	1.540	1.700	3.240	0,04	4.701	10.583	15.284	0,29
FISHING BOATS	1	0	1	0,19	2.887	0	2.887	0,04	1.892	0	1.892	0,04
SCIENTIFIC RESEARCH VESSEL	2	1	3	0,56	3.580	4.200	7.780	0,1	21.740	2.569	24.309	0,47
SEA BUSES	1	0	1	0,19	29.642	0	29.642	0,39	431	0	431	0,01
SERVICE SHIPS	15	13	28	5,21	49.496	49.739	99.235	1,32	38.184	57.339	95.523	1,83
OIL TANKERS	17	29	46	8,57	1.243.354	218.903	1.462.257	19,47	665.854	118.487	784.341	15,01
TRAIN FERRIES/RO-RO	1	0	1	0,19	6.266	0	6.266	0,08	15.195	0	15.195	0,29
MARINE VEHICLES	2	4	6	1,12	9.085	8.981	18.066	0,24	7.316	4.782	12.098	0,23
TOTAL	259	278	537	100%	5.924.536	1.585.964	7.510.500	100%	4.171.232	1.055.512	5.226.744	100%

Source : Turkish Chamber of Shipping

Table 13: The General Examination of The Turkish Merchant Fleet By National and International Registries (1000 DWT and Over)

SHIP TYPES	PCS				DWT				GT			
	National Reg.	Inter. Reg.	Total	%	National Reg.	Inter. Reg.	Total	%	National Reg.	Inter. Reg.	Total	%
DRY CARGO	22	189	211	39,27	53.659	878.902	932.561	12,42	33.209	572.160	605.369	11,58
BULK CARRIER	7	55	62	11,55	169.296	2.639.655	2.808.951	37,42	107.000	1.509.426	1.616.426	30,92
CONTAINERS	8	49	57	10,61	194.610	1.016.704	1.211.314	16,13	154.602	817.203	971.805	18,59
DRY CARGO-CONTAINER	1	12	13	2,42	2.356	97.429	99.785	1,33	1.720	66.821	68.541	1,31
CHEMICAL TANKERS	2	52	54	10,06	9.497	447.899	457.396	6,09	6.441	290.382	296.823	5,68
LPG TANKERS	1	6	7	1,30	4.444	33.803	38.247	0,51	3.983	32.103	36.086	0,69
ASPHALT TANKERS	1	2	3	0,56	2.770	39.896	42.666	0,57	1.900	31.348	33.248	0,64
WATER BARGES	0	1	1	0,19	0	1.027	1.027	0,01	0	488	488	0,01
RO-RO SHIPS	1	21	22	4,1	11.978	230.032	242.010	3,22	32.770	547.055	579.825	11,09
RO-RO FERRY/PASSENGER	1	7	8	1,49	1.500	25.902	27.402	0,36	19.638	33.675	53.313	1,02
FERRY BOATS	1	8	9	1,68	2.314	14.854	17.168	0,23	1.596	11.685	13.281	0,25
TRAIN FERRIES	2	0	2	0,37	2.600	0	2.600	0,03	2.466	0	2.466	0,05
PASSENGER AND CARGO SHIPS	2	0	2	0,37	3.240	0	3.240	0,04	15.284	0	15.284	0,29
FISHING BOATS	1	0	1	0,19	2.887	0	2.887	0,04	1.892	0	1.892	0,04
SCIENTIFIC RESEARCH VESSEL	0	3	3	0,56	0	7.780	7.780	0,1	0	24.309	24.309	0,47
SEA BUSES	0	1	1	0,19	0	29.642	29.642	0,39	0	431	431	0,01
SERVICE SHIPS	16	12	28	5,21	38.509	60.726	99.235	1,32	27.766	67.757	95.523	1,83
OIL TANKERS	10	36	46	8,57	21.624	1.440.633	1.462.257	19,47	12.499	771.842	784.341	15,01
TRAIN FERRIES/RO-RO	0	1	1	0,19	0	6.266	6.266	0,08	0	15.195	15.195	0,29
MARINE VEHICLES	4	2	6	1,12	8.981	9.085	18.066	0,24	4.782	7.316	12.098	0,23
TOTAL	80	457	537	100 %	530.265	6.980.235	7.510.500	100 %	427.548	4.799.196	5.226.744	100%

Source : Turkish Chamber of Shipping

Table 14: The Average Age Profile of the Turkish Merchant Fleet
(1000 DWT and Over)

SHIP TYPES	Number	Tonnage (DWT)	Tonnage (GT)	Ave. Age.
DRY CARGO	211	932.561	605.369	30
BULK CARRIER	62	2.808.951	1.616.426	17
CONTAINERS	57	1.211.314	971.805	14
DRY CARGO-CONTAINER	13	99.785	68.541	20
CHEMICAL TANKERS	54	457.396	296.823	17
LPG TANKERS	7	38.247	36.086	24
ASPHALT TANKERS	3	42.666	33.248	15
WATER BARGES	1	1.027	488	49
RO-RO SHIPS	22	242.010	579.825	14
RO-RO FERRY/PASSENGER	8	27.402	53.313	33
FERRY BOATS	9	17.168	13.281	28
TRAIN FERRIES	2	2.600	2.466	45
PASSENGER AND CARGO SHIPS	2	3.240	15.284	57
FISHING BOATS	1	2.887	1.892	32
SCIENTIFIC RESEARCH VESSEL	3	7.780	24.309	24
SEA BUSES	1	29.642	431	30
SERVICE SHIPS	28	99.235	95.523	33
OIL TANKERS	46	1.462.257	784.341	17
TRAIN FERRIES/RO-RO	1	6.266	15.195	39
MARINE VEHICLES	6	18.066	12.098	9
TOTAL	537	7.510.500	5.226.744	23,56

Source: Turkish Chamber of Shipping

Table 15: Turkish Merchant Fleet Distribution by Tonnage and Age Groups
(1000 DWT and Over)

DIVISIONS OF TONNAGE	0-9 YEARS			10-19 YEARS			20-29 YEARS			30+ YEARS			TOTAL	
	Pcs	DWT	%	Pcs	DWT	%	Pcs	DWT	%	Pcs	DWT	%	Pcs	DWT
150-1499	3	3.482	4,30%	5	6.699	8,28%	6	7.469	9,23%	50	63.251	78,18%	64	80.901
1500-5999	21	65.566	8,28%	50	193.316	24,42%	48	163.324	20,63%	121	369.334	46,66%	240	791.540
6000-9999	8	57.462	11,43%	23	171.883	34,19%	18	143.651	28,57%	18	129.794	25,81%	67	502.790
10000-34999	26	529.777	26,02%	50	895.003	43,95%	15	244.419	12,00%	18	367.227	18,03%	109	2.036.426
35000-52999	7	270.131	24,20%	13	576.040	51,61%	6	269.997	24,19%	0	0	0,00%	26	1.116.168
53000-79999	10	618.665	61,96%	5	307.658	30,81%	1	72.171	7,23%	0	0	0,00%	16	998.494
80000-119999	5	434.611	100,00%	0	0	0,00%	0	0	0,00%	0	0	0,00%	5	434.611
120000+	7	1.084.165	69,97%	3	465.403	30,03%	0	0	0,00%	0	0	0,00%	10	1.549.568
TOTAL	87	3.063.861	40,79%	149	2.616.002	34,83%	94	901.031	12,00%	207	929.606	12,38%	537	7.510.500

Source: Turkish Chamber of Shipping

1.5.The Position of The Turkish Merchant Fleet Within the World Fleet

As of January 1st 2019, accounting only for ships with size 1000GT and above, Turkish fleet under foreign flag is 21,8 million DWT, whereas the total fleet under both Turkish and foreign flag amounts to 28,6 million DWT.

On the other hand, the ratio distribution of the fleet regarding the flags of registration is as follows: 24% percent of these ships are registered under the Turkish flag and 76% are registered under the foreign flags.

Table 16: Turkish Ships Under the National Flag and Foreign Flags (1000 GT and Over)

Years	National Flag			Foreign Flag			Total Fleet Controlled		Years Change %
	No	1000 DWT	%	No	1000 DWT	%	No	1000 DWT	
1999	448	8.697	90%	69	915	10%	517	9.612	
2000	456	8.269	91%	96	855	9%	552	9.124	-5,1%
2001	445	7.321	82%	107	1.607	18%	552	8.928	-2,1%
2002	451	7.815	84%	117	1.514	16%	568	9.329	4,5%
2003	432	7.045	80%	147	1.772	20%	579	8.817	-5,5%
2004	408	6.556	75%	163	2.159	25%	571	8.715	-1,2%
2005	420	6.427	70%	237	2.725	30%	657	9.152	5,0%
2006	432	6.844	65%	353	3.609	35%	785	10.453	14,2%
2007	446	6.464	58%	424	4.650	42%	870	11.114	6,3%
2008	490	6.592	50%	513	6.591	50%	1.003	13.183	18,6%
2009	520	6.736	44%	636	8.592	56%	1.156	15.328	16,3%
2010	560	7.246	42%	665	9.954	58%	1.225	17.201	12,2%
2011	547	7.797	40%	672	11.863	60%	1.219	19.660	14,3%
2012	523	8.479	38%	642	14.093	62%	1.165	22.572	14,8%
2013	627	9.488	31%	842	20.838	69%	1.469	30.326	34,4%
2014	599	8.580	28%	890	21.846	72%	1.489	30.427	0,3%
2015	564	8.297	30%	834	19.209	70%	1.398	27.507	-9,6%
2016	551	8.272	28%	984	20.879	72%	1.535	29.151	6,0%
2017	525	7.800	27%	1.022	21.465	73%	1.547	29.265	0,4%
2018	483	7.288	25%	1.028	21.323	75%	1.511	28.611	-2,2%
2019	457	6.831	24%	1.027	21.758	76%	1.484	28.589	0,0%

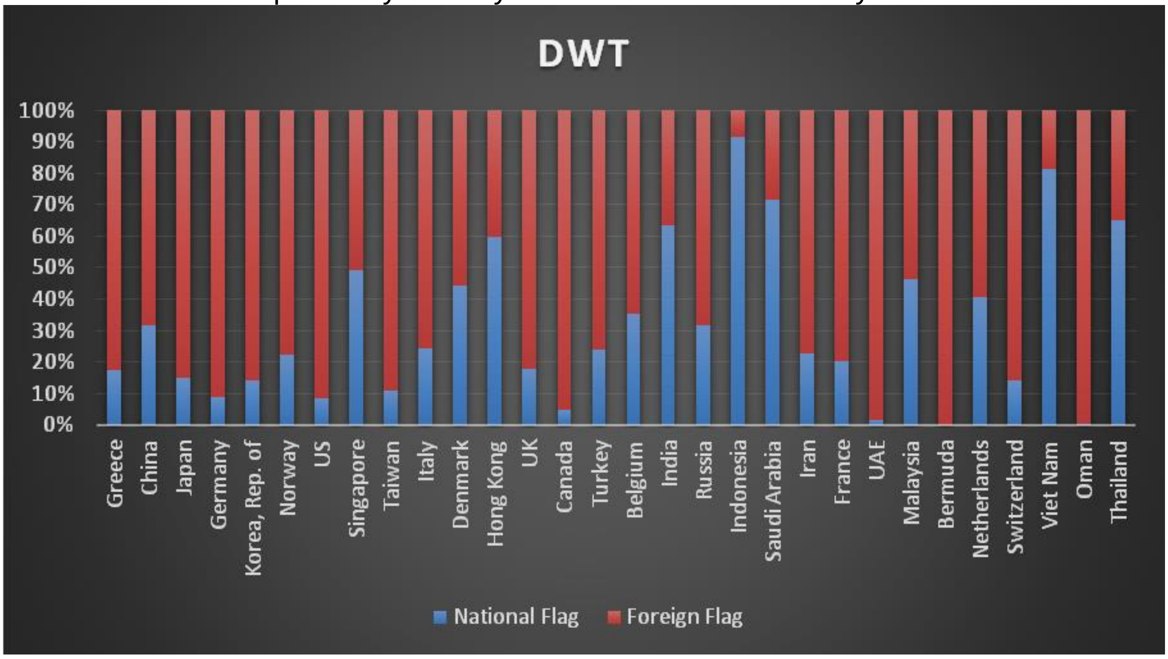
Source: ISL January-February 2019

Table 17 : Total Fleet of the 30 Countries by National and Foreign Flags (01 January 2019) (1000 GT and Over)

Country of Control (DWT-Rank 2019)		National Flag				International Flag				Total Fleet				Year Change %	DWT % Share
		No	1000 DWT	1000 TEU	Years	No	1000 DWT	1000 TEU	Years	No	1000 DWT	1000 TEU	Years		
1	Greece	686	65.616	49	14.6	4.164	314.665	2.111	11.2	4.850	380.281	2.161	11.7	4.0	82.7
2	China, PR of	2.987	85.579	881	12.2	2.676	184.601	2.899	11.4	5.663	270.180	3.780	11.8	13.9	68.3
3	Japan	820	35.724	154	11.9	3.280	206.179	1.698	8.2	4.100	241.904	1.852	8.9	-0.8	85.2
4	Germany	187	8.320	600	15.6	2.603	87.191	3.795	11.7	2.790	95.511	4.394	12.0	-9.7	91.3
5	Korea, Rep. of	709	11.374	110	17.9	916	68.143	468	11.2	1.625	79.517	578	14.1	-0.9	85.7
6	Norway	539	16.676	59	15.6	1.197	58.284	466	13.5	1.736	74.960	525	14.1	2.8	77.8
7	US	208	4.975	90	22.2	970	54.570	199	13.8	1.178	59.545	288	15.3	-11.6	91.6
8	Singapore	712	27.055	353	9.4	720	27.768	390	14.3	1.432	54.823	743	11.9	3.3	50.7
9	Taiwan	119	5.485	156	16.3	839	46.054	865	12.5	958	51.539	1.021	13.0	0.0	89.4
10	Italy	437	11.625	75	17.6	663	36.418	1.328	10.8	1.100	48.043	1.403	13.5	-5.2	75.8
11	Denmark	363	20.337	1.419	14.3	564	25.407	1.027	11.1	927	45.745	2.446	12.4	5.4	55.5
12	Hong Kong	422	22.412	28	9.0	510	15.171	48	18.7	932	37.584	77	14.3	-11.7	40.4
13	UK	189	5.737	107	13.2	568	26.251	578	11.8	757	31.987	685	12.2	5.4	82.1
14	Canada	125	1.529	7	25.1	398	30.021	921	10.7	523	31.550	929	14.1	3.2	95.2
15	Turkey	457	6.831	107	21.4	1.027	21.758	222	19.0	1.484	28.589	329	19.8	-0.9	76.1
16	Belgium	82	9.917	1	10.5	165	18.185	79	9.9	247	28.103	80	10.1	30.4	64.7
17	India	627	15.532	20	13.9	143	8.967	7	12.2	770	24.499	27	13.6	-1.4	36.6
18	Russia	1.114	7.144	89	29.0	338	15.373	36	19.5	1.452	22.517	126	26.8	0.8	68.3
19	Indonesia	1.855	18.150	212	23.3	80	1.639	16	19.2	1.935	19.789	228	23.1	4.1	8.3
20	Saudi Arabia	107	12.846	8	14.9	46	5.058	1	18.1	153	17.904	8	15.9	5.6	28.3
21	Iran	145	3.914	105	19.7	57	13.436	-	14.1	202	17.349	105	18.1	-3.2	77.4
22	France	109	3.257	220	14.5	204	12.707	934	10.3	313	15.964	1.154	11.8	7.4	79.6
23	UAE	45	232	3	14.0	492	13.973	121	20.3	537	14.205	125	19.8	-2.1	98.4
24	Malaysia	198	6.400	21	17.4	127	7.449	1	14.4	325	13.848	22	16.2	-3.7	53.8
25	Bermuda	-	-	-	-	67	11.796	0	9.5	67	11.796	0	9.5	12.2	100.0
26	Netherlands	564	4.706	194	12.6	309	6.837	70	13.7	873	11.542	264	13.0	-7.9	59.2
27	Switzerland	30	1.225	4	8.0	165	7.450	7	11.3	195	8.675	10	10.8	-8.3	85.9
28	Viet Nam	809	7.012	40	12.5	115	1.611	4	18.9	924	8.624	44	13.3	-2.4	18.7
29	Oman	5	6	-	12.0	44	7.871	1	8.1	49	7.877	1	8.5	1.1	99.9
30	Thailand	306	4.710	29	25.9	73	2.530	31	15.1	379	7.241	60	23.8	-9.7	34.9
Total 30 Countries		14.956	424.324	5.141	16.5	23.520	1.337.366	18.324	12.2	38.476	1.761.690	23.465	13.8	2.4	75.9
Others		2.264	32.316	222	23.6	2.565	72.958	394	24.7	4.829	105.275	616	24.2	4.0	69.3
Subtotal		17.220	456.640	5.363	17.4	26.085	1.410.324	18.719	13.0	43.305	1.866.964	24.081	14.7	2.5	75.5
									Unknown	434	5.852	193	24.2	93.5	
World Total										43.739	1.872.817	24.274	14.8	2.6	

Source: SSMR January / February 2019

Graph 10: By Country of Domicile as of 1 January 2019



The World fleet (300 GT and over) consists of 53.045 ships with a total size of 1.883.549.000 DWT based in 158 countries as of 01.01.2018. Turkish merchant fleet is positioned 27th in the world as shown in the Table.

Panama leads with a share of 17,8%, Liberia is second with 12,5% and Marshall Island is third with share of 11,8% of the total registry.

Graph 11: World Merchant Fleet Ranking by Turkish Flag

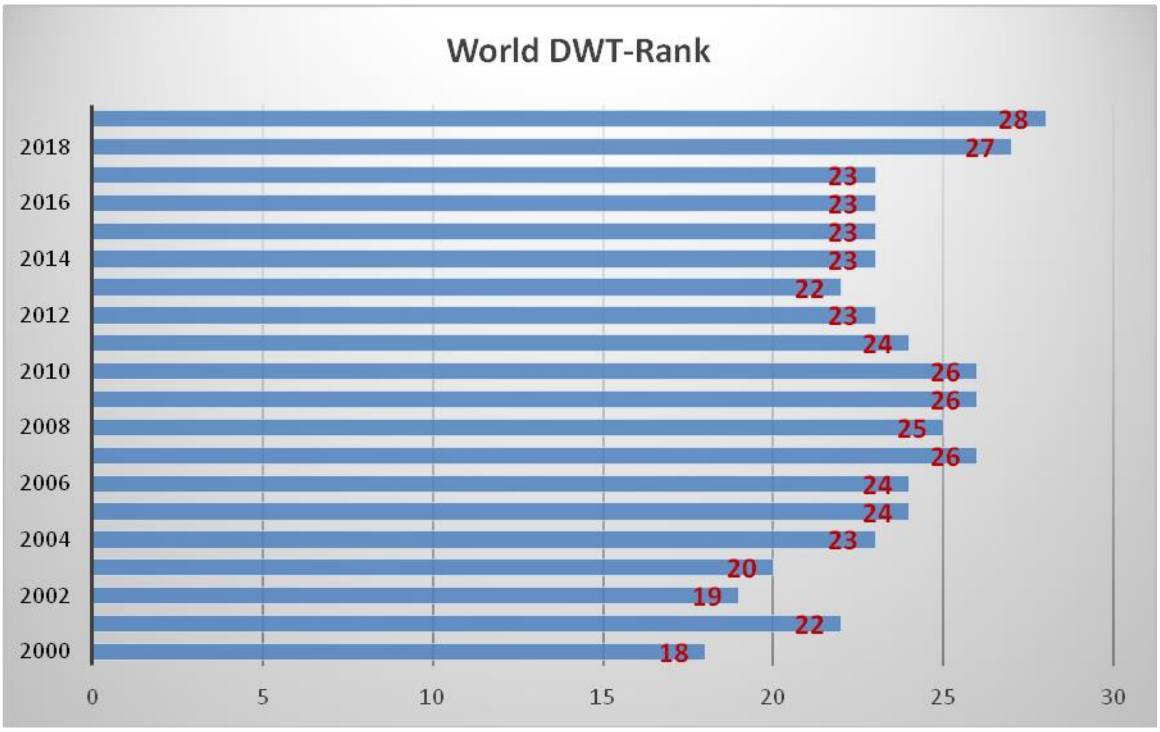


Table 18 : World Merchant Fleet Ranking by Flag as of 1 January 2019 (300 GT and Over)

DWT Rank 2019	Flag	1 January 2018				1 January 2019				DWT % Share	Years Change %
		No of Ships	1000 GT	1000 DWT	1000 TEU	No of Ships	1000 GT	1000 DWT	1000 TEU		
1	Panama	6.395	212.134	326.118	3.132	6.398	211.917	323.031	3.291	17.2	-0.9
2	Marshall Islands	3.117	140.951	229.735	1.282	3.255	146.245	237.316	1.267	12.6	3.3
3	Liberia	3.160	139.109	218.893	3.798	3.332	149.541	236.874	3.876	12.6	8.2
4	Hong Kong (SAR)	2.462	112.401	180.585	2.932	2.544	124.263	197.725	3.454	10.5	9.5
5	Singapore	2.333	82.723	124.563	2.226	2.326	84.497	126.533	2.345	6.7	1.6
6	Malta	2.036	71.445	107.748	1.519	1.998	73.890	109.635	1.590	5.8	1.8
7	China, PR of	3.224	51.855	80.288	856	3.414	55.194	86.121	893	4.6	7.3
8	Greece	946	41.129	72.201	44	913	39.573	69.099	50	3.7	-4.3
9	Bahamas	1.133	52.571	64.788	177	1.146	54.383	65.727	177	3.5	1.5
10	UK	767	30.671	41.854	816	735	30.755	42.844	826	2.3	2.4
11	Japan	2.640	25.429	36.792	84	2.552	27.083	38.385	159	2.0	4.3
12	S. Cyprus	811	21.544	34.112	446	839	21.801	33.774	461	1.8	-1.0
13	Denmark	480	16.778	18.715	1.180	504	20.310	22.436	1.494	1.2	19.9
14	Indonesia	3.069	13.658	19.161	213	3.267	14.689	20.564	216	1.1	7.3
15	Portugal	474	14.793	19.349	945	517	14.667	19.620	907	1.0	1.4
16	Norway	799	14.990	18.867	60	807	15.099	18.961	62	1.0	0.5
17	India	878	10.284	17.608	50	883	9.746	16.571	58	0.9	-5.9
18	Saudi Arabia	137	7.592	13.451	8	125	7.334	13.054	8	0.7	-3.0
19	Italy	701	15.313	14.489	127	673	14.541	12.904	121	0.7	-10.9
20	Korea, Rep. of	1.028	9.674	13.920	107	1.021	8.763	12.439	110	0.7	-10.6
21	Belgium	83	5.025	8.200	1	92	6.033	10.178	1	0.5	24.1
22	Germany	265	9.011	9.803	721	246	7.664	8.352	600	0.4	-14.8
23	Russia	1.486	6.388	7.999	100	1.515	6.542	8.307	102	0.4	3.9
24	US	363	7.333	8.220	232	364	7.326	8.126	241	0.4	-1.1
25	Bermuda	140	10.306	8.653	39	133	9.973	7.929	39	0.4	-8.4
26	Viet Nam	1.378	4.566	7.475	38	1.370	4.710	7.710	40	0.4	3.2
27	Antigua & Barbuda	810	6.505	8.505	450	744	5.631	7.478	381	0.4	-12.1
28	Turkey	805	5.441	7.638	123	782	5.270	7.303	120	0.4	-4.4
29	France	195	5.534	6.772	199	203	5.777	6.956	220	0.4	2.7
30	Malaysia	418	5.583	7.053	22	417	5.656	6.860	23	0.4	-2.7
31	Cayman Islands	138	4.189	6.020	1	144	4.454	6.611	1	0.4	9.8
32	Netherlands	785	6.124	6.391	249	773	6.138	6.237	246	0.3	-2.4
33	Thailand	556	3.669	6.130	27	565	3.443	5.650	30	0.3	-7.8
34	Taiwan	172	3.188	4.581	142	184	3.820	5.636	160	0.3	23.0
35	Philippines	948	3.860	5.611	56	1.021	3.716	5.362	52	0.3	-4.4
36	Brazil	120	2.462	3.972	52	127	2.651	4.310	54	0.2	8.5
37	Kuwait	45	2.682	4.856	1	40	2.275	4.135	1	0.2	-14.9
38	Iran	361	2.685	4.058	99	375	2.747	4.126	106	0.2	1.7
39	Belize	426	1.872	2.901	17	446	1.955	3.079	17	0.2	6.1
40	New Zealand	218	1.776	2.847	17	219	1.899	3.060	19	0.2	7.5
156	Total	53.045	1.224.375	1.833.549	23.102	53.732	1.261.907	1.881.589	24.285	100	2.6

Source: ISL January-February 2019

1.6.Comparison of the Turkish Merchant Fleet with the Neighboring Countries

The capacity of the merchant fleet of Turkey and the neighboring countries are shown in the following Table (19).

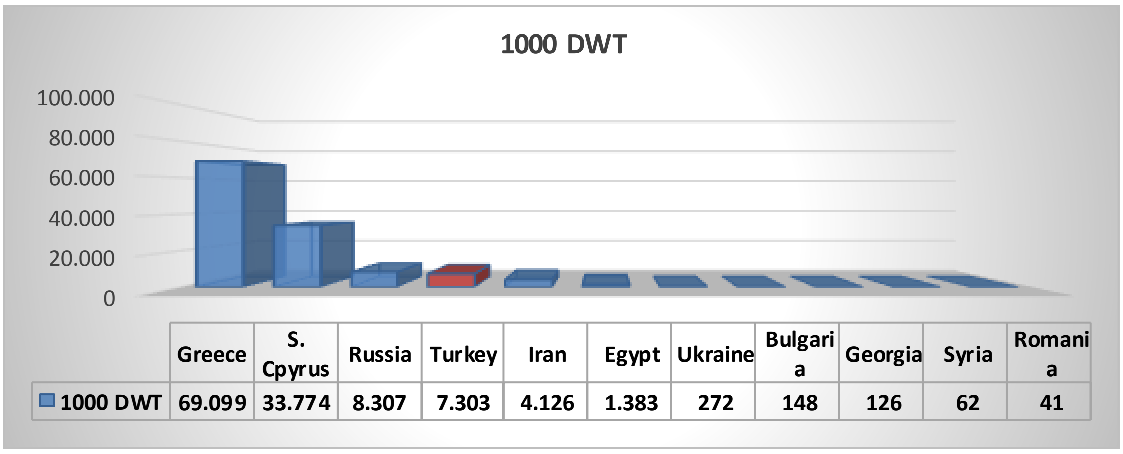
Greece is in the 1st place being among the largest merchant fleets of the world. Southern Cyprus is 2nd, Russia is 3rd and Turkey is in 4th place.

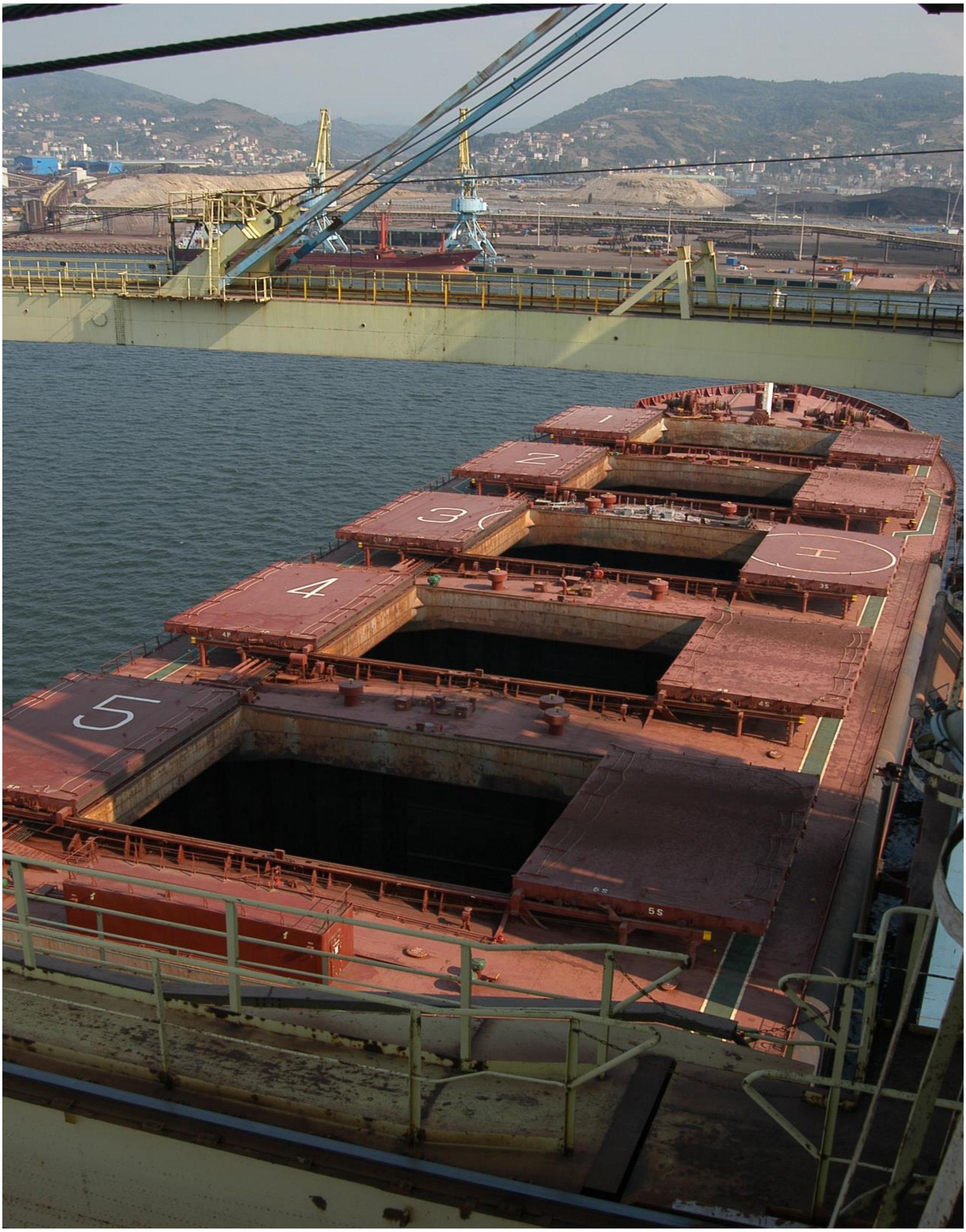
In addition to the national flags, when ships operating under foreign flag are added to the home registry, Turkey rises to 28,6 million DWT, Greece to 380 million DWT, Russia to 22 million DWT and Iran to 17 million DWT.

Table 19 : Turkish Merchant Fleet and the Neighbouring Countries (300 GT and Over)

World DWT Rank	Country	No of Ships	1000 DWT	World %	Change %
8	Greece	913	69.099	3,70%	-4,30%
12	S. Cpyrus	839	33.774	1,80%	-1,00%
23	Russia	1.515	8.307	0,40%	3,90%
28	Turkey	782	7.303	0,40%	-4,40%
38	Iran	375	4.126	0,20%	1,70%
52	Egypt	96	1.383	0,10%	-1,10%
86	Ukraine	102	272	0,00%	-6,20%
95	Bulgaria	31	148	0,00%	43,60%
98	Georgia	20	126	0,00%	109,60%
109	Syria	10	62	0,00%	6,10%
119	Romania	16	41	0,00%	1,00%
Source: ISL January-February 2018					

Graph 12 : Turkish Merchant Fleet and the Neighbouring Countries (01 January 2019)





CHAPTER II

DEVELOPMENTS IN SEABORNE TRADE

2. DEVELOPMENTS IN SEABORNE TRADE

2.1. Developments in the Transportation of Foreign Trade Cargoes

Trends are calculated by using an average of the 5 or 10 year period up to and including the current year, or as the compounded average growth rate over the period.

Estimated share of total world trade in 2018 (mt): sea 83%, land (road+rail) 16%, air <1%.

Table 20 : World Total Trade And World Seaborne Trade

Year	World Total (all modes) Trade Billion Tonnes	World Transport Change (%)	World Seaborne Trade Billion Tonnes	Seaborn Trade as % of Total
2008	10,86	-	8,61	79%
2009	9,56	-12%	8,29	87%
2010	10,82	13%	9,13	85%
2011	11,56	7%	9,51	83%
2012	11,83	3%	9,93	84%
2013	12,19	3%	10,26	84%
2014	12,57	3%	10,61	84%
2015	12,85	3%	10,82	84%
2016	13,13	4%	11,14	85%
2017	13,75	4%	11,6	84%
2018	14,28	4%	11,9	83%
2019(*)	14,84	4%	12,26	83%
(*) predicted value				

Source: Clarksons Research Feb.2019

Graph 13: World Total Trade and World Seaborne Trade

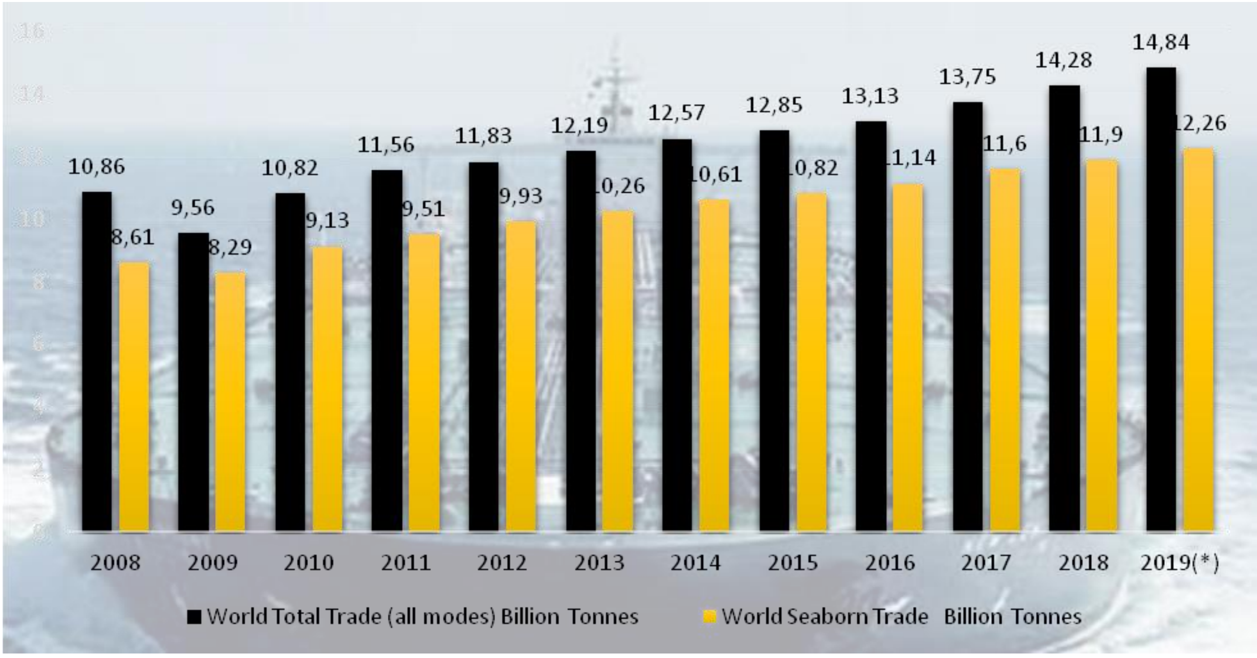


Table 21 : Turkish Foreign Trade Transportation by Modes (%)

Years	Sea	Rail	Road	Air	Pipeline and Others
2006	87,40	1,10	10,40	0,10	1,00
2007	87,40	1,10	10,00	0,60	0,90
2008	86,50	1,10	10,70	0,70	1,00
2009	85,00	0,80	12,60	0,80	0,80
2010	85,60	0,80	12,50	0,30	0,80
2011	85,80	0,80	11,80	0,40	1,20
2012	87,00	0,60	10,70	0,40	1,40
2013	86,40	0,50	11,40	0,40	1,30
2014	86,20	0,40	11,20	0,50	1,70
2015	87,70	0,50	10,70	0,40	0,70
2016	88,06	0,46	10,76	0,32	0,40
2017	88,47	0,44	10,25	0,32	0,52
2018	88,70	0,44	10,27	0,35	0,24

Source: Turkstat

88,70% of Turkey's foreign trade is being realised by maritime transportation. The progress between the years of 2006-2018 is shown in the Table below by the modes of transportation.

60.97 % of the volume of Turkey's foreign trade transportation has been carried by sea; 21.00 % has been carried by road; 0.50 % has been carried by rail; 10.81 % has been carried by air and 6.72 % has been carried by other transportation modes.

Graph 14 : Foreign Trade Transportation by Modes (%)

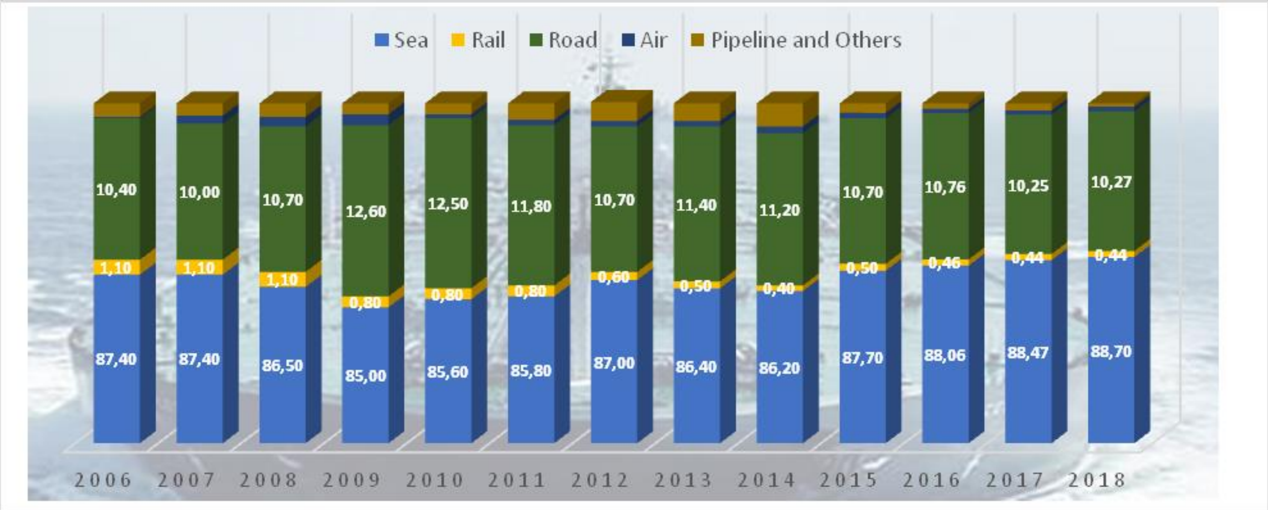


Table 22 : Foreign Trade Transportation by Modes (ton) and ($)

	Quantity ton %	Value US $ %
Export		
Rail	0,48%	0,43%
Sea	78,08%	62,84%
Pipeline and Others	0,24%	0,75%
Air	0,83%	8,19%
Road	20,38%	27,79%
Total	100,00%	100,00%
Import		
Rail	0,42%	0,55%
Sea	95,26%	59,56%
Pipeline and Others	0,24%	11,22%
Air	0,05%	12,79%
Road	4,04%	15,87%
Total	100,00%	100,00%
Seaborne Trade		
Rail	0,44%	0,50%
Sea	88,70%	60,97%
Pipeline and Others	0,24%	6,72%
Air	0,35%	10,81%
Road	10,27%	21,00%
Total	100,00%	100,00%

Source: Turkstat

2.2. Developments of Seaborne Trade

The progress of Turkey's seaborne trade has been examined under two headings; maritime cabotage and international transportation.

2.3. The Number of Incoming Ships to the Turkish Ports

The number of incoming ships to the Turkish ports between the years 2013-2017 is shown below:

In 2014, the number of incoming vessels decreased by 1.8% compared with 2013.
In 2015, the number of incoming vessels decreased by 1.4% compared with 2014.
In 2016, the number of incoming vessels decreased by 3.3% compared with 2015,
In 2017, the number of incoming vessels increased by 2.9% compared with 2016,
In 2018, the number of incoming vessels decreased by 1.29% compared with 2017,

Table 23: The Number of Incoming Ships to the Turkish Ports

Years	Turkish Flag Number	Foreign Flag Number	Total Number	Change %	TF %	FF %
2006	42.058	33.461	75.519	-	55,69%	44,31%
2007	43.662	35.262	78.924	4,51%	55,32%	44,68%
2008	45.362	36.042	81.404	3,14%	55,72%	44,28%
2009	45.813	34.631	80.444	-1,18%	56,95%	43,05%
2010	37.060	37.055	74.115	-7,87%	50,00%	50,00%
2011	37.234	37.900	75.134	1,37%	49,56%	50,44%
2012	38.333	37.542	75.875	0,99%	50,52%	49,48%
2013	39.835	36.295	76.130	0,34%	52,32%	47,68%
2014	38.685	36.081	74.766	-1,79%	51,74%	48,26%
2015	38.397	35.288	73.685	-1,45%	52,11%	47,89%
2016	37.644	33.576	71.220	-3,35%	52,86%	47,14%
2017	38.263	35.043	73.306	2,90%	52,20%	47,80%
2018	38.219	34.141	72.360	-1,29%	-0,11%	-2,57%

Source: Republic of Turkey Ministry of Transport and Infrastructure

Graph 15: Changes in the numbers of Turkish and Foreign Ships Coming to the Turkish Ports

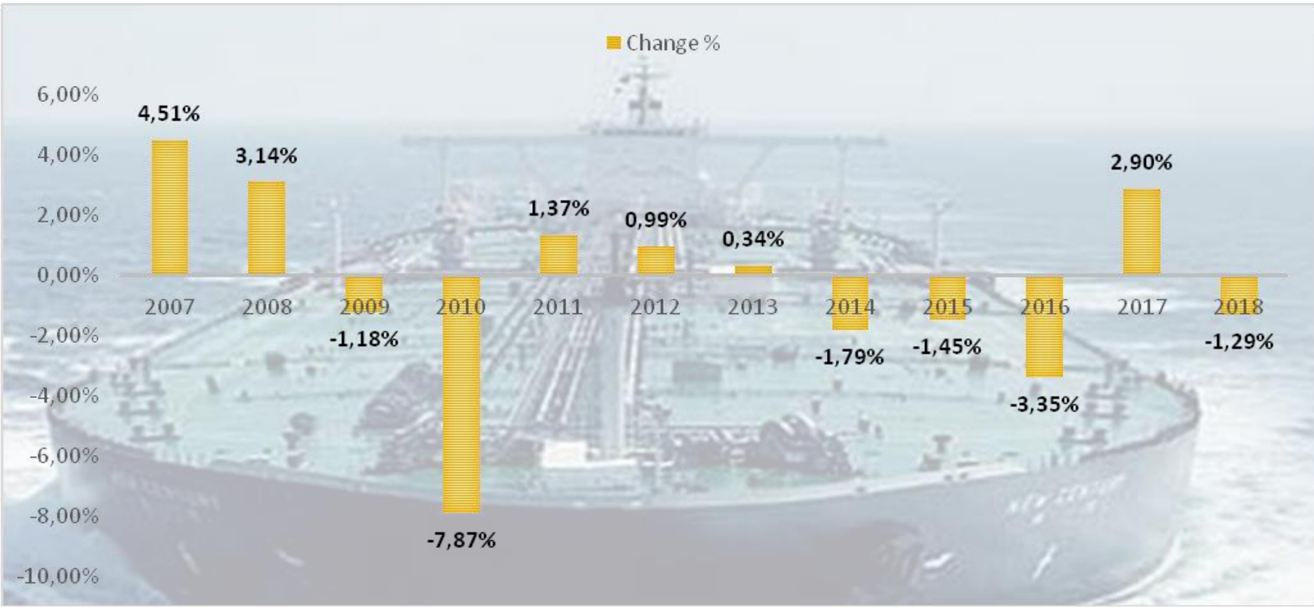


Table 24 : Numbers and GTs of Turkish and Foreign Ships Coming to the Turkish Ports in 2018

Port Authority	Turkish Flag		Foreign Flag		Total	
	Ship Number	Gross Ton	Ship Number	Gross Ton	Ship Number	Gross Ton
İzmit	4.323	21.723.998	5.665	122.040.416	9.988	143.764.413
Ambarlı	1.869	20.242.928	2.214	82.489.972	4.083	102.732.900
Aliağa	1.775	11.527.292	3.466	77.830.908	5.241	89.358.200
Mersin	940	9.278.514	3.373	76.248.369	4.313	85.526.883
İskenderun	1.576	6.704.508	3.215	60.409.715	4.791	67.114.223
Gemlik	1.612	9.985.753	2.320	53.545.266	3.932	63.531.019
Tekirdağ	1.068	5.434.899	1.413	37.810.874	2.481	43.245.773
Botaş	201	2.778.079	634	37.878.178	835	40.656.257
İzmir	740	5.595.426	1.307	25.814.563	2.047	31.409.989
Tuzla	2.091	17.019.202	1.041	11.057.220	3.132	28.076.422
Yalova	973	7.485.746	513	8.542.163	1.486	16.027.909
Samsun	1.156	3.398.982	1.932	11.120.464	3.088	14.519.446
İstanbul	1.860	3.402.363	529	7.781.510	2.389	11.183.874
Karabiga	830	1.492.289	473	9.077.045	1.303	10.569.334
KDZ. Ereğlisi	542	2.210.330	369	6.396.326	911	8.606.656
Zonguldak	255	1.323.262	355	6.452.333	610	7.775.595
Antalya	404	2.566.454	335	4.883.362	739	7.449.816
Çeşme	1.631	5.283.016	467	1.077.057	2.098	6.360.073
Bandırma	905	1.854.430	703	3.748.951	1.608	5.603.381
Güllük	1.240	1.868.680	423	3.452.073	1.663	5.320.754
Taşucu	184	182.747	808	5.066.640	992	5.249.387
Kuşadası	454	62.566	275	3.881.807	729	3.944.373
Trabzon	267	839.848	412	2.789.429	679	3.629.277
Çanakkale	1.020	1.155.353	133	1.818.226	1.153	2.973.579
Bodrum	1.644	567.532	382	1.172.119	2.026	1.739.650
Marmara A.	727	647.075	98	469.108	825	1.116.183
Bartın	97	157.208	263	922.816	360	1.080.024
Ünye	373	671.695	82	388.204	455	1.059.899
İğneada	82	6.520	45	1.017.893	127	1.024.413
Other	7.380	3.028.402	896	3.119.419	8.276	6.147.821
Total	38.219	148.495.099	34.141	668.302.426	72.360	816.797.526

Source: Republic of Turkey Ministry of Transport and Infrastructure

2.4. Cabotage Transportation

According to the Turkish Maritime Cabotage Law No. 815, the maritime transportation carried out by Turkish ships, being loaded at the harbors and seaports of Turkey and discharged at the harbors and seaports of Turkey, is defined as maritime cabotage.

The number of cargoes carried bulk and partially between 2007- 2018 in Turkish ports and wharves on ton basis is presented in Table 25.

Table 25: 2007-2018 Cabotage Transportation

Year	Cabotage Loading (tons)	Change %
2007	18.004.619	18,97%
2008	20.136.037	11,84%
2009	19.485.900	-3,23%
2010	19.434.485	-0,26%
2011	22.389.570	15,21%
2012	22.869.458	2,14%
2013	27.868.157	21,86%
2014	25.753.831	-7,59%
2015	26.578.284	3,20%
2016	27.050.225	1,78%
2017	29.898.010	10,50%
2018	29.550.554	-1,16%

Source: Republic of Turkey Ministry of Transport and Infrastructure

Graph 16: Rate of Change in Cabotage Transportation Between 2007-2018 (%)

The total cabotage transportation in 2018 is 29.550.554 tons. cabotage transportation increased about 64% between the years of 2007-2018.

Table 26: Cabotage Transportation by the Types of Cargoes in 2018 (mtons)

	Cabotage Loading	Cabotage Unloading	Total	%
Dry Bulk Cargo	7.387.667	8.019.732	15.407.399	26%
General Cargo	6.127.024	6.277.564	12.404.588	21%
Liquid Bulk Cargo	11.011.558	10.473.399	21.484.957	36%
Container	4.997.254	5.203.620	10.200.874	17%
Vehicle	27.051	30.976	58.027	0%
Total	29.550.554	30.005.291	59.555.845	100%

Source: Republic of Turkey Ministry of Transport and Infrastructure

Graph 17: 2018 Cabotage Transportation (Loading-Unloading) by the Types of Cargoes

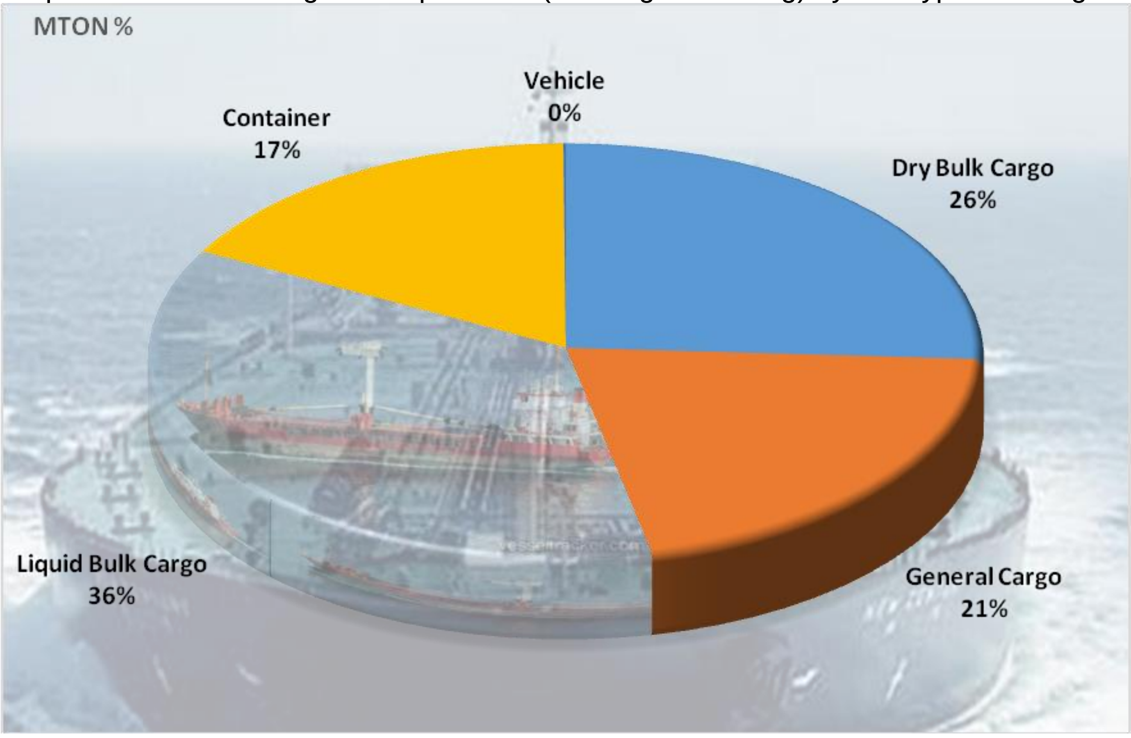


Table shows the cabotage transportation by cargo types. The first four cargo types are liquid bulk cargo (36%), dry bulk cargo (26%), general cargo (21%) and container (17%).
The ports with the largest shares in cabotage handling in 2018 are Kocaeli Port (18%), Aliağa Port (10%) and İskenderun Port (10%).
In cabotage loading, Kocaeli and İskenderun Ports lead with 18% and Aliağa Port follows with 17%, while in the case of cabotage unloading Kocaeli Port leads with 19%, Tekirdağ Port and Ambarlı Port follow with 10%and 8% respectively.

Table 27: 2018 Cabotage Transportation in Ports

Port Authority	Cabotage Loading	Cabotage Unloading	Total	%
Kocaeli	5.442.083	5.637.060	11.079.143	18,6%
İskenderun	5.385.047	1.373.430	6.758.477	11,3%
Aliağa	4.997.570	1.375.636	6.373.206	10,7%
Ambarlı	1.526.169	2.477.296	4.003.465	6,7%
Tekirdağ	720.165	2.990.610	3.710.775	6,2%
Gemlik	1.481.524	1.410.394	2.891.918	4,9%
Kdz.Ereğli	921.721	1.745.528	2.667.249	4,5%
İstanbul	62.328	2.312.804	2.375.132	4,0%
Samsun	1.304.187	830.553	2.134.740	3,6%
Antalya	452.635	1.541.371	1.994.006	3,3%
Botaş	0	1.895.576	1.895.576	3,2%
Karabiga	828.541	1.062.643	1.891.184	3,2%
Çanakkale	1.648.931	44.044	1.692.975	2,8%
Tuzla	737.405	625.327	1.362.732	2,3%
Mersin	352.783	810.995	1.163.778	2,0%
Ünye	686.196	434.735	1.120.931	1,9%
Marmara Ad.	1.021.063	1.272	1.022.335	1,7%
Bandırma	558.734	411.258	969.992	1,6%
İzmir	341.113	587.608	928.721	1,6%
Rize	11.000	561.983	572.983	1,0%
İnebolu	423.525	84.300	507.825	0,9%
Trabzon	160.166	326.377	486.543	0,8%
Tirebolu	0	433.957	433.957	0,7%
Yalova	500	348.664	349.164	0,6%
Hopa	126.197	137.575	263.772	0,4%
Zonguldak	110.880	131.903	242.783	0,4%
Bartın	98.359	47.345	145.704	0,2%
Güllük	126.997	2.200	129.197	0,2%
Göcek	0	101.293	101.293	0,2%
Bodrum	0	94.400	94.400	0,2%
Alanya	0	53.394	53.394	0,1%
Çeşme	0	43.950	43.950	0,1%
Fatsa	0	28.478	28.478	0,0%
Amasra	20.330	0	20.330	0,0%
Marmaris	0	18.493	18.493	0,0%
Bozcaada	0	7.858	7.858	0,0%
Giresun	0	5.785	5.785	0,0%
Dikili	4.311	196	4.507	0,0%
Karasu	0	3.420	3.420	0,0%
Erdek	0	2.119	2.119	0,0%
Taşucu	0	1.740	1.740	0,0%
Vakfıkebir	0	1.700	1.700	0,0%
İğneada	94	18	112	0,0%
Total	29.550.554	30.005.291	59.555.845	100,0%

Source: Republic of Turkey Ministry of Transport and Infrastructure

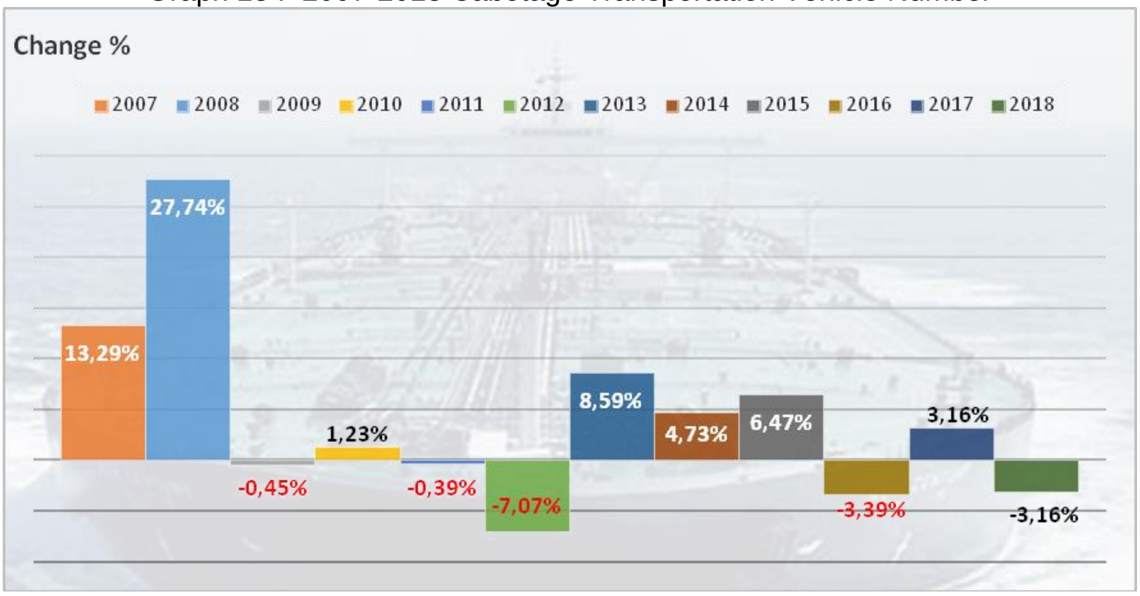
Table 28 : 2007-2018 Cabotage Transportation Vehicle Number

Years	Vehicle Number	Annual Change %	Vehicle (Number x Mile)	Annual Change %
2007	8.161.999	5,00%	59.942.527	13,29%
2008	8.866.797	8,64%	82.950.808	27,74%
2009	9.315.772	5,06%	82.580.396	-0,45%
2010	9.400.735	0,91%	83.607.444	1,23%
2011	10.402.917	10,66%	83.283.519	-0,39%
2012	10.710.645	2,96%	77.785.568	-7,07%
2013	11.318.561	5,68%	85.096.902	8,59%
2014	12.166.505	7,49%	89.322.962	4,73%
2015	13.042.399	7,20%	95.505.115	6,47%
2016	13.050.241	0,06%	92.267.227	-3,39%
2017	12.638.289	-3,15%	95.185.009	3,16%
2018	13.159.820	4,13%	92.868.442	3,16%

Source**:** Republic of Turkey Ministry of Transport and Infrastructure

In table 28, the changes in cabotage transportation of vehicles between the years 2007 and 2018 are being shown. The number of carried vehicles increased 61% in total between 2007 and 2018.

Graph 18 : 2007-2018 Cabotage Transportation Vehicle Number



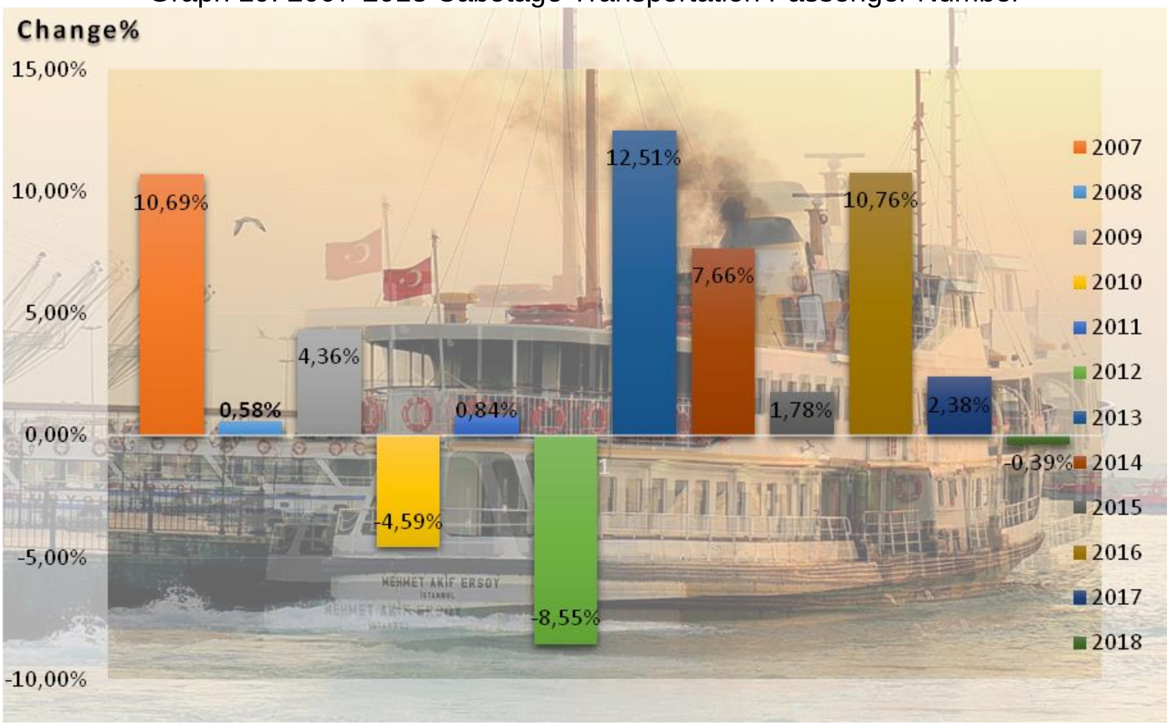
The Table about the numbers of passengers carried via cabotage transportation shows that the largest increase was in 2007 with 10.7% and then, in 2013 the increase has decreased to 3.4 %. Between the years 2007-2018, a decrease of 6.8 % in passenger number was observed.

Table 29 : 2007-2018 Cabotage Transportation Passenger Number

Year	Passenger Number	Annual Change %	Passenger (Number x Mile)	Change %
2007	149.824.929	10,70%	842.975.355	10,69%
2008	151.645.639	1,22%	847.917.253	0,58%
2009	159.194.370	4,98%	886.609.389	4,36%
2010	154.198.088	-3,14%	847.715.977	-4,59%
2011	156.842.003	1,71%	854.909.150	0,84%
2012	159.076.921	1,42%	787.572.051	-8,55%
2013	164.426.997	3,36%	900.226.869	12,51%
2014	161.048.004	-2,06%	974.923.011	7,66%
2015	163.723.544	1,66%	992.592.392	1,78%
2016	148.101.589	-9,54%	1.112.255.126	10,76%
2017	137.195.691	-7,36%	1.138.826.307	2,38%
2018	139.556.332	1,72%	1.134.349.263	-0,39%

Source: Republic of Turkey Ministry of Transport and Infrastructure

Graph 19: 2007-2018 Cabotage Transportation Passenger Number



2.5. Developments in International Sea Transportation

International sea transportation includes all transit cargoes that are loaded and unloaded in the harbors of Turkey, and Turkish exports and imports goods.

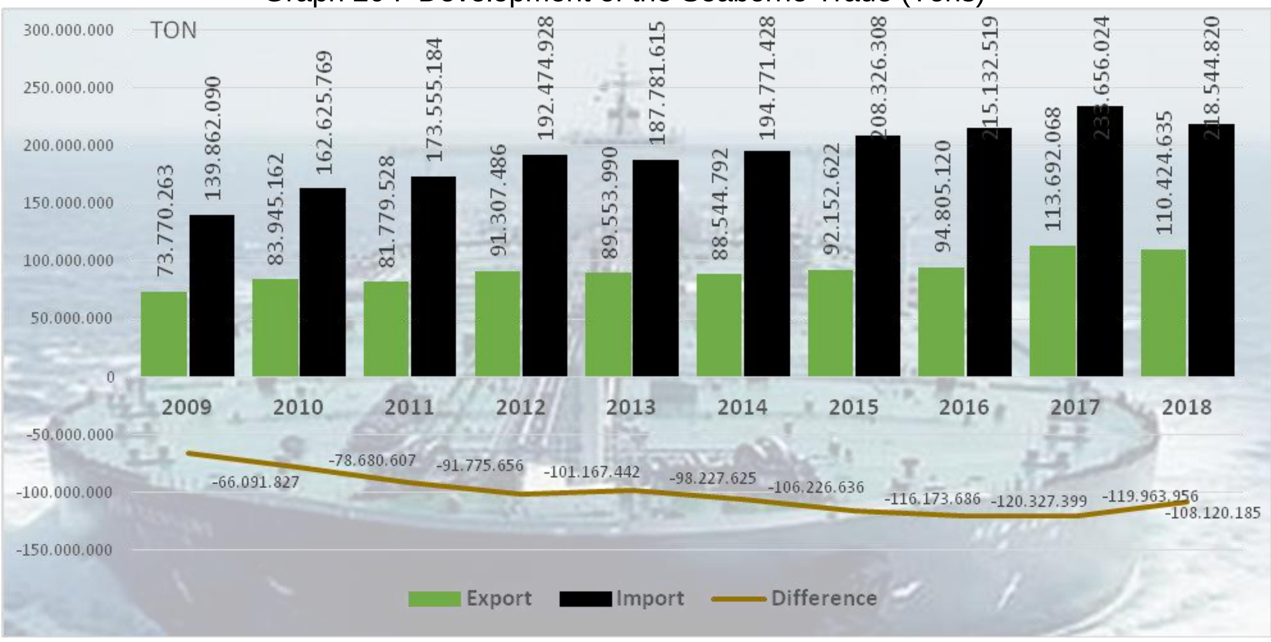
Table 30 : Share of Turkish Flagged Vessels Within International Shipping (2009-2018)

Years	Seaborne Trade Total	Export	Import	Turkish Flag	Turkish Flag %	Foreign Flag %
2009	213.632.353	73.770.263	139.862.090	29.965.566	14	86
2010	246.570.931	83.945.162	162.625.769	40.494.118	16	84
2011	255.334.712	81.779.528	173.555.184	42.396.010	17	83
2012	283.782.414	91.307.486	192.474.928	38.712.247	14	86
2013	277.335.605	89.553.990	187.781.615	34.610.534	12	88
2014	283.316.220	88.544.792	194.771.428	33.624.322	12	88
2015	300.478.930	92.152.622	208.326.308	36.479.586	12	88
2016	309.937.639	94.805.120	215.132.519	38.623.279	12	88
2017	347.348.092	113.692.068	233.656.024	36.815.820	11	89
2018	328.969.455	110.424.635	218.544.820	35.510.231	11	89%

Source: Republic of Turkey Ministry of Transport and Infrastructure

Compared with the previous year, export shipments decreased to 110 (110.424.635) million tons, import shipments decreased to 218 (218.544.820) million tons in 2018. The share of Turkish flag vessels transporting foreign trade cargoes has been realized as 11 % on average. As a whole, the share of the Turkish flag vessels transporting foreign trade cargoes between 2009-2018 has been realized as 13% on the average.

Graph 20 : Development of the Seaborne Trade (Tons)



The transportation of foreign trade cargoes by Turkish flag vessels includes 9% of the total of 218 million tonnes imports and 14% of the total of 110 million tonnes exports.

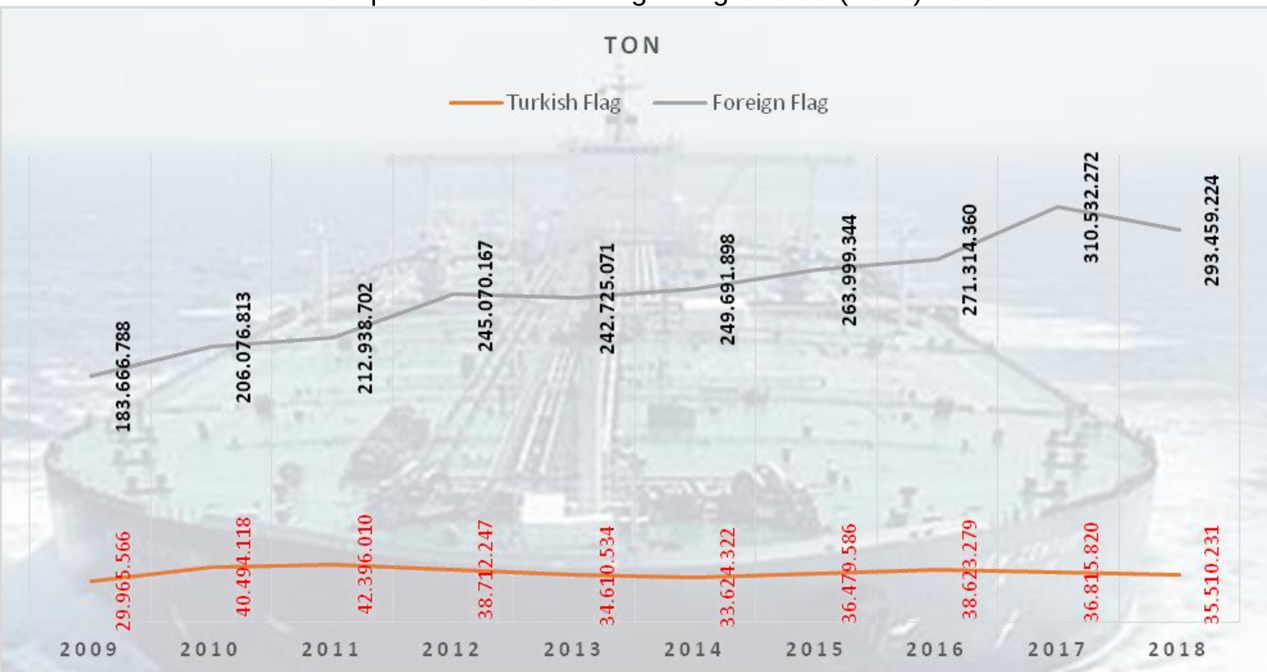
Table 31 : Foreign Trade Transportation by Flags (Tons)

Year	Turkish Flag Import	%	Turkish Flag Export	%	Foreign Flag Import	%	Foreign Flag Export	%	TF Seaborn Trade	FF Seaborn Trade
2009	20.387.046	15%	9.578.520	13	119.475.045	85	64.191.743	87	29.965.566	183.666.788
2010	28.878.432	18%	11.615.686	14	133.747.337	82	72.329.476	86	40.494.118	206.076.813
2011	30.122.065	17%	12.273.945	15	143.433.119	83	69.505.583	85	42.396.010	212.938.702
2012	26.476.350	14	12.235.897	13	165.998.578	86	79.071.589	87	38.712.247	245.070.167
2013	22.949.887	12	11.660.647	13	164.831.728	88	77.893.343	87	34.610.534	242.725.071
2014	20.880.367	11	12.743.955	14	173.891.061	89	75.800.837	86	33.624.322	249.691.898
2015	22.724.776	11	13.754.810	15	185.601.532	89	78.397.812	85	36.479.586	263.999.344
2016	23.350.424	11	15.272.855	16	191.782.095	89	79.532.265	84	38.623.279	271.314.360
2017	21.677.485	9%	15.138.335	13%	211.978.539	91%	98.553.733	87%	36.815.820	310.532.272
2018	19.850.109	9%	15.660.122	14%	198.694.711	91%	94.764.513	86%	35.510.231	293.459.224
							2017-2018 Change		-4%	-5%

Source: Republic of Turkey Ministry of Transport and Infrastructure

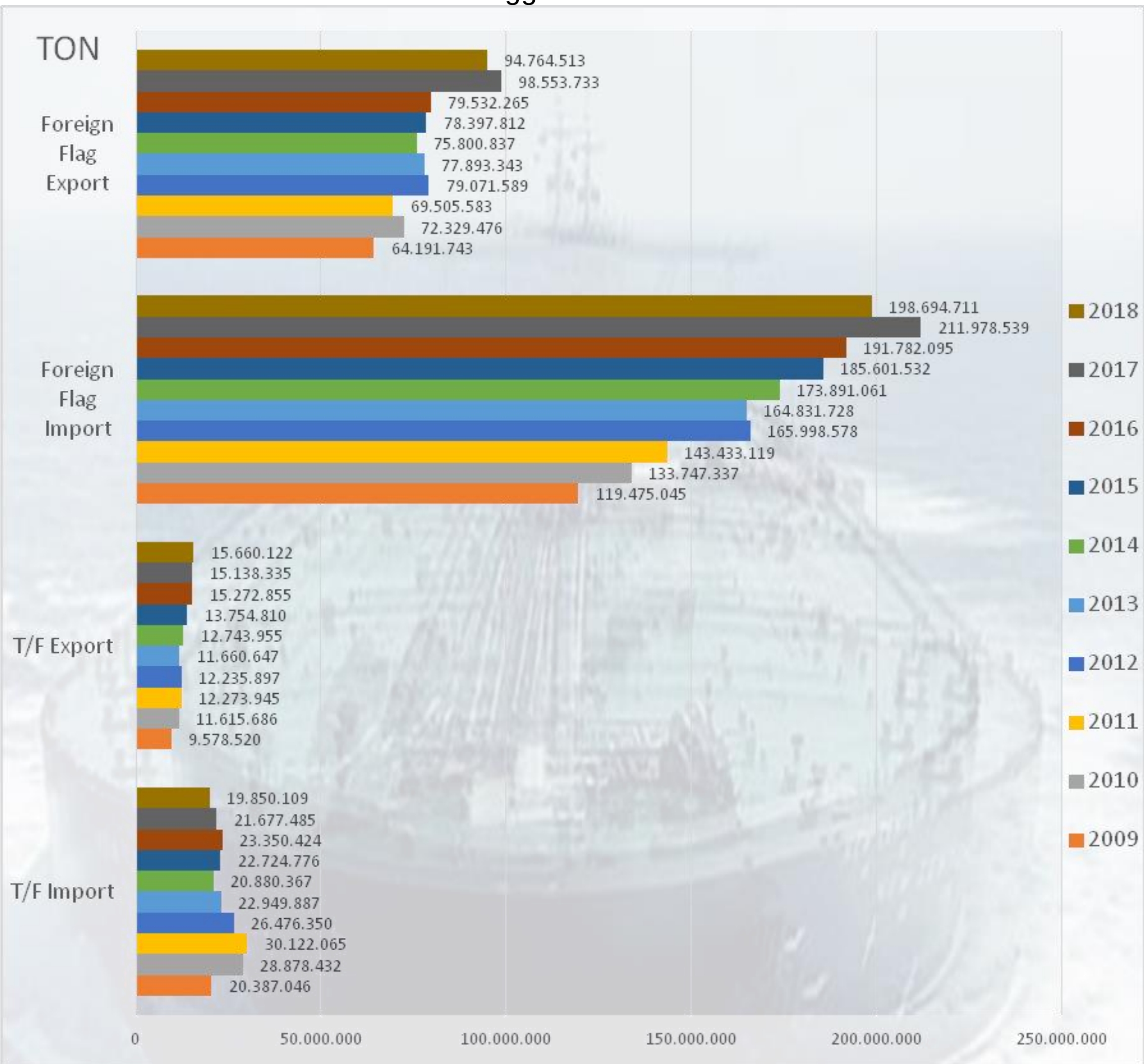
A comparison between 2009 and 2018 of the transportation of foreign trade cargoes reveals that the total amount increased from 183 million tons in 2009 to 293 million tonnes in 2018. Import goods increased from 119 million tons to 198 million tons, whereas export goods increased from 64 million tons to 94 million tons.

Graph 21: Turkish/Foreign Flag Shares (Tons)



The share of Turkish flag vessels in total foreign trade transportation increased to 15 million tons for exports and decreased to 19 million tons for imports in 2018 when compared to 9,5 and 20 million tons respectively in 2009.
The share of foreign flag vessels in total foreign trade transportation, increased to 94 million tons for exports and also increased to 198 million tons for imports in 2018, when compared with the 64 and 119 million tons in 2009.

Graph 22: Yearly Development Figures of Transportation Carried Out By Turkish/Foreign Flagged Vessels



2.6. Developments in Foreign Trade Transportation by Types of Cargoes

The major shipping segments of the 110 million tons exports and transit loading goods in 2018, are %34 Liquid Bulk Cargo and Container, 16% dry bulk Cargo, 13% general cargo, and %3 vehicles.

Table 32: Export And Transit Loading By Cargo Types

Cargo Types	Turkish Flag	Foreign Flag	Export	Transit Loading	Total	Export Share %
Dry Bulk Cargo	3.485.802	23.755.644	27.241.446	33.029	27.274.475	16%
General Cargo	2.177.135	20.389.816	22.566.951	8.533	22.575.484	13%
Liquid Cargo	338.078	6.759.544	7.097.622	52.116.163	59.213.785	34%
Container	5.895.245	42.729.153	48.624.398	10.917.499	59.541.897	34%
Vehicle	3.763.862	1.130.356	4.894.218	5.853	4.900.071	3%
Total	15.660.122	94.764.513	110.424.635	63.081.077	173.505.712	100%

Source: Republic of Turkey Ministry of Transport and Infrastructure

Major shipping segments of the 218 million tons imports and transit unloading goods in 2018 are 42% dry bulk cargo, 27% Liquid bulk cargo, 17% Container, %13 General Cargo and %2 vehicles.

Table 33 : Import And Transit Unloading By Cargo Types

Cargo Types	Turkish Flag	Foreign Flag	Import	Transit Unloading	Total	Import Share %
Dry Bulk Cargo	4.053.065	86.841.735	90.894.800	76.547	90.971.347	42%
General Cargo	2.255.520	26.714.823	28.970.343	27.350	28.997.693	13%
Liquid Cargo	6.248.721	52.478.922	58.727.643	290.684	59.018.327	27%
Container	4.131.778	32.204.828	36.336.606	8.152.088	44.488.694	17%
Vehicle	3.161.025	454.403	3.615.428	514	3.615.942	2%
Total	19.850.109	198.694.711	218.544.820	8.547.183	227.092.003	100%

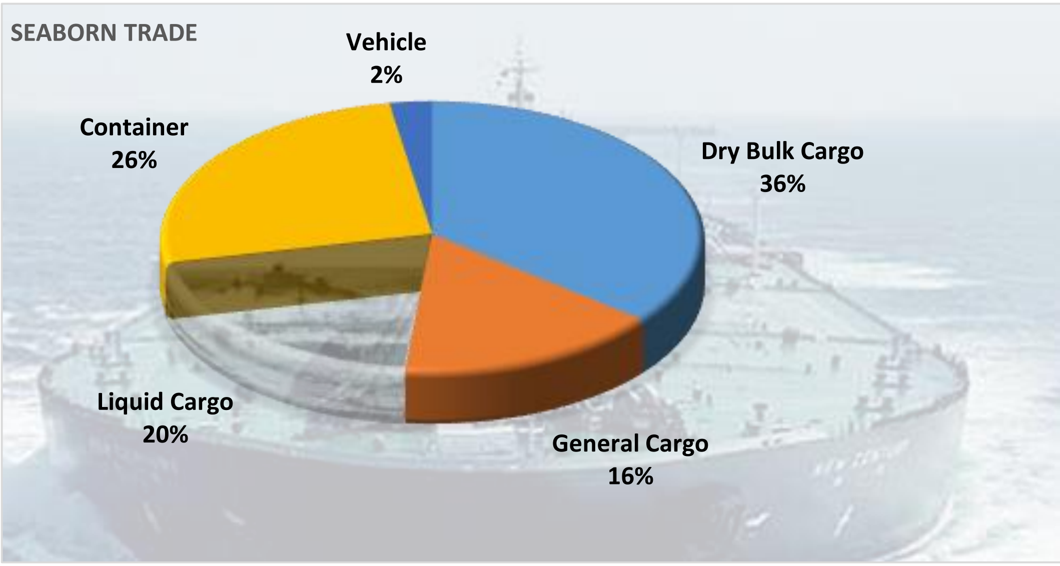
Source: Republic of Turkey Ministry of Transport and Infrastructure

Table 34 : Import and Export Figures by the Types of Cargoes

Cargo Types	Export	Import	Seaborn Trade
Dry Bulk Cargo	27.241.446	90.894.800	118.136.246
General Cargo	22.566.951	28.970.343	51.537.294
Liquid Cargo	7.097.622	58.727.643	65.825.265
Container	48.624.398	36.336.606	84.961.004
Vehicle	4.894.218	3.615.428	8.509.646
Total	110.424.635	218.544.820	328.969.455

Source: Republic of Turkey Ministry of Transport and Infrastructure

Graph 23 : Import and Export by the Types of Cargoes



2.7. The Progress in Seaborne Trade by Country Groups

In2018, 59 million tons of exports and 73 million tons of imports, totally (loading-unloading) 132 million tons of transportation have been realized to the OECD countries.
Table shows the export and import values to the OECD countries.

Table 35: Seaborne Export and Transit Loading of Turkey and OECD Countries in 2018

OECD Country	Turkish Flag	OECD Country Flag	Foreign Flag	Total Export	Transit Loading	2018 Total Loading	2017 Total Loading
Italy	5.536.609	429.353	6.101.271	12.067.233	36.526.710	48.593.943	55.419.982
Spain	1.136.356	0	9.011.529	10.147.885	1.316.756	11.464.641	9.125.741
Greece	1.033.523	201.806	5.841.755	7.077.084	1.168.418	8.245.502	6.685.970
U.S.	196.445	10.430	6.154.660	6.361.535	564.750	6.926.285	6.647.474
Isreal	1.564.607	87.533	4.735.538	6.387.678	270.249	6.657.927	5.881.133
U.K.	31.514	48.805	2.882.737	2.963.056	812.948	3.776.004	3.302.878
Belgium	35.828	0	3.667.862	3.703.690	57.683	3.761.373	3.160.374
Portugal	168.145	43.499	1.143.073	1.354.717	2.084.441	3.439.158	2.720.378
France	907.857	0	1.275.463	2.183.320	1.156.255	3.339.575	3.491.726
Canada	29.913	0	1.212.583	1.242.496	1.341.061	2.583.557	2.990.564
Holland	98.238	370.282	1.707.237	2.175.757	92.826	2.268.583	1.694.271
S.Korea	0	0	716.083	716.083	255.883	971.966	795.374
Germany	6.000	35.089	774.647	815.736	24.812	840.548	609.687
Sweden	0	0	489.636	489.636	0	489.636	458.410
Poland	32.800	0	304.098	336.898	0	336.898	290.734
Slovenia	26.838	0	221.905	248.743	9.652	258.395	311.679
Ireland	17.500	0	169.948	187.448	0	187.448	43.856
Australia	0	0	23.053	23.053	161.945	184.998	2.441
Chile	0	0	175.151	175.151	0	175.151	76.503
Mexico	0	0	90.383	90.383	0	90.383	9.123
Japan	1.430	3.005	66.101	70.536	0	70.536	105.294
Iceland	0	0	65.800	65.800	0	65.800	44.625
Finland	0	5.330	41.852	47.182	0	47.182	38.248
Denmark	440	0	34.694	35.134	3.110	38.244	28866
Lithuanian	0	0	21.125	21.125	0	21.125	0
Norway	0	0	4.345	4.345	11.115	15.460	4.305
Latvia	0	0	8.856	8.856	54	8.910	0
Slovakia	0	0	3.002	3.002	0	3.002	0
New Zeland	0	0	450	450	0	450	0
Austria	0	0	0	0	0	0	0
Estonia	0	0	0	0	0	0	15
Switzerland	0	0	0	0	0	0	0
Total	10.824.043	1.235.132	46.944.837	59.004.012	45.858.668	104.862.680	103.939.651

Source: Republic of Turkey Ministry of Transport and Infrastructure

The 3 major countries that stand out as Turkey's export & transit loading foreign trade partners among OECD countries with their respective shares are Italy with 46,3%, Spain with 10,9% and Greece with 7,8%.

Table 36 : Seaborne Import and Transit Loading of Turkey and OECD Countries in 2018 (2018)

OECD Country	Turkish Flag	OECD Country Flag	Foreign Flag	Import	Transit Unloading	2018 Total Unloading	2017 Total Unloading
U.S.	978.744	0	13.224.348	14.203.092	43.856	14.246.948	14.357.732
Greece	953.357	485.322	9.826.159	11.264.838	1.126.858	12.391.696	12.489.311
Isreal	417.848	10.317	6.524.384	6.952.549	387.844	7.340.393	5.154.930
Italy	2.955.396	435.514	3.021.217	6.412.127	250.636	6.662.763	8.573.271
Belgium	55.283	3.666	4.929.205	4.988.154	90.784	5.078.938	6.357.319
Holland	20.317	73.707	3.267.785	3.361.809	34.529	3.396.338	4.471.643
U.K.	35.965	92.741	3.036.027	3.164.733	46.953	3.211.686	4.294.959
Spain	149.300	4.319	2.564.567	2.718.186	98.767	2.816.953	3.030.711
Canada	165.000	0	2.472.729	2.637.729	15.446	2.653.175	2.585.124
France	894.967	0	1.640.324	2.535.291	79.020	2.614.311	2.866.300
Norway	504	156.591	2.393.124	2.550.219	0	2.550.219	3.375.551
S.Korea	0	828	1.986.127	1.986.955	245.808	2.232.763	2.621.310
Australia	0	0	2.087.345	2.087.345	22	2.087.367	1.573.148
Lithuanian	5.005	0	1.377.328	1.382.333	285	1.382.618	0
Finland	0	0	1.220.940	1.220.940	0	1.220.940	1.555.487
Germany	6.544	5.608	1.136.188	1.148.340	35.291	1.183.631	1.198.506
Denmark	0	0	889.786	889.786	0	889.786	714.576
Latvia	0	0	847.101	847.101	0	847.101	0
Sweden	0	0	697.359	697.359	0	697.359	620.584
Estonia	0	0	514.181	514.181	0	514.181	487.563
Portugal	16.678	17.027	337.956	371.661	56.594	428.255	416.036
Japan	0	0	263.511	263.511	39.469	302.980	155.563
Poland	0	0	208.104	208.104	3.255	211.359	196.535
Slovenia	16.577	0	156.380	172.957	21.180	194.137	116.558
Mexico	0	0	120.951	120.951	0	120.951	70.537
Chile	0	0	55.737	55.737	75	55.812	2.507
Switzerland	0	0	16.995	16.995	0	16.995	0
Ireland	0	0	10.120	10.120	88	10.208	11.651
Slovakia	3.975	0	0	3.975	0	3.975	0
Austria	0	0	269	269	0	269	0
Iceland	0	0	0	0	0	0	0
New Zeland	0	0	0	0	0	0	0
Total	6.675.460	1.285.640	64.826.247	72.787.347	2.576.760	75.364.107	77.297.412

Source: Republic of Turkey Ministry of Transport and Infrastructure

Among OECD countries, the first three that Turkey imports from / that conducts transit unloading in Turkey are USA (18,9%), Greece (16,4%) and Israel (9,7%). In 2018, the seaborne trade volume between Turkey and the OECD countries was 182 million metric tons of which 131 million metric tons were imports&exports while 51 million metric tons were transit cargoes. The seaborne trade share of the Turkish flag vessels was 9% and foreign flag vessels' was 91%.

Table 37 : International Maritime Trade of OECD Countries

OECD Country	2018 Seaborn Trade	Transit Loading - Unloading	2018 Loading-Unloading	%
Italy	18.479.360	37.027.982	55.507.342	30,4%
Greece	18.341.922	3.422.134	21.764.056	11,9%
U.S.	20.564.627	652.462	21.217.089	11,6%
Isreal	13.340.227	1.045.937	14.386.164	7,9%
Spain	12.866.071	1.514.290	14.380.361	7,9%
Belgium	8.691.844	239.251	8.931.095	4,9%
U.K.	6.127.789	906.854	7.034.643	3,8%
France	4.718.611	1.314.295	6.032.906	3,3%
Holland	5.537.566	161.884	5.699.450	3,1%
Canada	3.880.225	1.371.953	5.252.178	2,9%
Portugal	1.726.378	2.197.629	3.924.007	2,1%
S. Korea	2.703.038	747.499	3.450.537	1,9%
Norway	2.554.564	11.115	2.565.679	1,4%
Australia	2.110.398	161.989	2.272.387	1,2%
Germany	1.964.076	95.394	2.059.470	1,1%
Latvia	1.391.189	624	1.391.813	0,8%
Finland	1.268.122	0	1.268.122	0,7%
Sweden	1.186.995	0	1.186.995	0,6%
Denmark	924.920	3.110	928.030	0,5%
Lithuanian	868.226	0	868.226	0,5%
Poland	545.002	6.510	551.512	0,3%
Estonia	514.181	0	514.181	0,3%
Slovenia	421.700	52.012	473.712	0,3%
Japan	334.047	78.938	412.985	0,2%
Chile	230.888	150	231.038	0,1%
Mexico	211.334	0	211.334	0,1%
Ireland	197.568	176	197.744	0,1%
Iceland	65.800	0	65.800	0,0%
Switzerland	16.995	0	16.995	0,0%
Slovakia	6.977	0	6.977	0,0%
New Zeland	450	0	450	0,0%
Austria	269	0	269	0,0%
Total	131.791.359	51.012.188	182.803.547	100,0%

Source: Republic of Turkey Ministry of Transport and Infrastructure

In the year 2018, 50 million tons of exports and 46 million tons of imports or totally 96 million tons of seaborne transportation have been realized to the EU countries.
The 3 major countries that stand out as Turkey's export & transit loading foreign trade partners among EU countries are Italy with 50,2%, Spain with 11,8% and Greece with 8,5%.

Table 38 : Seaborne Trade (Export) to EU Countries and Transit Loading (ton) (2018)

EU Countries	Turkish Flag	EU Country Flag	Foreign Flag	Export	Transit Loading	2018 Total Loading	2017 Total Loading
Italy	5.536.609	429.353	6.101.271	12.067.233	36.526.710	48.593.943	55.419.982
Spain	1.136.356	0	9.011.529	10.147.885	1.316.756	11.464.641	9.125.741
Greece	1.033.523	201.806	5.841.755	7.077.084	1.168.418	8.245.502	6.685.970
U.K.	31.514	48.805	2.882.737	2.963.056	812.948	3.776.004	3.302.878
Belgium	35.828	0	3.667.862	3.703.690	57.683	3.761.373	3.160.374
Romania	368.231	0	1.841.992	2.210.223	1.356.589	3.566.812	3.366.265
Portugal	168.145	43.499	1.143.073	1.354.717	2.084.441	3.439.158	2.720.378
France	907.857	0	1.275.463	2.183.320	1.156.255	3.339.575	3.491.726
Malta	3.895	1.194.092	1.619.248	2.817.235	328.173	3.145.408	3.383.102
Holland	98.238	370.282	1.707.237	2.175.757	92.826	2.268.583	1.694.271
Bulgaria	425.016	0	824.919	1.249.935	819.122	2.069.057	1.732.772
Germany	6.000	35.089	774.647	815.736	24.812	840.548	609.687
Crotia	29.900	0	86.314	116.214	460.630	576.844	539.825
Sweden	0	0	489.636	489.636	0	489.636	458.410
Polland	32.800	0	304.098	336.898	0	336.898	290.734
Slovenia	26.838	0	221.905	248.743	9.652	258.395	311.679
S.Kıbrıs	14.822	0	208.385	223.207	0	223.207	0
Ireland	17.500	0	169.948	187.448	0	187.448	43.856
Finland	0	5.330	41.852	47.182	0	47.182	38.248
Denmark	440	0	34.694	35.134	3.110	38.244	28.866
Latvia	0	0	21.125	21.125	0	21.125	10.122
Letonya	0	0	8.856	8.856	54	8.910	41.156
Slovakia	0	0	3.002	3.002	0	3.002	0
Austria	0	0	0	0	0	0	0
Estonia	0	0	0	0	0	0	15
Total	9.873.512	2.328.256	38.281.548	50.483.316	46.218.179	96.701.495	96.456.057

Source: Republic of Turkey Ministry of Transport and Infrastructure

The 3 major countries that stand out as Turkey's import & transit unloading foreign trade partners among EU countries are Greece with 23,5%, Italy with 12,6% and Belgium with 9,6%.

Table 39 : Seaborne Trade (Import) to EU Countries (mTon) (2017-2018)

	Turkish Flag	EU Country Flag	Foreign Flag	Import	Transit Unloading	2018 Total Unloading	2017 Total Unloading
Greece	953.357	485.322	9.826.159	11.264.838	1.126.858	12.391.696	12.489.311
Italy	2.955.396	435.514	3.021.217	6.412.127	250.636	6.662.763	8.573.271
Belgium	55.283	3.666	4.929.205	4.988.154	90.784	5.078.938	6.357.319
Romania	465.357	0	2.274.588	2.739.945	756.654	3.496.599	4.516.069
Holland	20.317	73.707	3.267.785	3.361.809	34.529	3.396.338	4.471.643
U.K.	35.965	92.741	3.036.027	3.164.733	46.953	3.211.686	4.294.959
Bulgaria	1.095.936	0	1.597.152	2.693.088	396.933	3.090.021	4.451.710
Spain	149.300	4.319	2.564.567	2.718.186	98.767	2.816.953	3.030.711
France	894.967	0	1.640.324	2.535.291	79.020	2.614.311	2.866.300
Malta	2.000	313.796	1.436.407	1.752.203	164.115	1.916.318	2.478.826
Letonya	5.005	0	1.377.328	1.382.333	285	1.382.618	1.368.891
Finland	0	0	1.220.940	1.220.940	0	1.220.940	1.555.487
Germany	6.544	5.608	1.136.188	1.148.340	35.291	1.183.631	1.198.506
Denmark	0	0	889.786	889.786	0	889.786	714.576
Latvia	0	0	847.101	847.101	0	847.101	1.594.407
Sweden	0	0	697.359	697.359	0	697.359	620.584
Estonia	0	0	514.181	514.181	0	514.181	487.563
Portugal	16.678	17.027	337.956	371.661	56.594	428.255	416.036
Crotia	55.660	0	323.751	379.411	1.588	380.999	549.400
Polland	0	0	208.104	208.104	3.255	211.359	196.535
Slovenia	16.577	0	156.380	172.957	21.180	194.137	116.558
Ireland	0	0	10.120	10.120	88	10.208	11.651
S.Cypres	802	0	4.036	4.838	88	4.926	0
Slovakia	3.975	0	0	3.975	0	3.975	0
Austria	0	0	269	269	0	269	0
Total	6.733.119	1.431.700	41.316.661	49.481.480	3.163.618	52.645.367	62.360.313

Source: Republic of Turkey Ministry of Transport and Infrastructure

Graph 24: Seaborne Trade to EU Countries Tons (2017-2018)

In 2017, 15 million tons of exports and 76 million tons of imports, totally 91 million tons seaborne transportation have been realized to the BSEC countries.
The first 3 major countries that stand out as Turkey's export & transit loading foreign trade partners among BSEC countries are Greece with 36.4%, Romania with 15.7%, Russian with 15.1%.

Table 40 : Seaborne Trade to BSEC Countries (Tons) 2017-2018

BSEC Countries	Turkish Flag	BSEC Country Flag	Foreign Flag	Export	Transit Loading	2018 Total Loading	2017 Total Loading
Greece	1.033.523	201.806	5.841.755	7.077.084	1.168.418	8.245.502	6.685.970
Russian	366.710	371.204	2.037.356	2.775.270	659.450	3.434.720	3.278.869
Romania	368.231	0	1.841.992	2.210.223	1.356.589	3.566.812	3.366.265
Ukraine	337.267	123.967	1.507.520	1.968.754	739.217	2.707.971	2.207.686
Bulgaria	425.016	0	824.919	1.249.935	819.122	2.069.057	1.732.772
Georgia	808.686	0	338.045	1.146.731	1.156.671	2.303.402	1.773.919
Albania	2.714	1.800	233.302	237.816	0	237.816	269.117
Moldova	2.250	0	82.828	85.078	0	85.078	8.050
Azerbaijan	0	0	8.300	8.300	2.409	10.709	10.881
Total	3.344.397	698.777	12.716.017	16.759.191	5.901.876	22.661.067	19.333.529

Source: Republic of Turkey Ministry of Transport and Infrastructure

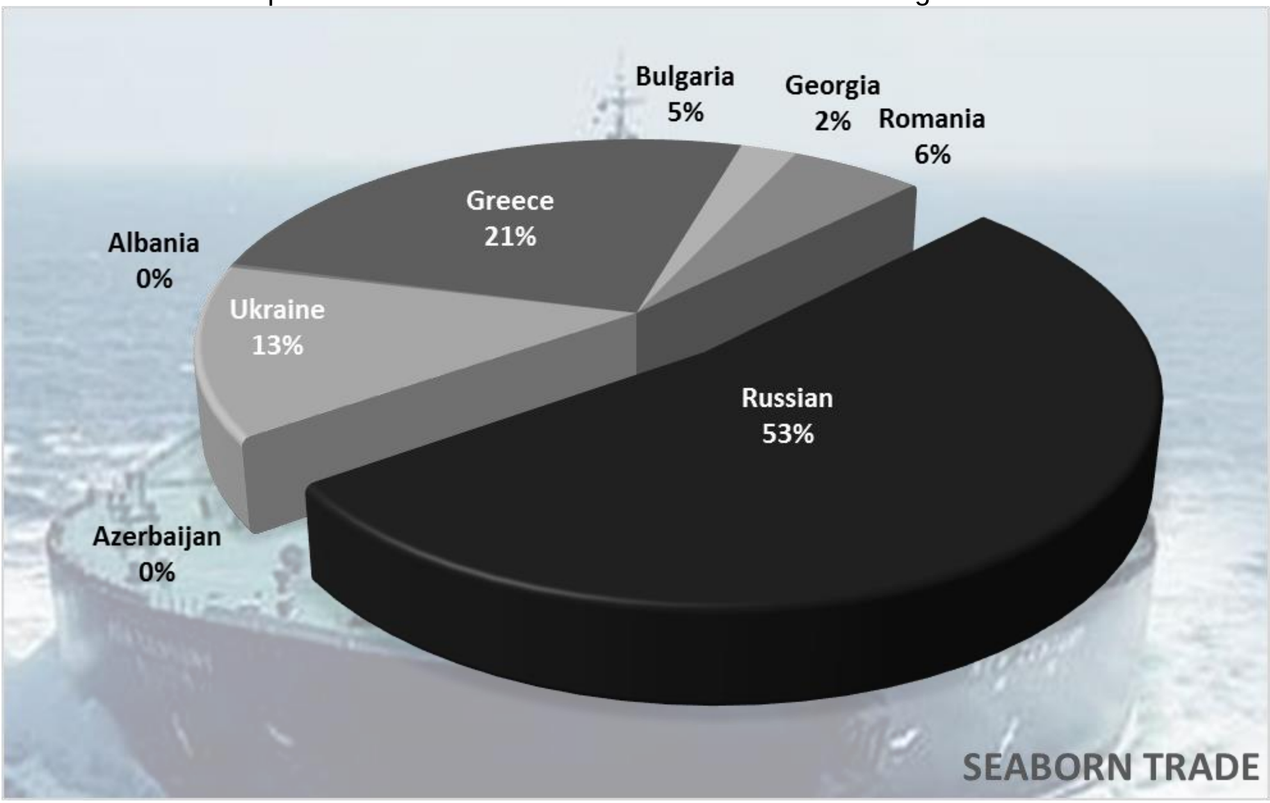
The first 3 major countries that stand out as Turkey's import & transit unloading foreign trade partners among BSEC countries are Russia with 59.4%, Ukraine with 13.7% and Greece with 16.3%.

Table 41 : Seaborne Trade to BSEC Countries (Tons)

BSEC Countries	Turkish Flag	BSEC Country Flag	Foreign Flag	Import	Transit Unloading	2018 Total Loading	2017 Total Unloading
Russian	3.266.323	4.321.346	36.052.711	43.640.380	1.421.119	45.061.499	44.897.327
Greece	953.357	485.322	9.826.159	11.264.838	1.126.858	12.391.696	12.489.311
Ukraine	1.704.044	624.448	7.443.314	9.771.806	647.694	10.419.500	13.032.672
Romania	465.357	0	2.274.588	2.739.945	756.654	3.496.599	4.516.069
Bulgaria	1.095.936	0	1.597.152	2.693.088	396.933	3.090.021	4.451.710
Georgia	425.726	0	533.399	959.125	314.064	1.273.189	937.749
Moldova	6.250	2.711	105.533	114.494	0	114.494	171.609
Albania	2.239	0	21.264	23.503	0	23.503	18.153
Azerbaijan	0	0	9.676	9.676	0	9.676	60.037
Total	7.919.232	5.433.827	57.863.796	71.216.855	4.663.322	75.880.177	80.574.637

Source: Republic of Turkey Ministry of Transport and Infrastructure

Graph 25 : Seaborne Trade to BSEC Countries Foreign Trade



Graph 26 : Seaborne Trade (Export-Import) to BSEC Countries Foreign Trade 2017-2018

2.8. World Container Fleet by Country of Domicile

The “country of domicile” examination (including container ships of 1.000 GT and over) shows that at the beginning of 2018, 20.796.000 TEU of the container capacity was not registered in the country of domicile of the owner, but flagged out.

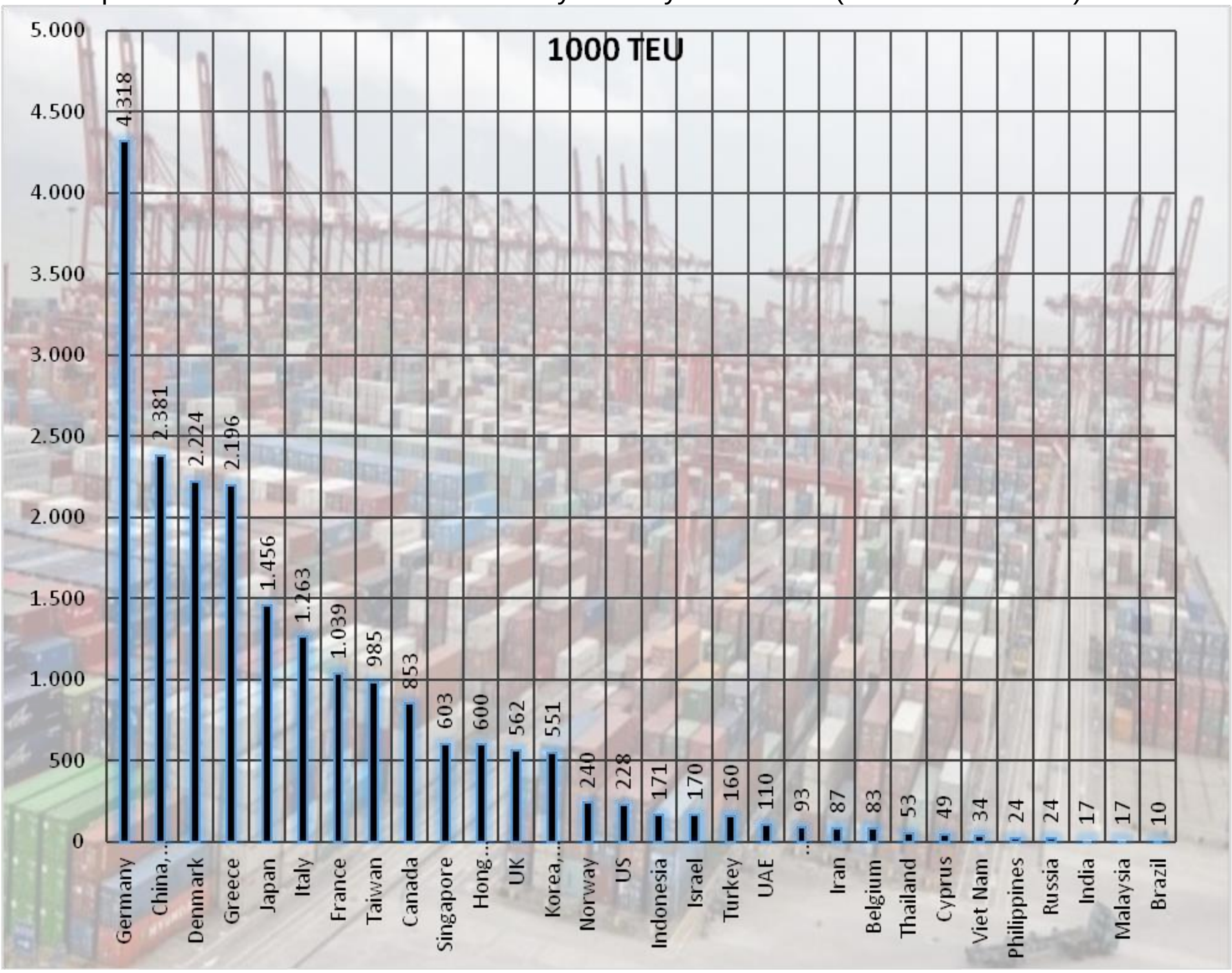
Table 42 : World Full Container Fleet by Country of Domicile (1000 GT and over) 2018

TEU Rank	Country of Control	National Flag			Foreign Flag			Total Fleet			FF TEU %
		No	1000 DWT	1000 TEU	No	1000 DWT	1000 TEU	No	1000 DWT	1000 TEU	
1	Germany	91	7.191	598	1.099	45.859	3.720	1.190	53.050	4.318	86.1
2	China, PR of	237	8.779	667	292	19.619	1.714	529	28.397	2.381	72.0
3	Denmark	120	12.344	1.128	202	13.836	1.096	322	26.180	2.224	49.3
4	Greece	6	457	40	481	26.463	2.156	487	26.919	2.196	98.2
5	Japan	12	776	72	266	16.051	1.384	278	16.827	1.456	95.1
6	Italy				207	15.775	1.263	207	15.775	1.263	100.0
7	France	24	2.341	196	111	9.926	843	135	12.268	1.039	81.1
8	Taiwan	35	1.740	137	219	10.508	848	254	12.248	985	86.1
9	Canada	1	15	1	105	9.765	852	106	9.780	853	99.9
10	Singapore	124	4.567	355	79	3.106	248	203	7.674	603	41.1
11	Hong Kong (SAR)	76	5.983	543	31	761	58	107	6.744	600	9.6
12	UK	13	895	78	114	6.140	483	127	7.034	562	86.0
13	Korea, Rep. of	84	1.359	101	112	5.551	450	196	6.910	551	81.6
14	Norway				62	2.952	240	62	2.952	240	100.0
15	US	30	914	67	47	2.079	161	77	2.993	228	70.5
16	Indonesia	191	2.282	155	12	215	16	203	2.497	171	9.2
17	Israel	5	288	23	26	1.839	147	31	2.127	170	86.4
18	Turkey	51	1.138	83	39	998	77	90	2.135	160	48.1
19	UAE	2	28	2	59	1.438	108	61	1.466	110	98.1
20	Netherlands	30	371	30	57	796	63	87	1.167	93	67.6
21	Iran	24	1.037	79	2	93	7	26	1.130	87	8.4
22	Belgium	0	0	0	26	1.067	83	26	1.067	83	100.0
23	Thailand	24	280	21	25	422	32	49	702	53	60.3
24	Cyprus	2	12	1	12	606	48	14	618	49	97.8
25	Viet Nam	38	407	29	7	64	5	45	472	34	13.7
26	Philippines	36	214	17	5	100	7	41	314	24	30.7
27	Russia	13	87	7	11	229	17	24	316	24	70.7
28	India	7	183	14	3	43	3	10	226	17	19.4
29	Malaysia	20	230	16	2	8	0	22	238	17	2.0
30	Brazil	4	139	10	0	0	0	4	139	10	100.0
	Total 30 countries	1.300	54.058	4.472	3.713	196.308	16.126	5.013	250.367	20.599	78.3
	Others	51	502	37	56	513	41	107	1.014	78	52.3
	Subtotal	1.351	54.560	4.510	3.769	196.821	16.167	5.120	251.381	20.677	78.2
	Unknown							13	1.279	120	
	WORLD TOTAL							5.133	252.660	20.796	

Source : ISL January-February 2018

With respect to the owner countries, German shipowners control by far the largest part of the world container fleet, namely 4,3 million TEU (1.190 container vessels) followed by China 2.3 million TEU (529container vessels) and Denmark 2.2 million TEU (322 container vessels).

Graph 27 : World Full Container Fleet by Country of Domicile (*1000 GT and over*) 2018



TEU based container transportations in 2018 realized as follows in their respective subgroups; exports became 4 million TEU, imports 4.2 million TEU, cabotage loading-unloading 935.661 TEU and transit 1.4 million TEU.

Transportation volume of Turkey’s container transports by seaway was 4.4 million TEU in 2009; in 2018 it became 9.9 million TEU, at the same period imports cargoes increased to 4.2 million TEU from 2.1 million TEU and the exports cargoes increased to 4.1 million TEU when compared with 2.1 million TEU in 2009.

Table 43 : Container Handling 2006-2017 (TEU)

Year	Loading (TEU)			Unloading (TEU)			Seaborn Trade (TEU)			
	Cabotage	Export	Total	Cabotage	Import	Total	Seborn Trade	Transit Handling	Total	Change %
2009	70.329	2.131.948	2.202.277	71.696	2.117.764	2.189.460	4.391.737	12.542	4.404.279	-15,17%
2010	104.278	2.306.587	2.410.865	104.047	2.354.304	2.458.351	4.869.216	874.239	5.743.455	30,41%
2011	154.338	2.690.889	2.845.227	305.256	2.770.190	3.075.446	5.461.079	757.171	6.218.250	8,27%
2012	236.905	2.879.122	3.116.027	235.440	2.942.562	3.178.001	5.821.683	898.368	6.720.051	8,07%
2013	274.589	3.165.653	3.440.242	269.908	3.199.969	3.469.877	6.365.622	989.815	7.355.437	9,46%
2014	266.997	3.488.008	3.755.005	260.067	3.581.811	3.841.878	7.069.819	754.238	7.824.057	6,37%
2015	305.882	3.394.508	3.700.390	300.182	3.454.345	3.754.527	6.848.854	691.481	7.540.335	-3,63%
2016	365.517	3.543.804	3.909.321	372.795	3.607.086	3.979.881	7.150.890	872.772	8.023.662	6,41%
2017	467.384	3.866.874	4.334.258	468.137	3.975.205	4.443.341	7.842.079	1.232.937	9.075.015	13,10%
2018	453.030	4.160.124	4.613.154	482.631	4.259.029	4.741.661	8.419.153	1.489.184	9.908.337	9,18%
2018 Container Handling 10.843.998 TEU										

Source: Republic of Turkey Ministry of Transport and Infrastructure

Graph 28 : Yearly Change of Foreign Trade Between 2009-2018 (TEU)

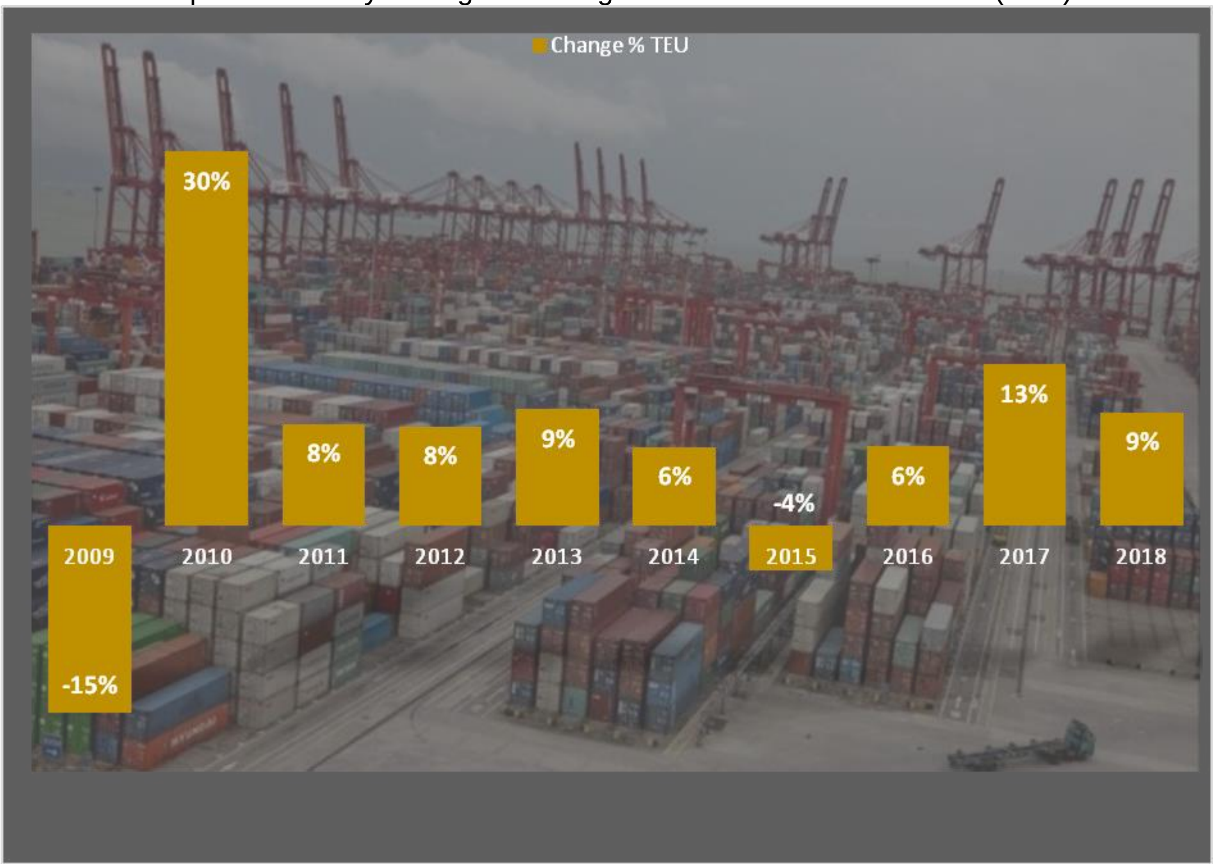


Table 44 : Countries Handled Container Over 100.000 TEU

Country	Export	Import	Seaborn Trade	Transit Handling	2018 Total Handling	2017 Total Handling
	TEU	TEU	TEU	TEU	TEU	TEU
Greece	449.909	858.450	1.308.360	171.591	1.479.950	1.311.562
Egypt	464.774	585.999	1.050.773	84.283	1.135.056	1.242.965
Israel	239.074	478.944	718.018	48.509	766.527	492.374
Italy	358.338	225.815	584.153	38.507	622.660	669.738
Spain	346.517	136.945	483.462	33.775	517.237	425.739
Saudi Arabia	287.786	156.365	444.150	58.974	503.124	222.614
Chine	146.794	173.861	320.655	103.462	424.117	519.800
Belgium	183.708	193.260	376.968	12.253	389.221	421.523
Malta	190.912	150.635	341.547	21.023	362.570	379.451
Russia	97.611	94.661	192.272	154.047	346.319	348.637
Lebanon	125.079	207.420	332.499	11.993	344.492	308.834
Georgia	72.044	123.480	195.524	122.421	317.944	240.831
Romania	55.470	70.329	125.799	130.866	256.665	282.429
U.K.	178.823	26.716	205.538	10.641	216.179	237.714
Singapore	116.481	62.214	178.695	27.862	206.557	253.497
Korea Rep.of	70.775	94.864	165.639	27.564	193.203	194.338
Bulgaria	47.998	46.687	94.685	94.852	189.537	151.751
Ukrania	37.343	50.164	87.507	90.581	178.087	151.989
Algeria	56.505	73.024	129.529	31.225	160.754	122.048
U.S.	68.574	61.881	130.455	5.651	136.106	124.044
U.A.E.	75.375	21.961	97.336	37.214	134.550	122.002
Libya	64.190	54.410	118.600	10.473	129.073	101.281
Portugal	66.318	20.613	86.931	26.444	113.375	80.085
France	70.034	28.094	98.128	15.135	113.262	97.023
Other	289.692	262.242	551.934	119.840	671.774	572.747
Total	4.160.124	4.259.030	8.419.154	1.489.183	9.908.337	9.075.015

Source: Republic of Turkey Ministry of Transport and Infrastructure

As of 2018, the countries which Turkey performed foreign trade with / conducted transit container transportation are as follows: Greece (14.9%), Egypt (11.4%) and Israel (7.7%). The data of the foreign trade/transit container transportation of top 18 countries are shown in the Table 44.

2.9. Vehicle Transportation Through Ro-Ro Lines

Ro-Ro lines of Turkey in 2018 are shown below. Table 45 above shows the amounts of the transported full vehicles (export and import) in the years 2018.

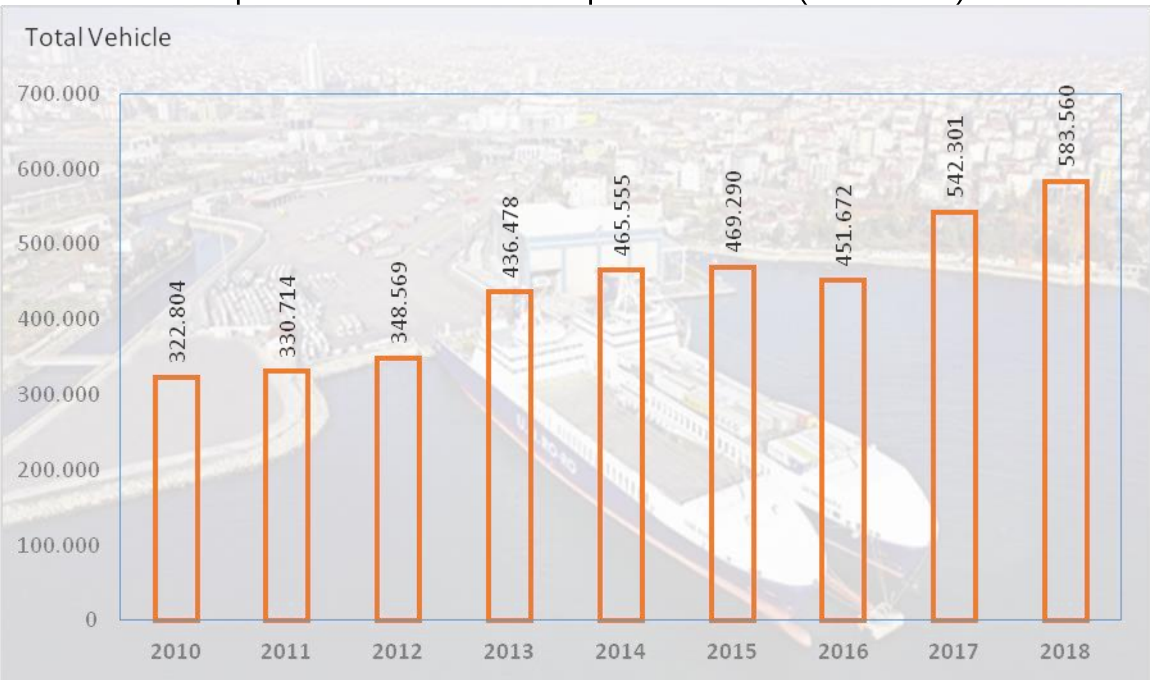
Table 45 : Ro-Ro Lines Transported Vehicles 2017-2018

Regions	Ro-Ro Lines	2018 Incoming Vehicle	2018 Outbound Vehicle	2018 Total Vehicle	2017 Total Vehicle
European	TUZLA(PENDİK)-TRIESTE	64.970	74.431	139.401	116.208
	TUZLA(PENDİK)-TOULEN	31.463	53.281	84.744	69.953
	TUZLA(PENDİK)-ANCONA	0	0	0	841
	YALOVA-LAVRIO-TRIESTE	32.627	34.508	67.135	18.770
	İSTANBUL(HAYDARPAŞA)-TRIESTE	0	0	0	55.552
	İSTANBUL(HAYDARPAŞA)-SETE	0	0	0	778
	ÇEŞME-TRIESTE	24.640	29.493	54.133	52.388
	MERSİN-TRIESTE	17.220	16.706	33.926	42.341
	İZMİR(ALSANCAK)-SETE	7.079	6.899	13.978	14.513
	AMBARLI-TRIESTE	2.501	12.709	15.210	16.495
	İZMİR(ALSANCAK)-TRIESTE	1.877	3.139	5.016	8.533
	TUZLA(PENDİK)-BARİ	272	10.238	10.510	2.764
	GEMLİK(BORUSAN)- ZEEBRUGGE	0	790	790	549
	TUZLA(PENDİK)-PATRAS	5.525	3.388	8.913	0
	ÇEŞME-SETE	3.517	3.715	7.232	0
	İZMİT-ZEEBRUGGE	0	0	0	808
	YALOVA-SETE	266	928	1.194	0
	TOTAL	191.957	250.225	442.182	400.493
Black Sea	İSTANBUL(HAYDARPAŞA)-CHORNOMORSK (ILYICHEVSKY)	11.142	11.818	22.960	18.689
	SAMSUN-GELİNCİK	4.712	6.748	11.460	10.916
	ZONGULDAK-CHORNOMORSK (ILYICHEVSKY)	7.318	7.522	14.840	15.609
	SAMSUN-TUAPSE	1.733	4.269	6.002	3.312
	SAMSUN-NOVOROSSİYSK	452	1.666	2.118	6.803
	SAMSUN-KAVKAZ TREN FERİ HATTI	30	171	201	509
	TOTAL	25.387	32.194	57.581	55.838
Mediterranean	MERSİN-MAGUSA	14.574	18.836	33.410	31.979
	TAŞUCU-GİRNE	6.826	7.986	14.812	14.241
	TAŞUCU-TRİPOLİ	7.256	7.200	14.456	19.788
	MERSİN-GİRNE	5.042	4.972	10.014	10.807
	İSKENDERUN-DHUBA	2.151	2.181	4.332	5.251
	MERSİN-HAIFA	1.255	1.208	2.463	1.790
	TAŞUCU-LATAKYA	374	379	753	0
	TOTAL	37.478	42.762	80.240	83.856
Other	TOTAL	869	2.688	3.557	2.114
Total		255.691	327.869	583.560	542.301

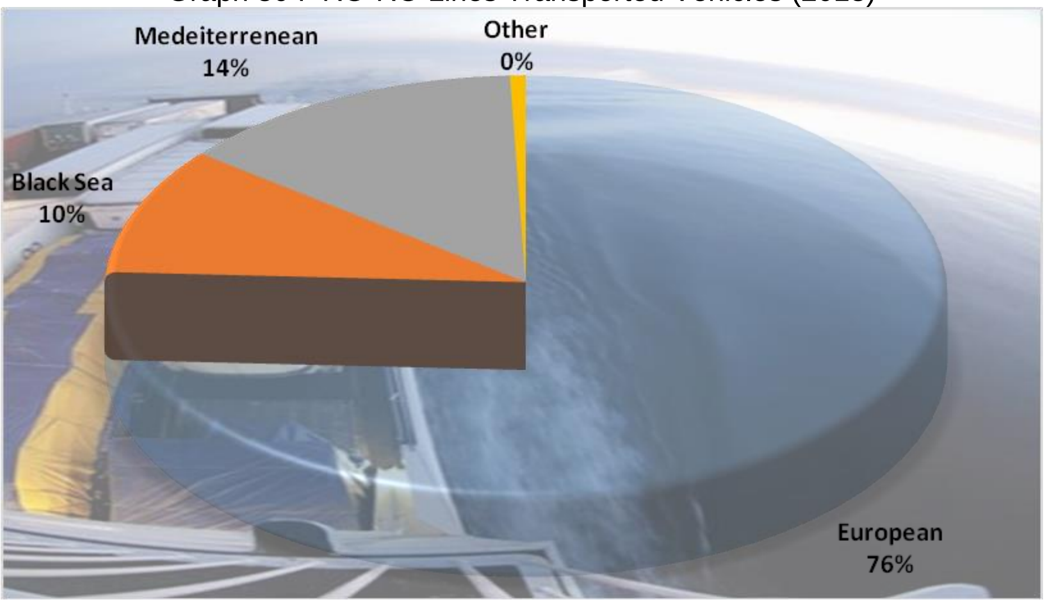
Source: Republic of Turkey Ministry of Transport and Infrastructure

In the 17 European lines 442.182 vehicles have been transported in 2018. (76%)
In the 6 Black Sea lines 57.581 vehicles have been transported in 2018. (10%)
In the 7 Mediterranean lines 80.240 vehicles have been transported in 2018. (14%)

Graph 29 : Ro-Ro Lines Transported Vehicles (2010- 2018)



Graph 30 : RO-RO Lines Transported Vehicles (2018)



CHAPTER III

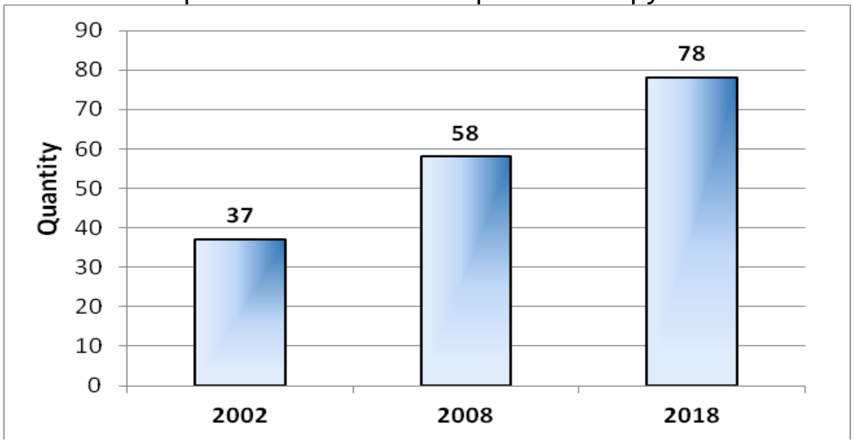
SHIPBUILDING INDUSTRY

3. SHIPBUILDING INDUSTRY

3.1. General Outlook of the Turkish Shipbuilding Industry

The number of operative shipyards, according to the facility definition in the local regulations, raised up to 78 as of April 2019 while it was only 37 in 2002. The quantity of shipyards under construction is 25 and also 15 areas are defined as shipyard investment areas as of April 2019.

Graph 31 : 2002 / 2019 Operative Shipyards

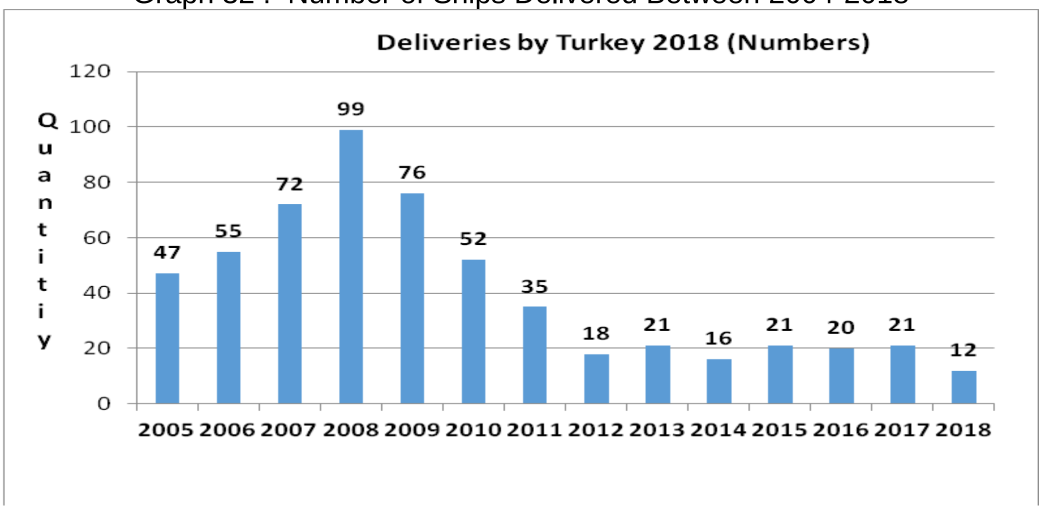


Source: Ministry of Transport and Infrastrucure 04/2019

Shipbuilding industry is a branch of heavy industry which provides;

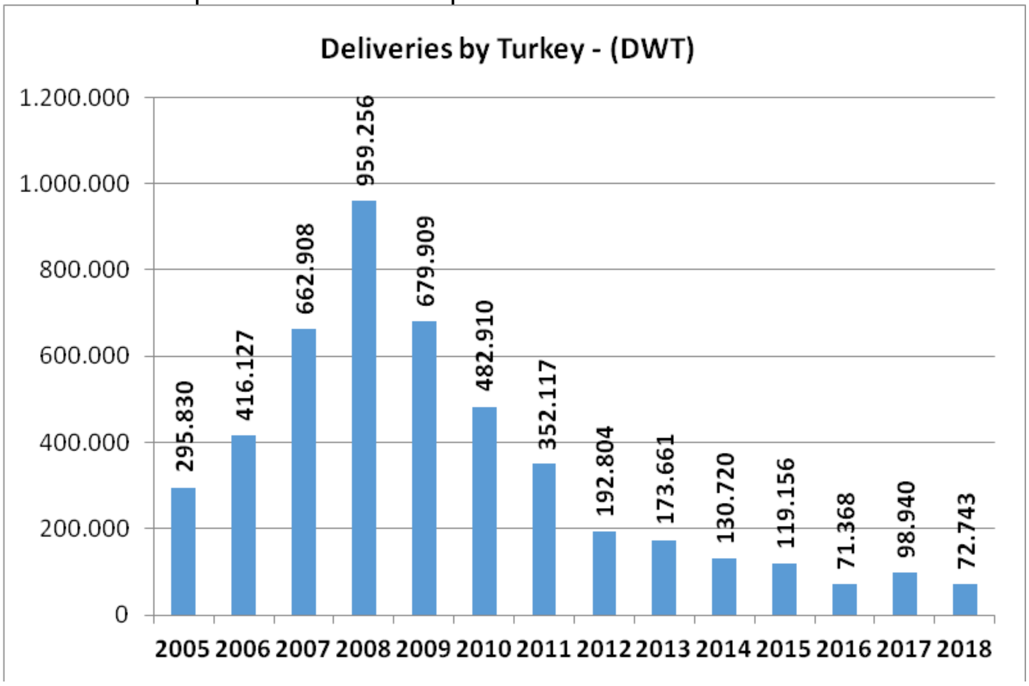
Progress in sub-industry
Increase in employment and the population in the neighbourhood
Rising the standards of quality of sub-industries
Increase of qualified productive power
Progress in growth and strength of regional trade
Rising the standard of living and the cultural level of labour
Employment in ratio 1 to 7 including sub-industry.
In the period 1995-2001 Turkish Shipyards delivered 166 ships with a total size of 836,000DWT. Also, during the next five years between 2002 and 2007, 443 ships with total DWT of 3.051.000 had been delivered.
In 2018, 12 ships with total DWT of 72.743 tons have been delivered.

Graph 32 : Number of Ships Delivered Between 2004-2018



Source: Clarkson Research Services 02/2019

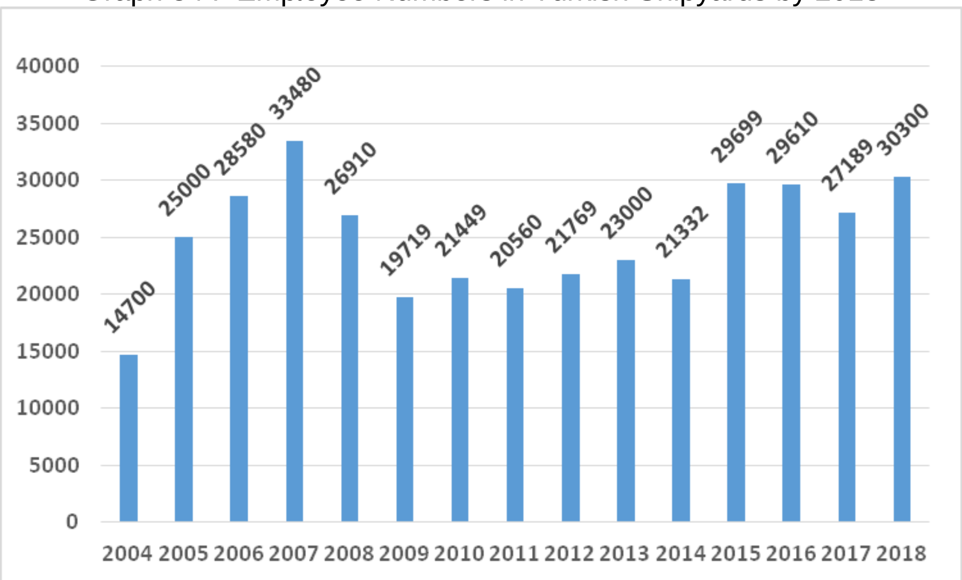
Graph 33 : DWT of Ships Delivered Between 2004-2018



Source: Clarkson Research Services 02/2019

Some of the operative shipyards in Turkey are still in the process of modernization and extension operations but on the other hand, due to the global economic crisis, some of these modernization and extension projects are cancelled or suspended due to the sanctions and restrictions imposed by the banks on the shipyards.
Furthermore, shipyards which are under construction in different cities of Turkey, have been also affected by the global economic crisis.

Graph 34 : Employee Numbers in Turkish Shipyards by 2018



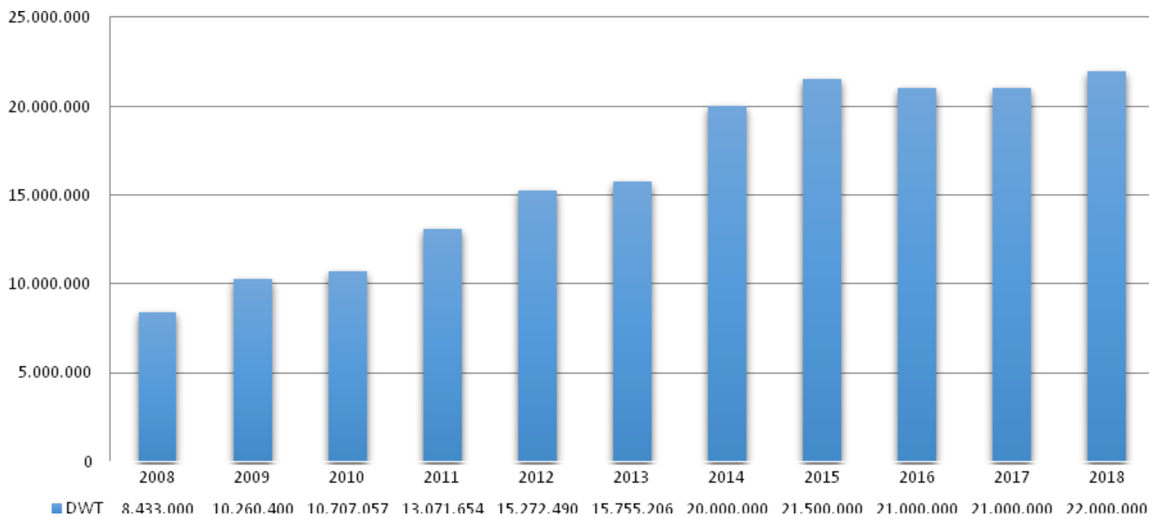
(*2018 data includes harbor launch and manufacture place workers)
Source: Ministry of Transport and Infrastrucure 03/2019

Before 2003; shipyards could take ship orders with a maximum tonnage of 16.000 DWT. By 2007, the picture improved to 180.000 DWT but unfortunately, the construction of such did not start due to the economic crisis.

Most of the ships constructed in Turkish shipyards are built for export purposes. Especially between 2002-2009, almost all of these ships were exported mainly to the EU member countries.

By the end of 2012, new orders incoming to our yards decreased to 0.5 million DWT. Due to the lack of new orders, the shipyards are now mostly involved with repair and maintenance activities. In 2013, 15.755.206 DWT of repair and maintenance had been done in Turkish shipyards. As of 2014, the total number was approximately 20.000.000 DWT and in 2018 it increased up to 22.000.000 DWT.

Graph 35 : Repair and Maintenance Activities

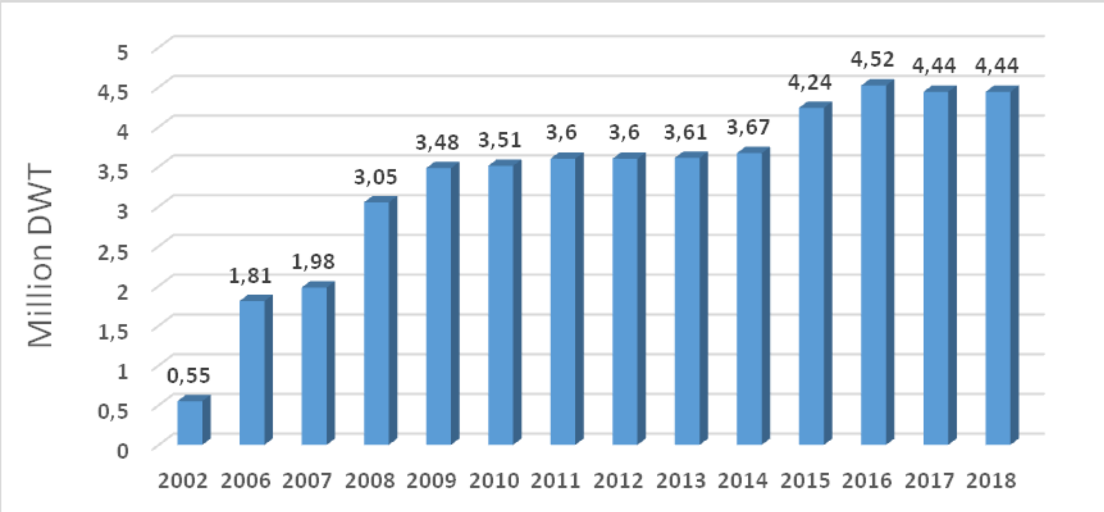


Source: Turkish Shipbuilders'Association (GİSBİR)

Graph 36 : Export Performance of Turkish Shipbuilding Industry (2009-2017)

Source: Ship and Yacht Exporters Association (e-birlik.net)

Graph 37 : Shipyards Project Capacities Between 2002-2018



Source: Ministry of Transport and Infrastrucure 03/2019

In 2002, our shipyard's total building capacity was 550.000 DWT. In 2017 it reached 4.44 million DWT which means a 6 fold growth compared to 2002.

As of April 2018, 30 floating docks and 10 dry docks are currently operational in Turkey.

Table 46 : Number of Floating and Dry Docks in Turkish Shipyards

NO	City	Operator	Floating /Dry Dock	Dimensions	Lifting Capacity (Tons)	Built
1	İSTANBUL	DENTAŞ İNŞA ve ONARIM SAN. A.Ş.	Floating Dock	128x30 m	5.000	1991
2	İSTANBUL	GİSAN GEMİ İNŞA SAN. ve AŞ.	Floating Dock	167x34 m	9.000	2012
3	İSTANBUL	ÇEKSAN GEMİ İNŞA ÇELİK KONS. SAN. ve TİC. A.Ş.	Floating Dock	130x29 m	7.000	1958
4	İSTANBUL	YARDIMCI GEMİ İNŞA A.Ş.	Floating Dock	155x36 m	8.500	1983
5	İSTANBUL	KUZEYSTAR SHİPYARD	Floating Dock	217,5x14,81 m	80.000	1963
6	İSTANBUL	KUZEYSTAR SHİPYARD	Floating Dock	197x39,6 m	45.000	1960
7	İSTANBUL	TORLAK DENİZCİLİK SAN ve TİC. A.Ş.	Floating Dock	67x28,4 m	7.500	1962
8	İSTANBUL	İSTANBUL DENİZCİLİK GEMİ İNŞA SAN. ve TİC. A.Ş.	Floating Dock	93x28 m	4.200	1969
9	İSTANBUL	SNR GEMİ İNŞA SANAYİ A.Ş.	Floating Dock	129x38 m	8.600	1967
10	İSTANBUL	DESAN DENİZ İNŞAAT SANAYİ A.Ş.	Floating Dock	172x36 m	19.000	1963
11	İSTANBUL	DESAN DENİZ İNŞAAT SANAYİ A.Ş.	Floating Dock	232x52	49.500	1914
12	İSTANBUL	DESAN 5442 NOLU PARSEL	Floating Dock	178x36 m	19.000	1939
13	İSTANBUL	GEMAK GEMİ İNŞAAT SANAYİ ve TİC.A.Ş.	Floating Dock	233x45 m	28.000	1961
14	İSTANBUL	GEMAK GEMİ İNŞAAT SANAYİ ve TİC.A.Ş.	Floating Dock	170x33 m	9.000	1995

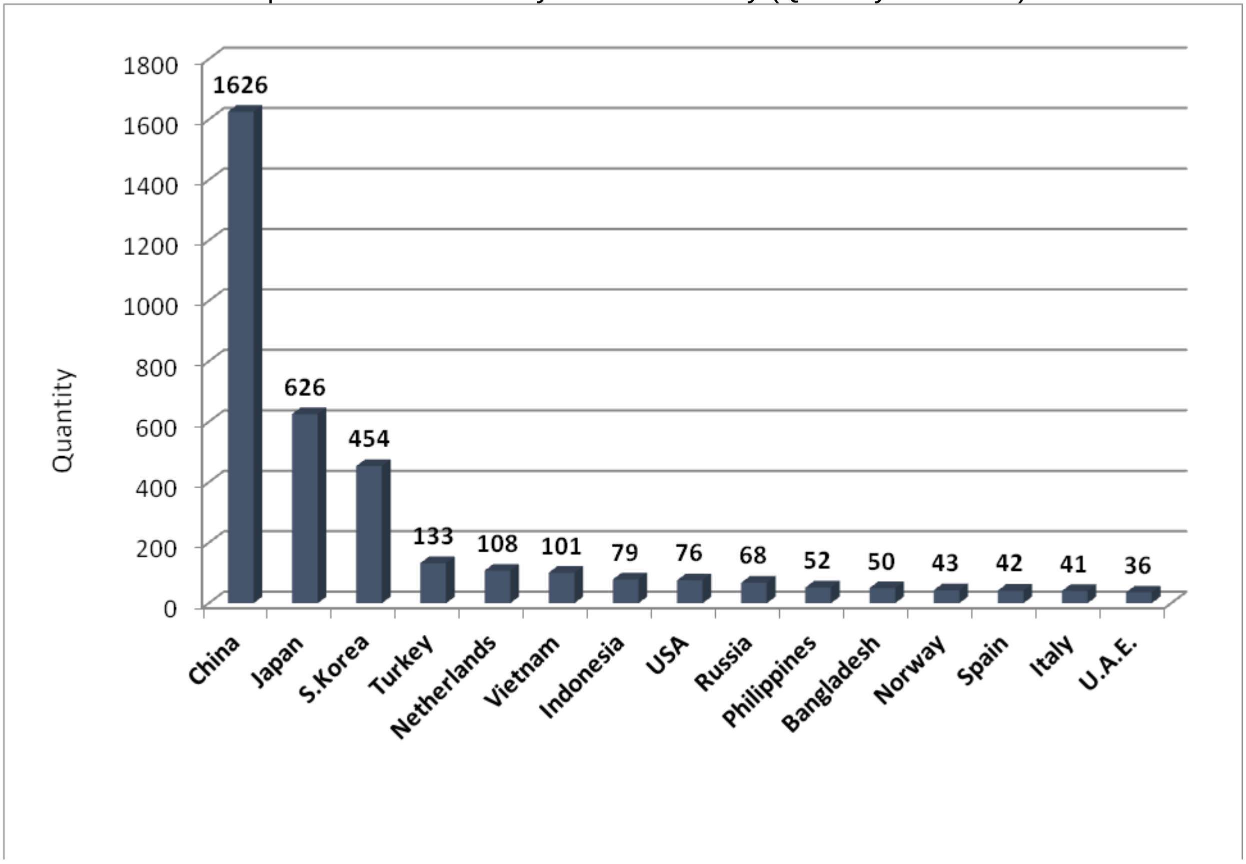
15	İSTANBUL	HİDRODİNAMİK GEMİ SAN. ve TİC. A.Ş.	Floating Dock	115x22 m	2.750	1965
16	İSTANBUL	GEMSAN GEMİ ve GEMİ İŞLETMECİLİĞİ SAN. ve TİC. LTD. ŞTİ.	Floating Dock	220x45 m	20.000	1981
17	İSTANBUL	ÇİNDEMİR MAKİNE GEMİ ONARIM ve TERSANECİLİK A.Ş.	Floating Dock	123x28 m	5.000	1964
18	İSTANBUL	ERKAL ULUSLARARASI NAKLİYAT ve TİCARET A.Ş.	Floating Dock	350x80 m	100.000	1998
19	İSTANBUL	TORGEM GEMI INSAAT SAN. VE TIC. A.S.	Floating Dock	53x20 m	2.500	1999
20	İSTANBUL	TURQUOISE YAT SAN. AŞ	Floating Dock	66x27 m	2.500	2016
21	İSTANBUL	TERSAN TERSANECİLİK ve TAŞIMACILIK SAN. ve TİC. A.Ş.	Floating Dock	130x30 m	7.100	
22	YALOVA	BEŞİKTAŞ GEMİ	Floating Dock	230x37 m	22.000	2007
23	YALOVA	BEŞİKTAŞ GEMİ	Floating Dock	382x66 m	70.000	1974
24	YALOVA	TERSAN TERSANECİLİK SAN ve TİC AŞ	Floating Dock	178x35 m	9.000	2013
25	YALOVA	DOĞRUYOL TERSANECİLİK SAN. ve TİC. AŞ.	Floating Dock	123x30 m	5.500	1993
26	YALOVA	HAT-SAN GEMİ İNŞAA BAKIM-ONARIM DEMİR NAK. SAN. ve TİC. A.Ş.	Floating Dock	180x30 m	10.000	2017
27	YALOVA	SANMAR TERSANESİ	Floating Dock	84x34 m	3.500	2015
28	YALOVA	SEFİNE DENİZCİLİK TERSANESİ SAN. ve TİC. A.Ş.	Floating Dock	240x57 m	11.227	1973
29	KOCAELİ	UZMAR GEMİ İNŞ. SAN. ve TİC. A.Ş.	Floating Dock	68x38 m	2.000	1973
30	KASTAMONU	INEBOLU DENIZCILIK SAN. ve TIC. A.S.	Floating Dock	118x29 m	4.500	1969
TOTAL 30 FLOATING DOCKS, TOTAL CAPACITY 576.877 Tonnes						

NO	City	Operator	Floating / Dry Dock	Dimensions
1	İSTANBUL	İSTANBUL ŞEHİR HATLARI(HALİÇ)	Dry Dock	109x22,5
2	İSTANBUL	İSTANBUL ŞEHİR HATLARI(HALİÇ)	Dry Dock	81,5x17
3	İSTANBUL	İSTANBUL ŞEHİR HATLARI(HALİÇ)	Dry Dock	151x16
4	İSTANBUL	URSA GEMİCİLİK BAKIM ONARIM TERSANECİLİK SAN. TİC. AŞ.	Dry Dock	56x14 m
5	İSTANBUL	İSTANBUL TERSANE KOMUTANLIĞI (PENDİK TERSANESİ)	Dry Dock	300X69
6	İSTANBUL	TUZLA GEMİ ENDÜSTRİSİ AŞ.	Dry Dock	300x53 m
7	İSTANBUL	SEDEF GEMİ İNŞAATI AŞ.	Dry Dock	315x50 m
8	İSTANBUL	DENİZ ENDÜSTRİSİ AŞ.	Dry Dock	210x37 m
9	YALOVA	SEFİNE DENİZCİLİK TERSANECİLİK TURİZM SAN. ve TİC. AŞ.	Dry Dock	240x40 m
10	YALOVA	BEŞİKTAŞ GEMİ (A-10)	Dry Dock	235x40x6,5 m

Source: Ministry of Transport and Infrastrucure 04/2019

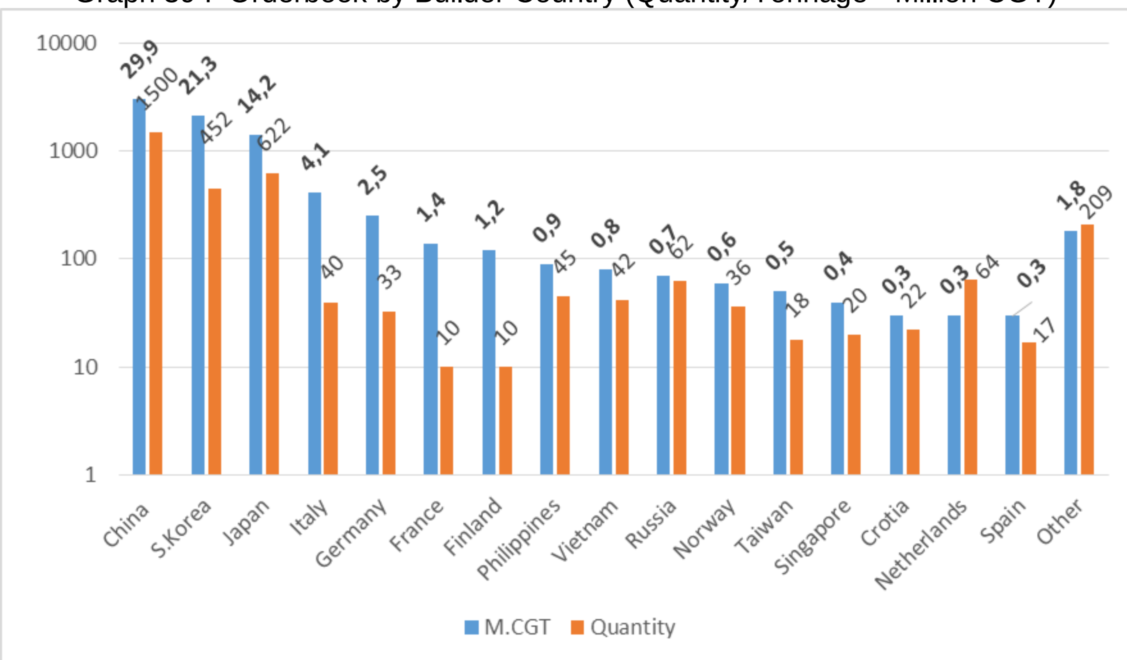
In terms of quantity, Turkish shipyards are in the 4th place in the world ranking.

Graph 38 : Orderbook by Builder Country (Quantity-Numbers)



Source: Clarkson Research Services 04/2019

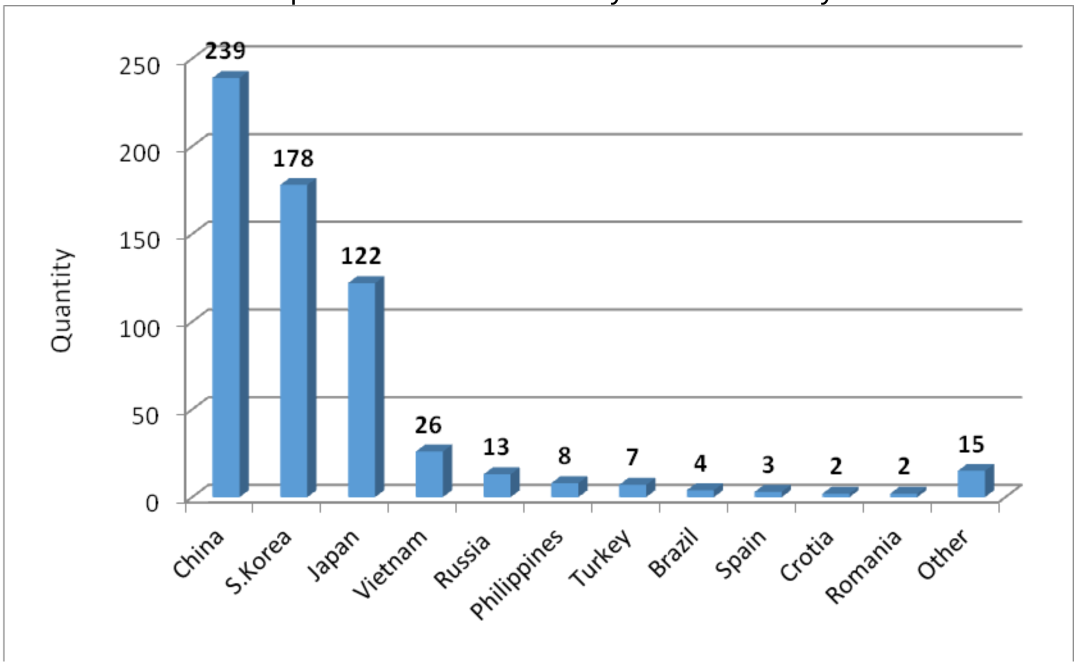
Graph 39 : Orderbook by Builder Country (Quantity/Tonnage - Million CGT)



Source: Clarkson Research Services 04/2019

Our shipyards have a good reputation for building small and medium tonnage chemical tankers. By April 2019, Turkey was in the 7th place in terms of quantity among the countries which take tanker orders.

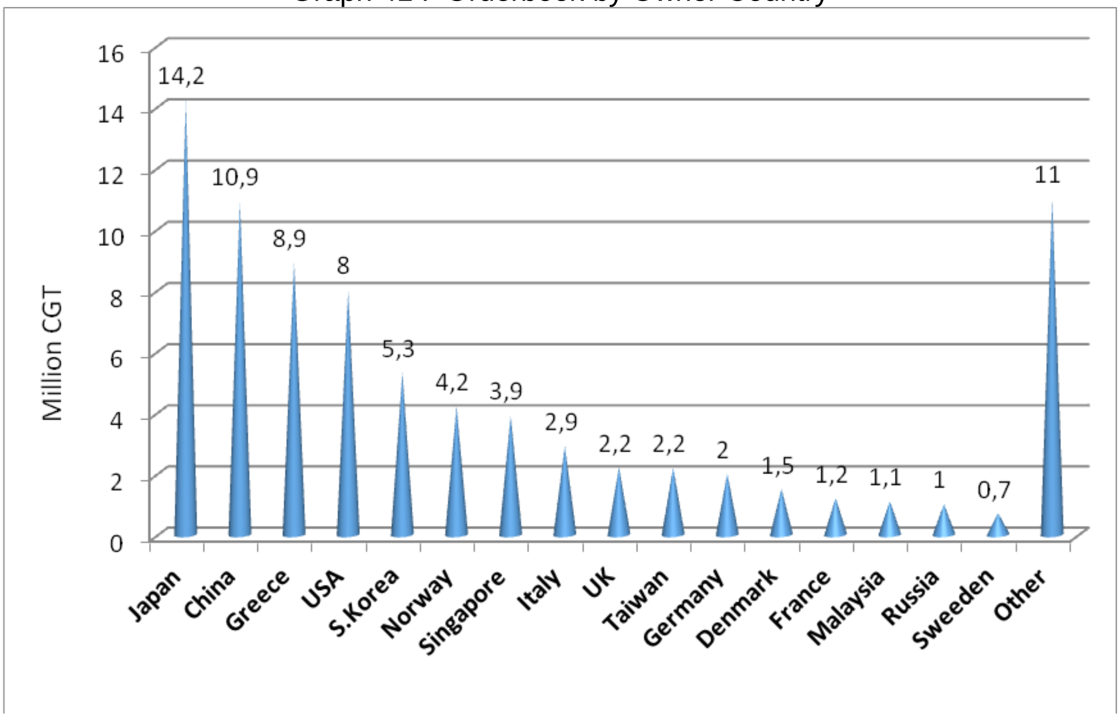
Graph 40 : Tanker Orders by Builder Country



Source: Clarkson Research Services 04/2019

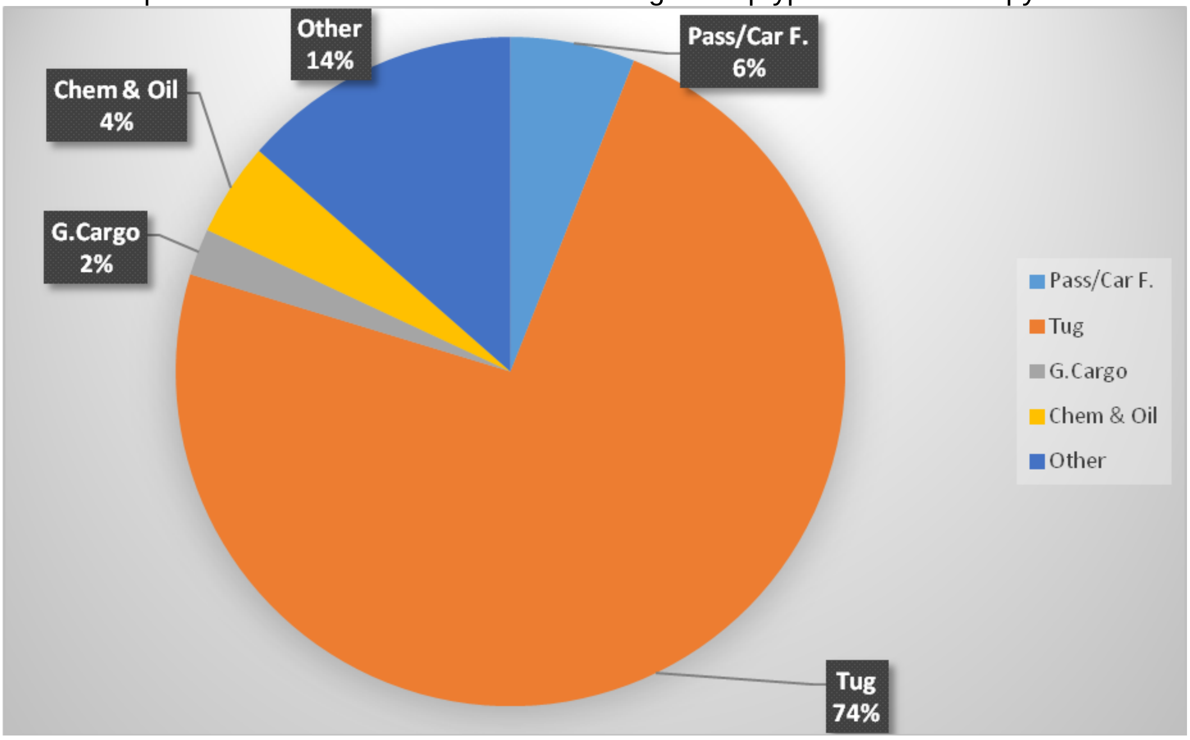
As of April 2019, Turkish shipowners' worldwide orders consist of 107 ships with a total size of 1.8 million DWT.

Graph 41 : Orderbook by Owner Country



Source: Clarkson Research Services 04/2019

Graph 42 : Distribution of Orders According to Shiptype in Turkish Shipyards



Source: Clarkson Research Services 04/2019

3.2. Defence Industry Projects

Defence industry projects gained a great acceleration within the last few years. Especially with the significant achievements in the MİLGEM Project, Turkish shipyards gained recognition abroad and started to take orders of naval shipbuilding projects in which the ratio of local industry participation is quite high. It is known that there are approximately 162 countries with naval forces around the world. Turkey is one of the 10 countries which has the ability to design, build and maintain a naval ship. The progress in the field of defence industry projects, that were mostly foreign-dependent in the past, clearly indicates the level and advancement that Turkish Shipbuilding industry has achieved until now. Today Turkey's naval needs are mostly met by its locally developed shipyards.

Naval platform projects in the defence industry;

MİLGEM (National Ship) Projet

The Project consists of 8 ships. The first two ships named TCG-HEYBELIADA and TCG-BÜYÜKADA are currently serving the Turkish Naval Forces Command. The third ship named TCG-BURGAZADA was launched on 18th June 2016, and the fourth ship, the TCG-KINALI was launched on 3rd July 2017 with test activities in progress.

There are ongoing works to procure the design and construction of the 5th ship by Istanbul Shipyard Command, which is the first of the frigate class 5-8.ships. The 6-8th ships' design and construction will be conducted by private sector shipyards. The first 4 of the ships were corvette class.

Multi-Purpose Amphibious Assault Ship (LHD)

The Multi-Purpose Amphibious Assault Ship named TCG ANADOLU is planned to be built with a total/full displacement of 27,436 tons, 231 meters in length and will be the largest naval platform in the inventory of our Turkish Armed Forces.

Amphibious Ship (LST)

The construction of the first ship, the TCG-BAYRAKTAR, was realized with 70.68% domestic industry participation and the share of the SME's in domestic industry participation was approximately 48%.

The second vessel in the program, the" TCG SANCAKTAR", is planned to be delivered to the Turkish Naval Forces in 2018 upon the completion of sea acceptance tests.

Submarine Rescue Mother Ship (MOSHIP)
The building of the TCG ALEMDAR Submarine Rescue Mother Ship (MOSHIP) started in 2011 and it has the most advanced technologies in the world and been operational since then.

Coast Guard Search & Rescue Boat

New Type Patrol Boat (YTKB)
Within the scope of the Project, preliminary and final deliveries of all sixteen New Type Patrol Boats have been completed. Contracting activities will continue until March 2018.

*Based on the information of Presidency of The Republic of Turkey Undersecretariat for Defence Industries web site. (https://www.ssm.gov.tr/WebSite/contentlist.aspx?PageID=88&LangID=2)

3.3. Yacht and Boat Building Industry

Yacht and boat building is one of the most important sectors providing employment with its high accretion value and high export ratio. This specific industry is the combination of the sectors in yards dealing with ironing, painting, electric-electronic, textile, decoration, etc.
Yacht and boat building industry is quite different from the shipbuilding because of its concept, scope, and technology. In shipbuilding industry, long term investments and big coastal areas are needed for production, but in boat & yacht building, relatively fewer investments, areas and time are needed. Boat&yacht building needs comparatively less investment but has a higher accretion value.

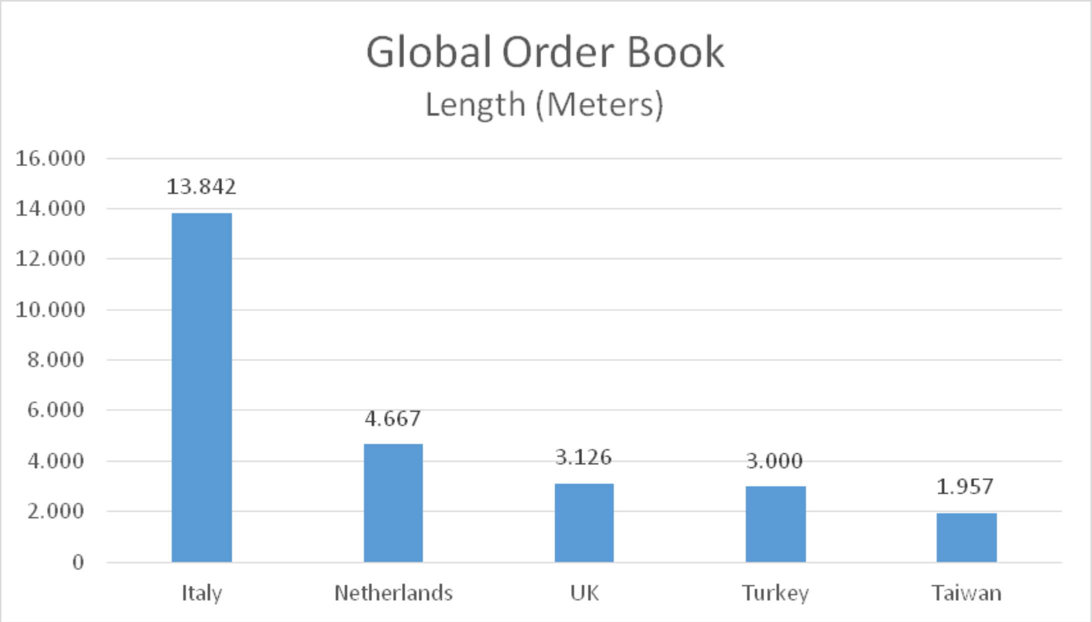
Turkey; with its beautiful coasts, cultural and historical resources, has a great market potential not only for yachts but also especially for mega-yacht tourism. Inclusion of mega-yacht mooring places to the projects which are planned to be constructed in Ataköy and Zeytinburnu, will add a great prestige and income to our marine tourism.

To summarize the advantages of our boat&yacht building industry, the main positive aspects are;

- Educated and competent labour
- Production quality in accordance with international standards
- Reasonable costs
- Adequate subindustry with quality
- Technology basis production
- Closeness to the international markets
- Appropriate climate
- Our country's potential in boat&yacht building
- Main disadvantages are;
- Heavy taxes of special consumption, value-added and motor vehicle collected from boats.
- Long bureaucratic procedures during the registering operations.

Turkey is keeping third place in global order book by the total length of 3594 meters at the end of 2017. By February 2019, Turkey is in the 4th place according to length with 3.000 meters of order and under construction of yachts.

Graph 43 : 24 Meters and Above Yacht Orders by Country (Length)



Source: Boat International Turkey-Global Orderbook Feb.2019

3.4. Sub-Industry

In parallel with the improvements in shipbuilding industry in the recent years, the Turkish sub-industry is also continuously progressing, although some of the items are still being imported by the shipyards due to the lack of production. Sub-industry which amounts to almost 20% percent of the ship's price, is one of the most important branches in the shipbuilding industry. It has the highest employment value in sub-sectors. The main problem of sub-industry in Turkey is that the production is made by local and small enterprises which causes problems about standardization and approval of the products.

Turkish manufacturers are regarded as among the best in producing supplying anchor, chain, bollard, electric cables, and hydraulic units. However, since the production of electronic types of equipment, especially navigational systems, is monopolized by some large companies worldwide, such systems are barely produced in Turkey. Also, steel sheet production in Turkey can meet only a small amount of demand.

Turkish Sub-industry is able to produce;

Anchor, chain, bollard, locking equipment - Windlass and equipment - Valves and Central heating Systems - Electric Panels and Tables - Fire Fighting Systems -Pumps - Isolation Equipment - Pipes – Refrigerated Units - Hatch Covers - Diesel generator – Boiler - Carpenter and furnishings.

Main items imported in sub-industry can be summarized as;

Sheet steel/iron and profiles – Holland profiles – Telecommunication systems – Rudder Systems – Bow /Stern thrusters.

Sub-industry creates employment in a ratio of 1 to 3. In 2002, 30.000 people were employed in sub-industry and the number raised to 103.500 but again due to the global economic crisis it, unfortunately, decreased to 57.537 by the end of 2009. By the end of 2017 it had been estimated that 81.600 people are working in the sub-industry.

CHAPTER IV

PORT DEVELOPMENTS

4. PORT DEVELOPMENTS

4.1. Ports Information In General

The coastline of Anatolia is 8333 Km long. Total numbers of ports and seaports are 180 along the coastline. 6 of them are operated by Turkish Maritime Administrations and 2 ports are operated by Turkish State Railways.

Ports are divided into three in terms of the way they are operated.

GOVERNMENTAL	20 PORTS
MUNICIPAL	23 PORTS
PRIVATE	137 PORTS

The major part of international trade is being realized through maritime transportation in Turkey. In 2017, 88,47% of goods (imports and exports) has been transported by sea.

Existing Theoretical Capacity of Turkish Ports (Acc.to 2015 Backfield of Ports, Road, and Railway Connections Master Plan) are as below;

Cargo Type	Theoretical Capacity
Container	25.543.028 TEU
General Cargo + Dry Bulk Cargo	318.246.892 Tons
Liquid Bulk Cargo	254.896.000 Tons
Vehicle	Tons

Turkish ports should increase their expertise on certain types of cargoes and/or new port projects for container handling so as to become more competitive in the Mediterranean and the Black Sea regions. Recently, the number of private container terminals increased, especially in the Marmara Region.
Turkish ports hold strategic position on the Eastern Mediterranean and the Black Sea Shipping Lines and are at the intersection point of East-West and North-South directional international transport corridors. They are in an advantageous position to attract transshipment/transit cargoes. Ports in all regions of Turkey are so located that they can serve different transportation nets. The Mediterranean and Aegean Sea ports are located with little miss distance and have the ability to attract Asian-European main shipping lines' cargoes passing through the Mediterranean. Especially, the Mediterranean ports are in a position to operate as transshipment/transit ports for delivering cargoes coming from main shipping lines to the Middle East and Central Asian countries. Meanwhile, Ports in the Marmara Region are important in terms of Turkish connection of Trans-European and Pan-European transport corridors formed by EU and extending those corridors to East. As a result of growing trade and transport volume in the Black Sea which is the most important means of access for trading among the landlocked Central Asian countries with Europe, the importance of our ports in the area has increased.

460.153.560 tons of cargo was handled in the Turkish ports in 2018.
24% of handling is export with 110.424.635 tons.
47,5% of handling is import with 218.544.820 tons.
12,9% of handling is cabotage with 59.555.845 tons.
15,6% of handling is transit with 71.628.260 tons.
Table below shows total cargo handled at Turkish ports according to the type of transportation in the last five years.

Table 47 : Cargo Handling Figures At Turkish Ports (Acc. to Transport Mode)

MODE OF TRANSPORT		2014	2015	2016	2017	2018
EXPORT	TURKISH	12.739.297	13.754.810	15.272.855	15.138.335	15.660.122
	FOREIGN	75.797.517	78.397.812	79.532.265	98.553.733	94.764.513
	TOTAL	88.536.814	92.152.622	94.805.120	113.692.068	110.424.635
IMPORT	TURKISH	20.876.309	22.724.776	23.350.424	21.677.485	19.850.109
	FOREIGN	173.837.477	185.601.532	191.782.095	211.978.539	198.694.711
	TOTAL	194.713.786	208.326.308	215.132.519	233.656.024	218.544.820
CABOTAGE	LOADING	24.982.892	25.894.384	26.249.991	29.898.010	29.550.554
	UNLOADING	25.746.316	26.578.284	27.050.225	30.498.069	30.005.291
	TOTAL	50.729.208	52.472.668	53.300.216	60.396.079	59.555.845
TRANSIT	LOADING	44.278.082	58.597.204	61.436.179	55.544.396	63.081.077
	UNLOADING	4.833.478	4.487.893	5.527.128	7.885.329	8.547.183
	TOTAL	49.111.560	63.085.097	66.963.307	63.429.725	71.628.260
GR.TOTAL	LOADING	157.797.788	176.644.210	182.491.290	199.134.474	203.056.266
	UNLOADING	225.293.580	239.392.485	247.709.872	272.039.422	257.097.294
	TOTAL	383.091.368	416.036.695	430.201.162	471.173.896	460.153.560

Source: Republic of Turkey Ministry of Transport and Infrastructure

Graph 44 : Cargo Handling Figures According To Years

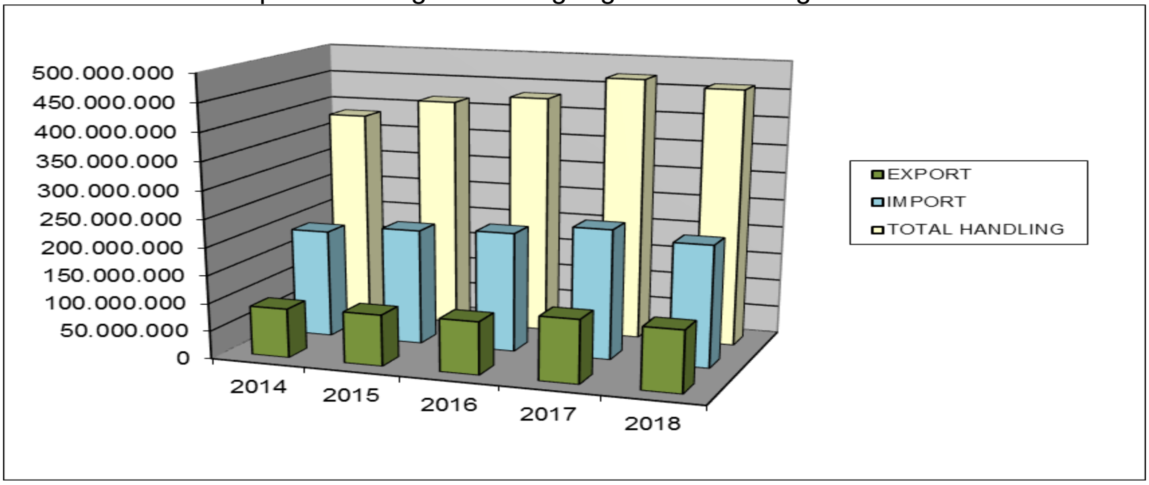
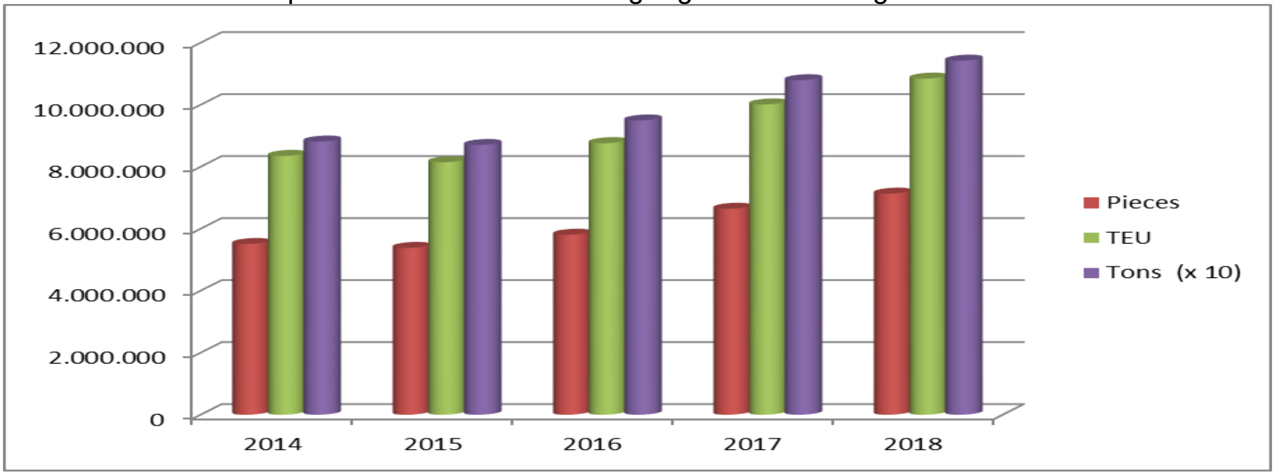


Table 48 : Container Handling Figures At Turkish Ports

MODE OF TRANSPORT		2014	2015	2016	2017	2018
EXPORT	PCS	2.269.118	2.198.508	2.309.172	2.490.272	2.665.729
	TEU	3.487.949	3.394.508	3.543.804	3.866.874	4.160.124
	TONS	39.106.361	38.419.925	41.444.254	44.433.316	48.624.398
IMPORT	PCS	2.335.795	2.248.636	2.352.515	2.580.351	2.751.631
	TEU	3.581.809	3.454.345	3.607.086	3.975.205	4.259.029
	TONS	34.790.524	34.007.962	35.608.597	37.275.863	36.336.606
CABOTAGE	PCS	390.510	454.012	543.526	703.324	689.215
	TEU	526.798	606.064	738.312	935.521	935.661
	TONS	4.934.786	5.869.320	7.032.995	10.059.528	10.200.874
TRANSIT	PCS	513.195	481.454	601.662	870.356	1.026.230
	TEU	754.216	691.481	872.772	1.232.937	1.489.184
	TONS	9.305.368	8.728.650	10.842.751	16.149.201	19.069.587
GRAND TOTAL	PCS	5.508.618	5.382.610	5.806.875	6.644.303	7.132.805
	TEU	8.350.772	8.146.398	8.761.974	10.010.537	10.843.998
	TONS	88.137.039	87.025.857	94.928.597	107.917.908	114.231.465

Source: Republic of Turkey Ministry of Transport and Infrastructure

Graph 45 : Container Handling Figures According To Years



As in all around the world, the port sector is a very dynamic industry inTurkey. Developments in the World economy directly influence goods and service trade and especially expectations about goods' trade impact the investment plans of ports which are seen as the most important transportation infrastructures. Rising positive expectations about goods and service trade in medium and long terms speed up port investments, whereas negative expectations may suspend those investments.

Nowadays, ports are not just loading/unloading hubs in classic terms, but they have become Logistic Centers where, with the development of multimodal shipping, various transportation modes intersect. Ports are in a dynamic development, growth and renewing trend as they are obliged to cover the expectations and demands of partners in this system. However, this trend might come to a halt by reasons like economic stagnation. Thus in a crisis period, many port operators suspended their investments in Turkey. However, since the last quarter of 2009 increase in goods and service trade encouraged port operators to make investments again. There are two options for increasing the handling capacity of Ports and these are: Existing ports' increasing their efficiency and making physical investments. The physical investments consist;

Developing physical conditions of port by adding new jetties and backfields,

Increasing handling capacity of port by having new types of equipment.

Both options ultimately provide an increase of port's cargo and ship reception capacity. Within these two coverages, explained capacity and improving in the forthcoming years for the existing and newly planned ports are shown below.

Port/Facility	Load Type	Existing Capacity	Project End
Limak İskenderun	Container	1,000,000 TEU	3,000,000 TEU
Toros Tarım (Samsun)	Bulk Solid/General Cargo	3,300,000 Tons	8,500,000 Tons
Aksa	General Cargo	600,000 Tons	4,000,000 Tons
Petkim Container Terminal (Petlim)	Container	800.000 TEU	1,500,000 TEU (might be increased to 4,000,000 TEU subject to cargo demand in the area in future)

State Investments

Currently, 3 large scale (mega) projects are planned as state investments.

Northern Aegean Çandarlı Port is under construction while others are at the stage of research and planning. Located in İzmir/Bergama Northern Aegean Çandarlı port first stage consisting of 1500 meters long breakwater's construction and additional substructures and superstructures is foreseen to be completed by 2018. Çandarlı Port construction was divided into two phases. The first phase will be built in three stages (1 m. TEU + 1m. TEU. + 2 m. TEU). The second phase has not been planned yet.

Located on the east of existing Mersin MIP, new Mersin container port is planned in 5 phases, which aims to provide 1.7-1.9 million TEU in its first phase, followed by further expansion to take total 10 - 11.4 million TEU upon completion.

Being located in the boundaries of Zonguldak/west Black Sea region, Filyos Port will serve the industrial zone which is planned to be assembled nearby. Upon completion, the port will be able to handle 700.000 TEU containers and 16 million tons general/bulk cargo.

Besides those projects;

Derince Container Terminal which will be built on the fill area east of existing Derince Port will provide 1.000.000 TEU capacity *increase (Derince Container Terminal is a part of Safi Derince Port which has been privatized.)*

The capacity of İzmir Port is planned to reach 2.500.000 TEU after privatization.

4.2.TDI Ports and Privatizations

Table 49 : The Ports Operated By Turkish Maritime Administrations (TDİ)

PORTS	PIER LENGTH (Meters)	DEPTH (Meters)	HANDLING (000x ton/year)	SHIP CAPACITY (number/years)	STORAGE CAPACITY (000x ton/year)	CONTAINER CAPACITY (Teu/year)	PASSENGER CAPACITY (person/years)
SARAYBURNU Pier 1 and 2	242	(-8,-12)	-	130	-	-	250000
KURUÇEŞME Pier 1	129	(-6,-8)	-	200	-	-	-
KURUÇEŞME Pier 2	161	(-6,-8)	-	200	-	-	-
KABATEPE	295	(-4,-5)	-	365	-		90000
GÖKÇEADA (Port of Kuzu)	900	(-6,-7)	400	700	-		200000
GÖKÇEADA (Uğurlu Pier)	76	(-6,-8)	-	365	-	-	-
TAŞUCU	610	(-6, -10)	1200	1500	127	-	-
TOPLAM	2413		1600	3460	127	-	2040000

Source: TDI

In 1997, Ports of Rize, Ordu, Sinop, Giresun, and Hopa
In 1998, Port of Antalya
In 2000, Ports of Marmaris and Alanya
In 2003, Ports of Çeşme, Kuşadası, Trabzon, and Dikili
In 2014, Port of Salıpazarı
have been privatized, by the method of conveying the right of operation for 30 years.
In 2014, Port of Kemerköy
In 2015, Port of İnebolu
In 2016, Bodrum Gökçebel Marina
have been privatized, by the method of conveying the right of operation for 49 years.
In 2018, Port of Tekirdağ has been privatized, by the method of conveying the right of operation for 36 years.

4.3.TCDD Ports and Privatizations

Table 50 : Ports Operated By TCDD

CAPACITY	Theoretical Cap.	Current Cap.	Improvable	Theoretical Cap.	Current Cap.	Improvable
Total Wharf Length (m)	3.386	--	--	3.413	--	--
Depths (m)	6-10	--	--	5-12	--	--
Port Area (m²)	525.000	--	--	343.420	--	--
Ship Acceptance Capacity (ship/year)	1.305	3.588	2.503	1.169	1.944	5.435
HANDLING CAPACITY						
Container (Teu/Year)	810.208	1.025.624	1.984.018	654.637	481.008	1.217.047
G.Cargo & D.Bulk Cargo (Tons/Year)	1.317.104	4.597.883	5.814.420	1.913.111	231.912	16.374.641
Ro-Ro (Vehicle-Truck / Year)	350.000 V	884.500 V	--	149.100 T	143.988 T	--
Liquid Bulk Cargo (Tons/Year)	--	--	--	--	--	--
STORAGE CAPACITY						
Container (Teu/Year)	611.000	--	--	426.181	--	--
G.Cargo & D.Bulk Cargo (Closed) (Tons/Year)	--	--	--	225.115	--	--
G.Cargo & D.Bulk Cargo (Open) (Tons/Year)	1.299.375	--	--	1.620.000	--	--
Ro-Ro (Vehicle-Truck / Year)	104.354 V	--	--	45.600 T	--	--
Liquid Bulk Cargo (m³/Year)	--	--	--	--	--	--

Source: TCDD

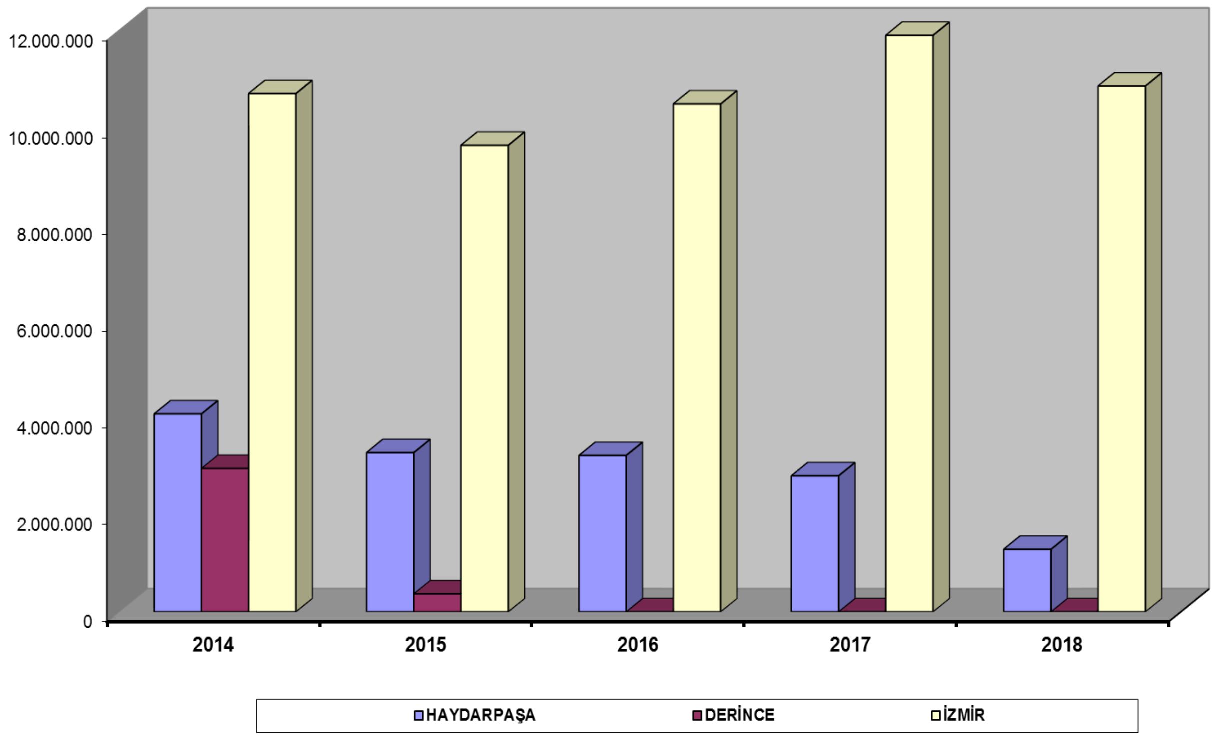
Table 51 : TCDD Ports 2014-2018 Handling Figures Acc. To Cargo Groups

TCDD PORTS 2014 - 2018 Handling Figures Acc. To Cargo Groups

PORT	YEAR	GENERAL CARGO	CONTAINER	DRY BULK	LIQUID BULK	TOTAL
HAYDARPAŞA	2014	2.759.000	762.088	568900	0	4.089.988
	2015	2.630.004	661.552	0	0	3.291.556
	2016	2.678.024	553.116	0	0	3.231.140
	2017	2.383.960	427.334	0	0	2.811.294
	2018	952.197	340.971	0	0	1.293.168
DERİNCE	2014	1.473.008	19.525	1.347.509	123.894	2.963.936
	2015	219.011	1.788	149.273	2.977	373.049
	2016	0	0	0	0	0
	2017	0	0	0	0	0
	2018	0	0	0	0	0
İZMİR	2014	560.179	6.782.740	3.047.204	314.730	10.704.853
	2015	763.370	6.656.669	1.969.201	247.710	9.636.950
	2016	912.554	7.602.048	1.714.695	261.588	10.490.885
	2017	938.274	7.895.352	2.750.898	324.206	11.908.730
	2018	775.529	7.392.536	2.407.474	285.396	10.860.935
TOTAL	2014	4.792.187	7.564.353	4.963.613	438.624	17.758.777
	2015	3.612.385	7.320.009	2.118.474	250.687	13.301.555
	2016	3.590.578	8.155.164	1.714.695	261.588	13.722.025
	2017	3.322.234	8.322.686	2.750.898	324.206	14.720.024
	2018	1.727.726	7.733.507	2.407.474	285.396	12.154.103

* Derince Port 2015 Tonnage is till end of February

Graph 46 : TCDD Ports 2014 – 2018 Handling Figures



Graph 47 : 2018 TCDD Ports Handling Acc. To Cargo Groups

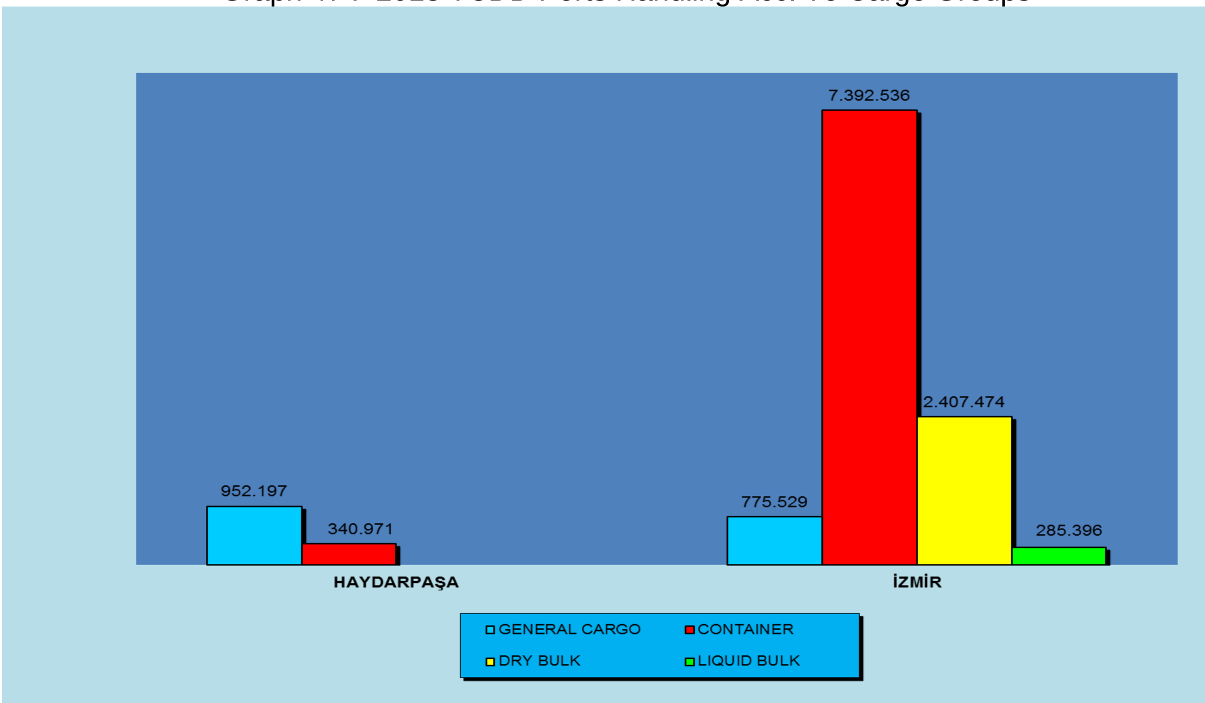
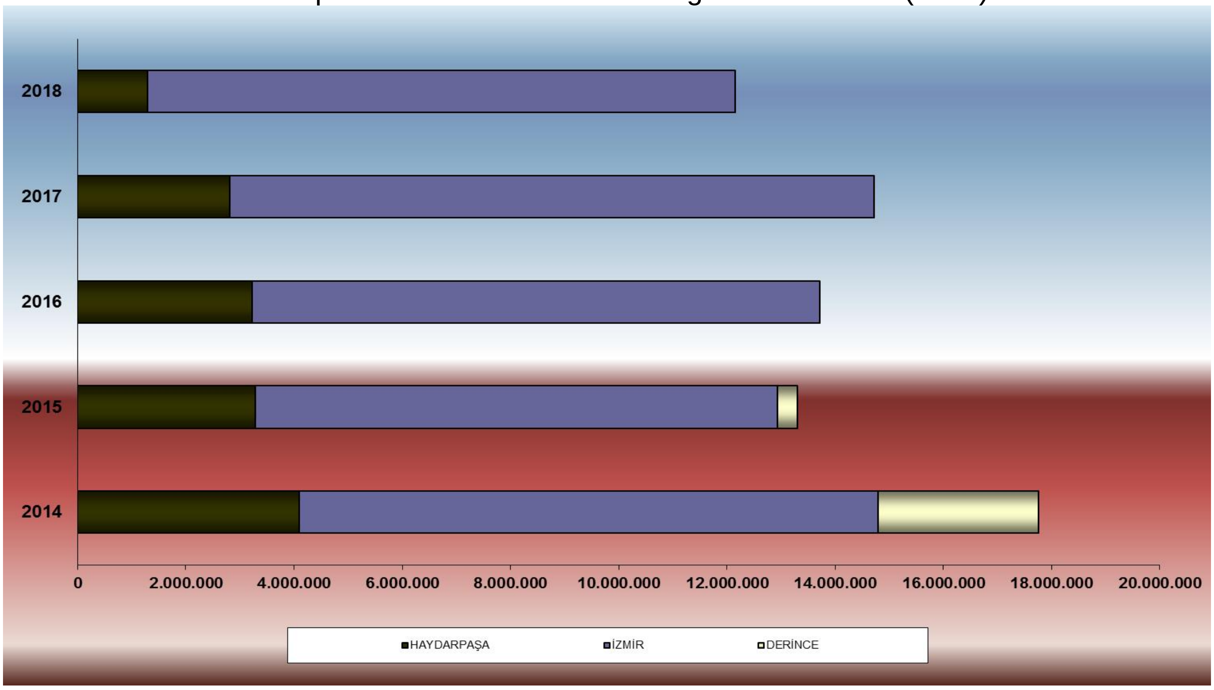


Table 52 : TCDD Ports Loading And Unloading Figures

TCDD Ports Loading And Unloading Figures							
YEARS	LOADING			UNLOADING			TOTAL
	EXPORT	DOMESTIC	TRANSIT	IMPORT	DOMESTIC	TRANSIT	
HAYDARPAŞA							
2014	1.559.846	568.900	0	1.961.242	0	0	4.089.988
2015	1.415.146	0	0	1.875.954	456	0	3.291.556
2016	1.507.124	0	0	1.724.016	0	0	3.231.140
2017	1.301.059	0	0	1.510.235	0	0	2.811.294
2018	**566.243**	**0**	**0**	**726.765**	**160**	**0**	**1.293.168**
İZMİR							
2014	5.713.213	23.731	0	4.686.457	281.452	0	10.704.853
2015	4.967.082	0	0	4.397.228	272.640	0	9.636.950
2016	5.555.580	0	0	4.677.439	257.866	0	10.490.885
2017	6.020.876	31.553	0	5.480.171	376.130	0	11.908.730
2018	**5.453.110**	**21.002**	**0**	**4.884.092**	**502.731**	**0**	**10.860.935**
DERİNCE							
2014	1.559.066	2.863	6.636	1.233.367	160.091	1.913	2.963.936
2015	243.045	130	0	123.329	6.545	0	373.049
2016	0	0	0	0	0	0	0
2017	0	0	0	0	0	0	0
2018	**0**	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL							
2014	8.832.125	595.494	6.636	7.881.066	441.543	1.913	17.758.777
2015	6.625.273	130	0	6.396.511	279.641	0	13.301.555
2016	7.062.704	0	0	6.401.455	257.866	0	13.722.025
2017	7.321.935	31.553	0	6.990.406	376.130	0	14.720.024
2018	**6.019.353**	**21.002**	**0**	**5.610.857**	**502.891**	**0**	**12.154.103**

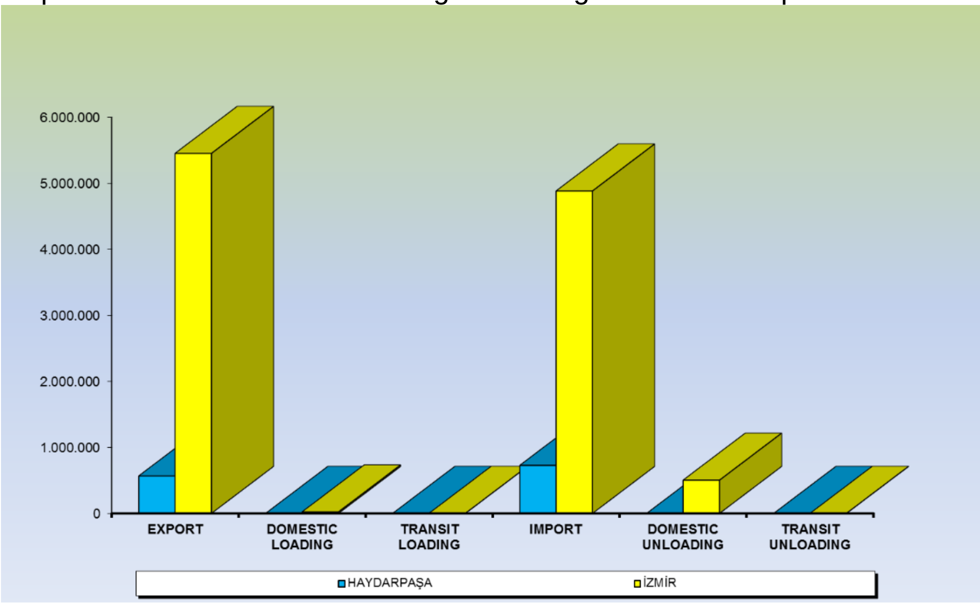
* Derince Port 2015 Tonnage is till end of February

Graph 48 : TCDD Ports Handling Acc. To Years (Tons)



Source: TCDD

Graph 49 : 2018 TCDD Ports Cargo Handling Acc. To Transportation Modes



Source: TCDD

Haydarpaşa Port

Haydarpaşa Port is in the province of İstanbul, one of the most important metropolises. İstanbul is not only the most industrialized region but it has also the foremost cultural sightseeing and fascinating historical artifacts. İstanbul is known as an open-air museum in the world.

Haydarpaşa is in the meeting point of and in the area covering Black Sea Countries and the waterway of Rhein-Main-Danube Canal and it is gaining substantial importance in this respect.

Haydarpaşa port has all modes of transport such as sea, rail and land road. It renders services 24 hours, the length of the berth is 2,675 meters, ships receipt capacity is 2,213 per year, and also container handling capacity is 360.000 TEU.

Port Capacities

	Ship Receipt Ships/Year	Berth Length (m)	Max. Depth (-m)
General Cargo	1,134	1,688	6, 10
Container	1,200	650	12
Dry Bulk	79	190	10
Ro-Ro	238	141	8
Total	2,651	2,669	

Storage Area	m²	Capacity
Open (Tons/Year)	17,390	417,360
Closed (Tons/Year)	20,502	329,152
Container (TEU/Year)	164,360	211,200
InlandTerminal(TEU /Year)	55,000	542,800

İzmir Port

İzmir Port faces the Aegean Sea and is situated at the pivotal point of the sea trade between Western Europe and North Africa. It has a vast agricultural and industrial hinterland plays a substantial role not only essential core for the industry and agricultural trade in the Aegean Region but also has a vital function in the Turkish exports.

İzmir port with its infrastructure and skilled manpower and also having a modern container terminal, maintains all the services for general, dry and liquid bulk cargoes, Ro-Ro, and cruises.

Port Capacities

	Ships/Year	Berth Lenght (m)	Max. Depth (-m)
Dry Cargo	810	1,429	7, 10.5
Container	1,500	1,050	13
Dry Bulk	79	150	10.5
Passenger	1,246	330	8, 10.5
Total	3,635	2,959	

Storage Area	m²	Kapasite
Open (Tons/Year)	23,580	565,000
Closed (Tons/Year)	24,678	394,848
Container (TEU/Year)	192,360	266,000

4.4.Port Privatizations of Turkish Railways

Privatization Completed Ports

PORT NAME	DATE OF APPR.	DATE OF SIGN.	PRICE ($)
MERSİN	07.11.2005	11.05.2007	755 MILLION USD
BANDIRMA	19.09.2008	18.05.2010	175,5 MILLION USD
SAMSUN	19.09.2008	31.03.2010	125,2 MILLION USD
İSKENDERUN	07.01.2011	30.12.2011	372 MILLION USD
DERINCE	12.08.2014	02.03.2015	543 MILLION USD

Privatization Tender Cancelled Ports

PORT NAME	DATE OF TENDER	CANCELLING DATE OF TENDER
İZMİR	03.05.2007	28.04.2010

Source: TCDD & Privatization Adm.

4.5.Privatized TCDD Ports

Mersin International Port (MIP)

Strategic Location

MIP is an international port embracing The Middle East and Europe in The Eastern Mediterranean Sea.

Mersin International Port (MIP) serves all the trading regimes including import, export, transit, transshipment, and cabotage. Mersin is situated in Mersin Bay, a broad body of water that is open southward to The Mediterranean. It is the main port for the Eastern Mediterranean Region's industry and agriculture. The port's rail link and its easy access to the international highway make it an ideal transit port for trade to the Middle East and the Black Sea regions. With its modern infrastructure and equipment, efficient cargo handling, vast storage areas and its proximity to the Free Trade Zone, Mersin is one the most important ports in the Eastern Mediterranean.

Mersin International Port (MIP) is linked by railway and highways to Turkey’s industrialized cities such as Gaziantep, Kayseri, Kahramanmaraş, Konya and to countries at borders such as Syria, Iraq, and Iran. MIP is one of the most important container gateways in the Mediterranean Region with excellent transshipment and hinterland connections to the Middle East and the Black Sea. Parallel to the development of the logistics sector across the world, efforts are in progress to make Mersin a leading logistics centre.

By being one of the most important ports in The Eastern Mediterranean and with its vast hinterland, committed human resources and easy access, MIP handles a considerable portion of Turkey’s export & import volumes. Eastern Anatolia, Southeastern and Central Anatolia Regions choose MIP for their import and export activities. MIP is a port of choice for transit and transshipment operations fulfilled by dedicated and experienced staff with a service quality being at international standards.

Access by railroad

MIP is connected directly to the Turkish rail network providing a connection to the major industrialised cities such as Gaziantep, Kayseri, Kahramanmaraş, and Konya, as well as to international destinations. MIP has constructed a dedicated rail terminal with 4 railway lines of 2 km in length for container operations.

Table 53 : Handling Figures – Port of Mersin (2018)

MERSIN INTERNATIONAL PORT							
TYPE OF CARGO	LOADING (Tonnes)			UNLOADING (Tonnes)			TOTAL
	EXPORT	DOMESTIC	TRANSIT	IMPORT	DOMESTIC	TRANSIT	
CEMENT	1.859.955	20.758	35.042	10.866		847	1.927.468
CEREALS	231.894	18.685	16.050	821.273		16.053	1.103.955
CHEMICALS	1.289.347	28.853	82.549	1.752.357	107	204.987	3.358.200
CITRUS	172.958		8.922	49.302		10.122	241.304
CNTR			186.860			601.642	788.502
CONST. MACHINERY	13.334		1.148	43.185		6.395	64.062
COTTON	114.971	150	3.831	122.536		5.092	246.580
FERTILIZERS	200.184	16.300	2.996	349.560	28.449	19.573	617.062
FOOD STUFF	1.927.274	423	52.964	981.703	477	100.232	3.063.073
FROZEN MEAT	12.009		1.133	67.294		46.897	127.333
FRUITS	160.175		2.469	200.064	41	395.295	758.044
GENERAL CARGO	3.726.151	1.458	357.585	3.181.747	14.480	433.983	7.715.404
GLASS	144.049	274	20.510	32.626		12.060	209.519
LEGUMES	297.264	119	3.315	840.218	22	7.844	1.148.782
LIVESTOCK	146			60.029		4.811	64.986
MACHINERY	139.637	62	5.286	141.267	37	13.310	299.599
MINERALS	1.837.685	17.614	11.711	747.234	5.646	11.171	2.631.061
PETR. PRODUCTS	18.039	6.295	4.054	4.940.012	533.119	4.644	5.506.163
RICE	82.509		2.557	301.743		17.128	403.937
SODIUM CARB.	636.150		71	10.031		22	646.274
SUGAR	2.637		5.024	33.825		1.029	42.515
TEXTILE	424.513	69	10.308	490.801	349	25.121	951.161
TIMBER	21.382		8.870	95.931	71	6.092	132.346
VEGETABLE OIL	128.702		4.795	583.269		9.792	726.558
VEHICLES	33.457	3	13.301	232.962		37.486	317.209
TOTAL	13.474.422	111.063	841.351	16.089.835	582.798	1.991.628	33.091.097

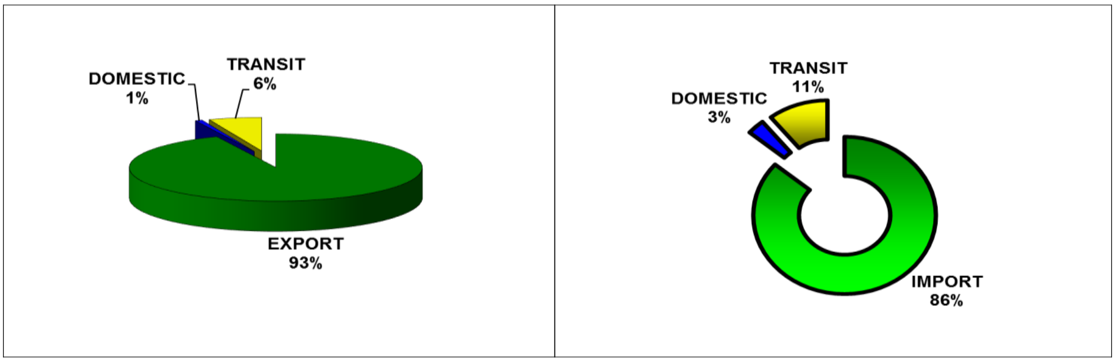
Access by highway

MIP has highway connections to the major industrialised cities such as Gaziantep, Kayseri, Kahramanmaraş and Konya. The highway serves also as an efficient transportation mechanism in international destinations.

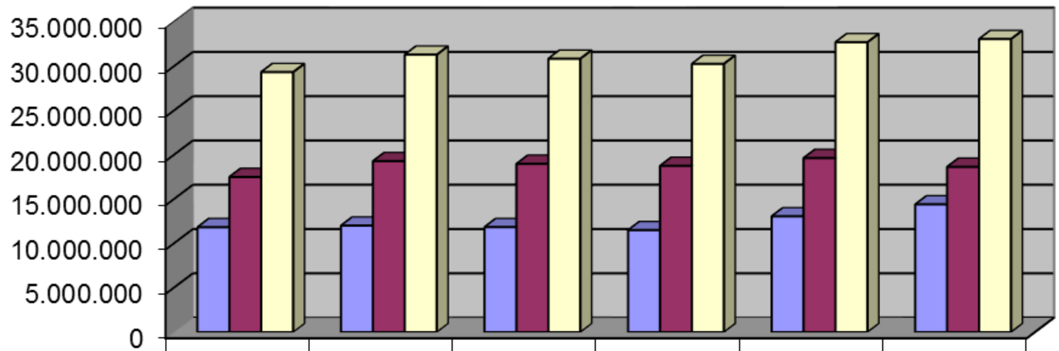
Free Port Zone

The Mersin Free Port Zone is located adjacent to MIP and is connected by a direct road for convenience.

Graph 50: Mersin Port 2018 Loading & Unloading



Graph 51: Mersin Handling Figures Acc. To Years (Tons)



	2013	2014	2015	2016	2017	2018
LOADING	11.845.82	12.025.45	11.859.04	11.513.42	13.072.52	14.426.83
UNLOADING	17.515.01	19.303.22	19.006.86	18.774.24	19.657.18	18.664.26
TOTAL HANDLING	29.360.83	31.328.67	30.865.90	30.287.67	32.729.70	33.091.09

Source: Mersin DTO, MIP

Samsunport (Samsun)

Samsunport carries out sea transport with Georgia’s ports of Batumi, Poti, and Sukhumi; Russia’s ports of Sochi, Tuapse, Novorossiysk, Azov Sea ports of Azov, Taganrog, Jdanov, Yalta, Berdyansk, Genichesk; Crimea’s ports of Feodosiya, Yalta, Todor, Sevastopol, Yevpatorskiy; Ukraine’s ports of Nikolayev, Odesa, İlichevsk; Romania’s port of Constanta and Bulgaria’s port of Varna. Samsunport also has connections with Istanbul and all world ports.

Samsunport is the biggest port of Turkey in the Black Sea region and also it has a large hinterland. Because of this feature, the port is a popular place for cargoes which come to or out from Anatolia. Samsun port has railway and road connections with Kastamonu, Ankara, Kirsehir, Kayseri, Nigde, Konya, Malatya, Sinop, Corum, Amasya, Ordu, Sivas, Erzincan, Yozgat, Tokat. Samsun port aims to achieve top quality and speedy service by renewing vehicle parks, making the revision of the present vehicles, construction of new warehouses, silos, and liquid tanks.
Storage and port services are provided within the 350.000 sqm of the total port area of 445.000 sqm. In Samsun port, there are also steel cereal silos, warehouses, and general cargo storage areas.

Main Port

Dock numbers 1-2-3-4-5 have a total length of 776 meters and a draft of 10,5 meters. Dock number 6 has a length of 180 meters and drafts of 6,5 / 7 meters.
Dock numbers 7-8-9 have length of 400 meters and drafts of 6,5 / 7 meters.

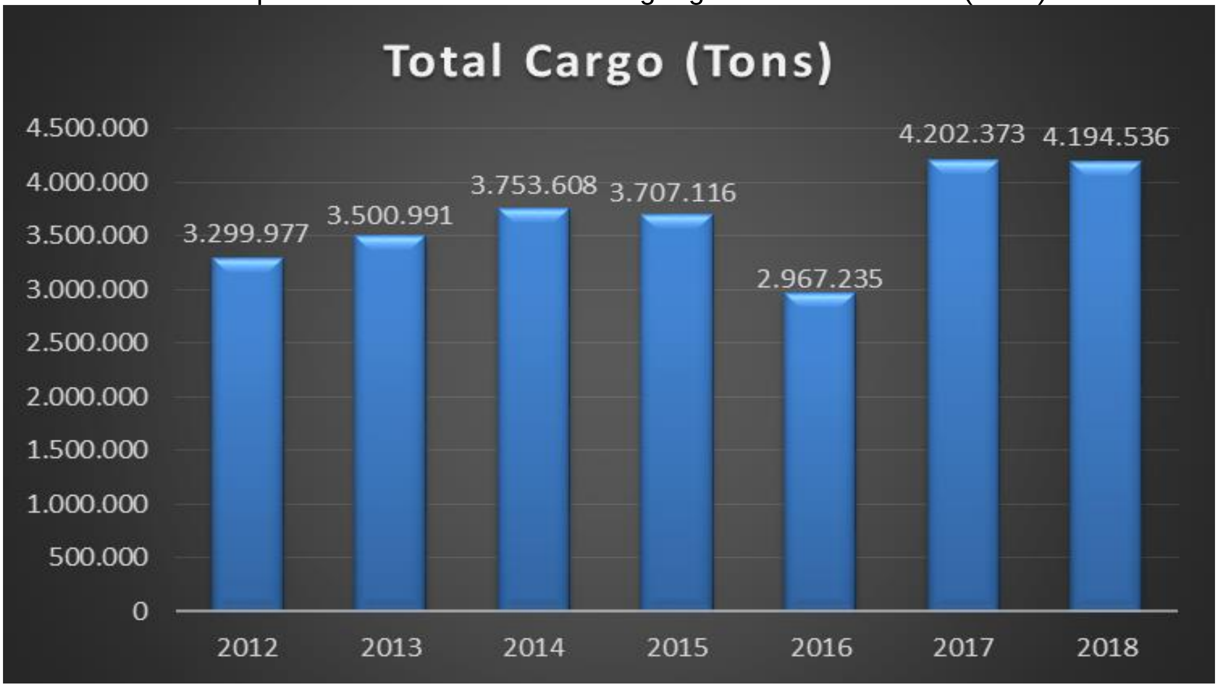
Industry Dock
Dock numbers 10-11-12 have length of 400 meters and a draft of 11 meters. Dock number 8 is Rail ferry Ramp, suitable for 1520 mm rail cars.
1253 vessels called Samsun Port in 2018. Handling Figures of Samsun Port according to cargo groups are as below;

Table 54 : Handling Figures of Samsun port Acc. To Years

Year	No. of Ships	Dry Bulk (Tons)	Liquid Bulk (Tons)	General Cargo (Tons)	Container (Tons)	Ro-Ro (Tons)	Wagon Ferry (Tons)	Total (Tons)
2018	1253	2.211.998	43.586	661.099	740.195	534.171	3.487	4.194.536
2017	1334	2.092.909	42.824	784.884	721.580	530.384	29.792	4.202.373
2016	986	1.459.473	38.936	569.239	627.007	266.376	6.206	2.967.235
2015	1484	1.543.466	56.470	802.569	658.451	629.874	16.287	3.707.116
2014	1423	1.665.403	48.559	794.776	589.552	617.128	38.190	3.753.608
2013	1250	1.657.680	61.558	761.662	486.623	491.547	41.921	3.500.991
2012	1391	1.543.651	55.742	716.700	393.184	528.682	62.018	3.299.977

Source: Samsunport

Graph 52 : Samsun Port Handling Figures Acc. To Years (Tons)



Çelebi Bandırma Port

Port Features	
Coordinates	40 ° 21’ 45’’ N - 027º 57’ 50’’ E
Types of Cargo	Bulk, General, Liquid, Ro-Ro, Container
Area Capacity	
Total Port Area	268.348 m²
Total Storage Area	215.569 m²
Customs Area	268.348 m²
Car - Truck Parking Area	1.500 m²
CFS	8.200 m²
Total Dock Length	2.973 m
Cargo Capacity	
Containers (Teu/Year)	350.000
Bulk and General (Tons/Year)	12.000.000
Liquid Bulk (Tons/Year)	4.320.000
Vehicle (Vehicle/Year)	700.000
Storage Capacity	
Containers (TEU)	4.195
Bulk / Open Area (Tons)	165.000
Bulk / Closed Area (Tons)	35.000
General (Tons)	110.000
Liquid Bulk / Temporary Stor. Transhipment Facility	345 m³
Vessel Acceptance Capacity	
Container (Vessel/Year)	330
Dry Bulk (Vessel/Year)	3.240
Liquid Bulk (Vessel/Year)	216
General Cargo (Vessel/Year)	216
Ro-Ro (Vessel/Year)	13.140

The port has connections to Istanbul, Turkey's business and industrial center, to the Southern Marmara and Aegean Region and has a strategic location at the south coast of Marmara. It offers bulk load, ro-ro, and mixed load handling services. Çelebi, thanks to the railway and highway connections and wide warehouses of Port of Bandırma, is considered the port that can provide the greatest benefit to the Southern Marmara, Central Anatolia, and the Aegean Sea Regions.

Port's 20 docks with a total length of 2,974 meters and with depths ranging from 6 to 12 meters, handle bulk cargo, breakbulk cargo, containers, liquid cargo, and Ro-Ro vessels. Loading and unloading services are carried out by high-technology mobile cranes, excavators, and conveyor systems.
The port has two breakwaters, one with a length of 1,000 meters and the other 500 meters, with a clearing of 225 meters in-between.

The port of Bandırma boasts the capability to meet the needs of all types of cargoes with 1 Liebherr LHM 400, 2 Reggiane MHC 200, 1 Gottwald HMK 170,1 Sennebogen 880 EQ, 1 Sennebogen 870 R Special, 2 Sennebogen 835R Special, 3 Sennebogen 835M Special, 1 Sennebogen 305, 1 Hyster Block Marble loader with capacity 32 tons, five forklifts, two stackers with carrying capacities of 45 tons, one side lifter with a capacity of 8 tons, three mini loaders, 2 loaders, and other equipment.

Table 55 : Handling Figures of Çelebi Bandırma Port Acc. To Years & Cargo Groups

Year	General Cargo (Tons)	Dry Bulk (Tons)	Liquid Bulk (Tons)	Container (TEU)	Ro-Ro (Pcs)	Passenger (Pcs)
2018	442.841	3.063.734	505.910	35.695	196.192	941.610
2017	588.084	3.607.944	486.521	28.838	244.584	1.014.897
2016	407.894	3.210.578	394.026	11.471	215.090	951.788
2015	449.275	3.035.469	324.024	18.613	205.890	1.052.971
2014	406.026	3.906.540	257.143	25.163	220.534	1.028.496
2013	330.778	3.521.039	217.981	23.628	213.201	966.739
2012	367.221	3.485.486	225.189	9.748	205.462	821.008
2011	345.082	3.214.328	190.912	2.072	198.366	967.115

Source: Çelebi Bandırma Port

Limakport İskenderun

Coordinates	36° 36' N, 36° 11' E
Port Area	1.000.000 (m2)
Number of Berths	8
Berthing Place Lengths	1.652 (m)
General Cargo Berths Length	732 (m)
Container Berths Length	920
Berthing Place Water Depths	10-15.5 (m) max.
Container Berth Water Depth	15,5 (m)
Reefer Plugs	600
Container Capacity	1.000.000 TEU/Year
Dry Bulk Capacity	2.500.000 Ton/Year
General Cargo Capacity	600.000 Ton/Year
Ro-Ro Capacity	120.000 Vehicle/Year
Ro-Pax Capacity	30.000 Truck/Year

LimakPort İskenderun is located on the Northeast of the Mediterranean Sea. It renders services for transit traffic to Middle East countries as well as East and Southeast Anatolian regions. In this regard, it occupies an important place as a transit port. The Port has become a very important and advantageous location for all the manufacturers, traders and exporters of a wide hinterland extending from Mersin to Şırnak and from Malatya to Kilis. Furthermore, the Port plays a big role in transit trade for the Middle East, particularly Northern Iraq.

The Port has a breakwater of 1375 m long. The depth at the port entrance is 12 m. The port is also connected with state railway and highway network. As a multi-purpose port, it serves different types of commodities and cargo groups such as general cargo, dry/liquid bulk, container handling, and Ro-Ro vessels.

Table 56 : Handling Figures of Limakport İskenderun

Bulk Cargo / General Cargo / Container

Year	Loading (Tons)	Unloading (Tons)	Total (Tons)
2013	898.509	1.284.899	2.183.408
2014	764.444	2.035.390	2.799.834
2015	1.338.443	2.378.422	3.716.865
2016	2.380.977	3.214.362	5.595.339
2017	2.137.952	3.341.090	5.479.042
2018	2.487.032	4.530.902	7.017.934

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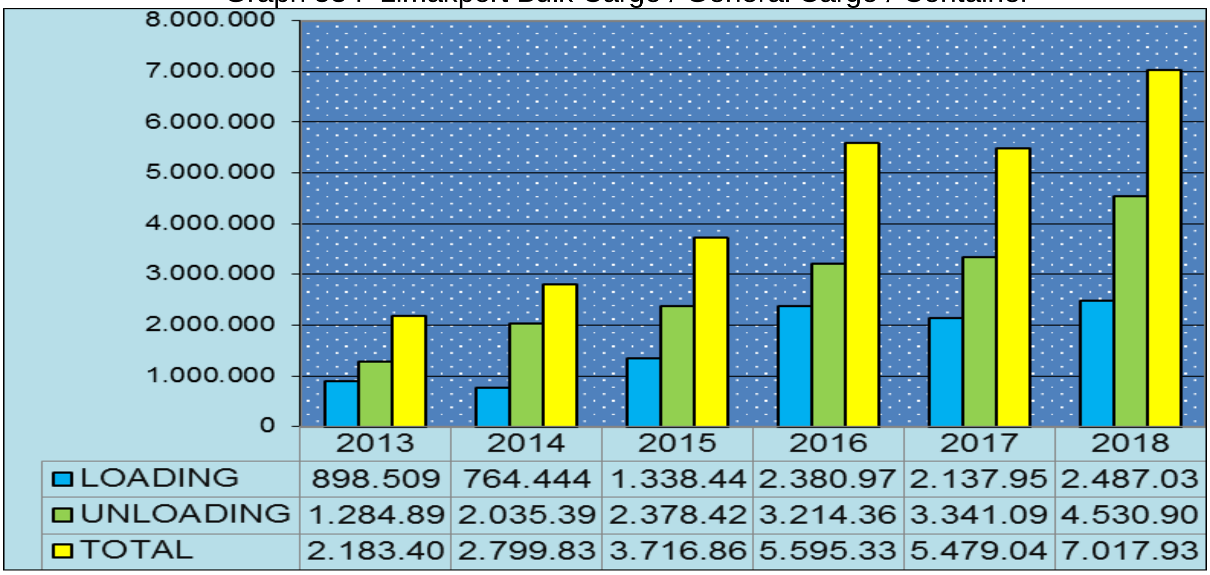
Ro-Ro / Ro-Pax

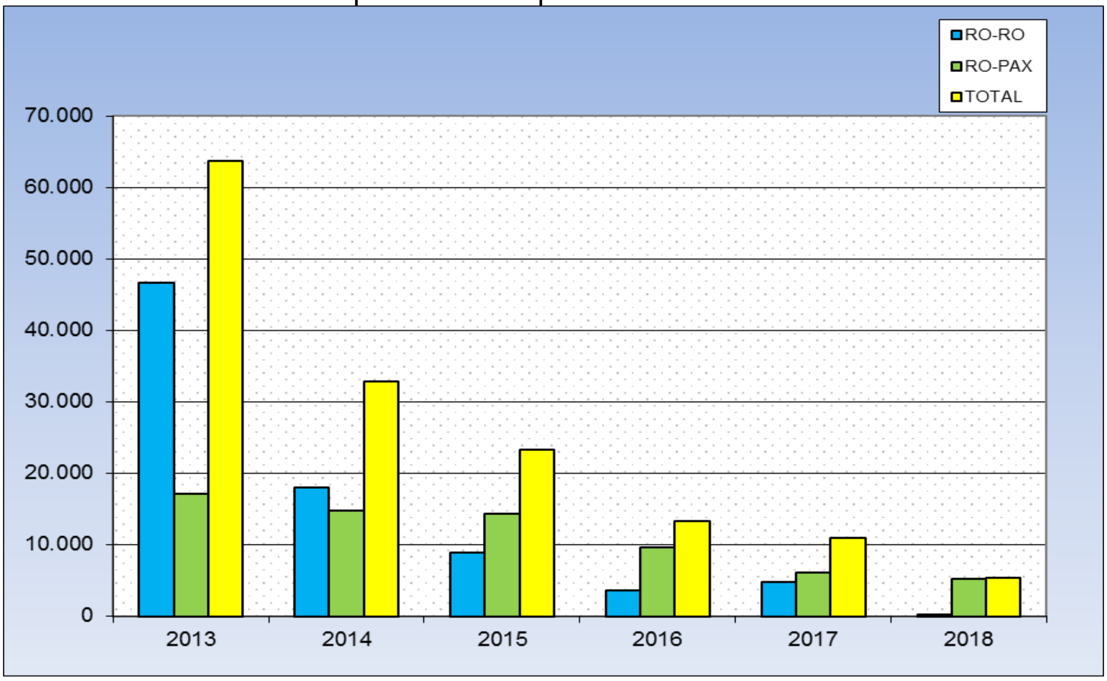
Year	Ro-Ro	Ro-Pax	Total
2013	46.602	17.087	63.689
2014	18.066	14.736	32.802
2015	8.888	14.355	23.243
2016	3.648	9.635	13.283
2017	4.784	6.127	10.911
2018	169	5179	5348

Source: Limakport İskenderun

Graph 53 : Limakport Bulk Cargo / General Cargo / Container



Graph 54 : Limakport Ro-Ro / Ro-Pax



Safi Derince International Port

Located in the Marmara Region, to the northern part of Izmit Gulf; Safi Derince International Port serves different type of commodities and cargo groups including Ro-Ro, project cargo, dry bulk, general cargo, liquid cargo, containers, and railway carriages.

Port Area	1.200.000 m²
Tank Capacity	1.500.000 m³
Container Handling Capacity	2.500.000 TEU
Dry Bulk Cargo Handling Capacity	10.000.000 Tons
Ro-Ro Capacity	1.500.000 Vehicle/Unit

Berths	Length(m)	Depth(m)
1-2	90	14
3-4	440	15
5-6	550	12
7	160	10
8	120	5,5

The currently existing open storage area is 450.000 m². There are two new enclosed and operational warehouses (1800 m² and 2500 m²) and a third one (5000 m²) is yet to be completed.

Equipments
- Mobile Cranes (35tons/200tons)
- Forklifts (3tons/35tons)
- Mini Loader
- Reachstacker / Emptystacker
- Excavators
- Warehouses (35 tons overhead crane)
- Gottwald (2x125 tons)
- Sennebogen 870 Serial Excavator Crane
- Tractors
- Trailer
- Tug Master (90tons/150tons)
- STS/RTG/RMG

Table 57 : Handling Figures of Safi Derince International Port Acc. To Years And Cargo Groups

Year	Dry Bulk (Tons)	Liquid Bulk (Tons)	General Cargo (Tons)	Container (TEU)	Ro-Ro (Pcs)
2015	1.675.290	18.533	510.241	1.983	450.860
2016	1.876.300	16.865	626.400	6.750	422.350
2017	1.930.000	0	340.686	1.495	397.391
2018	3.200.520	0	567.680	800	366.684

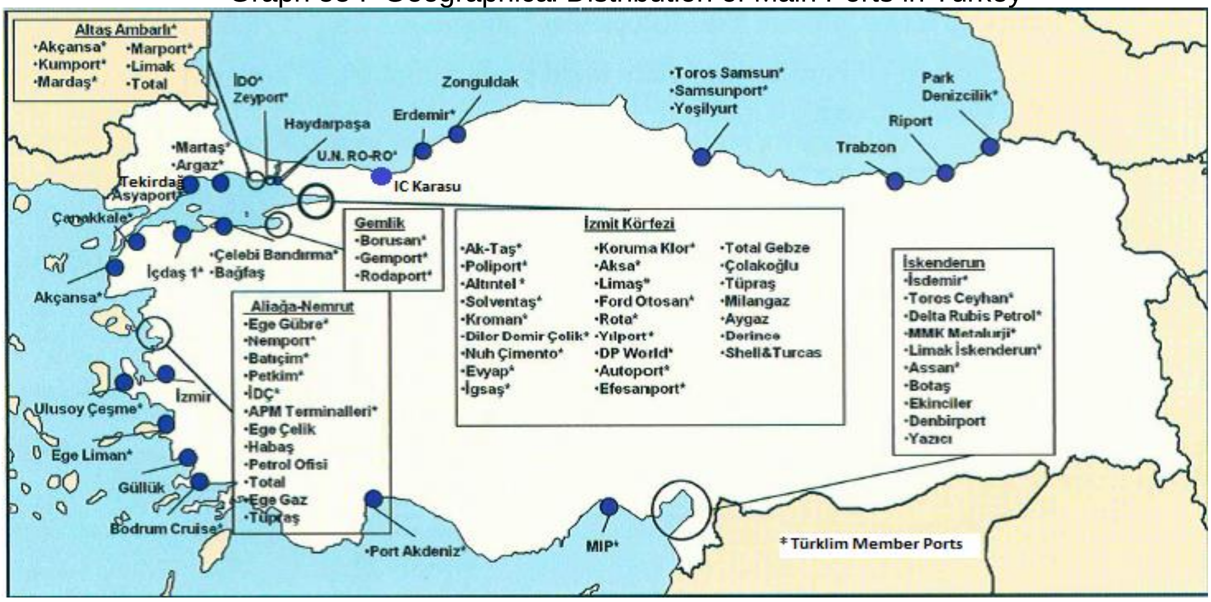
4.6.Private Ports' List and Geographical Distribution of Main Ports In Turkey

Table 58 : Private Ports List
ALİDAŞ ALANYA LİMANI ANTALYA LİMANI SERBEST BÖLGE RIHTIMI ÇEKİSAN ŞAMANDIRASI MOİL ŞAMANDIRA PLATFORMU ORTADOĞU ANTALYA LİMAN İŞLETMELERİ A.Ş. (PORT AKDENİZ) POAŞ ANTALYA ŞAMANDIRA TERMİNALİ
AKÇANSA ÇANAKKALE LİMANI BAGFAŞ İSKELESİ ÇELEBİ BANDIRMA LİMANI BORUSAN LİMANI BP GEMLİK TERMİNALİ GEMLİK GÜBRE LİMANI GEMPORT RODA LİMANI İÇDAŞ İSKELESİ DOLAMİT MADENCİLİK RIHTIMI ÖZGÜMÜŞ MADENCİLİK RIHTIMI
ASYAPORT CEYPORT TEKİRDAĞ AUTOPORT LİMAN İŞLETMELERİ A.Ş. AKÇANSA AMBARLI LİMANI AMBARLI DEPOLAMA TESİSLERİ ANADOLU ÇİMENTO TESİSLERİ LİMAK AMBARLI TERMİNALİ AYGAZ LPG DEPOLAMA VE DOLUM TESİSLERİ ÇEKİSAN ÇEKMECE DEPOLAMA KUMPORT LİMANI MARDAŞ

MARPORT PETROL OFİSİ HARAMİDERE TESİSLERİ TOTAL HARAMİDERE İSKELESİ ANADOLU YAKASI KUMCULARI İSKELELERİ MOBIL OIL SERVİBURNU İSKELESİ PETROL OFİSİ ÇUBUKLU TESİSLERİ ZEYPORT AKÇANSA YALOVA ÇİMENTO TERMİNALİ İSKELESİ AKSA AKRİLİK KİMYA SANAYİ A.Ş. AKTAŞ TERMİNALİ ALEMDAR DİLİSKELESİ ALTINTEL İSKELESİ AYGAZ YARIMCA DOLUM TESİSİ ARGAZ LPG AKARYAKIT DOLUM VE DEPOLAMA TESİSİ ÇOLAKOĞLU METALURJİ TESİSLERİ DİLER LİMAN TESİSLERİ EVYAP DENİZ İŞLETMECİLİĞİ LOJİSTİK VE İNŞAAT A.Ş. FORD OTOSAN YENİKÖY İSKELESİ GÜBRETAŞ TESİSLERİ HABAŞ TERMİNALİ İGSAŞ İSTANBUL GÜBRE SANAYİ A.Ş. EFESAN PORT KIZILKAYA LİMANI KORUMA KLOR ALKALİ SAN. VE TİC. A.Ş. KROMAN ÇELİK LİMAN TESİSLERİ LAFARGE ASLAN ÇİMENTO İSKELESİ LİMAŞ İZMİT TERMİNALİ MARMARA TRANSPORT İSKELESİ MİLANGAZ ŞAMANDIRA TESİSLERİ NUH ÇİMENTO SAN. A.Ş. (NUHPORT) OPAY PLATFORM İSKELESİ PETLINE PLATFORMU PETROL OFİSİ DERİNCE İSKELESİ POLİPORT SEDEF KONTEYNER TERMİNALİ VE LİMAN İŞLETMELERİ SHELL DERİNCE TESİSLERİ SOLVENTAŞ TOTAL GEBZE TERMİNALİ TURKUAZ İSKELESİ TÜPRAŞ İZMİT RAFİNERİ TESİSLERİ TÜPRAŞ KÖRFEZ SIVI YÜK İSKELESİ YALOVA ELYAF İSKELESİ YARIMCA ROTA LİMANI SAFİ DERİNCE LİMANI DP WORLD YARIMCA LİMANI ERDEM EREĞLİ ÇİMENTO ÖZEL LİMANI ERDEMİR LİMANI EREN HOLDİNG LİMANI BÜTANGAZ TERMİNALİ OPET MARMARA TERMİNALİ İSKELE VE PLATFORMU SALIPAZARI KRUVAZİYER LİMANI MARTAŞ MARMARA EREĞLİSİ LİMAN TESİSLERİ ÇAYIROVA CAM SANAYİ İSKELESİ GİSAŞ TUZLA İSKELESİ U.N. RO-RO PENDİK LİMANI YILPORT
AKDENİZ KİMYA NEMPORT LİMANI EGE ÇELİK LİMANI EGE GÜBRE LİMANI EGE GAZ LNG TERMİNALİ HABAŞ İSKELESİ BATIÇİM A.Ş. BATI LİMAN TESİSLERİ İDÇ LİMANI PETROL OFİSİ ALİAĞA TESİSLERİ TOTAL OIL İSKELESİ TÜPRAŞ LİMANI PETKİM LİMANI

PETLİM KONTEYNER LİMANI BODRUM CRUISE PORT GÜLLÜK LİMANI ÇEŞME LİMANI DİKİLİ İSKELESİ MOPAK İSKELESİ KUŞADASI YOLCU LİMANI MARMARİS LİMANI
LİMAKPORT İSKENDERUN TOROS CEYHAN TERMİNALİ SAVKA MERSİN TERMİNALİ ADVANSA SASA POLYESTER TESİSLERİ ÇEKİSAN ŞAMANDIRASI GÜBRETAŞ SARISEKİ İSKELESİ İSDEMİR LİMANI DELTA PETROL LİMANI ORHAN EKİNCİ İSKELESİ YAZICI İSKELESİ ATAŞ TERMİNALİ MERSİN LİMANI MMK ATAKAŞ DÖRTYOL LİMAN İŞLETMESİ MESBAŞ RIHTIMI SAVKA PLATFORMU SANKO LİMAN TESİSİ ENERJİ MERSİN TERMİNALİ
IC KARASU LİMANI SAMSUNPORT TOROS TARIM SANAYİİ SAMSUN LİMAN İŞLETMESİ SÜRSAN ŞAMANDIRASI ORDU LİMANI AYGAZ ŞAMANDIRALARI PETROL OFİSİ ŞAMANDIRALARI TOTAL OIL ŞAMANDIRASI YILDIZ ENTEGRE AĞAÇ SAN. ŞAMANDIRASI SİNOP LİMANI YEŞİLYURT LİMANI
GİRESUN LİMANI PARK DENİZCİLİK HOPA LİMAN İŞLETMELERİ A.Ş. RİPORT ÜNYE ÇİMENTO TESİSİ LİMANI POAŞ ŞAMANDIRA TESİSLERİ TRABZON LİMANI

Graph 55 : Geographical Distribution of Main Ports in Turkey



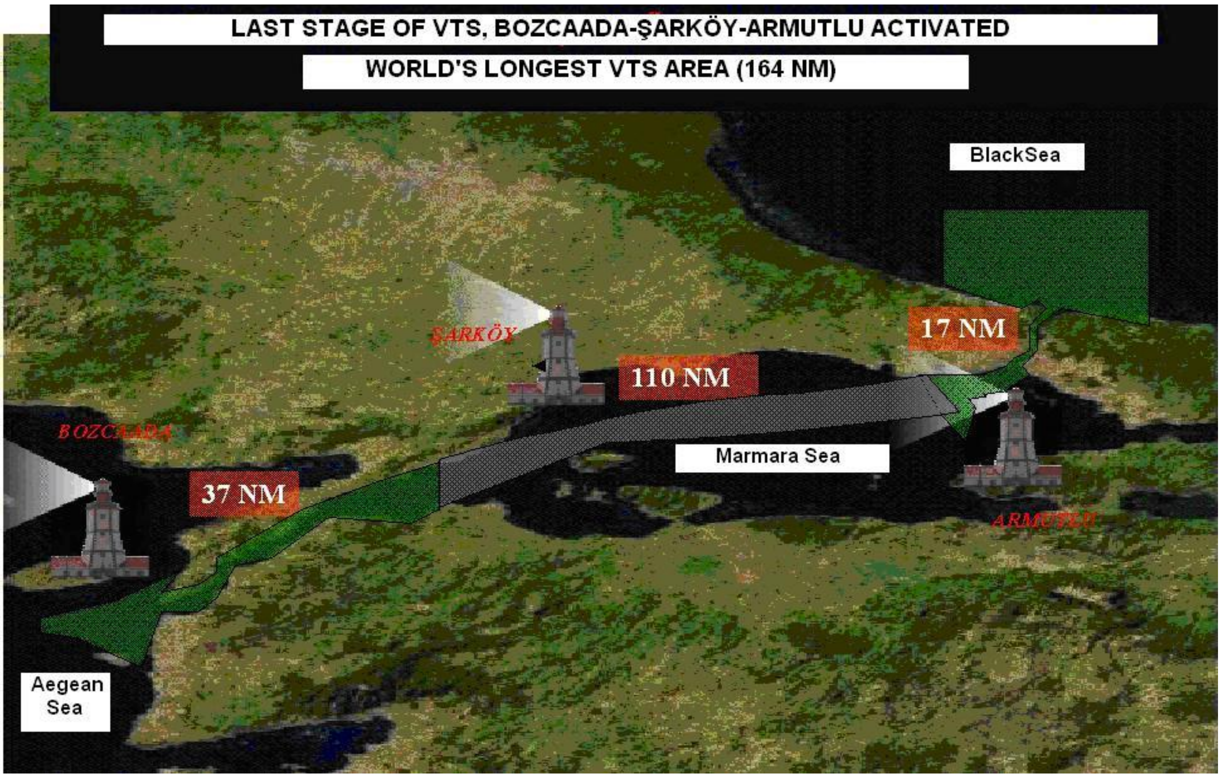
Source: TURKLIM

CHAPTER V

TURKISH STRAITS AND MARITIME TRAFFIC SYSTEMS

5. TURKISH STRAITS AND MARITIME TRAFFIC SYSTEMS

5.1. Turkish Straits



The region called Turkish Straits includes İstanbul and Çanakkale Straits and the Sea of Marmara. It is one of the regions that have the highest concentration of maritime traffic in the World.

Turkish Straits consist of the Istanbul Strait with a length of 17 nm, navigating area in Marmara Sea with a length of 110 nm and the Çanakkale Strait with a length of 37 nm. The total length of the Turkish Straits is 164 nm and is open to international maritime vessel traffic under the control of the Turkish government.

This 164 nm long seaway, starting from the north entrance of Istanbul Strait and ending at the south exit of Çanakkale Strait, is a region that should be treated with high importance both from geomorphological and hydrographical aspects. Especially, having 12 sharp turning points two of which are the 45º in front of Istanbul Strait-Kandilli and the other the 80º in front of Yeniköy and with complex currents reaching relative speeds of 7-8 knots makes it even a region with higher priority

The Strait of Istanbul is unique as it runs through the city of İstanbul with more than 15 million inhabitants. The shoreline of Istanbul is densely populated. Vessels approach frequently as close as 50 meters to these inhabited areas. Excluding the vessel traffic, the local traffic such as leisure crafts and fishing vessels, daily domestic vessel movements alone in the Strait of Istanbul are more than 2500. More than 2.5 million people are moving daily by sea from one side to the other. Istanbul is a city with 3000 years of history. It is declared as a “world heritage city” by UNESCO.

Besides their geopolitical and strategical importance, the Turkish Straits are highly congested with international maritime traffic due to being the only waterway between the Black Sea and The Mediterranean without any alternative.

The numbers of vessels that passed through the Turkish Straits between the years 2006-2018 are shown in Table below.

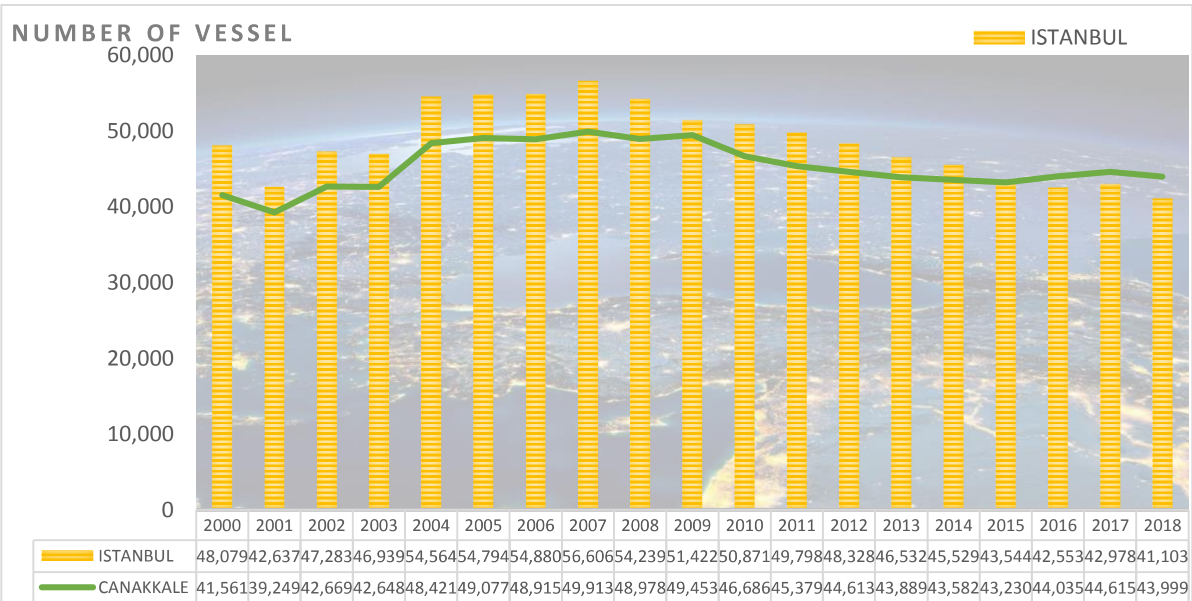
Table 59 : Ships Passing Through the Turkish Straits (2006-2018)

Years	ISTANBUL			CANAKKALE		
	Number of Vessel	GT	GT Change %	Number of Vessel	GT	GT Change %
2006	54.880	475.796.880	-	48.915	595.826.240	-
2007	56.606	484.867.696	2%	49.913	611.885.819	3%
2008	54.239	515.639.614	6%	48.978	657.396.892	8%
2009	51.422	514.656.446	0%	49.453	667.412.661	2%
2010	50.871	505.615.881	-2%	46.686	672.843.533	1%
2011	49.798	523.543.509	4%	45.379	705.412.518	5%
2012	48.328	550.526.579	6%	44.613	735.728.537	5%
2013	46.532	551.771.780	0%	43.889	745.567.671	2%
2014	45.529	582.468.334	6%	43.582	761.631.756	3%
2015	43.544	565.216.784	-4%	43.230	777.989.382	3%
2016	42.553	565.282.287	0%	44.035	772.922.682	-1%
2017	42.978	599.324.748	7%	44.615	823.460.636	8%
2018	41.103	613.088.166	3%	43.999	849.140.218	4%

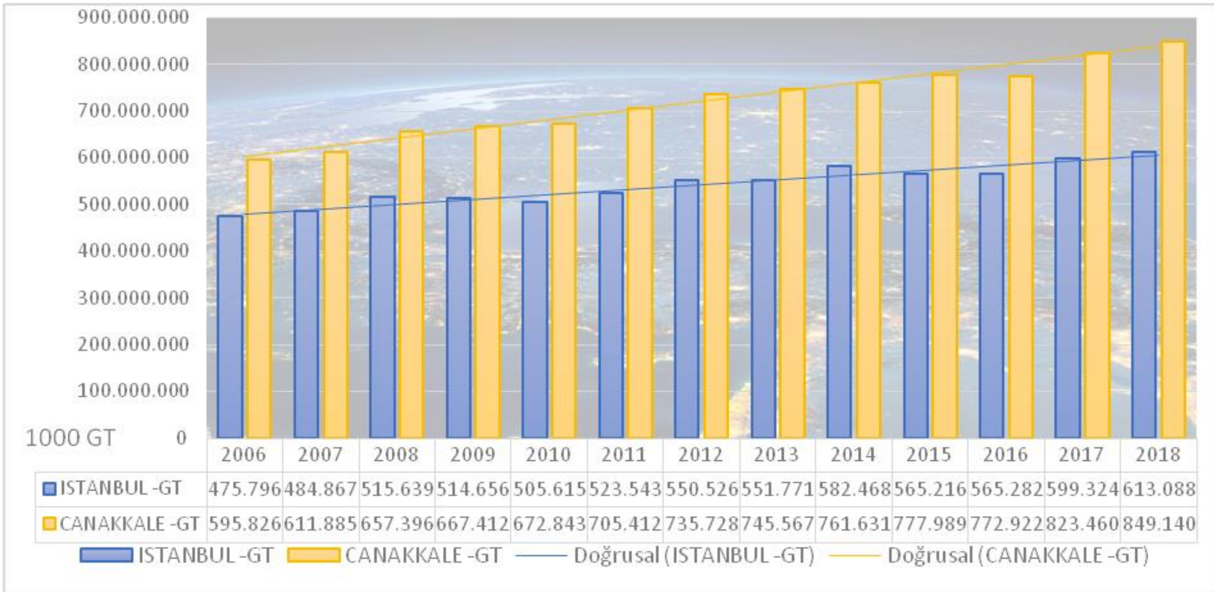
Source: Republic of Turkey Ministry of Transport and Infrastructure

In the year 2018, 41.103 ships in total passed through the Istanbul Strait with a monthly average of 3.425 ships; 43.999 ships in total passed through the Çanakkale Strait with a monthly average of 3.667 ships.

Graph 56 : Number of Ships Passing Through the Turkish Straits (2000-2018)



Graph 57 : Ships Passing Through the Turkish Straits GT(2000-2018)



A significant part of the ships passing through the Turkish Straits carry toxic, hazardous and explosive substances (such as crude oil, ammonia, liquefied gas, radioactive substances, hazardous wastes). Especially in the 1990s, parallel to the increase in the oil flow to the ports in the Black Sea, the number of ships carrying dangerous goods and oil from the Turkish Straits also increased.

Table 60 : Dangerous Passing Through The Turkish Straits

Years	Istanbul		Canakkale	
	Total Tankers Carrying Dangerous Substances	Oil and Dangerous Cargoes (ton)	Total Tankers Carrying Dangerous Substances	Oil and Dangerous Cargoes (ton)
2006	10.153	143.452.500	9567	152.726.000
2007	10.054	143.939.500	9271	149.320.000
2008	9303	140.357.500	8758	149.052.000
2009	9299	144.660.000	9567	152.105.500
2010	9274	146.750.500	9252	156.929.000
2011	9103	138.496.500	8818	154.606.000
2012	9027	131.123.000	8998	151.040.000
2013	9006	134.444.000	9299	149.091.000
2014	8745	133.961.000	9250	152.286.000
2015	8633	135.952.000	9524	155.531.000
2016	8703	136.100.000	9481	156.203.000
2017	8832	146.943.000	9478	166.729.000
2018	8587	147.375.459	9251	164.583.997

Source: Republic of Turkey Ministry of Transport and Infrastructure

The statistics of ships passing through İstanbul and Çanakkale Straits, with respect to length, piloting and country are shown in the following tables.

Table 61 : The Monthly Statistics of Vessels Passed Istanbul Strait According to Their Length and Pilot Request

Months	Number of Ship	Gross Tonnage	With Pilot	Sp1 Given	Non Call In Vessel	LOA Longer Than 200M	Lower Than 500 GT	Total Tankers			
								TTA	LPG LNG	TCH	Towaged
January	3.374	47.293.602	1.918	3.352	2.049	302	30	518	56	160	6
February	3.237	46.327.666	1.870	3.218	1.991	289	27	522	71	130	4
March	3.706	51.869.688	2.103	3.680	2.243	329	22	543	62	154	2
April	3.595	52.509.361	2.071	3.583	2.199	352	28	504	53	160	7
May	3.568	51.061.996	1.925	3.542	2.156	342	38	485	61	174	4
June	3.229	47.592.533	1.757	3.214	2.020	324	39	493	52	174	7
July	3.608	52.016.359	1.984	3.584	2.189	341	53	514	52	155	15
August	3.444	54.026.054	1.941	3.400	2.231	394	75	481	48	155	21
September	3.157	50.332.247	1.794	3.146	2.086	355	54	458	33	149	17
October	3.518	54.770.175	2.064	3.492	2.331	355	47	505	56	184	15
November	3.193	52.003.434	1.965	3.178	2.155	358	47	451	32	191	6
December	3.474	53.285.051	2.173	3.455	2.234	365	48	540	47	164	12
Total	41.103	613.088.166	23.565	40.844	25.884	4.106	508	6.014	623	1.950	116

Source: Republic of Turkey Ministry of Transport and Infrastructure

Table 62 : The Monthly Statistics of Vessels Passed Canakkale Strait According to Their Length and Pilot Request

Months	Number of Ship	Gross Tonnage	With Pilot	Sp1 Given	Non Call In Vessel	LOA Longer Than 200M	Lower Than 500 GT	Total Tankers			
								TTA	LPG LNG	TCH	Towage d
January	3.545	67.560.600	1.614	3.523	2.059	529	36	521	71	191	9
February	3.436	65.236.095	1.572	3.416	1.998	491	41	519	78	179	13
March	3.829	72.056.454	1.722	3.785	2.225	552	68	533	77	205	11
April	3.795	72.199.881	1.705	3.771	2.202	570	61	487	61	202	18
May	3.807	71.769.305	1.644	3.760	2.166	566	71	513	57	207	3
June	3.653	67.937.957	1.686	3.610	2.021	513	88	527	60	214	10
July	3.751	71.874.855	1.704	3.693	2.195	566	77	521	58	183	13
August	3.634	71.209.193	1.668	3.581	2.211	580	81	486	54	197	23
September	3.566	70.545.578	1.628	3.538	2.109	564	59	536	39	154	11
October	3.833	75.510.522	1.724	3.796	2.303	576	63	527	48	217	17
November	3.526	69.767.149	1.576	3.436	2.140	532	48	478	38	230	10
December	3.624	73.472.629	1.715	3.604	2.206	573	39	539	57	187	18
Total	43.999	849.140.218	19.958	43.513	25.835	6.612	732	6.187	698	2.366	156

Source: Republic of Turkey Ministry of Transport and Infrastructure

Table 63 : 2016-2017-2018 Statistics of Vessels Passed Istanbul Strait According to Their Ship Type

Ship types	2016	2017	2018
Barge / Barge Carrier	21.344	21.163	19.269
Bulk Carrier	7.664	8.206	8.501
Cement Carrier	6.033	6.212	6.014
Container Ship	2.734	2.659	2.561
Ferry	1.681	1.878	1.950
General Cargo Ship	989	742	623
Livestock Carrier	585	544	508
Naval	237	262	384
Passenger Ship	234	227	367
Refrigerated Cargo Carrier	291	336	367
Roll on Roll of Vessel	352	396	245
Other Tanker, TTA	342	237	176
Chemical Tanker, TCH	16	45	88
Liquefied Petroleum Gas/Natural Gas Tanker, LPG/LNG	40	46	34
Tug	4	6	12
Vehicle Carrier	6	18	3
Other	1	1	1
Total	42.553	42.978	41.103

Source: Republic of Turkey Ministry of Transport and Infrastructure

Table 64 : The Monthly Statistics of Vessels Passed Canakkale Strait According to Their Ship Type

Ship types	2016	2017	2018
Barge / Barge Carrier	16.680	16.485	15.764
Bulk Carrier	8.060	8.585	8.916
Cement Carrier	6.041	6.145	6.181
Container Ship	4.728	4.957	5.123
Ferry	2.559	2.599	2.368
General Cargo Ship	2.473	2.479	2.243
Livestock Carrier	433	576	670
Naval	653	627	601
Passenger Ship	454	511	597
Refrigerated Cargo Carrier	755	652	595
Roll on Roll of Vessel	365	365	398
Other Tanker, TTA	335	271	217
Chemical Tanker, TCH	126	82	103
Liquefied Natural Gas Tanker, LNG	125	113	67
Liquefied Petroleum Gas Tanker, LPG	29	89	57
Tug	190	49	55
Vehicle Carrier	29	24	30
Other	0	6	14
Total	44.035	44.615	43.999

Source: Republic of Turkey Ministry of Transport and Infrastructure

Table 65 : 2006-2018 Years of Vessels Passed İstanbul Strait According to Their Length and Pilot Request

Years	Number of Ship	Gross Tonnage	With Pilot	Sp1 Given	Transit Passage	LOA Longer Than 200M	Lower Than 500 GT	Total Tankers			
								TTA	LPG LNG	TCH	Towaged
2006	54.880	475.796.880	26.589	53.324	31.880	3.653	2.176	7.659	814	1.680	111
2007	56.606	484.867.696	26.685	55.132	31.826	3.653	2.138	7.204	800	2.050	105
2008	54.396	515.639.614	27.001	53.232	31.762	3.911	1.800	6.564	764	1.975	119
2009	51.422	514.656.446	24.977	50.712	32.297	3.871	1.128	6.557	866	1.876	122
2010	50.871	505.615.881	26.035	50.020	28.668	3.623	1.377	6.464	1.099	1.711	115
2011	49.798	523.543.509	26.011	49.179	27.938	3.800	1.046	6.216	1.227	1.660	93
2012	48.329	550.526.579	24.812	47.638	27.345	3.866	1.064	5.913	1.336	1.779	98
2013	46.532	551.771.780	24.023	45.616	26.577	3.801	1.192	5.685	1.741	1.580	87
2014	45.529	582.468.334	24.508	44.928	26.212	4.295	928	5.587	1.540	1.618	90
2015	43.544	565.216.784	23.349	43.039	25.243	3.930	879	5.825	1.232	1.576	71
2016	42.553	565.282.287	22.356	42.132	26.050	3.873	522	6.033	989	1.681	73
2017	42.978	599.324.748	24.059	42.700	26.111	4.005	436	6.212	742	1.878	88
2018	41.103	613.088.166	23.565	40.844	25.884	4.106	508	6.014	623	1.950	116

Source: Republic of Turkey Ministry of Transport and Infrastructure

Graph 58 : The Statistics Summary Of Vessels Passed Istanbul Strait Number Of Vessel, With Pilot and Non Call in Vessel

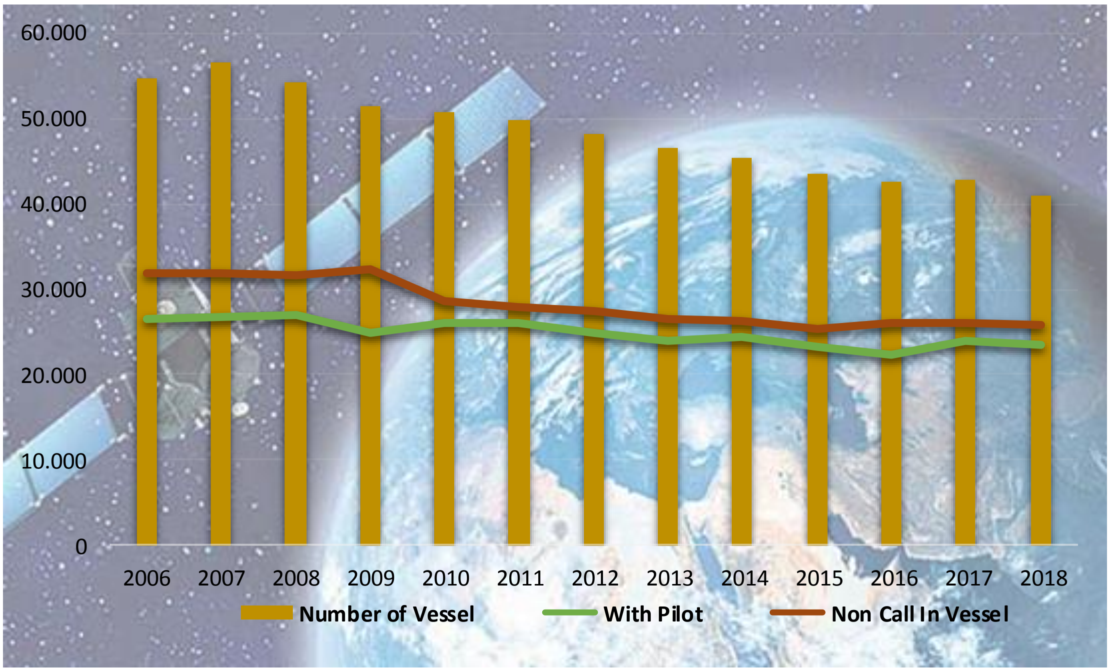
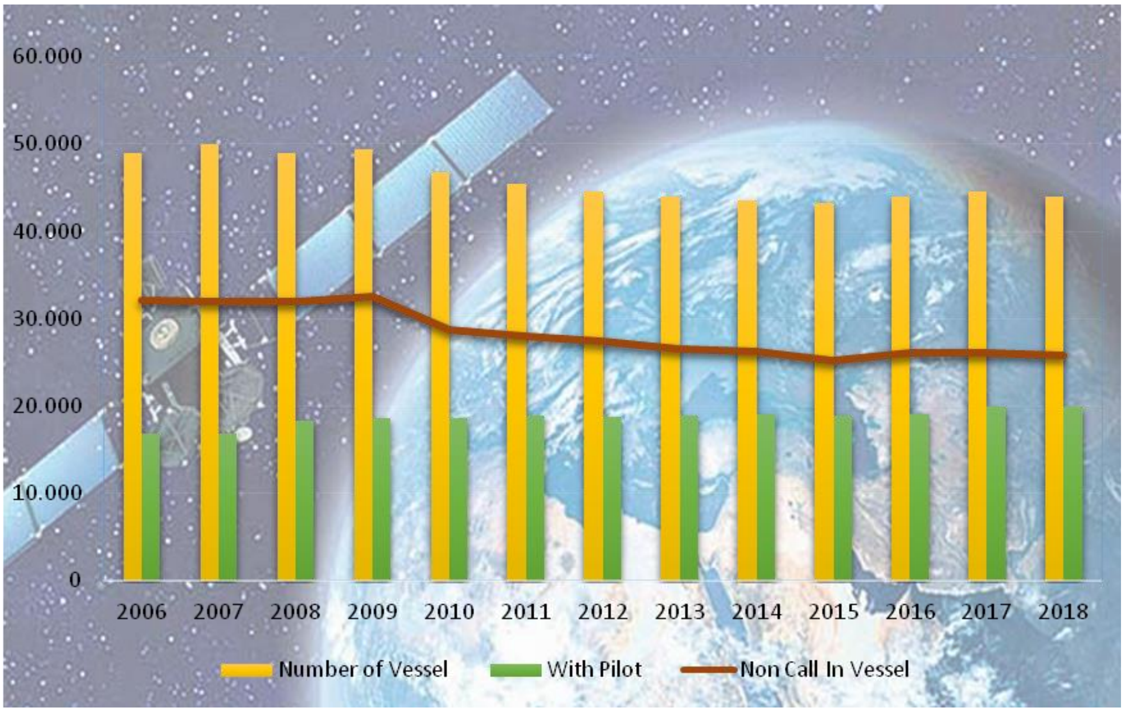


Table 66 : 2006-2018 Years of Vessels Passed Çanakkale Strait According to Their Length and Pilot Request

Years	Number of Ship	Gross Tonnage	With Pilot	Sp1 Given	Transit Passage	LOA Longer Than 200M	Lower Than 500 GT	Total Tankers			
								TTA	LPG LNG	TCH	Towaged
2006	48.915	595.826.240	16.871	48.264	32.061	4.845	1.404	7.204	798	1.565	131
2007	49.913	611.885.819	16.885	48.802	31.981	4.945	1.873	6.527	754	1.990	138
2008	48.978	657.396.892	18.334	48.565	31.981	5.223	844	5.990	777	1.991	162
2009	49.453	667.412.661	18.588	49.210	32.559	5.176	615	6.293	842	2.432	146
2010	46.686	672.843.533	18.678	46.469	28.768	5.098	598	6.017	902	2.333	138
2011	45.379	705.412.518	18.920	45.196	27.983	5.494	572	5.661	974	2.183	159
2012	44.613	735.728.537	18.775	44.416	27.418	5.919	519	5.656	1.038	2.304	134
2013	43.889	745.567.671	18.924	43.579	26.534	5.824	448	5.822	1.380	2.097	123
2014	43.582	761.631.756	19.107	43.238	26.257	5.902	512	5.875	1.206	2.169	116
2015	43.230	777.989.382	18.843	42.755	25.220	5.842	581	6.009	1.036	2.479	122
2016	44.035	772.922.682	19.007	43.543	26.071	5.665	661	6.041	881	2.559	139
2017	44.615	823.460.636	19.925	43.888	26.087	6.197	755	6.145	734	2.599	149
2018	43.999	849.140.218	19.958	43.513	25.835	6.612	732	6.187	698	2.366	156

Source: Republic of Turkey Ministry of Transport and Infrastructure

Graph 59 : The Statistics Summary Of Vessels Passed Canakkale Strait Number Of Vessel, With Pilot and Non Call in Vessel



5.2. Turkish Straits Vessel Traffic Services

Turkish Straits VTS, comprised of the Straits of Istanbul and Çanakkale and the Sea of Marmara, was established on 30th December 2003 in order to enhance maritime safety, minimize the risks of the possible threats and protect the marine environment in line with national legislation and the international regulations, by using the latest technology and now it serves the safe navigation to 44000 vessels yearly.

Upgrade of Turkish Straits Vessel Traffic Services System

In order to continue to operate the mentioned system in an optimum way and without interruption; a need has appeared for the renewal and betterment of the software and hardware of subsystem of data processing and also with the purpose of adding to the system the necessary applications, additional equipment, operational and management characteristics, plans have been made for adjudication concerning the said work. The modernization process is going on.

Vessel Traffic Management and Information System (VTMIS) Project

Within the scope of the Project for Vessel Traffic Management and Information System (VTMIS) the installation of which is still performed by the relevant Ministry, it is planned that Regional Vessel Traffic Services (VTS) to be built in order to increase the navigation safety in İzmit, İzmir, Iskenderun and Mersin regions, where vessel traffic is intense and risky.

With the regional VTS Systems it is aimed to increase the sea traffic safety and efficiency and to monitor, arrange, organize and manage the vessel traffic movements in interaction with vessels with a view to protect the sea environment as well as to provide one or more of the services of information, navigation assistance and traffic organization in some or all of the regional VTS areas. Regional VTS Systems consist of 24 Traffic Monitoring Stations and 3 Vessel Traffic Services Centers.

The main components of the system are, x-band microwave radars, closed-circuit tv cameras, automatic weather stations, VHF/direction finder stations, VHF/ MF/ HF/ Inmarsat-C communication equipment’s, record and replay units and Automatic Identification System base stations.

In these new VTS’s, in addition to the existing TSVTS, there will be some improved features such as, port management and information module which will be established in order to monitor and manage all the movements of the vessels and cargoes in the territorial waters of Turkey.

Automatic Identification System (AIS)

As another safety and security arrangement, AIS based traffic monitoring and management system covering all Turkish coastal waters and beyond provides a complete picture of traffic in Turkey’s surrounding seas with all the pertinent details. It also contains several additional searches, backtracking and viewing functions that became operational on the 9th of July 2007.

The system provides an opportunity to monitor all vessels and marine vehicles that have an AIS transponder within the coverage area and also to obtain more detailed information. Among others several goals can be listed, such as increasing navigation safety and maritime security through our coasts; to make contribution to Search and Rescue activities; to prevent maritime accidents and to intervene maritime accidents immediately; to cooperate with other institutions concerning illegal migration and violations of fishing boats in foreign territorial waters and to prevent illegal fishing activities. The centre of this system which covers all over the Turkish coasts with 27 Coastal Base Stations and monitors all ships momentarily is in Ankara.

Upgrade of AIS

In order to continue to operate the mentioned system in an optimum way and without interruption a need has appeared for the renewal and improval of the software and hardware of sub-system of data processing and also with the purpose of adding to the system the necessary applications, additional equipment, operational and management characteristics. The upgrading process is going on.

Long Range Identification and Tracking (LRIT) System
Turkey has invested a significant amount of effort, time and financial resources to ensure the timely implementation of its National LRIT Data Centre. Moreover, Turkey actively participated in all Ad Hoc LRIT Group meetings and followed all LRIT related developments with great interest and desire. Turkey's National LRIT Data Centre is established and Application Service Provider (ASP) of Turkey is provided by TURKSAT A.S, which is the National Satellite Company of Turkey. Turkey's National LRIT Data Center (TRNDC) has passed the developmental and integration test phases conducted by IMO satisfactorily to participate into the LRIT production environment on 8 March 2010.

İstanbul Local Traffic Control Centre

In order to enhance maritime safety and security in the boundaries of Harbour Master of İstanbul and in order to monitor the local traffic in the Strait of İstanbul, a Local Traffic Control Centre was established at the end of 2018.

CHAPTER VI

Maritime Education in Turkey

6.MARITIME EDUCATION IN TURKEY

International Maritime Organization (IMO) accepts the Ministry of Transport and Infrastructure (Administration) as respondent for maritime education. Our Administration implemented the requirements brought by international conventions since the 1990's to our domestic law relating to the matter. The Republic of Turkey has kept its place in the "White List" on maritime education with MSC Circ. 1164/Rev 19 published by IMO on 25 May 2018. Besides as a result of audits carried out by European Maritime Safety Agency (EMSA) in our country, students who graduated from our country's maritime schools are given way to work on board of EU flagged ships. 29 Faculty, 32 Vocational High School, 50 Vocational and Technical Anatolian High School, and 34 Private Maritime Educational Course are maintaining maritime educational activities in our country.

Table 67 : Maritime Faculties

No	CITY	FACULTY
1	ADANA	ÇUKUROVA UNIVERSITY
2	ANTALYA	AKDENİZ UNIVERSITY
3	HATAY	İSKENDERUN TEKNİK UNIVERSITY
4	ISPARTA	ISPARTA UYGULAMALI BİLİMLER UNIVERSITY
5	MERSİN	MERSİN UNIVERSITY
6	MUĞLA	MUĞLA SITKI KOÇMAN UNIVERSITY
7	ELAĞZIĞ	FIRAT UNIVERSITY
8	ERZURUM	ATATÜRK UNIVERSITY
9	VAN	VAN YÜZÜNCÜ YIL UNIVERSITY
10	İZMİR	DOKUZ EYLÜL UNIVERSITY
11	İZMİR	EGE UNIVERSITY
12	İZMİR	İZMİR KATİP ÇELEBİ UNIVERSITY
13	ANKARA	ANKARA UNIVERSITY
14	ORDU	ORDU UNIVERSITY
15	RİZE	RECEP TAYYİP ERDOĞAN UNIVERSITY
16	SİNOP	SİNOP UNIVERSITY
17	TRABZON	KARADENİZ TEKNİK UNIVERSITY
18	ZONGULDAK	ZONGULDAK BÜLENT ECEVİT UNIVERSITY
19	KKTC	GİRNE UNIVERSITY
20	KKTC	İSTANBUL TEKNİK ÜNİVERSİTESİ-KKTC EĞİTİM ARAŞTIRMA YERLEŞKESİ
21	BALIKESİR	BANDIRMA ONYEDİ EYLÜL UNIVERSITY
22	ÇANAKKALE	ÇANAKKALE ONSEKİZ MART UNIVERSITY
23	İSTANBUL	İSTANBUL TEKNİK UNIVERSITY
24	İSTANBUL	İSTANBUL UNIVERSITY
25	İSTANBUL	İSTANBUL UNIVERSITY-CERRAHPAŞA
26	İSTANBUL	MALTEPE UNIVERSITY
27	İSTANBUL	PİRİ REİS UNIVERSITY
28	İSTANBUL	YILDIZ TEKNİK UNIVERSITY
29	KOCAELİ	KOCAELİ UNIVERSITY

Table 68 : Vocational Maritime School Of Higher Education

No	CITY	SCHOOL NAME
1	ADANA	ÇUKUROVA UNIVERSITY
2	ANTALYA	AKDENİZ UNIVERSITY
3	HATAY	İSKENDERUN UNIVERSITY
4	MERSİN	MERSİN UNIVERSITY
5	MUĞLA	MUĞLA SITKI KOÇMAN UNIVERSITY
6	İZMİR	EGE UNIVERSITY
7	İZMİR	YAŞAR UNIVERSITY
9	ARTVİN	ARTVİN ÇORUH UNIVERSITY
10	BARTIN	BARTIN UNIVERSITY
11	GİRESUN	GİRESUN UNIVERSITY
12	KASTAMONU	KASTAMONU UNIVERSITY
13	ORDU	ORDU UNIVERSITY
14	SAMSUN	ONDOKUZ MAYIS UNIVERSITY
15	SİNOP	SİNOP UNIVERSITY
16	TRABZON	KARADENİZ TEKNİK UNIVERSITY
17	ZONGULDAK	ZONGULDAK BÜLENT ECEVİT UNIVERSITY
18	KKTC	GİRNE UNIVERSITY
19	BALIKESİR	BANDIRMA ONYEDİ EYLÜL UNIVERSITY
20	BURSA	BURSA ULUDAĞ UNIVERSITY
21	ÇANAKKALE	ÇANAKKALE ONSEKİZ MART UNIVERSITY
22	İSTANBUL	BEYKOZ UNIVERSITY
23	İSTANBUL	GALATASARAY UNIVERSITY
24	İSTANBUL	İSTANBUL GEDİK UNIVERSITY
25	İSTANBUL	İSTANBUL GELİŞİM UNIVERSITY
26	İSTANBUL	İSTANBUL UNIVERSITY-CERRAHPAŞA
27	İSTANBUL	NİŞANTAŞI UNIVERSITY
28	İSTANBUL	PİRİ REİS UNIVERSITY
29	İSTANBUL	SAĞLIK BİLİMLERİ UNIVERSITY
30	KOCAELİ	KOCAELİ UNIVERSITY
31	TEKİRDAĞ	TEKİRDAĞ NAMIK KEMAL UNIVERSITY

32	YALOVA	YALOVA UNIVERSITY

Table 69 : Maritime Vocational High Schools In Turkey

NO	CITY	HIGH SCHOOL NAME
1	ADANA	ÇAKABEY VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
2	ANTALYA	FETTAH TAMİNCE VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
3	ANTALYA	MANAVGAT TİCARET VE SANAYİ ODASI VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
4	AYDIN	DİDİM VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
5	AYDIN	ADVİYE - ERTUĞRUL ACUN VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
6	BALIKESİR	PAKMAYA KENAN KAPTAN VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
7	BALIKESİR	KARŞIYAKA ÇOK PROGRAMLI ANADOLU LİSESİ
8	BİTLİS	TATVAN SEYDİ ALİ REİS VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
9	ÇANAKKALE	ARMATÖR YAKUP AKSOY VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
10	Düzce	AKÇAKOCA FEDAİ KARABIYIK VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
11	Giresun	BULANCAK KAPTAN AHMET FATOĞLU VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
12	Giresun	ESPİYE Ş. CENGİZ SARIBAŞ VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
13	Giresun	TİREBOLU PİRİ REİS VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
14	HATAY	SEFA ATAKAŞ VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
15	İSTANBUL	ZİYA KALKAVAN VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
16	İSTANBUL	BEYKOZ BARBAROS HAYRETTİN PAŞA VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL

17	İSTANBUL	PENDİK BARBAROS HAYRETTİN PAŞA VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
18	İSTANBUL	PİRİ REİS VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
19	İSTANBUL	ÖZEL ERYETİŞ REİS VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
20	İSTANBUL	HACI RAHİME ULUSOY VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
21	İZMİR	ÇEŞME ULUSOY DENİZCİLİK TEKNOLOJİSİ VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
22	İZMİR	GÜZELBAHÇE İMKB VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
23	İZMİR	KARABURUN MORDOĞAN FATMA EMİN KARAAĞAÇ VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
24	İZMİR	KONAK ÇINARLI VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
25	İZMİR	KONAK NEVVAR SALİH İŞGÖREN EĞİTİM KAMPÜSÜ - 4 VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
26	İZMİR	ŞEHİT İDARİ ATAŞE ÇAĞLAR YÜCEL VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
27	KASTAMONU	PİRİ REİS VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
28	KOCAELİ	GÖLCÜK VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
29	KOCAELİ	HEREKE NUH ÇİMENTO VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
30	MERSİN	AKDENİZ MERSİN DENİZ TİCARET ODASI VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
31	MERSİN	TAŞUCU PROF. DR. DURMUŞ TEZCAN VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
32	Muğla	BODRUM VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
33	Muğla	BODRUM TURGUT REİS VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
34	Muğla	KÖYCEĞİZ ŞEHİT ÖMER HALİSDEMİR VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
35	Muğla	BOZBURUN MULTI-PROGRAMMED ANATOLIAN HIGH SCHOOL

36	Muğla	75. YIL VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
37	Muğla	MİLAS VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
38	Muğla	ÖREN MULTI-PROGRAMMED ANATOLIAN HIGH SCHOOL
39	ORDU	ATATÜRK VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
40	RİZE	IŞIKLI VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
41	RİZE	ÇAYELİ AHMET HAMDİ İSAKOĞLU VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
42	RİZE	HASAN KEMAL YARDIMCI VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
43	SAMSUN	NEDİME SERAP ULUSOY VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
44	SİNOP	PROF. DR. NECMETTİN ERBAKAN VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
45	TEKİRDAĞ	KUMBAĞ VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
46	TRABZON	OF HACI MEHMET BAHATTİN ULUSOY VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
47	TRABZON	SÜRMENE TÜRK TELEKOM VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
48	VAN	VAN PİRİ REİS VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
49	YALOVA	YALOVA ALTINOVA TERSANE GİRİŞİMCİLERİ A.Ş. VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL
50	ZONGULDAK	HATİCE ERDEM VOCATIONAL AND TECHNICAL ANATOLIAN HIGH SCHOOL

Table 70 : Private Maritime Training Courses In Turkey

No	CITY	NAME OF ORGANISATION
1	İSTANBUL	PRIVATE AKTEN MARITIME TRAINING CENTER
2	FETHİYE	PRIVATE ALBATROS MARITIME AND YACHTSMAN TRAINING CENTER
3	İSTANBUL	PRIVATE ATILIM MARITIME AND SEAMEN COURSE
4	İSTANBUL	PRIVATE EUROPE MARITIME SEAMEN EDUCATION COURSE
5	İSTANBUL	PRIVATE BEYAZ ERGUVAN MARITIME AND SEAMEN COURSE
6	İSTANBUL	PRIVATE BİLİMSEL MARITIME SEAMEN EDUCATION COURSE KADIKÖY BRANCH
7	İSTANBUL	PRIVATE BOSPHORUS MARITIME AND SEAMEN EDUCATION COURSE
8	MERSİN	PRIVATE BONCUK MARITIME AND SEAMEN COURSE
9	SAMSUN	PRIVATE ÇAPA MARITIME AND SEAMEN COURSE
10	ANTALYA	PRIVATE DEM MARITIME COURSE
11	MERSİN	PRIVATE DOĞA MARITIME AND SEAMEN COURSE
12	İZMİR	PRIVATE DÖNENCE MARITIME AND SEAMEN COURSE
13	İSTANBUL	PRIVATE EKOL MARITIME TRAINING CENTER
14	TUZLA	PRIVATE ERYETİŞ REİS MARITIME AND SEAMEN EDUCATION COURSE
15	FETHİYE	PRIVATE FETHİYE MARITIME COURSE
16	ÇANAKKALE	PRIVATE GÜLAY MARITIME TRAINING CENTER
17	GÜLLÜK	PRIVATE GÜLLÜK SEAMEN TRAINING COURSE
18	KOCAELİ	PRIVATE İNCİ MARITIME AND SEAMEN EDUCATION COURSE
19	İZMİR	PRIVATE İZMİR PUSULA MARITIME AND SEAMEN COURSE
20	SAMSUN	PRIVATE KAPTAN MARITIME AND SEAMEN COURSE
21	BODRUM	PRIVATE MARİNA DRAGOS BODRUM MARITIME TRAINING COURSE
22	MARMARİS	PRIVATE MARMARİS MARITIME TRAINING COURSE
23	FİNİKE	PRIVATE MARTI MARITIME TRAINING CENTER
24	İSTANBUL	PRIVATE MERCAN MARITIME AND SEAMEN COURSE
25	MERSİN	PRIVATE MODERN MARITIME AND SEAMEN EDUCATION COURSE
26	ANKARA	PRIVATE OYAK DEFENCE AND SECURITY INCORPORATED COMPANY
27	RİZE	PRIVATE RİZE SAHİL MARITIME SEAMEN COURSE
28	SAMSUN	PRIVATE SAMSUN MARITIME AND SEAMEN COURSE
29	TRABZON	PRIVATE SANCAK MARITIME TRAINING CENTER
30	TUZLA	PRIVATE TURGUTREİS SEAMEN COURSE
31	GÖÇEK	PRIVATE YENİ VİRA MARITIME SAIL AND SEAMEN COURSE
32	TEKİRDAĞ	PRIVATE DERİN DENİZ SEAMEN EDUCATION COURSE
33	İSTANBUL	PRIVATE LİSKUR ARMADA MARITIME TRAINING CENTER
34	KOCAELİ	HERGÜNER MARITIME COURSE

CHAPTER VII
MARINE TOURISM

7.MARINE TOURISM
7.1.Marine Tourism

Marine Tourism consists of Yachting Tourism, Marina Administrations, Cruise Tourism and Ferryboat Administrations, Underwater Diving and Water Sports.

With over 8.333 kilometers of coastline along the four seas, Turkey is a treasure with its coves, inlets, bays, and beaches at which yachtsmen can choose a different and private anchorage each night.

The sailing paradise of Turkey is also home to the Blue Voyage. This idyllic cruise means sailing with the winds into coves and over the seas and becoming one with nature. For lovers of the active life, sailing in clear waters provides great opportunities for swimming, fishing, skiing, surfing, and diving.

Sailing in Turkey also allows tourists to experience a truly enriching cultural exchange with the hospitality and gracious people of the coastal villages and towns. The tempered winds which generally blow from the west and northwest make the long summers ideal for yachting, and seem to encourage the appreciation of nature. From some of the turquoise coast's unspoilt and sheltered bays can be seen mountain peaks rising to almost 3.000 meters above sea level.

In Turkey, modern facilities and comfort have not overshadowed ancient hospitality and the slower pace of life.

Marine tourism revenue is 20% of the total Tourism income.

Place: GOCEK In Fethiye (12 Islands)

As from the 1970's, taking into consideration, primarily the contributions the yacht tourism made to the Turkish economy and then the other sea tourism elements, it has been decided to establish a "Maritime Tourism Working Group", administered by the Chairman of the Executive Committee of the Turkish Chamber of Shipping, also participated by the Chairmen of our Chamber's Professional Committees and Branches.

The Maritime Tourism Working Group established at the Turkish Chamber of Shipping began to perform its activities on 20 December 2000, after being approved by the Board of Directors of our Chamber. Maritime Tourism Working Group consists of the Chairmen of the Head Office, Antalya, Bodrum, Fethiye, İzmir Marmaris, and İskenderun Branches and also the Chairmen of All Kinds of Passenger Transportation, Yacht Administrations, Daily Pleasure Boat Administrations, Marina Administrations, Chairmen of the Professional Committees of Underwater and Water Sports Professional Committees, the Representative of the Cruise Tourism, Maritime Tourism Ankara Representative of the Board of Directors. Maritime Tourism Working Group represents actively the Maritime Tourism in the name of the Turkish Chamber of Shipping.

The most prominent success of the Maritime Tourism Working Group has become to introduce and to establish the concept of “Maritime Tourism” which has not been mentioned sufficiently in the Shipping Sector and also at various platforms and especially almost none in the public sector.

7.2.Yacht Tourism

The yacht building industry in Turkey is located mostly in Istanbul region and also in some parts of the Black Sea, Marmara Sea, Aegean Sea, and the Mediterranean Region. The yachts, which are built in Aegean and the Mediterranean regions, are usually exported to Germany and Greece.

For example, Antalya has been announced as the 4th city in the World for Composite Boat Building in 2018.
İstanbul Tuzla is the place where the Maltese Falcon has been built in 2008. Kocaeli Free Trade Zone and Bursa are also important centers.
As we mentioned the traditional Wooden yachts are built in Aegean area, such as Bodrum, Bozburun. Well-known designers such as Andrea Hoek, Ron Holland, Ken Freivo are building projects here. There are still well-known craftsman for wooden boats who continue building wooden boat in their backyards.

Table 71 : Yachts Licenced by the Ministry of Culture and Tourism

YEARS	INVESTMENT LICENCED		OPERATION LICENCE					
			DOMESTIC YACHTS		FOREIGN YACTHS LICENSED BY THE MINISTRY OF CULTURE AND TOURISM		TOTAL	
	Yat-Yachts	Yatak-Beds	Yat-Yachts	Yatak-Beds	Yat-Yachts	Yatak-Beds	Yat-Yachts	Yatak-Beds
1990	378	3.986	441	4.365	583	4.102	1.024	8.467
1991	397	4.281	460	4.559	403	2.846	863	7.405
1992	390	4.121	481	4.971	525	3.609	1.006	8.580
1993	400	4.253	474	5.034	553	3.732	1.027	8.766
1994	328	3.565	524	5.401	498	3.243	1.022	8.644
1995	336	3.655	547	5.567	412	2.616	959	8.183
1996	324	3.628	585	5.905	398	2.542	983	8.447
1997	321	3.605	606	6.071	393	2.470	999	8.550
1998	322	3.628	618	6.100	414	2.557	1.032	8.579
1999	323	3.625	612	6.013	410	2.573	1.022	8.586
2000	325	3.642	617	6.022	455	2.856	1.072	8.878
2001	307	3.551	821	7.404	480	2.977	1.301	10.381
2002	234	2.645	725	6.774	369	2.457	1.094	9.231
2003	234	2.645	725	6.905	333	2.329	1.058	9.234
2004	148	1.532	720	6.640	294	2.110	1.014	8.750
2005	97	874	723	6.394	345	2.486	1.068	8.880
2006	19	235	666	5.398	395	2.764	1.061	8.162
2007	19	235	845	6.764	381	2.748	1.133	9.512
2008	10	139	990	8.051	431	3.116	1.421	11.167
2009	10	139	964	7.841	433	3.191	1.397	11.032
2010	3	46	521	4.851	438	3.240	959	8.091
2011	4	48	992	10.292	868	7.199	1.860	17.491
2012	-	-	1.246	13.203	829	6.567	2.075	19.770
2013	-	-	1.529	15.312	871	6.911	2.400	22.223
2014	-	-	1.529	15.312	838	6.674	2.367	21.986
2015		-	1.529	15.312	826	6.626		21.938
2016		-	1.537	15.994	608	5.100	2.145	21.094
2017	1	26	1.542	16.055	314	2.555	1.856	18.610
2018	-		1.571	16.124	220	2.043	1.791	18.791

Source: Ministry of Culture&Tourism

Table 72 : Marine Tourism Facility & Vessels with Tourism Administration Certificate (2018)

Marine Tourism Facility

	Number Of Facility	Yacht Capacity Sea	Land	Total Mooring Capacity
Business Tourism Documentation of Yacht Harbour	27	8598	3.117	11. 715
Business Tourism Documentation of Yacht Slipway	6	-	967	967
Investment Tourism Documentation of Yacht Harbour	8	2.752	778	3.530
GENERAL TOTAL:	41	11. 350	4. 862	16. 212

Marine Tourism Vessels

	Number of Business	Number of Yacht	Number of Beds
Business Tourism Documentation of Turkish Flagged Yacht	1.158	1.537	16.124
Investment Tourism Documentation of Turkish Flagged Yacht	1	1	26
Business Tourism Documentation of Foreign Flagged Yacht	18	251	2.043
GENERAL TOTAL	1. 177	1.823	18.193

	Number of Business	Number of Vessels	Passengers Capacity
Business Tourism Documentation of One a Day Trip	1.918	2.101	126.121

	Number of Business	Number of Vessels	Passenger Capacity Summer-Winter
Business Tourism Documentation of Restaurant Ship	46	46	16.618 / 12.094

Source: Ministry of Culture&Tourism

7.3. Blue Voyage

“Blue Voyage" is one of the most authentic ways of travel in Turkey. The Gullet Tourism, other than the bareboat concept, is a travel and vacation type that is derived from Blue Voyage tradition and is peculiar to Turkey and can be considered fully Turkish style. This is a type of yacht tourism performed with the vessels having permanent crew or multi-property yachts, which became famous at the classic, ultra-luxury or international races and then adapted to tourism, or in some exceptional cases, performed with yachts adapted from classical design basically.

Almost 75-80 % of the yacht fleet consists of traditional wooden or classic vessels sailing on the waters of Aegean and The Mediterranean for hundreds of years. The blue voyage has made an evolution in terms of boat building technologies by adapting tradition to tourism.
Since the 60s Turkey protects and sustains the building of these traditional boats in many areas on our coasts.
During the 60s the sponge divers were using the same boats for fishing purposes. The first blue voyages that were done by the Fisherman of Halicarnassos and his friends, the esteemed intellectuals of the time, went on voyages where there was no electricity, no bathroom, and kitchen.

It is known we have the famous ‘Blue Voyage’ in our country. This is a concept that began in the 60s with our famous story-teller and philosopher/author ‘Fisherman of Halicarnassos’. Sailing with a crew on the turquoise waters of Turkey would be a memorable experience.
Together with 3 or 4 crew members, blue voyages are proven to be the most comfortable and joyful way to explore our bays.

And this is how it became now: convenience and pleasure on the boat.
They come in 3 different shapes: Gulets with her broad rounded stern, favorite of the blue voyage, ideal for relaxation.

Tirhandils are traditional boat type with a single mast pointed stern and fairly large hull. Once, favorite of the sponge divers due to uncluttered space on deck
Mirror sterns are especially favorite with the flat stern allowing space for two extra cabins at the rear.

The route of the Blue Voyage from Kuşadası down to Antalya covers an area of 350 sea miles. This route is shortened or lengthened according to the wishes of the guests. By choosing the most convenient voyage itinerary, one will experience the beauty of the Turkish cuisine and the congeniality of the traditional Turkish hospitality.

The best period to join the Blue Voyage is between April and November.

Table 73 : Yearly Distribution of the Flag Q Yachts Arrived in Turkish Ports by their Flags and Types

FLAG	2015 C	2015 P	2016 C	2016 P	2017 C	2017 P
Germany	184	234	94	307	46	211
Austria	17	41	31	44	13	36
Belgium	4	39	2	34	2	29
Denmark	-	17	1	17	-	14
Finland	4	19	2	15	1	12
France	182	106	33	118	22	55
Netherlands	86	76	59	117	36	111
U.Kingdom	326	866	69	930	36	824
Ireland	1	6	-	3	-	2
Spain	-	13	-	6	-	5
Sweden	1	31	-	16	2	24
Italy	4	95	1	78	-	62
Luxembourg	5	6	4	4	6	1
Portugal	5	4	3	-	2	1
Greece	378	70	274	72	315	35
Czech Rep.	-	-	1	-	-	1
Switzerland	2	69	-	65	-	46
Iceland	-	-	-	1	-	-
Hungary	1	1	-	2	1	5
Norway	4	15	-	9	-	7
U.S.A	228	3 557	169	4 402	53	2 113
Australia	8	44	4	45	2	35
Japan	-	-	-	-	-	1
Canada	2	18	-	18	-	15
Mexico	-	1	-	-	-	-
New Zealand	4	31	-	7	-	13
Serbia	-	-	-	1	-	2
Malta	114	102	57	86	61	93
Israel	-	29	1	20	1	17
Others	157	607	72	563	104	586
T. Foreign	1 717	6 097	877	6 980	703	4 356
Turkey	2 371	397	3 269	505	3 295	2 300
Grand Total	4 088	6 494	4 146	7 485	3 998	6 656

Flag Q Yatchs: Vessels departing from a foreign country and arrives in another countries ports.

C : Commercial P : Private

Five Blue Voyage Routes In Anatolia

Horizons drenched in a thousand shades of blue, hot golden beaches, the sound of the surf splashing against the broadside of the boat, and the sharp iodine smell of the sea—here are five summer routes in Anatolia.

Bodrum–Gökova

The most important stop on this route, which starts in the coves near Bodrum, is the island of Kara Ada. The island is known for its therapeutic hot water springs, and it is possible to have a mud bath in its natural pools. Mersincik Harbor, in the Gulf of Gökova, is ideal for swimming—its waters are very clear. The coves of Büyük and KüçükÇatı present alternative options. Tuzla Cove, which cuts roughly three miles eastward into Koyun Point, resembles a lake, while Karacasöğüt is a well-protected cove surrounded by pine-forested hills. İngiliz Harbor is famous for its sunset. Sedir Island, one of the greatest spots on the route, is known for its deserted beaches. The island is peppered with the ruins of the ancient town of Kedreai. It is said that the Egyptian princess Cleopatra bathed in the small cove in the northwest of this olive tree-covered island. At dusk, the boats stop for the night in Akbük Harbor, whose sea is as clear as an aquarium. The next morning, after laying anchor in Çamaltı Cove and hiking overland for roughly half an hour, one reaches the ancient ruins of Keramos. Later, lunch is had at Çökertme Cove. After following a route that visits.

Orak Island, Çiftlik, and Bitez, the ships return to Bodrum.

The Blue Voyage can be taken as a day trip or with accommodation. The cabin charter tours range from three to eight days. Experts recommend one week as the ideal duration for a Blue Voyage.

Datça – Bozburun

The boats take off from Datça Harbor and follow the path of the coves buried like so many treasures in the peninsula. After a stop for breakfast, the boat moves on to the Gulf of Hisarönü. Dişlice Island, at the entrance of Bencik Harbor, conceals small beaches on its shores. Orhaniye, our first stop on the Bozburun Peninsula, shines like a blue bead amid lush green forests. The walls on the island located in the middle of the cove were used as watchtowers during the Byzantine era. Kızkumu, one of the most favored beaches in the region, is a shallow sandbar that stretches out to the sea like an extended tongue. Selimiye, which boats reach after a dance with blue and green, is a small fishermen's village filled with seafood restaurants. After Bozburun—the center of the peninsula—the boats pass by Simi Island and reach Bozukkale. There are the ruins of the ancient city of Loryma in this cove, which is surrounded by steep hills. The next stop is Serçe Harbor, which has many sunken ships off its shores. After here, optionally, a route that visits Çiftlik, Kadırga, and Turunç respectively can be followed.

All Blue Voyage vessels that hold permits to carry passengers for touristic purposes must comply with standards set by the Ministry of Culture and Tourism. No voyages take place in weather and sea conditions seen as unfit by the Port Authorities, Coast Guard, and Meteorological Service.

Marmaris–Fethiye

Starting in Marmaris, which is one of the most important Blue Voyage centers in Anatolia, this route first stops by Ekincik Cove. İztuzu Beach—one of the most important habitats of the loggerhead (caretta caretta) sea turtle—is the port of entrance to Dalyan, which resembles a giant marine labyrinth. By boarding smaller boats here, you can go all the way out to Lake Köyceğiz. The Kaunus Rock Tombs, with their marvelous panorama, are among the places worth seeing in the area. Dişibilmez Point and Manastır Point are two important

stops before Göcek. It is known that ships were built on Tersane (“Shipyard”) Island, located off the shores of Göcek, during the Byzantine era. Scattered among the olive trees of the shore of this bowl-shaped island are numerous ruins of houses. After such a pleasant day, the boats stop in Göcek for the night. The next day, the boats set out to the Ölüdeniz (the Blue Lagoon), gliding on the Mediterranean like white swans. It is forbidden to lay anchor in Ölüdeniz, a lagoon that resembles a giant lake with its clear, tranquil waters. It is possible to moor off its shores and go to the beach via boat. On Gemiler (“Ships”) Island in the Gulf of Fethiye, there are ruins of an ancient church from the Byzantine era.
Capacity ranges from eight to twenty-five on cabin charter tours.

Kaş–Göcek

This route, which has received great interest in recent years, joins two important Mediterranean harbors. The Yediburunlar region, which falls between the two places, is unaccommodating of overnight stays due to generally having choppy seas. The true privilege of this route is that it includes the area of Kekova, which can be considered the most beautiful place along the Antalya–Kaş route. Continuing off the shores of Üçağız, which is studded with the ruins of the ancient harbor disguised amid carob trees, the voyage enters a brand-new, dreamlike realm in the Sunken City: ancient avenues shimmering beneath clear, turquoise-colored waters; elegant columns; ruins of buildings; stairs disappearing into the depths beneath; and fields of amphorae… The boats are floating above a mysterious Lycian town that is thought to have been plunged into the seas due to an earthquake in the second century BC. The journey continues, passing by rock tombs, monks’ cells, and tiny coves, until Simena. The first long leg of the journey from here has a view of Kastelorizo (Meis) Island.

Antalya–Finike

The coves on this route promise a lovely voyage along which natural and historical beauties are intertwined. Starting in Antalya, which is one of the most important centers of tourism in the Mediterranean, the journey stops by a modern Anatolian marina in Kemer. The ancient Lycian town of Phaselis is reached right after Asar Point. Established as a triple-harbored seaside town by sailors from Rhodes in the seventh century BC, Phaselis was famed in Roman times—its golden age—for its high-quality perfumes. As you wander the ancient streets connecting the harbors, your senses are delighted by a combination of the sound of the surf and the scent of the pines. Just a little ahead are Çıralı, Olimpos Beach, and Yanartaş, which are quite memorably beautiful. The name of the piece of land stretching northward from Taşlık Point is Çavuş Harbor. To the west of the bay, which is surrounded by green hills, there is a beach, and immediately behind it a plain. Finike, a protected harbor, is four miles northeast of Bunda Point.
Blue Voyage tours in Anatolia start in May and run through the end of October. Demand is at its most concentrated in the high season of July and August.

7.4. Statistics of The Yachts & Capacity of The Registered Yachting Facilities

Most of Turkey's marinas are located on the Southern Aegean and Mediterranean coasts. These well-equipped ports contain all the services and provisions any yacht would require.

Table below shows the yacht marinas registered by the Ministry of Tourism.

Table 74 : Marine Tourisim Facility with Tourism Administration Certificate (2018)

Business Tourism Documentation of Yacht Harbour				
			CAPACITY	
NO	PORT NAME	CITY OF	AT SEA	ON SHORE
1	Setur Kuşadası Yacht Port	Kuşadası/ AYDIN	310	-
2	Ataköy Yacht Port	Ataköy/İSTANBUL	1.040	60
3	G-Marina Kemer	Kemer /ANTALYA	150	150
4	Marmaris Yacht Port	Marmaris/MUĞLA	676	122
5	Club Marinas	Göcek / MUĞLA	121	-
6	Setur Antalya Marinas	ANTALYA	200	150
7	Kumlubükü Yacht Club	Marmaris/MUĞLA	10	-
8	D-MarinTurgutreis Yacht Port	Bodrum/MUĞLA	455	100
9	Ece Marina	Fethiye / MUĞLA	230	-
10	Milta Bodrum Yacht Port	Bodrum / MUĞLA	425	50
11	My Marina Ekincik	Marmaris/MUĞLA	67	15
12	D-Marin Didim Marinas	Didim / AYDIN	576	600
13	D-Marin Port Göcek Marina s	Fethiye /MUĞLA	379	-
14	Alaçatı Yat limanı	Çeşme / İZMİR	260	100
15	Marintürk Göcek Village Port	Göcek-Fethiye/ MUĞLA	116	200
16	SETUR Yalova Yacht Port	YALOVA	240	80
17	Alanya Yacht Port	Alanya/ANTALYA	287	160
18	Teos Marinas	Seferihisar/İZMİR	480	80
19	Port lasos	Milas/ MUĞLA	100	-
20	Skopea Marinas	Fethiye/MUĞLA	80	-
21	Marmaris Adaköy Marinas	Marmaris/MUĞLA	33	-
22	I&C Çeşme Yacht Port	Çeşme / İZMİR	377	100
23	West İstanbul Marinas	Beylikdüzü/ İSTANBUL	600	370
24	SETUR Ayvalık Marinas	Ayvalık/ BALIKESİR	200	150
25	Mersin Yacht Port	Mersin	500	500
26	Güllük Yat Marin	Milas / MUĞLA	270	-
27	Gökova Ören Marinas	Milas/ MUĞLA	416	130
TOTAL			8598	3.117
GENERAL TOTAL			11.715	

Business Tourism Documentation of Yacht Slipway				
			CAPACITY	
NO	PORT NAME	CITY OF	AT SEA	ON SHORE
1	Ayvalık Yacht Slipway	Ayvalık / BALIKESİR	-	140
2	Yat Lift Yacht Slipway	Bodrum / MUĞLA		400
3	Ağanlar Yacht Slipway	Bodrum / MUĞLA	-	200
4	Göcek Yacht Slipway	Fethiye /MUĞLA		156
5	Neta Marinas Yacht Slipway	Bodrum / MUĞLA		21
6	Ege Yacht Slipway	Milas/MUĞLA		50
TOTAL			0	967
GENERAL TOTAL			967	

Yacht Harbour Investment Tourism Documentation				
			CAPACITY	
NO	PORT NAME	CITY OF	AT SEA	ON SHORE
1	Alacatur Touristic Facility	Turgutreis / MUĞLA	40	12
2	Meersea Körmen Yacht Port	Datça / MUĞLA	246	56
3	Kalkedon Marinas	Bodrum / MUĞLA	200	200
4	Ataport Yacht Port	Zeytinburnu / İSTANBUL	1.000	100
5	Mandalya Dock	Milas / MUĞLA	50	-
6	Yalıkavak Bodrum Marinas	Bodrum / MUĞLA	710	140
7	Martı Marina s	Marmaris/ MUĞLA	306	70
8	Tümsağ Kumkuyu Yacht Port	Erdemli/ MERSİN	200	200
TOTAL			2.752	778
GENERAL TOTAL			3.530	

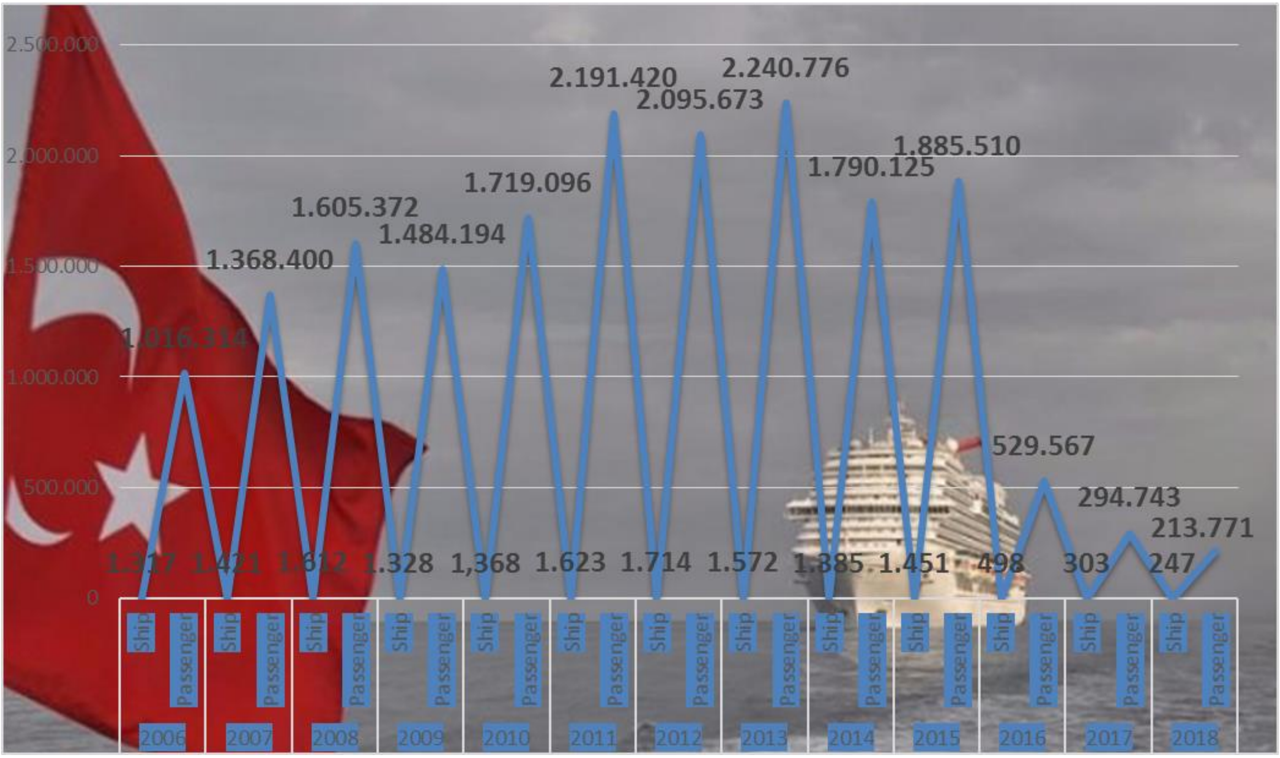
Source: Ministery of Culture &Tourism

7.5.Cruise Tourism in Turkey

Cruise Tourism, which is one of the new industries in the shipping sector, has emerged as a result of the rising demand for cruising with more modern ships. World cruise tourism has been developing with a great acceleration with more ships and increasing capacities. Cruise industry today offers a market of 25 Billion USD. Turkey located in the Mediterranean Basin is in a suitable region for crusing sector, which is.

World Cruise Companies Arrival-Departure Port of Istanbul, Izmir, Antalya, (Turn-Around Port) as reported by declaring AI Development Program.

Graph 60 : Statistics of Cruises and Passengers Arrived at Turkish Ports Between 2006-2018



Being one of the most important touristic centers of Turkey, increasing the access of Istanbul to Cruise and Mega Yacht Tourism Services, required great effort exertion to develop the ports of Salıpazarı, Zeyport, and Kazlıçeşme. Also, the activities have been accelerated to open Ataköy Marina to Cruise Tourism and to make it a Mega Yacht Port and Recreation Area.

Table 75: Number of Cruise Ships and Transit Passengers Coming by Cruise Ships

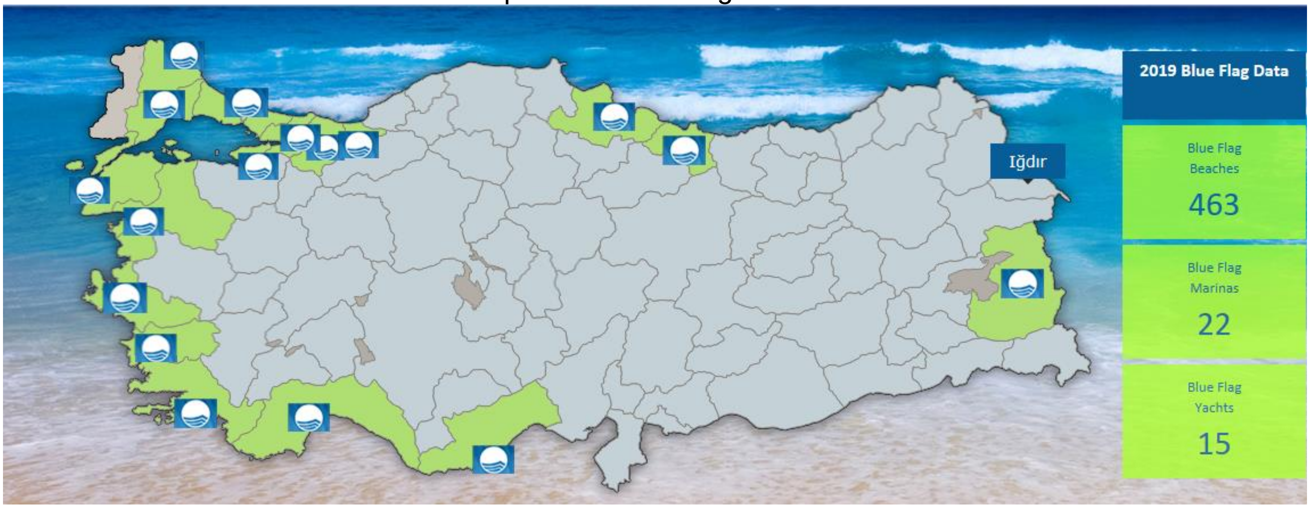
PORT	2010		2011		2012		2013		2014		2015		2016	
NAME	SHIP	PASSENGER	SHIP	PASSENGER	SHIP	PASSENGER	SHIP	PASSENGER	SHIP	PASSENGER	SHIP	PASSENGER	SHIP	PASSENGER
Alanya	2	1.071	22	25.743	22	25.743	53	40.843	23	18.556	34	22.332	13	9.271
Antalya	41	103.859	64	127.250	55	159.430	64	163.575	58	175.778	52	168.538	16	45.979
Anamur	0	0	4	351	1	63	0	0	0	0	0	0	0	0
Bartın	4	555	2	208	9	882	15	2.071	20	2.824	8	954	2	171
Bozcada											12	62.050	46	61.315
Bodrum	89	31.700	82	46.031	131	52.832	114	28.546	78	32.879	90	14.970	3	1.336
Çanakkale	17	7.670	23	4.371	25	4.184	36	7.467	42	9.999	73	22.494	28	6.394
Çeşme	16	9247	1	89	25	4.787	54	62.741	57	62.115	41	40.772	68	57.987
Datca	3	778	0	0	0	0	0	0	0	0	0	0	0	0
Dikili	26	15.401	34	17.485	24	4.865	21	7.655	32	7.914	41	8.317	17	3.998
Fethiye	5	879	5	1.975	11	1.969	4	1.067	8	1.938	10	2.824	2	338
Göcek	16	2.274	7	1.216	6	1.038	2	252	3	380	6	883	2	162
Güllük	1	279	3	1.692	7	1.079	7	476	3	329	3	347	3	323
İskenderu	1	106	5	1.308	0	0	0	0	0	0	0	0	0	0
İstanbul	342	508.246	420	627.897	382	596.027	381	689.417	317	518.935	345	595.880	56	43.543
İzmir	159	378.266	262	493.533	288	552.764	190	486.493	124	257.233	114	241.716	24	27.619
Kaş	8	1.317	3	507	7	1.018	3	1.152	3	625	11	4.122	4	1.057
Kemer	6	602	0	0	0	0	0	0	0	0	0	0	0	0
Kuşadası	517	493.911	568	662.456	464	564.317	428	577.685	448	556.745	506	567.315	271	349.781
Marmaris	84	146.531	84	170.021	88	110.279	112	152.685	82	107.724	83	129.126	22	15.628
Mersin	1	106	3	416	2	774	3	1.381	0	0	2	1.597	3	2.505
Mudanya	1	24	5	922	0	0	2	414	0	0	2	655	1	54
Samsun	4	825	3	208	7	1.190	12	1.281	17	1.558	5	550	2	171
Sinop	7	7.098	9	4.088	10	3.708	16	7.460	30	17.518	5	1.361	2	174
Taşucu	2	201	4	805	4	709	0		3	937	1	286	3	226
Trabzon	14	7.952	13	6.267	18	8.015	24	8.115	37	16.138	10	2.281	2	1
Tuzla	2	0	0	0	0	0	1	0	0	0	0	0	0	0
Yalova	-	-	-	-	1	0	0	0	0	0	2	0	0	0
TOPLAM	1.368	1.719.098	1.623	2.191.420	1.587	2.095.673	1.572	2.240.776	1385	1.790.125	1.456	1.889.370	590	628.033

Source: Minister of Transport, Maritime Affairs and Com.

7.6. Blue Flag Campaign

The Blue Flag Campaign is one of the four projects executed under the co-ordination of the Europe Environmental Education Foundation (EEEF). The Environmental Education Foundation of Turkey (TURCEV) designates which beaches and marinas have the right to display a Blue Flag, which is judged on the basis of the cleanliness of the water, environmental concerns, security, safety, and services.

Graph 61 : Blue Flag Data



Source: TURÇEV

Nominees are evaluated by a national, then a European jury, after which the successful ones are awarded the Blue Flag for one year. The sea-water analysis is performed every 15 days during the high season by the local department of the Ministry of Health, and funded by the Ministry of Tourism, and taking into account the physical, pH and microbiological parameters. (Source: Ministry of Culture and Tourism)

7.7. Underwater Diving

In the seas of Turkey, divers can discover a fascinating undersea world, from underwater caverns to sunken ships and even the remains of ancient cities. The only areas prohibited to diving are military zones and areas under protection. Diving for scientific research is also prohibited.

We have around 800 certified and authorized companies engaged in tourism business above the water and in diving.

7.8. Equipped Diving Rules

Forbidden Zones	All kinds of diving activities excluding scientific studies in military forbidden zones as well as regions in which there are Cultural and Natural Wealth Required to be protected underwater according to Official Gazette dated 19.08.1989 and numbered 20257 issuing 35th article of Decision of Board of Ministers, according to Cultural and Natural Wealth Protection Law Number 863.
Certificate	Equipped divers for sportive purposes should have the proficiency certificate (diving card) issued by Underwater Sports, Life Guarding and Water Ski Federation. But certificates issued by educational organizations under international standards, are also valid. These certificates can be upgraded to proficiency certificate (diving card) by applying to the Federation. Sportive diving authorizations, technical specifications, and certificates are issued in compliance with the principles determined and accepted by Youth and Sports General Directorate, Underwater Sports Life Guarding and Water Ski Federation. As regards sportive diving for foreign divers, they should be a member of International Underwater Sports Federation or

	national organizations or have a certificate issued by authorized organizations or institutions of their countries.
Responsibility	Diving and life security of the divers belong to divers themselves, but during training, all the responsibility is with the lecturer. When diving in Turkey, taking aguide skin diver is obligatory. Foreign divers should take guide skin diver during diving. Also, the protection of cultural and natural wealth, maintaining property and life security of divers during diving, are under the responsibility and obligation of guide skin diver. However, existing problems and personal mistakes of divers who violate rules are not within the scope of responsibility of guide skin diver.
Material	There is no limit for equipment during sportive diving. Balance vest (life vest, BC), tube pressure monitor, depth monitor and time hour usage is obligatory. Usage of lifting balloon or similar materials is forbidden. Decompressed dives are completely forbidden. High pressurized tube filling compressor inland or in ships, which requires permission from corresponding authorities, can be present during diving. Agency, club, establishment, hotel, holiday village, school, etc. who organize diving, as well as ships, should provide first aid material in stock. Underwater photographing and video cameras and all kinds of related materials can be used during diving.
Material Maintenance	Tourism agencies, yacht operators, organizations and institutions as well as underwater clubs organizing sportive diving should perform periodic tests and maintenance of diving materials (such as tube regulator, balance vest) used and owned by skin divers. These tests can be performed at civil skin diving firms, agencies or organizations authorized by Ministry of Industry and Commerce.
Ships to be used during dives	During underwater diving, using Turkish flag ships is a must. However, if permission is taken for foreign groups who wish to dive from their own boats, they can be used as well. 103
Diving permission	Equipped sportive diving is subject to permission. City Tourism Directorate or authorized body should be informed by clubs, organizations or institutions in order to organize diving to regions excluding forbidden zones. This information is submitted to Regional Coast Guard by the correspondent authority. All kinds of equipped sportive diving are subject to permission for foreign divers. Authorities who issue these permissions are City Tourism Directorate or authorized bodies. One copy of permission forms issued is submitted to Harbor Master and one copy is submitted to Regional Coast Guard by the issuing authority. One copy of the permission should be kept by organizers at all times and should be shown to authorities during controls. Taking permission and submitting information is not obligatory during training and diving with double person system.

CHAPTER VIII

TURKISH FISHING SECTOR

8.TURKISH FISHING SECTOR
8.1.Turkish Fishing Sector

Turkey has a rich water products potential. The seas around Anatolia have variable and distinct ecological characteristics. The area of natural lakes is 178.000 km², and the area of dam lakes is 3,442 km².

Our seas host 500 fish species. Turkey has a share of 0.04 % in the world water products.

60-80 % of Turkey's water products consist of pelajic fish. Pelajic fishes are mainly anchovy (Engras encrasicholus) and pilchard (sardina pilcharolus). Other important pelajic species are horse mackerel (Trachurus trachurus), çaça (sprattus sprattus), tirsi (Alosa alosa), chup mackerel (scomber japonicus), mackerel (scomber scombrus), blue fish (Pamatomus saltatrix), atlantic bonito (Sarda sarda) and blue fine tuna (Thunnus thynnus). Major deep sea fishes are hake (Merluccius merluccius), whitting (merlangius merlangus euxinus), stripped mullet (Mullus barbartus) and red mullet (Mullus surmelatus). Amongst the flat fishes, (Scophthalmidae-Soleidae), sea bass (Dicentrarchus labrax), hani (Serranidae), shrimp species (Penaeidae) and squid species (Loliginidae and Ommastrephidae) can be considered.
Annual fish production of Turkey is 1 million tons. 80% of fish production comes from sea, 10% from inland water production and 10 % from farming production.

Graph 62 : Quantity of Captured Sea Product (2018)

Production of water products, especially in the 1970's, showed a rapid development as a result of low-interest credits provided by the State and by customs tax exemptions and increase both in the number of fishing vessels and in the strength of catch. The production of fish products realized approximately 180.000 tons has increased above 700.000 tons.

Fishery production decreased by 0.3% in 2018. Compared to the previous year, fishery production decreased by 0.3% in 2018 and realized as 628,631 tonnes. The total fishery production included sea fish with 35.3%, other sea products with 9.9%, inland water products with 4.8% and aquaculture products with 50%.

In 2018, while fishing products decreased by 11.4%, aquaculture increased by 13.8%. While the production made by fishing was 314.094 tonnes, aquaculture production realized as 314.537 tonnes. Compared to the previous year, the volume of captured of marine production decreased by 11.9%, capture of inland water production decreased by 6.2%. 33.4% of the aquaculture production took place in the inland waters and 66.6% in the sea. Within all the production of marine products by capture, East Black Sea Region was at the top with a share of 31.5%. The other three regions followed; West Black Sea with 30.6%, Marmara with 18.4%, Aegean with 15% and Mediterranean with 4.5%.

In 2018, per capita average consumption of fish increased by 11.8%. Per capita average consumption of fish was 5.49kg in 2017 and increased to 6.14kg with a rate of 11.8% in 2018.

Table 76 : Fisheries Statistics by The Years

	Sea Products **(Ton** - Tonnes)	Aquaculture Production **(Ton** - Tonnes)	Freshwater Products **(Ton -** Tonnes)
2006	488 966	128 943	44 082
2007	589 129	139 873	43 321
2008	453 113	152 186	41 011
2009	425 046	158 729	39 187
2010	445 680	167 141	40 259
2011	477 658	188 790	37 097
2012	396 322	212 410	36 120
2013	339 047	233 394	35 074
2014	266 078	235 133	36 134
2015	397 731	240 334	34 176
2016	301 464	253 395	33 856
2017	322 173	276 502	32 145
2018	283 955	314 537	30 139

Source: For aquaculture production and freshwater products, Ministry of Agriculture and Forestry.

Table 77 : Quantity of Caught Sea Fish

Ton - Tonnes

Type of fish	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total	**380 636,0**	**399 656,0**	**432 246,0**	**315 636,5**	**295 167,9**	**231 058,3**	**345 765,0**	**263 724,5**	**269 676,4**	**222 023,6**
Akya - Leer fish	1 167,0	883,0	585,9	349,3	333,5	173,5	109,3	186,6	211,9	181,7
Avcı - Greater amberjack	96,0	53,0	31,4	43,2	54,3	9,2	8,8	7,0	8,5	8,4
Albakor (Patlakgöz) - Albacore	631,0	402,0	1 395,7	61,7	70,6	0,3	53,4	25,2	44,0	37,8
Bakalorya-Berlam - Hake-Eurepean hake	1 557,0	1 256,0	921,1	892,5	676,0	642,2	706,0	783,8	1 011,3	1 019,3
Barbunya - Red mullet	2 461,0	2 351,0	1 861,4	2 453,1	2 055,4	1 426,1	1 255,2	1 453,6	1 406,4	1 399,3
Barbunya (Paşa barbunu) - Goldon banded	317,0	446,0	427,8	337,2	88,8	34,8	25,3	78,7	69,4	49,9
Çaça - Sprat	53 385,0	57 023,0	87 140,8	12 091,7	9 764,0	41 647,9	76 995,6	50 224,9	33 949,5	20 056,6
Çipura - Seabream	1 186,0	1 164,0	766,1	917,7	943,5	606,3	480,9	495,1	590,0	544,1
Dil – Common sole	882,0	1 062,0	829,3	792,0	693,6	411,3	328,0	352,2	486,4	432,4
Dülger - John dory	104,0	90,0	67,4	69,1	61,5	44,8	46,0	47,1	48,3	52,1
Fangri - Common seabream	177,0	132,0	69,7	50,8	70,7	36,3	31,3	25,3	28,8	44,7
Fener balığı - Angler fish	317,0	219,0	193,0	199,2	204,6	190,0	166,0	176,0	185,2	219,9
Gelincik - Shore rockling	21,0	9,0	15,3	9,4	14,1	11,6	7,4	10,4	11,7	15,8
Gobene (Tombik) - Frigate mackerel	1 873,0	1 081,0	2 551,8	907,2	863,3	561,7	476,0	406,8	474,1	367,0
Grenyüz - Meagre	23,0	101,0	30,9	56,9	16,5	17,5	20,0	23,6	10,1	55,9
Gümüş - Silverside	1 721,0	1 442,0	1 472,7	935,5	886,3	447,1	326,9	516,5	489,3	591,5
Hamsi - Anchovy	204 699,0	229 023,0	228 491,4	163 981,9	179 615,2	96 440,0	193 492,3	102 595,2	158 093,8	96 451,7
Hani - Painted comber	51,0	23,0	34,2	40,0	36,6	44,6	16,8	17,9	12,1	11,0
İskarmoz - Eurepean barracude	178,0	459,0	228,1	212,7	370,1	124,7	171,3	115,7	96,2	75,3
İskorpit - Black skorpion fish	339,0	254,0	196,4	367,3	192,2	201,9	143,2	138,6	306,0	208,2
İsparoz - Annular bream	427,0	745,0	195,9	129,2	106,6	58,7	75,0	84,2	86,6	45,9
İstavrit(Kraça)-Horse mackerel	20 373,0	14 392,0	18 072,7	24 625,3	21 817,8	12 213,2	14 290,4	8 859,8	8 065,6	14 221,8
İstavrit (Karagöz) - Scad	7 895,0	6 055,0	6 937,3	6 320,7	6 606,3	4 110,4	2 373,1	2 288,6	4 919,3	6 456,1
İşkine - Brown mearge	32,0	20,0	6,6	5,6	2,5	7,6	5,0	4,5	3,0	4,3
İzmarit - Picarel	1 116,0	1 243,0	877,5	903,2	765,7	349,9	332,0	328,9	285,9	255,3
Kalkan - Turbot	383,0	295,0	166,4	202,7	209,4	197,8	239,3	221,1	167,4	139,2
Karagöz - Two banded bream	282,0	202,0	152,6	195,2	123,0	147,9	108,8	125,0	210,9	128,4
Kayabalığı - Gobies	124,0	130,0	95,8	147,7	67,2	42,8	38,5	50,5	2,8	12,8
Kefal - Grey mullet	2 987,0	3 119,0	2 513,8	4 010,4	2 504,9	1 721,0	1 782,9	1 825,7	2 313,6	1 592,4
Keler - Angelshark	20,0	19,0	15,7	13,3	17,0	8,3	1,3	2,8	0,9	0,3
Kılıç - Sword fish**	301,0	334,0	189,6	79,7	96,8	55,7	34,9	76,5	441,0	427,0
Kırlangıç - Red gurnard	320,0	316,0	211,6	272,3	220,4	66,4	54,3	54,3	56,6	43,8
Kırlangıç (Mazak) - Trigla lineata	47,0	92,0	54,7	37,3	26,8	6,5	2,9	4,2	7,5	6,8
Kolyoz - Chup mackerel	2 952,0	2 004,0	3 127,0	2 182,7	2 573,7	1 695,0	1 209,9	1 602,0	2 043,0	1 503,5
Köpek - Topeshark	618,0	285,0	369,5	183,3	110,9	108,9	77,6	22,3	23,2	21,0
Kupez - Bogue	2 919,0	2 761,0	2 113,5	1 421,9	2 226,2	2 208,4	2 207,8	2 795,1	3 175,0	3 559,3
Lahoz - Waker	566,0	672,0	396,6	311,9	260,5	191,5	166,9	230,6	32,6	111,1
Levrek - Seabas	615,0	577,0	316,5	424,0	186,9	110,5	139,0	131,7	135,1	151,4
Lipsöz - Small-Scalled	107,0	80,0	84,2	27,6	51,3	20,4	17,3	28,2	20,4	40,6
Lüfer - Blue fish	5 999,0	4 744,0	3 122,0	7 389,5	5 225,2	8 386,3	4 135,7	9 573,6	1 935,7	5 767,4
Melanurya -Saddled seabream	241,0	243,0	112,8	139,4	113,6	127,9	59,3	90,2	92,3	63,7
Mercan - Striped bream	724,0	742,0	635,6	1 091,0	990,0	788,9	895,5	980,0	1 171,7	1 062,7
Mezgit - Whiting	11 146,0	13 558,0	9 454,8	7 367,1	9 396,9	9 555,1	13 158,3	11 540,8	8 248,0	6 813,9
Mığrı - European coger	3,0	8,0	0,8	3,9	1,5	0,2	1,4	2,6	0,3	-
Mırmır - Conger eel	390,0	281,0	196,2	113,4	122,6	143,8	83,1	123,7	152,3	181,7
Minekop - Croaker	24,0	41,0	23,7	14,0	25,8	91,1	28,9	30,9	26,7	25,3
Orfoz - Dusky grouper	83,0	63,0	34,0	23,0	20,1	13,4	16,6	11,0	3,1	2,6
Orkinos - Bluefin tuna*	981,0	423,0	527,5	535,5	551,4	555,0	1 091,0	1 324,0	1 514,7	1 283,7
Yazılı Orkinos - Little tunny	1 309,0	1 046,0	1 437,4	1 644,7	1 385,8	681,9	325,5	184,1	479,8	616,6
Öksüz - Piper	12,0	14,0	15,2	13,9	9,4	8,3	11,6	3,4	2,5	2,2
Palamut-Torik - Atlantic bonito	7 036,0	9 401,0	10 018,9	35 764,2	13 157,6	19 031,5	4 573,0	39 459,6	7 577,6	30 920,4
Patlakgöz mercan - Large-eye dentex	98,0	91,0	53,6	55,1	33,7	19,3	27,5	32,9	9,4	8,2
Pisi - Flounder	156,0	104,0	47,3	26,8	80,7	6,2	9,8	8,8	7,1	6,3
Sardalya - Pilchard	30 091,0	27 639,0	34 708,6	28 248,0	23 919,0	18 077,2	16 693,4	18 162,1	23 425,7	18 854,0
Sargöz - Black sea bream	30,0	38,0	23,8	48,9	25,9	26,9	21,9	51,4	19,8	52,0
Sarpa - Saupe	348,0	305,0	166,9	150,1	203,1	145,1	189,1	127,6	144,6	120,0
Sinagrit - Dentex	165,0	170,0	82,8	81,2	60,3	55,0	58,9	53,9	47,2	69,4
Sivriburun karagöz - Sharpsnout seabream	26,0	21,0	13,8	8,8	6,4	3,7	1,2	2,1	2,1	2,0
Tekir - Striped red	2 818,0	4 455,0	3 876,5	3 766,7	2 332,8	3 616,5	3 476,4	3 047,0	2 074,4	2 914,9
Tirsi - Twaite shad	3 070,0	2 574,0	2 581,5	1 699,3	1 541,0	2 094,4	2 034,7	1 642,0	1 576,2	1 605,3
Trança - Blue spatled bream	86,0	115,0	46,7	19,9	31,4	22,3	8,1	13,5	17,2	26,2
Uskumru - Mackerel	505,0	226,0	147,3	200,9	119,0	46,6	102,9	61,9	728,2	368,8
Vatoz - Thornback ray	707,0	668,0	401,0	275,2	299,0	196,4	168,6	116,1	183,0	82,6
Zargana - Gar fish	346,0	661,0	317,1	232,1	204,7	334,4	314,2	267,8	252,8	263,6
Zurna - Saury	487,0	565,0	319,2	283,3	191,1	218,8	102,8	131,3	152,9	139,3
Diğer - Other	486,0	646,0	673,1	178,2	135,2	419,4	159,0	266,0	307,7	227,2

Source: Ministry of Agriculture and Forestry

Changes in fish species; Anchovy production which is one of the important types of sea fish was about 229.000 tons, showing an increase of 11,88%. 116.000 tons of this catch with a rise

of 1.23% is used for domestic consumption, whereas the amount sent to fish meal factories was 113.000 tons, with an increase of 25,41%. Sprat production with 57.000 has a share of 14,27% after anchovy.
The production showed an increase for atlantic bonito by 33,61%, whiting by 21,64%, sprat by 6,81% grey mullet by 4,42% while it decreased for horse mackerel by 29,36%, scad by 23,31% and pilchard by 8,15%.
Other sea products production increased by 3,63% with respect to the previous year. Striped venus, of the other sea products, has the highest ratio of 58,52%.

Table 78 : Quantity of Caught Other Sea (Crustaceas, Molluscas)

Quantity of caught other sea fish (crustaceas, molluscs) — **Ton** - Tonnes

Type of fish	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Toplam - Total	80 685,5	43 879,0	35 019,3	51 965,7	37 739,1	52 496,1	61 931,2
Ahtapot - Octopus	361,0	283,6	253,7	215,0	245,9	162,7	223,7
Böcek - Spiny lobster	9,4	11,5	1,1	3,4	1,1	5,0	1,9
Deniz kereviti - Norway lobster	5,5	5,7	1,1	0,1	0,1	1,4	2,3
Deniz salyangozu - Sea snail	9 596,0	8 654,8	7 003,6	8795,3	10 353,7	9 194,1	9 672,3
İstakoz - Common lobster	8,0	7,0	1,4	3,9	1,5	1,8	4,7
İstiridye - Oystre	0,0	11,2	0,1	0,2	-	-	-
Kalamerya - Long finned squid	530,9	491,3	409,5	367,2	389,0	421,9	523,6
Erkek karides - Speckled shrimp	255,1	237,9	53,5	39,6	50,1	54,1	46,0
Jumbo karides - Green tiger prawn	640,9	451,8	469,5	489,5	719,8	728,6	758,8
Karabiga karides - Caramote prawn	383,9	354,4	271,9	278,7	252,4	208,0	219,4
Kırmızı karides - Giant gamba prawn	2 157,7	1 363,6	1 119,6	1 423,0	1 669,1	1 382,8	299,0
Pembe karides (Çimçim) - Deep water rose pr	1 600,5	1 619,9	2 501,8	1 764,4	1 809,5	2 356,8	3 212,9
Akıvades (Kum midyesi)-Carpet shell	14,9	83,4	8,8	5,3	4,8	-	0,8
Beyaz kum midyesi - Striped venus	61 225,4	28 029,7	21 827,6	37404,1	20 931,7	34 941,1	44 532,8
Kara midye - Mediterranean mussel	2 093,4	887,4	48,7	192,4	77,5	535,6	603,8
Kıllı midye - Bearded horse mussel	-	-	155,1	47,6	-	-	-
Kidonya - Warty venus	-	-	-	-	-	-	-
Mürekkepbalığı - Cuttle fish	1 396,1	1 244,1	696,8	744,7	925,1	986,0	1 041,9
Pavurya - Common shore crab	21,6	7,3	4,5	4,9	6,0	1,3	14,9
Tarak - Great Scallop	-	3,0	0,1	0,9	-	-	-
Mavi yengeç - Blue crab	2,1	0,6	1,5	0,6	2,0	8,8	10,5
Diğer - Other	383,1	130,8	189,4	184,9	299,8	1 506,1	761,9

Table 79 : Agriculture Production

Type of fish	2012	2013	2014	2015	2016	2017	2018
Toplam - Total	**212 410,0**	**233 393,9**	**235 133,0**	**240 334,0**	**253 395,0**	**276 502,0**	**314 537,0**
İç su - Inland water							
Alabalık (Gökkuşağı) - Trout (Rainbow trout)	111 335,0	122 873,3	107 533,0	100 411,0	99 712,0	101 761,0	103 192,0
Alabalık (Salmo sp.) - Trout (Salmo sp.)*	-	-	450,0	755,0	1 585,0	1 944,0	1 695,0
Aynalı sazan - Carp	222,0	145,5	157,0	206,0	196,0	233,0	212,0
Mersin balığı - Sturgeon*	-	-	17,0	28,0	6,0	13,0	2,0
Tilapya - Tilapia*	-	-	32,0	12,0	58,0	8,0	12,0
Yayın - European catfish**	-	-	-	-	-	8,0	5,0
Kurbağa - Frog*	-	-	50,0	43,0	44,0	43,0	49,0
Deniz - Marine water							
Alabalık (Gökkuşağı) - Trout (Rainbow trout)	3 234,0	5 186,2	4 812,0	6 187,0	4 643,0	4 972,0	9 235,0
Alabalık (Salmo sp.) - Trout (Salmo sp.)*	-	-	798,0	685,0	1 073,0	980,0	375,0
Çipura - Sea bream	30 743,0	35 701,1	41 873,0	51 844,0	58 254,0	61 090,0	76 680,0
Levrek - Sea bass	65 512,0	67 912,5	74 653,0	75 164,0	80 847,0	99 971,0	116 915,0
Fangri - Common seabream*	-	-	106,0	143,0	225,0	20,0	2,0
Antenli mercan - Bluespotted seabream**	-	-	-	-	-	122,0	74,0
Kırmızı bantlı mercan - Redbanded seabream**	-	-	-	-	-	66,0	1,0
Minekop (Kötek) - Corb*	-	-	39,0	61,0	20,0	125,0	30,0
Grenyüz (Sarıağız) - Meagre*	-	-	3 281,0	2 801,0	2 463,0	697,0	1 486,0
Sinagrit - Dentex*	-	-	113,0	132,0	43,0	51,0	24,0
Sivri burun karagöz - Sharpsnout seabream*	-	-	8,0	59,0	2,0	-	-
Trança - Blue spatled bream*	-	-	75,0	90,0	61,0	107,0	70,0
Orkinos - Bluefin tuna*	-	-	1 136,0	1 710,0	3 834,0	3 802,0	3 571,0
Midye - Mussel	-	-	-	3,0	329,0	489,0	907,0
Diğer - Other	1 364,0	1 575,3	-	-	-	-	-

37.6% of the amount of aquaculture production took place in the inland waters and 62.4% in the sea. Within all the production of marine products by capture, East Black Sea Region was the first with a share of 49%. The regions West Black Sea by 24.2%, Aegean by 14.8%, Marmara by 7.7% and Mediterranean by 4.3% followed this region

8.2.Fishing Fleet and Catching Water Products

Our fleet is using high-tech equipment and our fishing reserves are more than our yearly fishing capacity.
At present, we have 18.008 (2018) registered fishing boats.
The fishing technology in Turkey is considered to be efficient. Seaborn fishing is being done by artisanal fishing (extension meshes, drag side meshes, pareketa, fish trap) and industrial fishing (Purserseine-trawler) equipment.
The types of fishing, common in Turkey are short distance fishing and shore fishing (medium distance fishing). The ocean type (off-shore) fishing is in the beginning process. As of the end of 2018, there are 128 fisherman shelters, 44 smaller types of fisherman shelters and 58 slips.
Corporate bodies and individuals should have fishing certificates according to Water Products Law Number 1380. The Ministry of Agriculture may restrict the certificates in order to protect the fish potential. There are 18,024 certificated fishing vessels in Turkey and 1,010 are of big sizes.

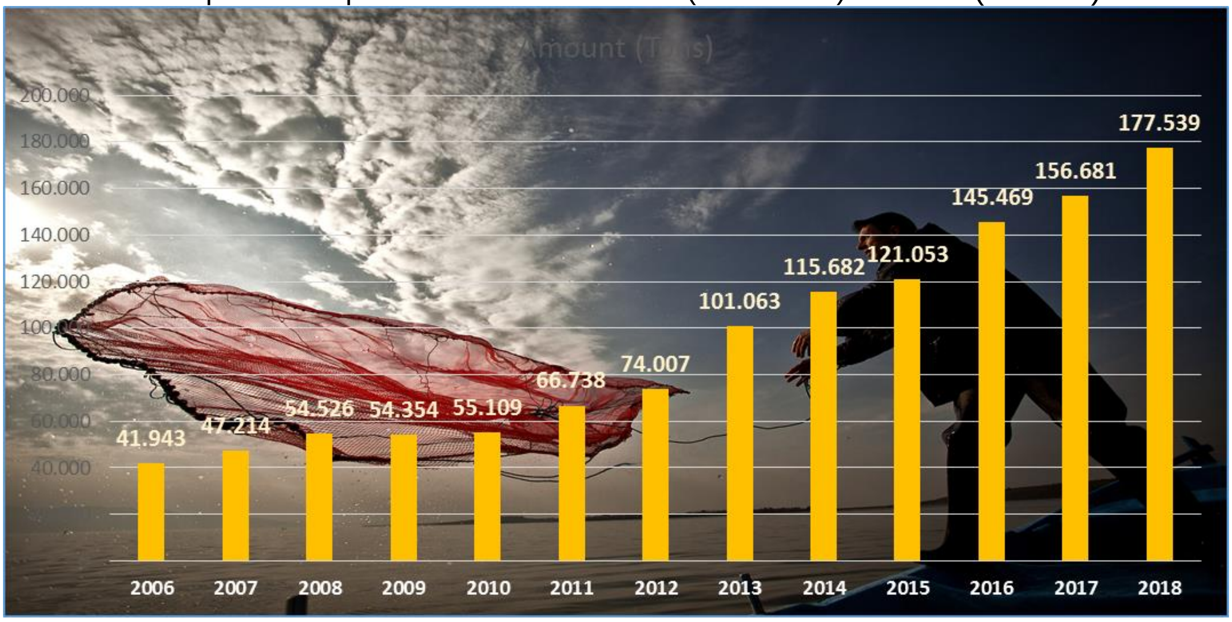
Dredging and encircle fishing is done by the fishing vessels longer than 12 meters. The Black Sea Region has the major share in fishing sector in Turkey with 1640 km coast line: there are 202 fisherman shelters and slips. In İstanbul, there are 44 shore facilities, consisting of 8 ports, 26 fisherman shelters, and 10 slips.
Fishing vessels in Turkey are generally small vessels, which are suitable for shore fishing. There are 18,008 fishing vessels in total and 83 % of these boats consist of vessels of 5-12 meters which perform shore fishing.
Production distribution of large scale fishermen, collected through survey and having vessels bigger than 10 meters, which have an important share in capture production and small scale fishermen, collected through survey, having vessels equal to or less than 10 meters.

8.3. Foreign Trade in Water Products Exports & Imports

In the previous years, major part of Turkish export water products consisted of frozen fish; but currently, it consists of canned fish. Export of canned-fish is mostly realized to Germany, England, Belgium, Spain, Italy and France. Export to Far East is also developing and some of the main markets are Japan and Hong Kong. Today, most of our exports of water products are realized in Japan by 28%.

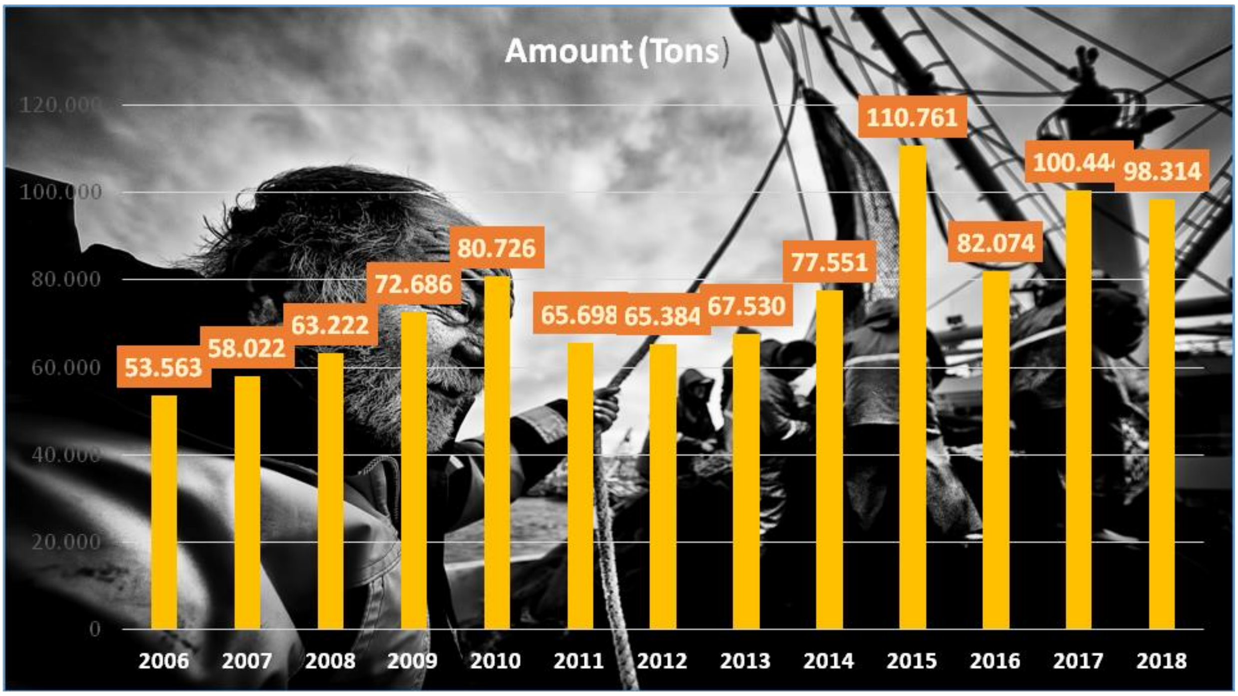
As of 2016, our exports of fish products are topped by Japan with the largest share, being followed by Holland, Greece, Italy, Spain, German, France, and Lebanon.
The number of exports increased by 276% in the last eleven years. Exports reached 156,681 tons in 2017; although it was 26.860 tons in 2002.

Graph 63 : Exports of Water Production (2006-2018) Amount (Tonnes)



Imports

Export of seafood includes crustaceans, molluscs, and cephalopods, which may be frozen, preserved, or chilled. The EU is Turkey’s primary market for fish and seafood exports, but exports are increasing to Russia, the Middle East and even the Far East and the US. Turkey also has a tuna ranching industry which catches and fattens tuna for the Japanese market.
Graph 63 : Imports of Water Products (2006-2018) (Amount) (Tonnes)



22,532 in 2002 (tons), 156,681 In 2018 the exports (tons), reaching the last eleven years, according to the number of exports increased nearly 100% has been achieved.

28,860 in 2002 (tons), 300.444 in 2018 the imports (tons) reaching the last eleven years, according to the number of exports increased nearly 100% has been achieved

As regards 2018 in our country's imports of fish products Norway has the biggest share, being followed by France, India, USA, Morocco, Georgia, and Greece

Turkish imports include frozen mackerel and other small pelagic fish, salmonids, and cephalopods. Imports of fishmeal and fish oil are also significant due to the large requirement for fish feed, of which fishmeal and fish oil are the main components.

8.4. Water Products Processing Industry

Technological improvements and changes are applied in water treatment industry and new water products from our own resources are treated and supplied to the market. A major amount of water products is supplied for fresh consumption, 4% for fish flour and oil, and 10% for water products treatment and utilization facilities.

Various products such as frozen inland and sea products, pre-cooked crayfish, tuna, anchovy, pilchard, canned horse mackerel, salted/corned anchovy, smoked trout, snakefish, salmon fish are produced by treatment industry using different sources. Facilities treating and utilizing water products are increasing and studies are carried out in order to comply with the provisions of Water Products Law No: 1380, Water Products Regulation and European Union Directives.

İstanbul & Marmara, Agean, Mediterranean, Blacksea Regions

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