2015
MARITIME SECTOR REPORT

İSTANBUL 2016

İstanbul & Marmara, Agean, Mediterranean, Blacksea Regions

TURKISH CHAMBER OF SHIPPING

TURKISH CHAMBER OF SHIPPING

İSTANBUL & MARMARA, AEGEAN, MEDITERRANEAN, BLACK SEA REGIONS

MARITIME SECTOR REPORT
2015

İ S T A N B U L – 2016

FOREWORD

The "TURKISH SHIPPING SECTOR REPORT 2015" 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 31.12.2015 and is presented to our members, Turkish and foreign institutions.

The Report mainly contains eight chapters:

First chapter is on Turkish Merchant Fleet and its yearly developments. The fleet has been analyzed by registry, building, tonnage and age. The position of 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 Merchant Fleet in 2015. The developments of sabotage 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 shipbuilding industry and the 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 2015 and yearly developments.

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 explains the maritime training affairs 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.

Metin KALKAVAN

Chairman of the Executive Committee

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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, Antalya, İskenderun, Fethiye and Karadeniz Ereğli. Turkish Chamber of Shipping which has 16 Representations in Turkey was first established as İstanbul Chamber of Shipping in 1982 and afterwards its area of activities has been extended gradually so as to cover the regions of the Sea of Marmara, the Aegean Sea coast, the Mediterranean coast and finally the Black Sea coast of Turkey.

ITS AIMS AND ACTIVITIES

The most important aim of the Turkish Chamber of Shipping is to try to develop shipping in accordance with the national transportation and shipping policy and public interest. Its other major aims 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 are to establish rules and practices as regards shipping, to make researches and collect information on shipping, to ensure that sea trade is developing in accordance with the national policy of transportation, to supply information to foreign organizations on the possibilities and tariffs of the Turkish ports, to become member of and to follow the activities of the international organizations concerned with shipping and to perform other functions stated in the law.

ITS MEMBERS

Turkish Chamber of Shipping has more than 8450 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 47 Professional Committees, according to their fields of occupation.

◆ THE NATIONAL AND INTERNATIONAL ORGANIZATIONS OF WHICH OUR CHAMBER IS A MEMBER

National Organizations:

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

International Organizations:

International Chamber of Shipping (ICS), International Chamber of Commerce - International Maritime Bureau (ICC-IMB), The Federation of National Associations of Ship Brokers and Agents (FONASBA), The Baltic and International Maritime Council (BIMCO), European Community Association of Ship Brokers and Agents (ECASBA), The International Association of Independent Tanker Owners (INTERTANKO), The Baltic Exchange, The Yacht HarboUr Association Ltd. (TYHA), International Council of Marine Industry Associations (ICOMIA), European Boating Association (EBA), TACCI (Turkish American Chamber of Commerce and Industry), The International Bunker Industry Association (IBIA), Union Maritime Pour la Mediterrance (UMM).

◆ ITS PUBLICATIONS

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

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CHAPTER I

THE DEVELOPMENT OF TURKISH SHIPPING

A Close Investigation of the Turkish Merchant Fleet

A Close Investigation of the Turkish merchant fleet has been made according to Turkish National Ship Registry and Turkish International Ship Registry. The values which were established for individual ship groups have been considered by number, tonnage, import and build in Turkey.

In the investigation 1000 GT and over ships have been taken into consideration. Age and tonnage ranges have also been evaluated in size and age group tables.

Number and tonnage evaluations have been shown totally as of 31 December 2015.

Assessments have been made also by taking into consideration the ships of the fleet above 1000 DWT.

The Examination of the Turkish Merchant Fleet by Number and Tonnage

A general examination of the merchant fleet has been made according to number, tonnage, import and build in Turkey. Table 1 shows that, Turkish merchant fleet consists of 593 ships. The examination of the table shows that 295 ships (6.7 million DWT) have been acquired by importation and 298 ships (1.6 million DWT) have been built in Turkey.

Distribution of 593 ships by their types ; 34.91 % dry cargo ships, 14.33 % bulk carriers, 9.78 % chemical tankers, 9.61 % containers and 5,73 % service ships, 25,64 % other types of ships.

Distribution of the fleet by DWT (8,3 Million) ; 48.71 % bulk carriers, 14.11 % dry cargo ships, 13.98 % oil tankers, 11.57 % containers, 5.13 % chemical tankers, and 6.5 % other types of ships.

By DWT, 9.6 % of our fleet is registered in National Ship Registry, 90.4 % of fleet is registered in International Ship Registry. By GT, 15 % of our fleet is registered in National Ship Registry, 85 % of the fleet is registered in International Ship Registry. (Table 2)

The fleet registered in International Ship Registry (7,5 Million Dwt) is composed of bulk carriers (47.8 %), oil tankers (15.4 %), dry cargo vessels (14.6 %), container ships (9.82 %), chemical tankers (5.65 %) and other types of ships (6.73 %). (Table 2)

Table 2 shows Turkish merchant fleet which consists of 593 ships. 14.3 % of total fleet (85 ships) registered in National Ship Registry and 85.7 % of total fleet (508 ships) registered in International Ship Registry.

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	55	152	207	34,91	440.001	736.312	1.176.313	14,11	305.271	465.326	770.597	12,69
BULK CARRIER	78	7	85	14,33	3.859.539	200.725	4.060.264	48,71	2.201.181	124.554	2.325.735	38,3
CONTAINERS	36	21	57	9,61	717.426	246.787	964.213	11,57	578.771	184.329	763.100	12,57
DRY CARGO/CONTAINERS	7	10	17	2,87	35.799	87.512	123.311	1,48	25.204	62.049	87.253	1,44
CHEMICAL TANKERS	25	33	58	9,78	223.274	204.010	427.284	5,13	142.096	135.586	277.682	4,57
LPG TANKERS	7	0	7	1,18	39389	0	39.389	0,47	37227	0	37.227	0,61
ASPHALT TANKERS	1	2	3	0,51	2.770	39.936	42.706	0,51	1.900	31.348	33.248	0,55
RO-RO SHIPS	23	0	23	3,88	232089	0	232.089	2,78	554159	0	554.159	9,13
RO-RO / PASSENGER	7	3	10	1,69	18471	0	18.471	0,22	33.258	6.740	39.998	0,66
FERRY BOATS	9	19	28	4,72	2.538	19.217	21.755	0,26	37.397	24.648	62.045	1,02
TRAIN FERRIES	0	6	6	1,01	0	1660	1.660	0,02	0	9835	9.835	0,16
PASSENGER AND CARGO SHIP	5	7	12	2,02	10.056	3.447	13.503	0,16	112.192	23.353	135.545	2,23
FISHING BOATS	1	0	1	0,17	569	0	569	0,01	1407	0	1.407	0,02
RESEARCH SHIPS	3	1	4	0,67	1790	4.200	5.990	0,07	17604	2.569	20.173	0,33
PASSENGER FERRIES	1	0	1	0,17	0	0	0	0	1043	0	1.043	0,02
HARBOUR CAR FERRIES	0	11	11	1,85	0	6.732	6.732	0,08	0	13.421	13.421	0,22
TUGS	3	0	3	0,51	2028	0	2.028	0,02	4.142	0	4.142	0,07
SERVICE SHIPS	22	12	34	5,73	28.099	0	28.099	0,34	270.951	32.005	302.956	4,99
OTHER	1	0	1	0,17	0	0	0	0	1.333	0	1.333	0,02
OIL TANKERS	10	14	24	4,05	1.115.797	49.803	1.165.600	13,98	585.736	30.788	616.524	10,15
TRAIN FERRIES/RO-RO	1	0	1	0,17	6266	0	6.266	0,08	15195	0	15.195	0,25
TOTAL:	**295**	**298**	**593**	**100**	**6.735.901**	**1.600.341**	**8.336.242**	**100**	**4.926.067**	**1.146.551**	**6.072.618**	**100**

Source: Turkish Chamber of Shipping -2016

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	13	194	207	34,91	76.368	1.099.945	1.176.313	14,11	48.027	722.570	770.597	12,69
BULK CARRIER	11	74	85	14,33	456.118	3.604.146	4.060.264	48,71	262.689	2.063.046	2.325.735	38,3
CONTAINERS	9	48	57	9,61	224.283	739.929	964.212	11,57	180.883	582.217	763.100	12,57
DRY CARGO/CONTAINERS	1	16	17	2,87	2.356	120.955	123.311	1,48	1.720	85.533	87.253	1,44
CHEMICAL TANKERS	1	57	58	9,78	1.638	425.645	427.283	5,13	1.082	276.600	277.682	4,57
LPG TANKERS	0	7	7	1,18	0	39.389	39.389	0,47	0	37.227	37.227	0,61
ASPHALT TANKERS	1	2	3	0,51	2.770	39.936	42.706	0,51	1.900	31.348	33.248	0,55
RO-RO SHIPS	0	23	23	3,88	0	232.089	232.089	2,78	0	554.159	554.159	9,13
RO-RO / PASSENGER	1	9	10	1,69	0	18.471	18.471	0,22	3.760	36.238	39.998	0,66
FERRY BOATS	1	27	28	4,72	2.314	19.442	21.756	0,26	1.596	60.450	62.046	1,02
TRAIN FERRIES	6	0	6	1,01	1.660	0	1.660	0,02	9.835	0	9.835	0,16
PASSENGER AND CARGO SHIP	5	7	12	2,02	3.761	9.742	13.503	0,16	106.306	29.239	135.545	2,23
FISHING BOATS	0	1	1	0,17	0	569	569	0,01	0	1.407	1.407	0,02
RESEARCH SHIPS	0	4	4	0,67	0	5.990	5.990	0,07	0	20.173	20.173	0,33
PASSENGER FERRIES	0	1	1	0,17	0	0	0	0	0	1.043	1.043	0,02
HARBOUR CAR FERRIES	1	10	11	1,85	441	6.291	6.732	0,08	1.077	12.344	13.421	0,22
TUGS	1	2	3	0,51	0	2.028	2.028	0,02	1.565	2.577	4.142	0,07
SERVICE SHIPS	31	3	34	5,73	24.051	4.048	28.099	0,34	288.627	14.329	302.956	4,99
OTHER	1	0	1	0,17	0	0	0	0	1.333	0	1.333	0,02
OIL TANKERS	2	22	24	4,05	7.069	1.158.532	1.165.601	13,98	3.797	612.727	616.524	10,15
TRAIN FERRIES/RO-RO	0	1	1	0,17	0	6.266	6.266	0,08	0	15.195	15.195	0,25
Total :	**85**	**508**	**593**	**100**	**802.829**	**7.533.413**	**8.336.242**	**100**	**914.197**	**5.158.422**	**6.072.619**	**100**

Source : Turkish Chamber of Shipping -2016

The majority of the fleet registered in National Ship Registry (802.829 DWT) is composed of bulk carriers (56.81 %), container (27.94 %), dry cargo ships (9.51 %) and other types of ships (5.74 %).

GRAPH (1): Examination of Registries (GT) (1000 GT and Over)

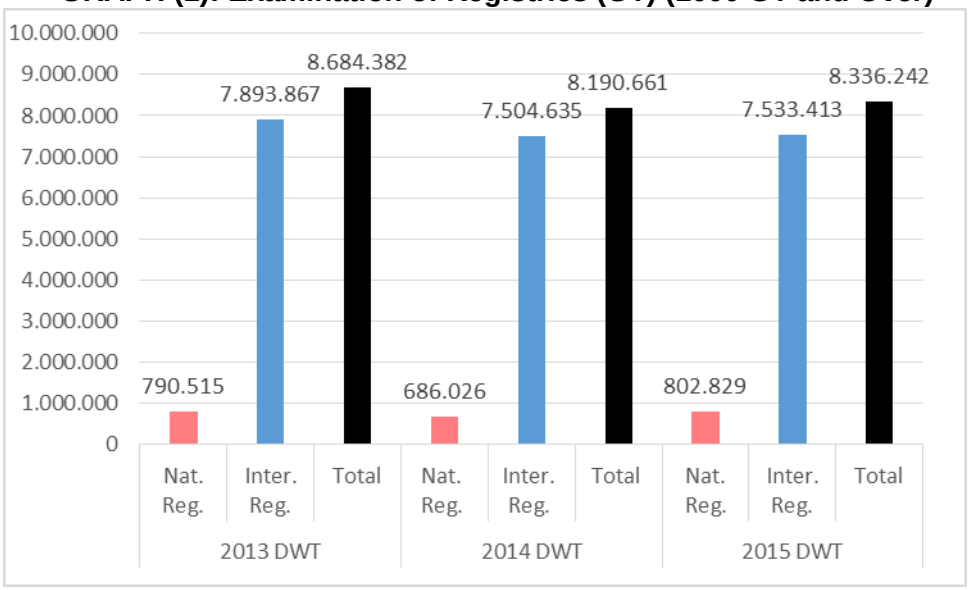


TABLE (3) Examination of Registries (Dwt) 2012-2013-2014

SHIP TYPES	2013 DWT			2014 DWT			2015 DWT		
	National Reg.	Inter. Reg.	Total	National Reg.	Inter. Reg.	Total	National Reg.	Inter. Reg.	Total
DRY CARGO	76.521	1.220.040	1.296.561	44.892	1.153.667	1.198.559	76.368	1.099.945	1.176.313
BULK CARRIERS	444.930	3.907.485	4.352.415	456.118	3.724.109	4.180.227	456.118	3.604.146	4.060.264
CONTAINERS	194.525	595.841	790.366	155.194	686.341	841.535	224.283	739.929	964.212
DRY CARGO/CONTAINERS	2.356	132.664	135.020	2.356	113.756	116.112	2.356	120.955	123.311
CONTAINER / RO-RO	0	0	0	0	0	0	0	0	0
OIL TANKERS	23.757	1.167.113	1.190.870	7.069	1.009.010	1.016.079	7.069	1.158.532	1.165.601
CHEMICAL TANKERS	24.701	508.778	533.479	1.638	438.490	440.128	1.638	425.645	427.283
PRODUCT TANKERS	0	0	0	0	0	0	0	0	0
LPG TANKERS	0	35.029	35.029	0	30.789	30.789	0	39.389	39.389
ASPHALT TANKERS	2.770	0	2.770	2.770	39936	42.706	2.770	39.936	42.706
RO-RO SHIPS	0	217.509	217.509	0	225.828	225.828	0	232.089	232.089
RO-RO/PASSERGER	0	29.342	29.342	0	19.679	19.679	0	18.471	18.471
FERRY BOATS	0	7.870	7.870	0	7.971	7.971	2314	19.442	21.756
TRAIN FERRIES	6.668	0	6.668	1.660	0	1.660	1.660	0	1.660
TRAIN FERRY/RO-RO	0	6.266	6.266	0	6.266	6.266	0	6.266	6.266
PASSENGER AND CARGO SHIPS	9.800	5.742	15.542	7.297	3.016	10.313	3.761	9.742	13.503
FISHING BOOT	0	568	568	0	569	569	0	569	569
SCİENTIFIC RESEARCH VESSEL	0	16897	16897	0	4.200	4.200	0	5.990	5.990
HARBOUR FERRIES	0	0	0	0	0	0	0	0	0
HARBOUR CAR FERRIES	3.093	20.893	23.986	2.755	19.206	21.961	441	6.291	6.732
TUGS	1.394	2.056	3.450	0	2.028	2.028	0	2.028	2.028
SERVICE SHIPS	0	19.774	19.774	4277	19.774	24.051	24.051	4.048	28.099
Total :	**790.515**	**7.893.867**	**8.684.382**	**686.026**	**7.504.635**	**8.190.661**	**802.829**	**7.533.413**	**8.336.242**

The Age Profile of Turkish Merchant Fleet

Table 4 shows the average age profile of Turkish Merchant Fleet according to ship types, number of ships and tonnage ranges. The Merchant Fleet of 1.000 GT and above comprises of 593 ships. The average age of these ships is 26,38 as of 31.12.2015.

The average age of dry cargo ships is 24 which consists of 14.1 % of the fleet. The average age of bulk carriers is 13 which consists of 48.7 % of the fleet. The average age of container is 13 which consists of 11.6 % of the fleet. The average age of chemical tankers is 14 which consists of 5.1 % of the fleet. The average age of oil tankers are 16 which consists of 14 % of the fleet.

TABLE 4: The Average Age Profile of the Turkish Merchant Fleet (1000 GT and Over)

Ship Types	Number	Tonnage (DWT)	Tonnage (GT)	Ave. Age
DRY CARGO	207	1.176.313	770.597	24
BULK CARRIERS	85	4.060.264	2.325.735	13
CONTAINERS	57	964.212	763.100	13
DRY CARGO/CONTAINERS	17	123.311	87.253	15
CHEMICAL TANKERS	58	427.283	277.682	14
LPG TANKERS	7	39.389	37.227	21
ASPHALT TANKERS	3	42.706	33.248	12
RO-RO SHIPS	23	232.089	554.159	14
RO-RO/PASSERGER	10	18.471	39.998	24
FERRY BOATS	28	21.756	62.045	18
TRAIN FERRIES	6	1.660	9.835	42
PASSENGER AND CARGO SHIPS	12	13.503	135.545	31
FISHING BOOT	1	569	1.407	42
SCİENTIFIC RESEARCH VESSEL	4	5.990	20.173	20
HARBOUR FERRIES	1	0	1.043	64
HARBOUR CAR FERRIES	11	6.732	13.421	27
TUGS	3	2.028	4.142	37
SERVICE SHIPS	34	28.099	302.956	35
OTHERS	1	0	1.333	35
OIL TANKERS	24	1.165.601	616.524	16
TRAIN FERRIES/RO-RO	1	6.266	15.195	37
Total :	593	8.336.242	6.072.618	26,38

Source:Turkish Cahmber of Shipping - 2016

Table 5 shows Turkish Merchant Fleet by age and tonnage ranges. Turkish Merchant Fleet consists of 593 ships of 8.336.242 DWT.

- 199 ships of 4.404.586 Dwt are between 0-9 age range,
- 119 ships of 2.422.547 Dwt are between 10-19 age range,
- 110 ships of 782.697 Dwt are between 20-29 age range,
- 165 ships of 726.413 Dwt are between 30 and over age range.

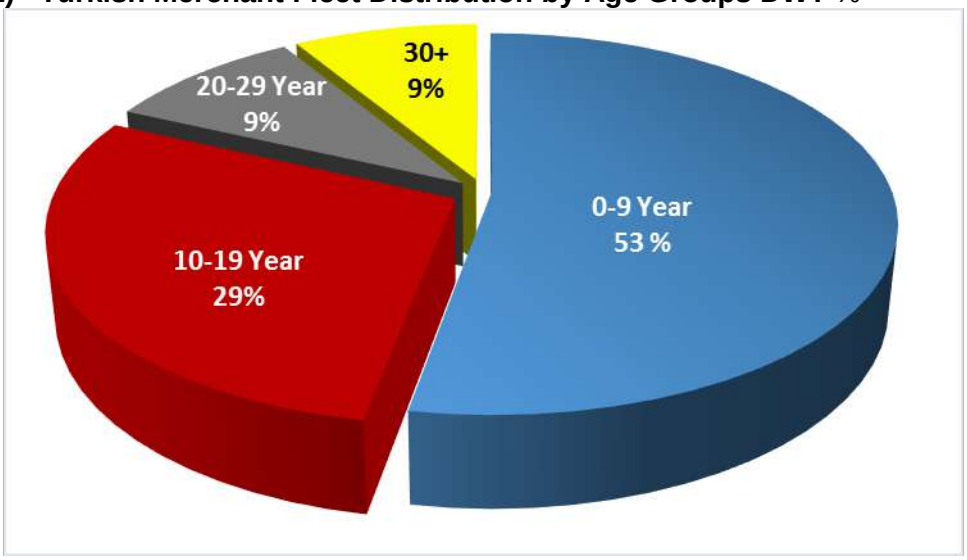
Table (5) Turkish Merchant Fleet Distribution by Tonnage and Age Groups (Dwt) (1000 GT and Over)

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
150-1499	26	4.362	0,10	10	3.873	0,16	16	5.448	0,70	38	6.295	0,87	90	19.977
1500-5999	50	215.593	4,89	38	145.190	5,99	54	194.522	24,85	92	299.110	41,18	234	854.415
6000-9999	27	194.628	4,42	21	173.186	7,15	23	179.331	22,91	19	137.149	18,88	90	684.294
10000-34999	56	1.036.161	23,52	28	525.527	21,69	14	274.530	35,07	16	283.859	39,08	114	2.120.077
35000-52999	4	160.682	3,65	13	608.901	25,13	3	128.866	16,46	0	0	0,00	20	898.449
53000-79999	25	1.488.899	33,80	5	320.889	13,25	0	0	0,00	0	0	0,00	30	1.809.788
80000-119999	6	515.059	11,69	0	0	0,00	0	0	0,00	0	0	0,00	6	515.059
120000+	5	789.203	17,92	4	644.981	26,62	0	0	0,00	0	0	0,00	9	1.434.184
TOTAL	**199**	**4.404.586**	**100,00**	**119**	**2.422.547**	**100,00**	**110**	**782.697**	**100,00**	**165**	**726.413**	**100,00**	**593**	**8.336.242**

Source:Turkish Cahmber of Shipping - 2015

Graph shows age groups of the fleet. 53 % of the fleet are between 0-9 age range, 29 % of the fleet are between 10-19 age range, 9 % of the fleet are between 20-29 age range and 9 % are 30 years and over.

GRAPH (2) Turkish Merchant Fleet Distribution by Age Groups DWT %



Below Tables show the age profile of Turkish Merchant Fleet according to tonnage ranges and ship types, dry cargo ships, bulk carriers, oil tankers, chemical tankers, containers and Ro-Ro by age and tonnage ranges.

Table 6 shows the Dry Cargo segment (207 ships) which is 1.176.313 DWT.

- 39 ships of 242.474 DWT are between 0-9 age range,
- 30 ships of 201.553 DWT are between 10-19 age range,
- 54 ships of 352.480 DWT are between 20-29 age range,
- 84 ships of 379.806 DWT are between 30 and over age range.

Table (6) Dry Cargo Ships by Tonnage and Age Groups (Dwt) **(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
150-1499	0	0	0,00	0	0	0,00	0	0	0,00	0	0	0,00	0	0
1500-5999	28	129.059	53,23	18	65.649	32,57	37	133.820	37,97	65	214.572	56,50	148	543.100
6000-9999	5	33.960	14,01	11	86.039	42,69	12	90.892	25,79	14	102.168	26,90	42	313.059
10000-34999	6	79.455	32,77	0	0	0,00	4	80.942	22,96	5	63.066	16,60	15	223.463
35000-52999	0	0	0,00	1	49.865	24,74	1	46.826	13,28	0	0	0,00	2	96.691
53000-79999	0	0	0,00	0	0	0,00	0	0	0,00	0	0	0,00	0	0
80000-119999	0	0	0,00	0	0	0,00	0	0	0,00	0	0	0,00	0	0
120000+	0	0	0,00	0	0	0,00	0	0	0,00	0	0	0,00	0	0
TOTAL	39	242.474	100	30	201.553	100,00	54	352.480	100	84	379.806	100,00	207	1.176.313

Source:Turkish Cahmber of Shipping - 2016

21 % of Dry Cargo Ships are between 0-9 age range, 17 % are between 10-19 age range, 30 % are between 20-29 age range, 32 % are 30 years and over.

GRAPH (3) Average Age of Dry Cargo Segment DWT %

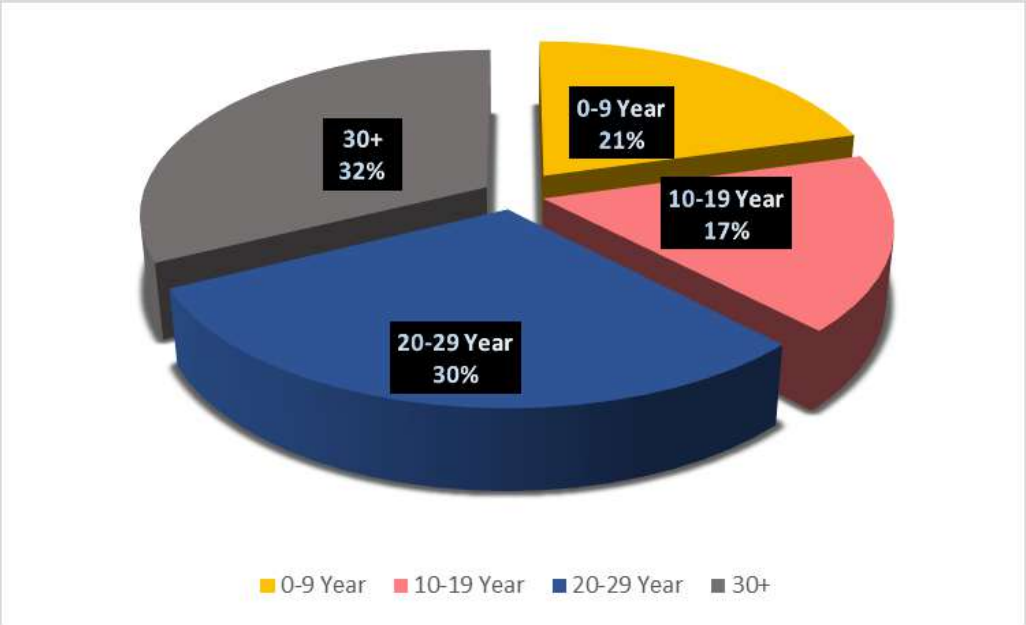


Table 7 shows the bulk carrier segment (85 ships) which is 4.060.264 DWT.

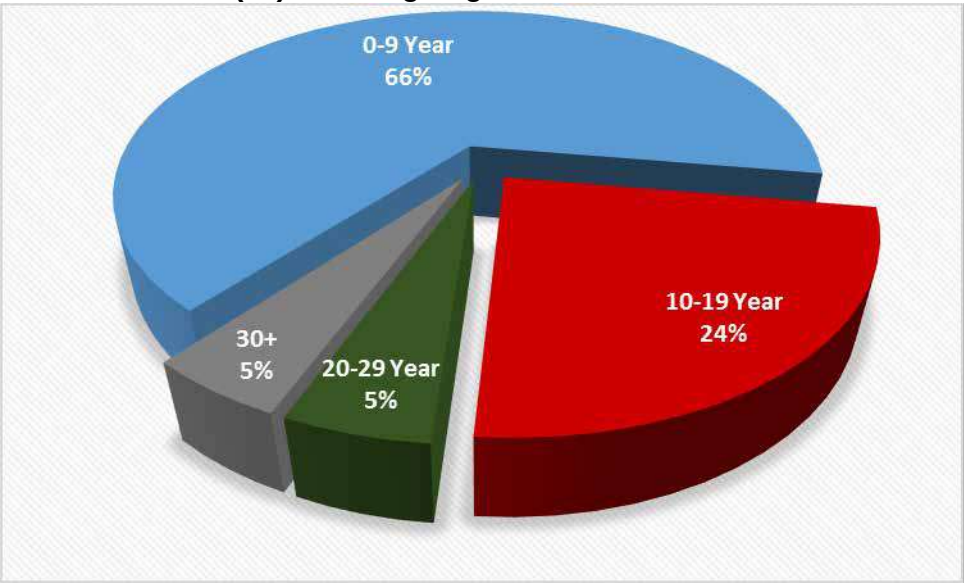
- 47 ships of 2.692.866 DWT are between 0-9 age range,
- 22 ships of 967.147 DWT are between 10-19 age range,
- 7 ships of 202.978 DWT are between 20-29 age range,
- 9 ships of 197.273 DWT are between 30 and over age range.

TABLE (7) Bulk Carrier Ships by Tonnage and Age Groups (Dwt)
(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
150-1499	0	0	0,00	0	0	0,00	0	0	0,00	0	0	0,00	0	0
1500-5999	0	0	0,00	0	0	0,00	1	4.213	2,08	0	0	0,00	1	4.213
6000-9999	2	13.201	0,49	0	0	0,00	0		0,00	0	0	0,00	2	13.201
10000-34999 (HandySize)	10	266.704	9,90	7	158.959	16,44	4	116.725	57,51	9	197.273	100,00	30	739.661
35000-52999 (HandyMax)	2	70.603	2,62	10	487.299	50,39	2	82.040	40,42	0	0	0,00	14	639.942
53000-79000 (Panamax)	25	1.488.889	55,29	5	320.889	33,18	0	0	0,00	0	0	0,00	30	1.809.778
80000-119999 (CapeSize)	6	515.059	19,13	0	0	0,00	0	0	0,00	0	0	0,00	6	515.059
120000 + (Large Size)	2	338.400	12,57			0,00			0,00			0,00	2	338.400
TOTAL	**47**	**2.692.866**	**100**	**22**	**967.147**	**100,00**	**7**	**202.978**	**100**	**9**	**197.273**	**100,00**	**85**	**4.060.264**

Source:Turkish Cahmber of Shipping - 2016

GRAPH (4) : Average Age of Bulk Carriers DWT %



66 % of the bulk carriers are 0-9 age range, 24 % are 10-19 age range, 5 % are 20-29 age range and 5 % are 30 age and over.

Table 8 shows oil tankers segment (24 ships) which is 1.165.601 DWT

- 7 ships of 473.479 DWT are 0-9 age range,
- 11 ships of 673.776 DWT are 10-19 age range,
- 1 ships of 2.829 DWT are 20-29 age range,
- 5 ships of 15.467 DWT are 30 age and over.

DIVISIONS OF TONNAGE

TABLE (8) :Oil Tankers by Tonnage and Age Groups (Dwt) **(1000 GT and Over)**

	0 - 9 Years			10 - 19 Years			20 - 29 Years			30 +Years			Total	
	No	DWT	%	No	DWT	%	No	DWT	%	No	DWT	%	No	DWT
150 - 1499	0	0	0,00	0	0	0,00	0	0	0,00	0	0	0,00	0	0
1500 - 5999	3	9.096	1,91	7	28.795	4,29	1	2.878	181,69	5	15.467	100,00	16	56.236
6000 - 19999	1	13.581	2,85	0	0	0,00	0	0	0,00	0	0	0,00	1	13.581
20000 – 49999 (Product Tanker)	0	0	0,00	0	0	0,00	0	0	0,00	0	0	0,00	0	0
50000 - 79999 (Panamax)	0	0	0,00	0	0	0,00	0	0	0,00	0	0	0,00	0	0
80000 - 109999 (Aframax)	0	0	0,00	0	0	0,00	0	0	0,00	0	0	0,00	0	0
110000 - 164999 (Suezmax)	3	450.802	94,65	4	644.981	96,13	0	0	0,00	0	0	0,00	7	1.095.783
165000 - 299999 (VLCC)	0	0	0,00		0	0,00	0	0	0,00	0	0	0,00	0	0
300000 + (ULCC)	0	0	0,00		0	0,00	0	0	0,00	0	0	0,00	0	0
Total	**7**	**473.479**	**100**	**11**	**673.776**	**100**	**1**	**2.879**	**100**	**5**	**15.467**	**100**	**24**	**1.165.600**

Source:Turkish Cahmber of Shipping - 2016

41 % of the oil tankers are 0-9 age range, 58 % are 10-19 age range and 1 % are 30 age and over.

GRAPH (5): Average Age of Oil Tankers DWT %

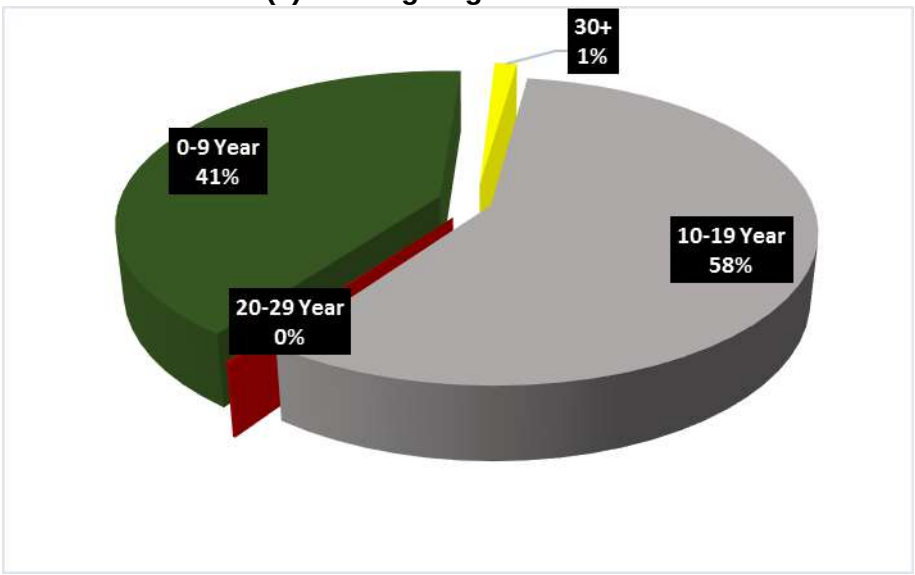


Table 9 shows the average age of the chemical tankers (58 ships) which are 427.283 DWT.

- 34 ships of 298.373 DWT are 0-9 age range,
- 6 ships of 23.393 DWT are 10-19 age range,
- 10 ships of 62.669 DWT are 20-29 age range,
- 8 ships of 42.848 DWT are 30 age and over.

DIVISIONS OF TONNAGE

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

	0 - 9 Years			10 - 19 Years			20 - 29 Years			30 +Years			Total	
	No	DWT	%	No	DWT	%	No	DWT	%	No	DWT	%	No	DWT
150 - 1499	0	0	0,00	0	0	0,00	0	0	0,00	0	0	0,00	0	0
1500 - 5999	13	52.909	17,73	6	23.393	100,00	4	18.215	29,07	5	16.898	39,44	28	111.415
6000 - 19999	20	193.933	65,00	0	0	0,00	6	44.454	70,93	3	25.950	60,56	29	264.337
20000 - 49999 (Product Tanker)	1	51532	17,27	0	0	0,00	0	0	0,00	0	0	0,00	1	51.532
50000 - 79999 (Panamax)	0	0	0,00	0	0	0,00	0	0	0,00	0	0	0,00	0	0
80000 - 109999 (Aframax)	0	0	0,00	0	0	0,00	0	0	0,00	0	0	0,00	0	0
110000 - 164999 (Suezmax)	0	0	0,00	0	0	0,00	0	0	0,00	0	0	0,00	0	0
165000 - 299999 (VLCC)	0	0	0,00	0	0	0,00	0	0	0,00	0	0	0,00	0	0
300000 + (ULCc)	0	0	0,00	0	0	0,00	0	0	0,00	0	0	0,00	0	0
Total	**34**	**298.373**	**100**	**6**	**23.393**	**100,00**	**10**	**62.669**	**100,00**	**8**	**42.848**	**100,00**	**58**	**427.283**

Source:Turkish Cahmber of Shipping - 2016

GRAPH (6) Average age of Chemical Tankers DWT %

70 % of other type of tankers are 0-9 age range, 5 % are 10-19 age range, 15 % are 20-29 age range and 10 % are 30 age and over.

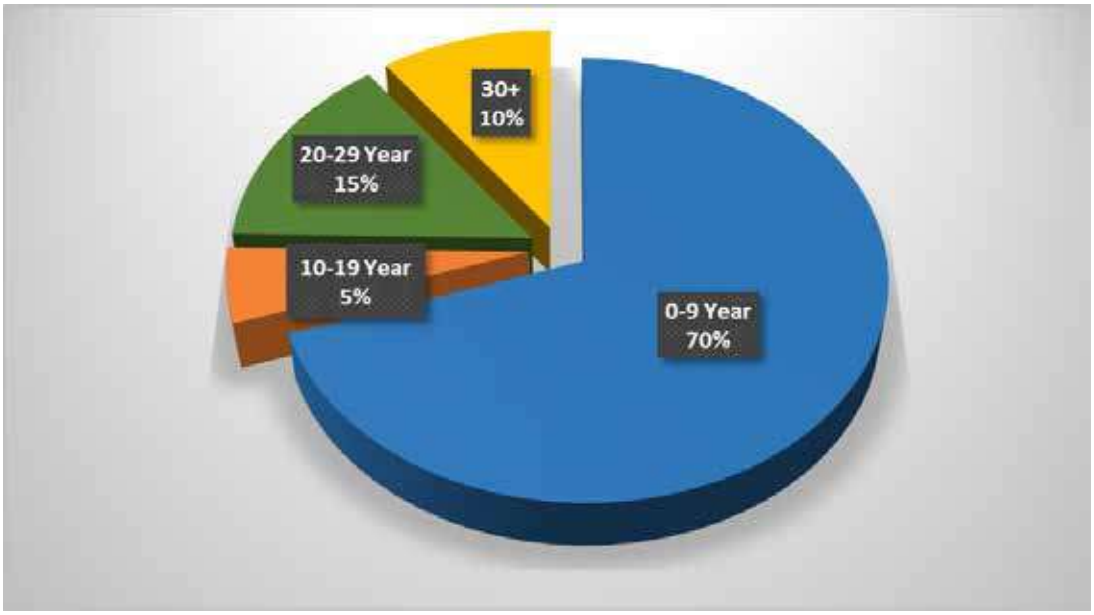


Table 10 shows the average age of the Container ships (57 ships) which are 964.212 DWT.

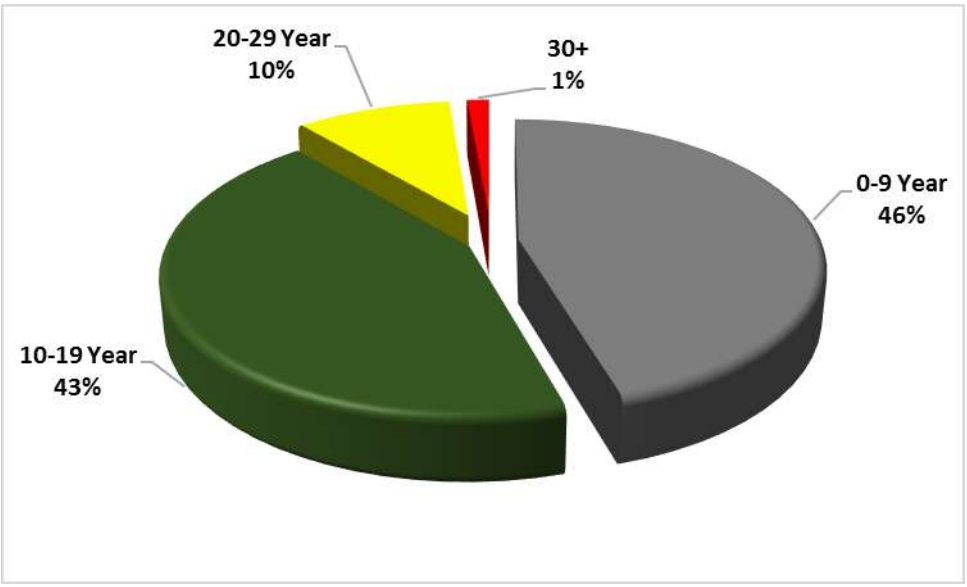
- 21 ships of 438.430 DWT are 0-9 age range,
- 24 ships of 418.268 DWT are 10-19 age range,
- 11 ships of 94.204 DWT are 20-29 age range,
- 1 ships of 13.309 DWT are 30 age and over

TABLE (10) Container Ships by Tonnage and Age Groups (Dwt) **(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
150-1499	0	0	0,00	0	0	0,00	0	0	0,00	0	0	0,00	0	0
1500-5999	1	3.301	0,75	1	3.171	0,76	4	17.345	18,41	0	0	0,00	6	23.817
6000-9999	2	12.606	2,88	4	29.883	7,14	3	28.028	29,75	0	0	0,00	9	70.517
10000-34999	17	383.976	87,58	17	313.477	74,95	4	48.831	51,84	1	13.309	100,00	39	759.593
35000-52999	1	38.547	8,79	2	71.737	17,15	0	0	0,00	0	0	0,00	3	110.284
53000-79999	0	0	0,00	0	0	0,00	0	0	0,00	0	0	0,00	0	0
80000-119999	0	0	0,00	0	0	0,00	0	0	0,00	0	0	0,00	0	0
120000+	0	0	0,00	0	0	0,00	0	0	0,00	0	0	0,00	0	0
Total	**21**	**438.430**	**100,00**	**24**	**418.268**	**100,00**	**11**	**94.204**	**100**	**1**	**13.309**	**100,00**	**57**	**964.212**

Source:Turkish Cahmber of Shipping - 2016

GRAPH (7) The Average Age of the Container ships DWT%



46 % of Container ships are 0-9 age range, 43 % are 10-19 age range and 10 % are 20-29 age range and 1 % 30 age and over.

Table 11 shows the average age of the Ro- Ro Ships, (23 ships) which are 232.089 DWT.

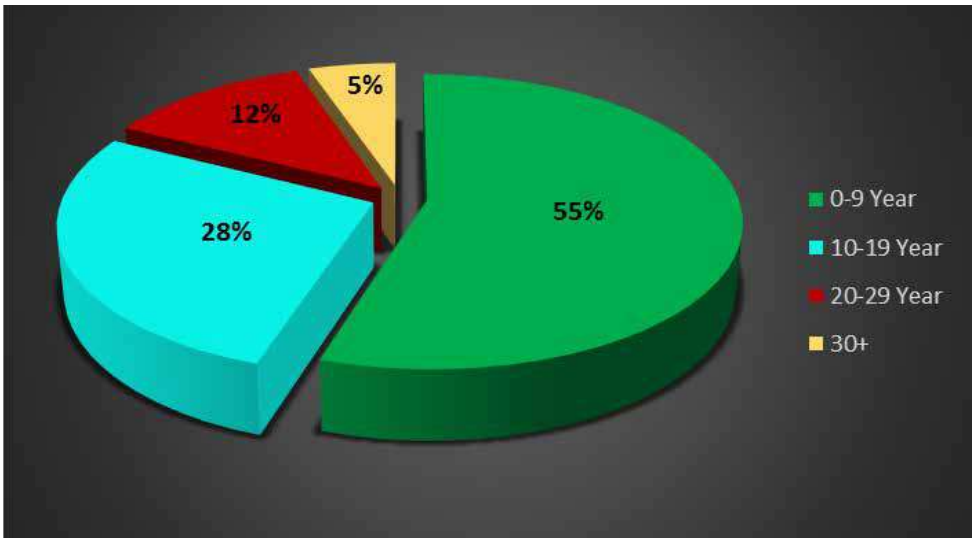
- 11 ships of 127.620 DWT are 0-9 age range,
- 6 ships of 63.866 DWT are 10-19 age range,
- 3 ships of 28.489 DWT are 20-29 age range,
- 3 ships of 12.113 DWT are 30 age range and over.

TABLE (11) Ro-Ro Ships by Tonnage and Age Groups (Dwt) (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
150-1499	0	0	0,00	0	0	0,00	1	457	1,60	0	0	0,00	1	457
1500-5999	0	0	0,00	0	0	0,00	0	0	0,00	3	12.113	100,00	3	12.113
6000-9999	2	18.570	14,55	3	29.630	46,39	0	0	0,00	0	0	0,00	5	48.200
10000-34999	9	109.050	85,45	3	34.236	53,61	2	28.032	98,40	0	0	0,00	14	171.318
35000-52999	0	0	0,00	0	0	0,00	0	0	0,00	0	0	0,00	0	0
53000-79999	0	0	0,00	0	0	0,00	0	0	0,00	0	0	0,00	0	0
80000-119999	0	0	0,00	0	0	0,00	0	0	0,00	0	0	0,00	0	0
120000+	0	0	0,00	0	0	0,00	0	0	0,00	0	0	0,00	0	0
Total	**11**	**127.620**	**100,00**	**6**	**63.866**	**100,00**	**3**	**28.489**	**100**	**3**	**12.113**	**100,00**	**23**	**232.089**

Source:Turkish Cahmber of Shipping - 2016

GRAPH (8) The Average Age of the Ro- Ro Ships DWT%



55 % of Ro-Ro Ships are 0-9 age range, 28 % are 10-19 age range, 12 % are 20-29 age range and 5 % are 30 age and over.

Turkish Merchant Fleet by Number and Tonnage 1000 DWT and Over

(Accepted International Seaborne Transportation Tonnage)

Table 13 shows that the numerical and tonnage examination of ships which are 1000 DWT and over, are suitable for international transportation. Turkish merchant fleet consists of 613 ships, 12 % of total fleet (73 ships) registered in National Ship Registry and 88 % of total fleet (540 ships) registered in International Ship Registry.

The total DWT and GT values of ships which are 1000 DWT and over are 8.505.152 DWT and 5.679.614 GT. The majority of these tonnage on DWT basis is composed of 47.7 % bulk carriers,15 % dry cargo ships, 14 % oil tankers, % 5 chemical tankers and 11.3 % container ships.

This segment consists of the 93 % of the total fleet on DWT bases. (Table 13)

7.3 % of the dry cargo segment which is totally 1.274.170 DWT are registered in National Ship Registry, 92.7 % are registered in International Ship Registry.

11.2 % of the bulk carrier segment which is totally 4.060.264 DWT are registered in National Ship Registry, 88.8 % are registered in International Ship Registry.

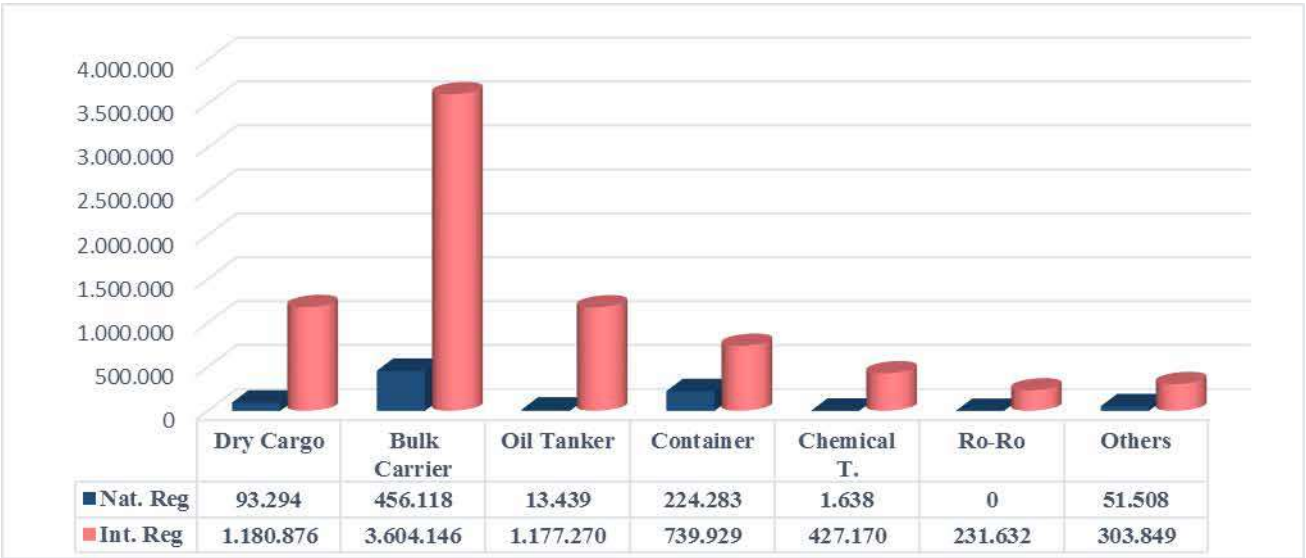
1.1 % of the oil tanker segment which is totally 1.190.709 are registered in National Ship Registry, 98.9 % are registered in International Ship Registry.

23.3 % of the Container Ships which are totally 964.212 DWT are registered in National Ship Registry. 76.7 % are registered in International Ship Registry.

0.4 % of the Chemical Tankers which are totally 428.808 DWT are registered in National Ship Registry. 99.6 % are registered in International Ship Registry

Ro/Ro ship segment which is totally 231.632 DWT are 100 % registered in International Ship Registry.

GRAPH (9) Turkish Fleet According to Registries, 1000 DWT and Over



	Dry Cargo	Bulk Carrier	Oil Tanker	Container	Chemical T.	Ro-Ro	Others
Nat. Reg	93.294	456.118	13.439	224.283	1.638	0	51.508
Int. Reg	1.180.876	3.604.146	1.177.270	739.929	427.170	231.632	303.849

TABLE (12) The General Examination of The Turkish Merchant Fleet by Number And Tonnage According to Import and Built (1000 DWT and over)

SHIP TYPES	Count			DWT			GT		
	Import	Built	Total	Import	Built	Total	Import	Built	Total
DRY CARGO	63	208	271	451.588	822.582	1.274.170	311.832	512.581	824.413
BULK CARRIER	78	7	85	3.859.539	200.725	4.060.264	2.201.181	124.554	2.325.735
CONTAINERS	36	21	57	717.426	246.787	964.212	578.771	184.329	763.100
DRY CARGO/CONTAINERS	7	10	17	35.799	87.512	123.311	25.204	62.049	87.253
CHEMICAL TANKERS	25	34	59	223.274	205.534	428.808	142.096	136.561	278.657
LPG TANKERS	7	0	7	39.389	0	39.389	37.227	0	37.227
ASPHALT TANKERS	1	2	3	2.770	39.936	42.706	1.900	31.348	33.248
WATER BARGES	0	1	1	0	1.027	1.027	0	488	488
RO-RO SHIPS	22	0	22	231.632	0	231.632	550.379	0	550.379
RO-RO FERRY-PASSENGER	5	2	7	18.471	2.727	21.198	28.673	1.976	30.649
FERRY BOATS	0	8	8	0	14.854	14.854	0	11.685	11.685
TRAIN FERRIES	0	1	1	0	1.300	1.300	0	1.233	1.233
PASSENGER AND CARGO SHIPS	3	1	4	10.056	1.700	11.756	23.075	10.583	33.658
SCIENTIFIC RESEARCH VESSEL	1	1	2	1.790	4.200	5.990	10.870	2.569	13.439
SEA BUSES	1	0	1	29.642	0	29.642	431	0	431
HARBOUR CAR FERRIES	0	2	2	0	3.876	3.876	0	2.673	2.673
TUGS	1	0	1	1.049	0	1.049	1.356	0	1.356
SERVICE SHIPS	12	10	22	39.753	13.240	52.993	32.306	4.788	37.094
OIL TANKERS	13	29	42	1.120.403	70.305	1.190.709	588.604	43.097	631.701
TRAIN FERRY/RO-RO	1	0	1	6.266	0	6.266	15.195	0	15.195
TOTAL :	**276**	**337**	**613**	**6.788.847**	**1.716.305**	**8.505.152**	**4.549.100**	**1.130.514**	**5.679.614**

Source: Turkish Chamber of Shipping - 2016

TABLE (13) The General Examination of the Turkish Merchant Fleet by National and International Registries (1000 DWT and over)

SHIP TYPES	COUNT			DWT			GT		
	National Reg.	Inter. Reg.	Total	National Reg.	Inter. Reg.	Total	National Reg.	Inter. Reg.	Total
DRY CARGO	26	245	271	93.294	1.180.876	1.274.170	57.549	766.865	824.414
BULK CARRIER	11	74	85	456.118	3.604.146	4.060.264	262.689	2.063.046	2.325.735
CONTAINERS	9	48	57	224.283	739.929	964.212	180.883	582.217	763.100
DRY CARGO/CONTAINERS	1	16	17	2.356	120.955	123.311	1.720	85.533	87.253
CHEMICAL TANKERS	1	58	59	1.638	427.170	428.808	1.082	277.575	278.657
LPG TANKERS	0	7	7	0	39.389	39.389	0	37.227	37.227
ASPHALT TANKERS	1	2	3	2.770	39.936	42.706	1.900	31.348	33.248
WATER BARGES	0	1	1	0	1.027	1.027	0	488	488
RO-RO SHIPS	0	22	22	0	231.632	231.632	0	550.379	550.379
RO-RO FERRY-PASSENGER	0	7	7	0	21.198	21.198	0	30.649	30.649
FERRY BOATS	1	7	8	2.314	12.540	14.854	1.596	10.090	11.686
TRAIN FERRIES	1	0	1	1.300	0	1.300	1.233	0	1.233
PASSENGER AND CARGO SHIPS	2	2	4	3.240	8.516	11.756	15.284	18.374	33.658
SCIENTIFIC RESEARCH VESSEL	0	2	2	0	5.990	5.990	0	13.439	13.439
SEA BUSES	0	1	1	0	29.642	29.642	0	431	431
HARBOUR CAR FERRIES	0	2	2	0	3.876	3.876	0	2.673	2.673
TUGS	0	1	1	0	1.049	1.049	0	1.356	1.356
SERVICE SHIPS	14	8	22	39.528	13.465	52.993	27.860	9.234	37.094
OIL TANKERS	6	36	42	13.439	1.177.270	1.190.709	7.654	624.047	631.701
TRAIN FERRY/RO-RO	0	1	1	0	6.266	6.266	0	15.195	15.195
Total :	**73**	**540**	**613**	**840.280**	**7.664.872**	**8.505.152**	**559.450**	**5.120.166**	**5.679.614**

Source: Turkish Chamber of Shipping - 2016

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

Ship Types	No	DWT	Ave. DWT	GT	Ave. GT	Ave. Age
DRY CARGO	272	1.279.589	25	828.211	24	28
BULK CARRIER	85	4.060.264	10	2.325.735	10	13
CHEMICAL TANKERS	59	428.808	12	278.657	12	14
CONTAINERS	57	964.212	11	763.100	12	13
OIL TANKERS	42	1.190.708	10	631.701	10	18
SERVICE SHIPS	22	52.993	33	37.094	29	34
RO-RO SHIPS	22	231.632	12	550.379	10	14
DRY CARGO/CONTAINERS	16	117.893	13	83455	13	15
FERRY BOATS	8	14.854	25	11.685	25	25
RO-RO FERRY-PASSENGER	7	21.198	36	30.649	37	33
LPG TANKERS	7	39.389	17	37.227	17	21
PASSENGER AND CARGO SHIPS	4	11.756	44	33.658	39	46
ASPHALT TANKERS	3	42.706	3	33.248	3	12
SCIENTIFIC RESEARCH VESSEL	2	5.990	11	13.439	27	17
HARBOUR CAR FERRIES	2	3.876	36	2673	36	37
TUGS	1	1.049	39	1.356	39	39
SEA BUSES	1	29.642	27	431	27	27
TRAIN FERRIES	1	1.300	50	1.233	50	50
WATER BARGES	1	1.027	47	488	47	47
TRAIN FERRY/RO-RO	1	6.266	37	15.195	37	37
TOTAL	**613**	**8.505.152**	**25**	**5.679.614**	**25**	**27**
Source: Turkish Chamber of Shipping - 2016						

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+over			Total	
	No	DWT	%	No	DWT	%	No	DWT	%	No	DWT	%	No	DWT
150-1499	2	2.241	0,05	2	2.824	0,12	17	22.089	2,65	44	55.074	6,63	65	82.228
1500-5999	57	227.405	5,15	40	148.293	6,12	58	201.387	24,13	123	354.348	42,67	278	931.433
6000-9999	27	194.628	4,41	21	173.186	7,15	23	178.331	21,36	19	137.249	16,53	90	683.394
10000-34999	56	1.039.161	23,52	28	524.526	21,65	15	304.171	36,44	16	283.859	34,18	115	2.151.717
35000-52999	4	160.682	3,64	13	608.901	25,13	3	128.766	15,43	0	0	0	20	898.349
53000-79999	25	1.488.899	33,71	5	320.889	13,25	0	0	0	0	0	0	30	1.809.788
80000-119999	6	515.059	11,66	0	0	0	0	0	0	0	0	0	6	515.059
120000+	5	789.203	17,87	4	643.981	26,58	0	0	0	0	0	0	9	1.433.184
Genel Toplam :	**182**	**4.417.278**	**100**	**113**	**2.422.600**	**100**	**116**	**834.744**	**100**	**202**	**830.530**	**100**	**613**	**8.505.152**

The Position of The Turkish Merchant Fleet Within the World Fleet

In 2016 our tonnage under foreign flags is 20.8 million DWT, as of 1 January 2016, concerning the ships of 1000 GT and above, the total tonnage of the Turkish ship-owners, both under Turkish flag and foreign flags is 29.1 million DWT.

As of the beginning of 2016, regarding the Turkish Ship owners' ships of 1000 GT and above, 35.9 % percent of these ships are registered under Turkish flag and 64.1 % are registered under foreign flags.

TABLE (16) Turkish Ships Under the National Flag and Foreign Flags (1000 GT and over)

Year	National Flag			Foreign Flag			Total Fleet Controlled	
	No	1000 DWT	%	No	1000 DWT	%	No	1000 DWT
1999	448	8.697	90,48	69	915	9,52	517	9.612
2000	456	8.269	90,63	96	855	9,37	552	9.124
2001	445	7.321	82	107	1.607	18	552	8.928
2002	451	7.815	83,77	117	1.514	16,23	568	9.329
2003	432	7.045	79,9	147	1.772	20,1	579	8.817
2004	408	6.556	75,23	163	2.159	24,77	571	8.715
2005	420	6.427	70,23	237	2.725	29,77	657	9.152
2006	432	6.844	65,47	353	3.609	34,53	785	10.453
2007	446	6.464	58,16	424	4.650	41,84	870	11.114
2008	490	6.592	50	513	6.591	50	1.003	13.183
2009	520	6.736	43,9	636	8.592	56,2	1.156	15.328
2010	560	7.246	42,1	665	9.954	57,9	1.225	17.201
2011	547	7.797	39,7	672	11.863	60,3	1.219	19.660
2012	523	8.479	37,6	642	14.093	62,4	1.165	22.572
2013	627	9.488	31,3	842	20.838	68,7	1.469	30.326
2014	599	8.580	28,2	890	21.846	71,8	1.489	30.427
2015	564	8.297	30,2	834	19.209	69,8	1.398	27.507
2016	**551**	**8.272**	**35.9**	**984**	**20.879**	**64.1**	**1.535**	**29.151**

Source: ISL January-February 2016

GRAPH (10) Progress of the Turkish Merchant Fleet

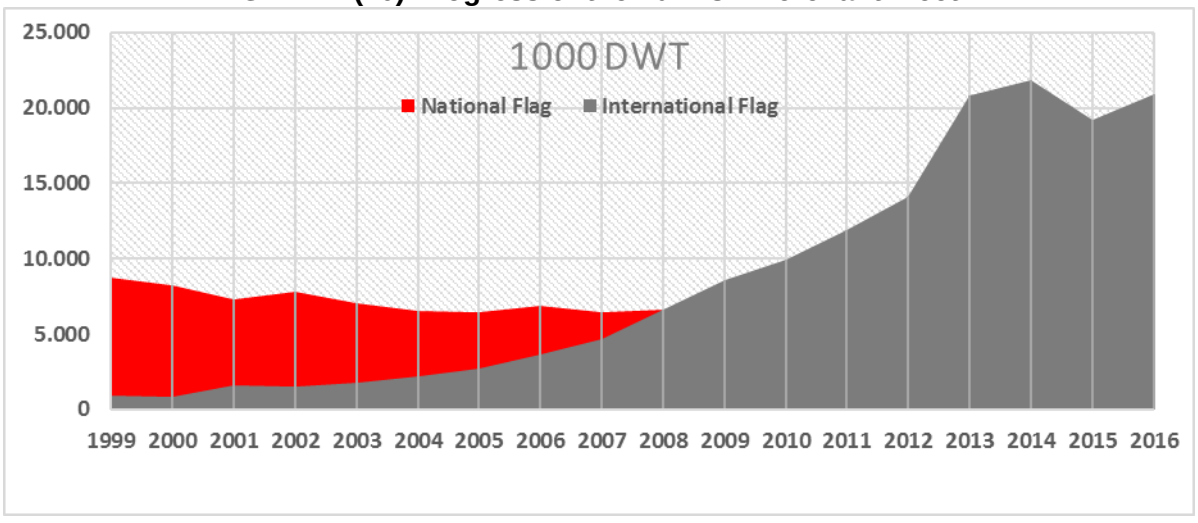


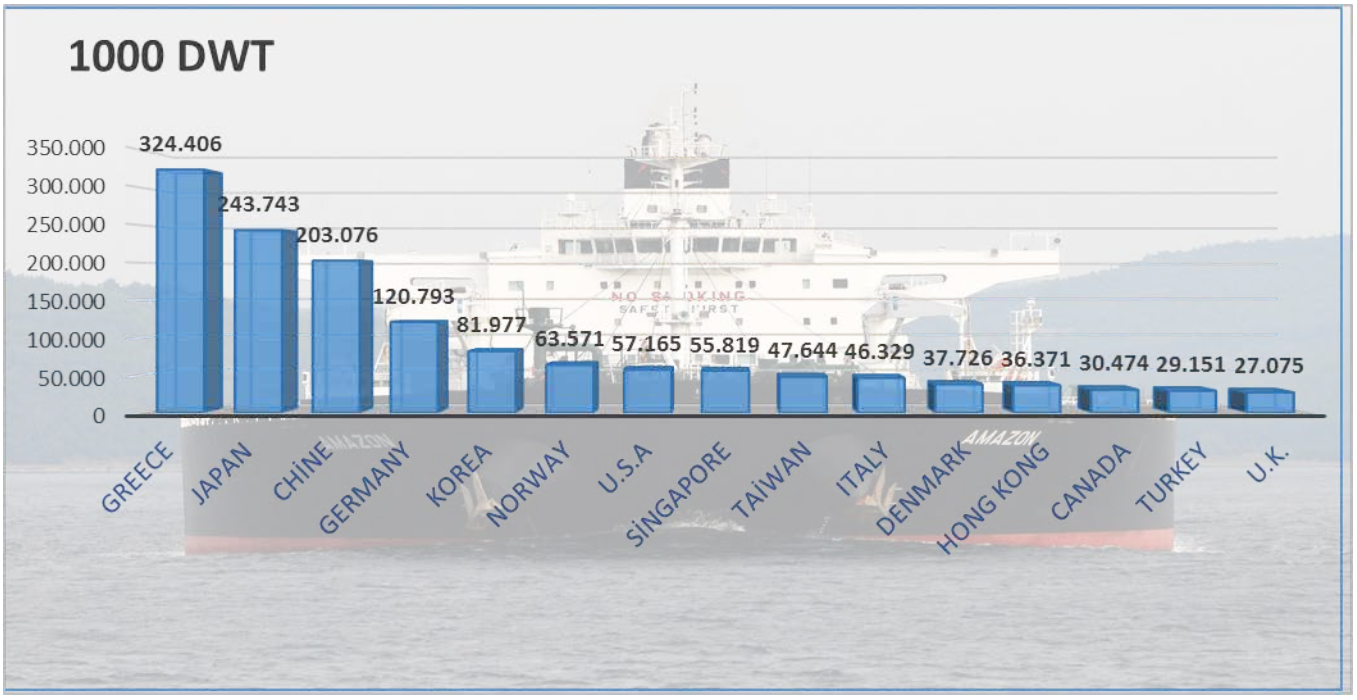
TABLE (17) Total Fleet of the 30 Countries by National and Foreign Flags
(01 January 2016) *(1000 GT and over)*

Rank	Country	National Flag			International Fag			Total Flag				DWT % change over prev.year %
		No	1000 DWT	1000 TEU	No	1000 DWT	1000 TEU	No	1000 DWT	1000 TEU	Yaş Ort.	
1	Greece	750	68.784	73	3.689	255.622	1.964	4.439	324.406	2.037	11.3	5.3
2	Japan	775	28.530	41	3.412	215.212	1.270	4.187	243.743	1.311	8.3	0.6
3	China	2.502	71.407	627	2.268	131.668	1452	4.770	203.076	2.079	11.2	7.0
4	Germany	217	11.251	839	3.239	109.542	4.869	3.456	120.793	5.708	10.3	-2.3
5	Korea	734	14.991	104	901	66.986	576	1.635	81.977	680	13.8	-3.7
6	Norway	497	15.466	62	1.110	48.105	260	1.607	63.571	322	14.2	6.1
7	USA	192	4.633	76	932	52.532	199	1.124	57.165	276	15.2	2.7
8	Singapore	757	32.235	796	611	23.583	269	1.368	55.819	1065	11.3	1.2
9	Taiwan	111	5.010	134	776	42.634	841	887	47.644	975	11.7	5.1
10	Italy	482	14.515	76	603	31.814	1098	1085	46.329	1.175	12.3	10.7
11	Denmark	329	15.774	974	533	21.953	768	862	37.726	1743	11.6	2.0
12	Hong Kong	479	27.174	431	359	9.197	56	838	36.371	487	11.9	3.6
13	Canada	**113**	**880**	**6**	**378**	**29.594**	**754**	**491**	**30.474**	**760**	**14.3**	23.7
14	**Turkey**	**551**	**8.272**	**110**	**984**	**20.879**	**139**	**1535**	**29.151**	**249**	**18.1**	**6.0**
15	UK	213	6.541	117	447	20.534	411	660	27.075	528	11.5	23.1
16	India	595	14.848	22	139	9.100	7	734	23.948	30	12.3	3.0
17	Russia	1081	6.103	76	380	15.080	39	1461	21.183	115	25.4	-6.9
18	Belgium	66	7.186	1	130	12.883	72	196	20.068	73	9.7	10.6
19	Iran	143	3.987	105	64	13.785	7	207	17.771	112	15.2	-1.3
20	Indonesia	1.460	12.969	160	94	1.940	14	1.554	14.909	175	23.8	0.1
21	Saudi Arabia	73	2858	8	70	10.670	1	143	13.528	8	15.8	1.7
22	UAE	45	309	1	429	12.292	85	474	12.601	85	19.2	4.2
23	Malaysia	216	6.292	19	94	6.033	1	310	12.324	20	16.3	-0.4
24	France	115	3122	199	166	7.779	403	281	10.901	602	10.9	5.0
25	Holland	637	5.563	225	271	5.201	50	908	10.764	276	11.0	2.2
26	Kuwait	36	5.324	22	58	4.985	342	94	10.309	364	9.0	17.9
27	Bermuda				42	8.694	0	42	8.694	0	11.9	15.7
28	Brazil	69	2589	12	30	5.987	2	99	8.576	14	18.8	-35.3
29	Sweden	47	1.524	9	140	6.317	14	187	7.841	23	9.8	36.4
30	Viet Nam	747	6254	33	82	1.170	6	829	7.424	39	11.5	5.8
	Total 30 Countries	**14.032**	**404.391**	**5.358**	**22.431**	**1.201.771**	**15.969**	**36.463**	**1.606.161**	**21.331**	**12.9**	3.6
	World Total							**41.822**	**1.797.066**	**22.096**	**14.0**	**3.3**

Table 17 shows the first 30 countries which own the largest merchant fleet in the world scale. 94 % of the World fleet (1000 GT and over) of 1.6 Billion DWT, is being ontrolled by the following countries as of 1 January 2016.

The biggest fleets with open registry flags (1000 GT and over), in national and foreign flag vessels Greece is on the 1st row, Japan is on the 2nd and China is on the 3rd row, whereas Turkey is on the 14th row.

GRAPH (11) By Country of Domicile as of 1 January 2016



The World fleet (300 GT and over) is 51.405 ships of 1.716088.000 DWT based on 153 countries as of 01.01.2016. The position of Turkish merchant fleet is shown in the Table as being on 23st place in World ranking

Panama, having a share of 18.9 % is in the first place, Liberia, having a share of 11.7 % is in the second place, Marshall Island, having a share of 11.3 % is in the third place.

The Turkish fleet range among the World fleets between the years 2005 and 2016 is as follows:

- In 2005, the 24 th
- In 2006, the 24 th
- In 2007, the 26 th
- In 2008, the 25 th
- In 2009, the 26 th
- In 2010, the 26 th
- In 2011, the 24 th
- In 2012, the 23 rd
- In 2013, the 22 nd
- In 2014, the 23 rd
- In 2015, the 23 rd
- In 2016, the 23 rd

TABLE (18) World Merchant Fleet Ranking by Flag as of January 1st, 2016
(300 GT and over)

Rank	Country	No of Ships	1000 GT	1000 DWT	1000 TEU	DWT %	Annual Change %
1	Panama	6.517	212.868	324.583	3.291	18.9	-5.4%
2	Liberia	3.036	128.656	200.964	3.855	11.7	1.1%
3	Marshall Island	2.681	118.855	193.090	1.209	11.3	14.5%
4	Hong Kong	2.364	99.961	161.024	2.595	9.4	7.1%
5	Singapore	2.353	81.515	124.274	2.110	7.2	10.6%
6	Malta	1.957	62.250	94.502	1.282	5.5	15.9%
7	Greece	983	41.195	73.110	73	4.3	-6.5%
8	Chine	2.855	45.949	71.967	635	4.2	-0.7%
9	Bahamas	1.166	52.306	66.971	224	3.9	5.8%
10	U.K.	731	27.020	35.458	871	2.1	-6.1%
11	South Cyprus	813	20.530	32.542	443	0.8	-1.3%
12	Japan	2.633	21.092	30.931	46	1.3	43.5%
13	Norway	774	14.359	18.091	63	1.9	-1.1%
14	Denmark	461	15.166	17.178	986	1.0	-3.6%
15	Korea	1048	10.713	16.225	106	0.9	-0.6%
16	Italy	705	15.524	15.875	127	0.9	6.3%
17	Indian	834	9.055	15.507	35	0.9	5.4%
18	Indonesia	2.721	10.768	14.988	167	0.9	15.4%
19	Tanzania	205	7.085	13.235	8	0.8	13.4%
20	Antiqua & Barbuda	1026	8.821	11.379	647	0.7	-9.9%
21	Germany	274	10.193	11.282	839	0.7	-10.1%
22	Bermuda	134	10.044	8.976	13	0.5	-8.7%
23	**Turkey**	**853**	**5.909**	**8.532**	**112**	**0.5**	**-2.0%**
24	Portugal	258	6.377	8.352	381	0.5	121.9%
25	Belgium	84	5.121	8.163	1	0.5	-2.0%
Total	**153 Countries**	**51.405**	**1.145.991**	**1.716.088**	**22.106**	**100.0**	**3.3%**

The position of the Turkish Merchant Fleet Among the Fleets of the Neighboring Countries

The capacity of the merchant fleet of Turkey and the neighboring countries are shown on the following Table 19 Greece is in the first place being among the first three largest merchant fleets of the World. Southern Cyprus is in the second and Turkey is in the third place.

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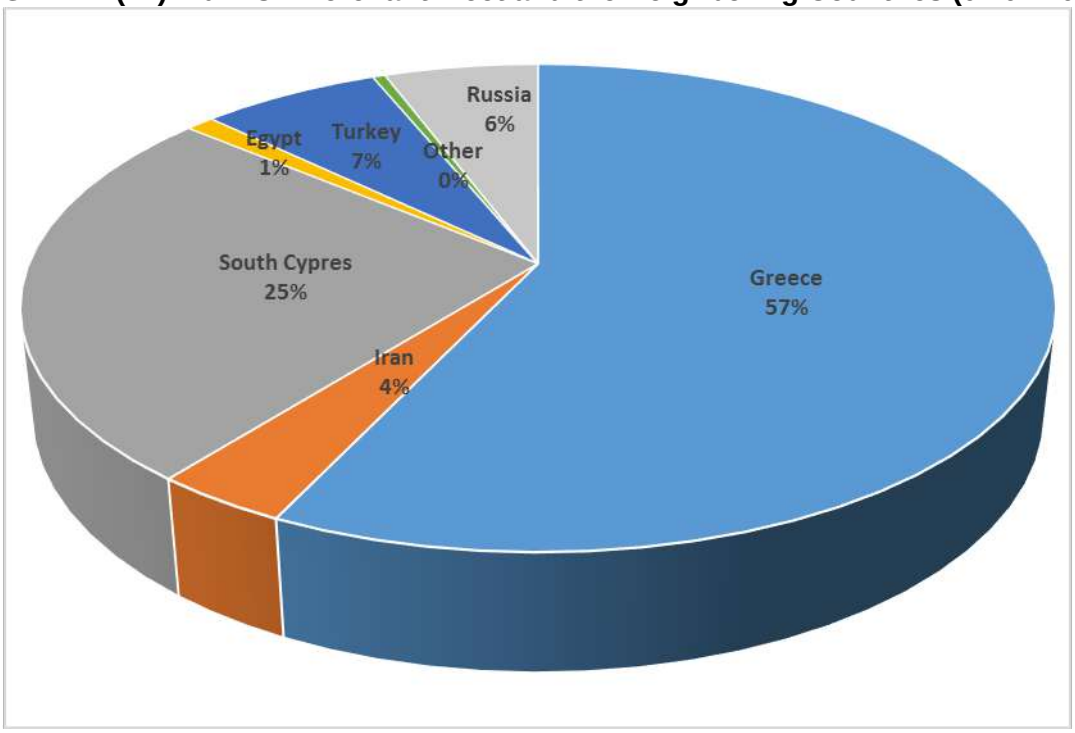
TABLE (19): Turkish Merchant Fleet and the Neighboring Countries (01.01 2016)
(300 GT and over)

World dwt rank	Country	No	1000 DWT	World Share %	Change Rate %
7	Greece	983	73.110	4,3%	-6,5%
11	South Cyprus	813	32.542	1,9%	-1,3%
23	**Turkey**	**853**	**8.532**	**0,5%**	**-2,0%**
28	Russia	1.446	7.334	0,4%	19,3%
36	Iran	365	4.633	0,3%	9,2%
57	Egypt	86	1.355	0,1%	1,8%
86	Ukraine	112	348	0.0	-4,9%
101	Bulgaria	28	116	0.0	-18,0%
108	Syria	9	62	0.0	-5,9%
118	Romania	15	37	0.0	-32,3%
120	Georgia	17	34	0.0	-82,8%

Source: ISL January-February 2016

GRAPH (12) Turkish Merchant Fleet and the Neighboring Countries (01.01 2016)



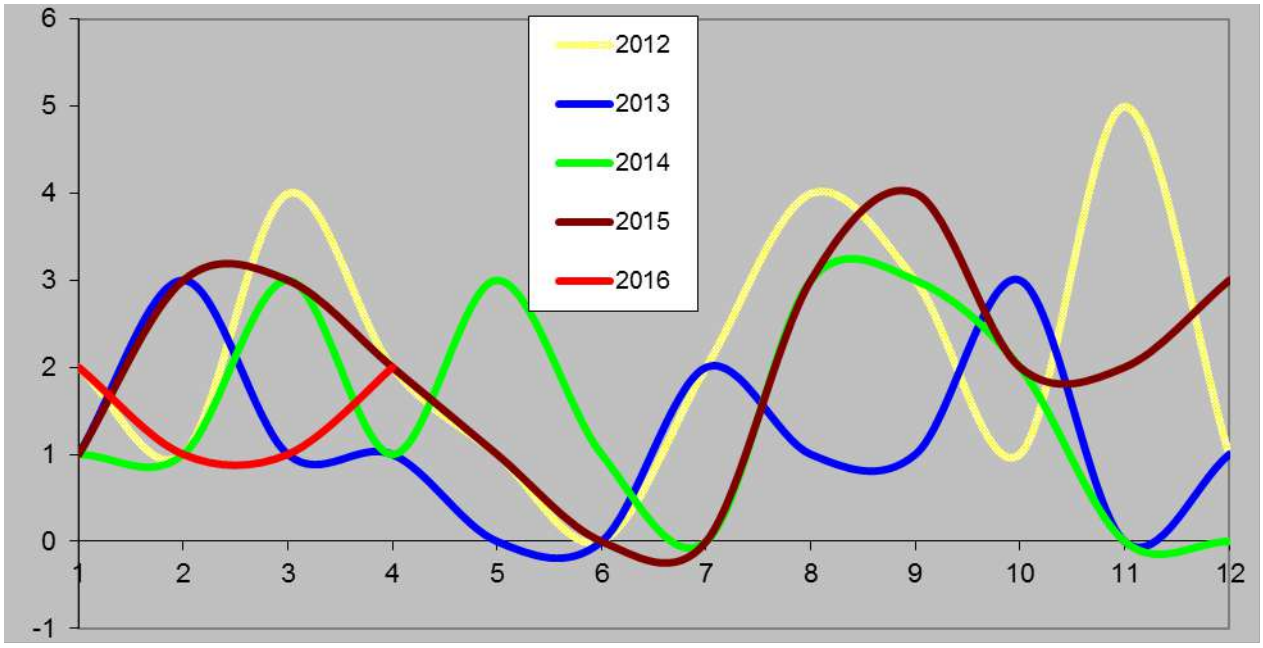
Port State Control Applications

Turkey is in the White List.

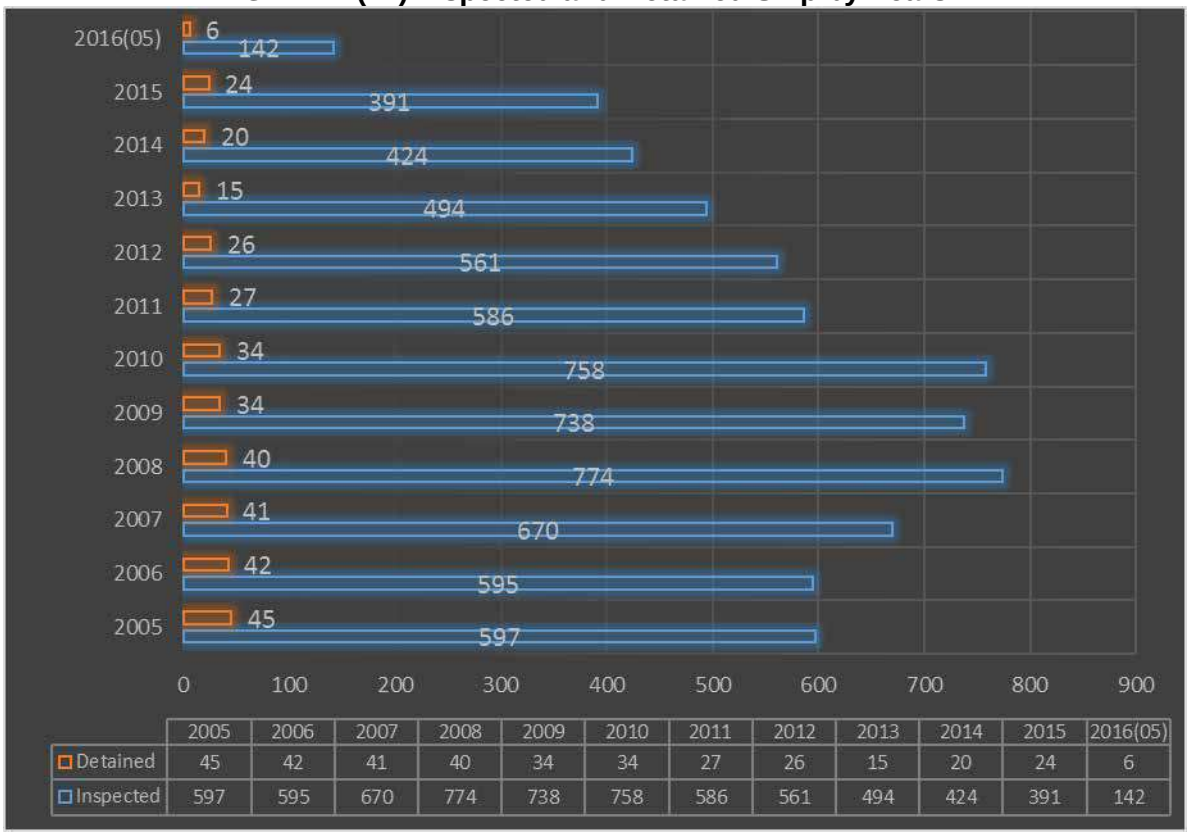
Our Chamber, together with Maritime administration is making every effort to preserve our fleet's high quality and aims to upgrade its place on the white list.

The Port State Control (PSC) is still being used in eight different geographical areas of the world, as well as for our ships. These controls are used in our country, too, and the studies in this matter continues meticulously. Within this context, Turkey has become a member of the Mediterranean and Black Sea Memorandums (MoU) and is taking any measures to prevent unfair competition and increase quality in shipping. Therefore, we continue to control entries of non-standard vessels to our territorial waters and apply necessary controls. For this reason, the requirements of the international legislations such as SOLAS, MARPOL, SCTW, ISPS and ISM are being applied effectively. Detention rates of Turkish ships in foreign ports under the scope of Paris MoU is decreasing each year and it was taken in White List in 2008. When we look at the detention numbers, it was 40 in 2008, 34 in 2009, 34 in 2010, 27 in 2011, 26 in 2012, 15 in 2013, 19 in 2014, 24 in 2015 and only 6 as of May 2016.

GRAPH (13) Inspected and Detained Ships By Years



GRAPH (14) Inspected and Detained Ship by Years



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016(05)
Detained	45	42	41	40	34	34	27	26	15	20	24	6
Inspected	597	595	670	774	738	758	586	561	494	424	391	142

Source: Paris MoU Web Site

CHAPTER II

DEVELOPMENT OF TONNAGE CARRIED WORLD AND BY TURKISH MERCHANT FLEET IN 2015

The Developments in the Transportation of Foreign Trade Cargoes

2016 is a projection. *Trends calculated using an average of the 5 or 10 year period up to and including the current year, or a compound average growth rate over the period.
Estimated share of total world trade in 2014 (mt): sea 84%, land (road+rail) 16%, air <1%.

TABLE (20) World Total Trade And World Seaborn Trade

Year	World Total Trade (all modes) Billion Tonnes	World Transport Change (%)	World Seaborn Trade Billion Tonnes	Seaborn Trade as % of Total
2008	10,86	-	8,61	79,00%
2009	9,56	-12%	8,29	87,00%
2010	10,82	13%	9,07	84,00%
2011	11,54	7%	9,47	82,00%
2012	11,83	3%	9,88	84,00%
2013	12,19	3%	10,21	84,00%
2014	12,56	3%	10,54	84,00%
2015 (*)	12,94	3%	10,77	83,00%
2016 (**)	13,44	4%	11,03	82,00%
(*)approximate value (**)predicted value)				

Source *: Clarksons Research Feb.2016*

GRAPH (15) World Total Trade And World Seaborn Trade

TABLE (21) Turkish Foreign Trade Transportation by Modes (%)

Years	Sea	Rail	Road	Air	Pipeline and Others
2006	87,4	1,1	10,4	0,1	1
2007	87,4	1,1	10	0,6	0,9
2008	86,5	1,1	10,7	0,7	1
2009	85	0,8	12,6	0,8	0,8
2010	85,6	0,8	12,5	0,3	0,8
2011	85,8	0,8	11,8	0,4	1,2
2012	87	0,6	10,7	0,4	1,4
2013	86,4	0,5	11,4	0,4	1,3
2014	86,2	0,4	11,2	0,5	1,7
2015	**87,7**	**0,5**	**10,7**	**0,4**	**0,7**

Source: Turkstat

87,7 % of the Turkey's foreign trade is being realised by maritime transportation. The progress of transportation between the years of 2006-2015 is shown in the Table below by the modes of transportation.

87,7 % of the volume of Turkey's foreign trade transportation has been carried by sea, 10.7 % has been carried by road, 0.5 % has been carried by rail, 0.4 % has been carried by air and 0.7 % has been carried by other transportation modes.

GRAPH (16) Foreign Trade Transportation by Modes (%)

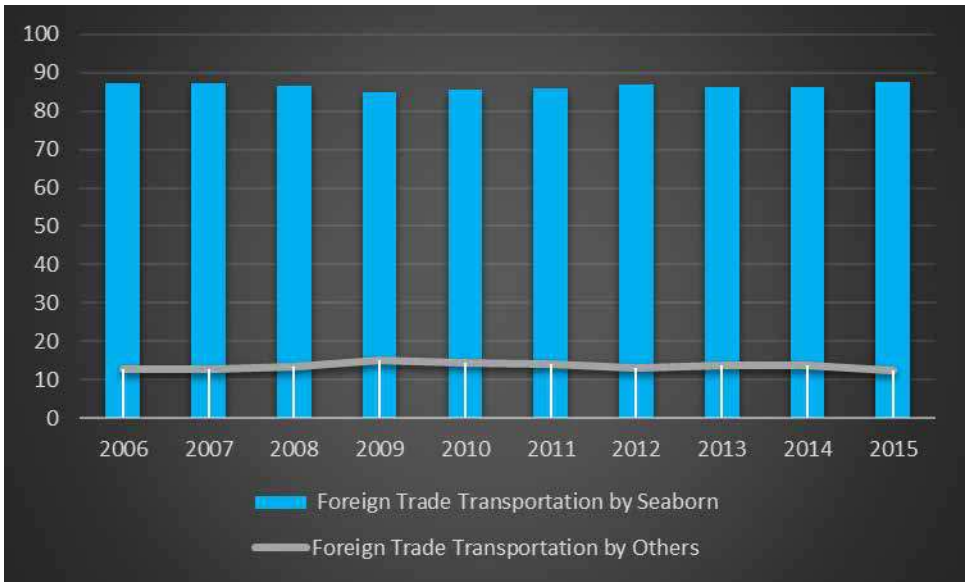
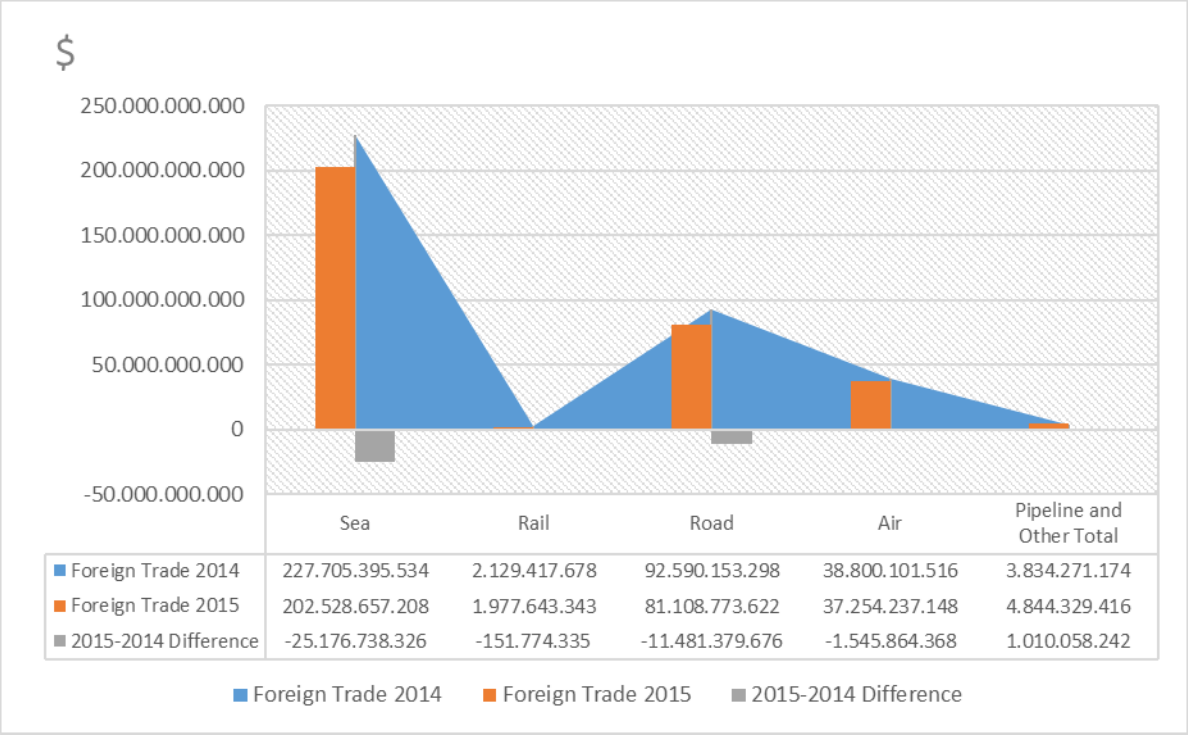


TABLE (22): Foreign Trade Transportation by Modes ($)

Modes	Import $ 2014	Import $ 2015	Export $ 2014	Export $ 2015	Foreign Trade $ 2014	Foreign Trade $ 2015	Rate %	Difference % 2014-2015
Sea	141.387.178.988	124.435.708.471	86.318.216.546	78.092.948.737	227.705.395.534	202.528.657.208	62	-11,06
Rail	1.206.626.075	1.169.581.267	922.791.603	808.062.076	2.129.417.678	1.977.643.343	1	-7,13
Road	37.300.838.943	34.364.202.503	55.289.314.355	46.744.571.119	92.590.153.298	81.108.773.622	25	-12,40
Air	24.696.882.758	19.975.981.962	14.103.218.758	17.278.255.186	38.800.101.516	37.254.237.148	11	-3,98
Pipeline and Others Total	2.825.658.334	3.833.194.606	1.008.612.840	1.011.134.810	3.834.271.174	4.844.329.416	1	26,34
Total	207.417.185.098	**183.778.668.809**	157.642.154.102	**143.934.971.928**	365.059.339.200	**327.713.640.737**	100	**-10,23**

Source: Turkstat

GRAPH (17) Foreign Trade Transportation by Modes (%)



Developments in the Transportation of Seaborne Trade

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

The Number of Incoming Ships to the Turkish Ports

The number of incoming ships to the Turkish ports between the years 2011-2012-2013-2014-2015 is shown below:

- In 2011, the number of incoming vessels increased by 1.4% when compared with 2010,
- In 2012, the number of incoming vessels increased by 1 % when compared with 2011,
- In 2013, the number of incoming vessels decreased by 0.3% when compared with 2012.
- In 2014, the number of incoming vessels decreased by 1.8 % when compared with 2013.
- In 2015, the number of incoming vessels decreased by 1,4 % when compared with 2014.

TAB LE (23) The Number of Incoming Ships to the Turkish Ports

Years	Turkish Flag Number	Foreign Flag Number	Total Number	TF %	FF %
2006	42.058	33.461	75.519	55,69	44,31
2007	43.662	35.262	78.924	55,32	44,68
2008	45.362	36.042	81.404	55,72	44,28
2009	45.813	34.631	80.444	56,95	43,05
2010	37.060	37.055	74.115	50	50
2011	37.234	37.900	75.134	49,6	50,4
2012	38.333	37.542	75.875	50,5	49,5
2013	39.835	36.295	76.130	52,32	47,68
2014	38.685	36.081	74.766	51,74	48,26
2015	38.397	35.288	73.685	52,10	47,89

Source: Republic of Turkey Ministry of Transport, Maritime Affairs and Communications

GRAPH (18) Numbers of Incoming Ships to the Turkish Ports

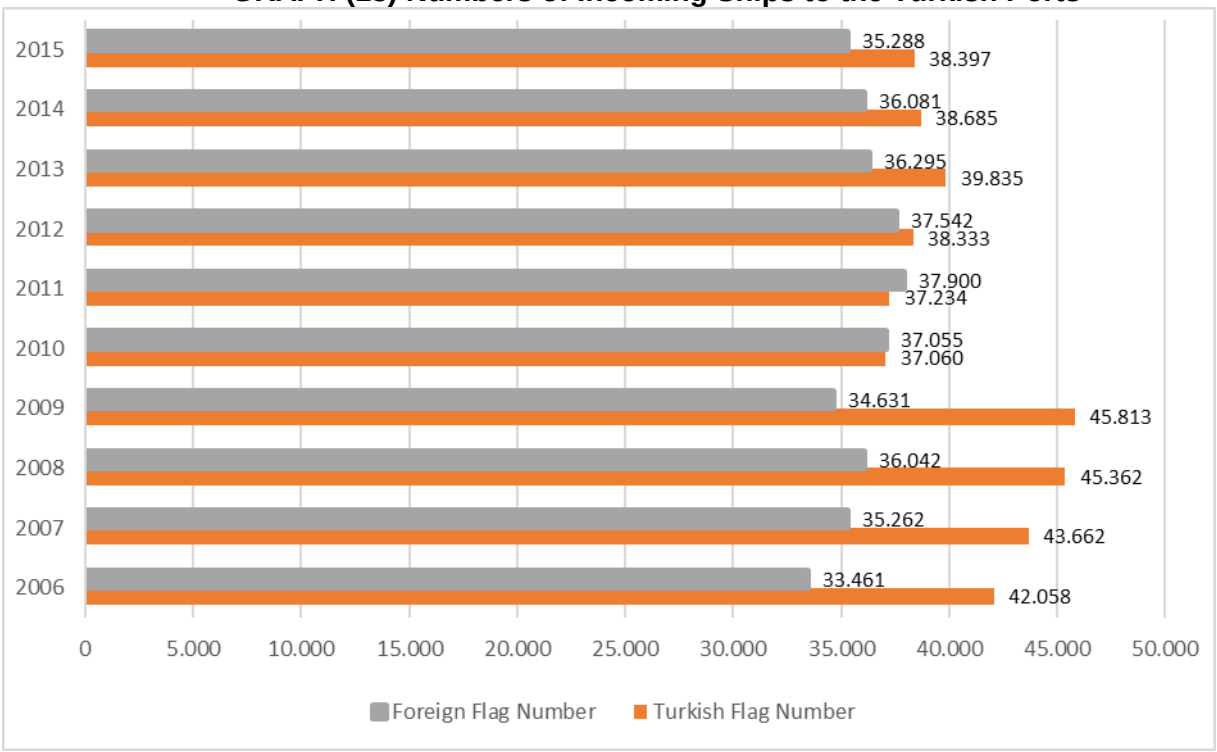


Table (24) Numbers of Incoming Ships to the Turkish Ports in 2015

Port Authority	Turkish Flag		Foreign Fag		Total	
	Ship Numb	Gross Ton	Ship Number	Gross Ton	Ship Number	Gross Ton
IZMIT	4.017	18.790.809	5.974	111.275.318	9.991	130.066.128
AMBARLI	2.344	16.514.981	2.359	69.565.861	4.703	86.080.842
ALIAGA	1.651	9.417.290	3.210	57.508.875	4.861	66.926.165
MERSIN	994	9.855.579	3.248	52.645.609	4.242	62.501.188
GEMLIK	1.750	9.956.347	2.164	46.076.533	3.914	56.032.880
BOTAS	247	3.361.942	1.240	52.634.971	1.487	55.996.913
ISKENDERUN	1.555	5.338.818	2.247	38.195.253	3.802	43.534.071
ISTANBUL	2.087	8.427.799	1.339	31.097.482	3.426	39.525.281
IZMIR	594	5.201.139	1.542	32.136.252	2.136	37.337.391
TUZLA	2.607	16.068.686	1.123	12.819.724	3.730	28.888.410
TEKIRDAG	1.383	2.920.165	945	18.693.580	2.328	21.613.745
KUSADASI	465	82.879	658	21.318.455	1.123	21.401.334
SAMSUN	873	2.748.554	1.887	10.524.319	2.760	13.272.873
ANTALYA	523	1.937.822	514	9.010.108	1.037	10.947.930
KDZ.EREGLI	479	1.893.224	374	6.124.349	853	8.017.573
YALOVA	732	894.474	459	6.530.342	1.191	7.424.815
KARABIGA	890	1.631.996	347	4.988.408	1.237	6.620.404
ZONGULDAK	306	1.177.298	361	5.069.594	667	6.246.892
BANDIRMA	1.018	1.416.825	700	4.058.891	1.718	5.475.716
CESME	1.315	4.449.026	524	1.020.208	1.839	5.469.234
CANAKKALE	1.265	1.403.721	225	3.007.348	1.490	4.411.069
TASUCU	219	65.813	931	4.237.894	1.150	4.303.707
GULLUK	399	1.221.998	382	2.963.089	781	4.185.087
MARMARIS	445	184.525	273	3.787.450	718	3.971.975
TRABZON	344	949.341	420	2.672.866	764	3.622.207
BODRUM	1.203	296.170	634	2.925.097	1.837	3.221.266
MARMARA A.	1.133	915.786	93	415.254	1.226	1.331.040
BARTIN	247	485.162	185	661.774	432	1.146.936
DIGER	7.312	3.153.986	930	4.812.888	8.242	7.966.874
TOTAL	**38.397**	**130.762.155**	**35.288**	**616.777.791**	**73.685**	**747.539.946**

Source: Republic of Turkey Ministry of Transport, Maritime Affairs and Communications

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 amounts of cargoes carried by Ferries and carried as bulk and partial cargoes between 2006- 2015 in Turkish ports and wharves on ton basis are at the Table

TABLE (25) 2006-2015 Cabotage Transportation

Years	Cabotage By Road Tons	Cabotage Transportation	Total Cabotage Tons	Change %
2006	19.756.679	15.133.337	34.890.016	9,6
2007	18.873.278	18.004.619	36.877.897	5,7
2008	17.856.494	20.136.037	37.992.531	3
2009	13.027.429	19.485.900	32.513.329	-14,4
2010	14.686.657	19.434.485	34.121.142	4,9
2011	15.612.213	22.389.570	38.001.783	11,4
2012	13.913.980	22.869.458	36.783.438	-3,2
2013	13.623.118	27.868.157	41.491.275	12,8
2014	13.745.113	25.753.831	39.498.944	-4,8
2015	**12.455.087**	**26.578.284**	**39.033.371**	-1,18%

Source: Republic of Turkey Ministry of Transport, Maritime Affairs and Communications

GRAPH (19) 2006-2015 Cabotage Transportation

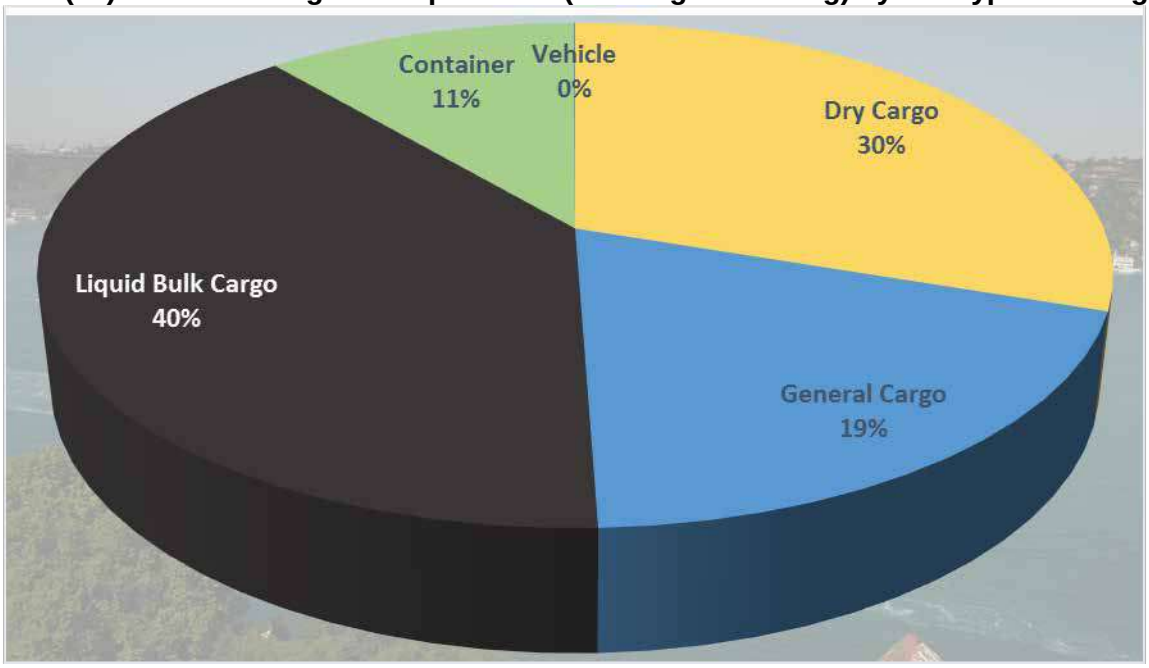
The total cabotage transportation in 2015 is 39.033.371 tons; 12.455.087 tons is carried by Ferries and 26.578.284 tons is carried as bulk and partial cargoes (Table 25) The cabotage transportation increased about 11,9 % between the years 2006-2015.

TABLE (26) 2015 –Cabotage Transportation by the Types of Cargoes

Cargo Types	Cabotage Loading	Cabotage Unloading	Total	%
Dry Cargo	7.292.686	8.543.579	15.836.265	30,18
General Cargo	4.999.432	5.103.676	10.103.108	19,25
Liquid Bulk Cargo	10.515.694	10.128.875	20.644.569	39,34
Container	3.074.835	2.794.485	5.869.320	11,19
Vehicle	11.737	7.669	19.406	0,04
Total	25.894.384	26.578.284	52.472.668	100

Source: Republic of Turkey Ministry of Transport, Maritime Affairs and Communications

GRAPH (20) 2015 Cabotage Transportation (Loading-Unloading) by the Types of Cargoes



The most significant increase in cabotage transportation is seen in 2013 by 12.8 %, the increase in 2011 by 11.4 and 2006 by 9.6 % respectively.

Table Shows the cabotage transportation by types of cargoes. The first three cargoes are liquid bulk cargo (39 %), dry bulk cargo (30%) general cargo (19%) and container (11%).

In cabotage handling in 2015, Kocaeli Port (20%), Aliağa Port (11%) and Ambarlı Port (8%) took the first three place.

In cabotage loading, Kocaeli Port (18%), Aliağa Ports (15%) and Iskenderun Port (10%) are on the first three places, while in cabotage unloading Kocaeli Port (22%), Ambarlı Port (11%) and Istanbul Port (9%) are on the top of the list.

TABLE (27) 2015 Cabotage Transportation in Ports

Port Authority	Cabotage Loading	Cabotage Unloading	Total	%
KOCAELI	4.680.313	5.957.457	10.637.770	20,27%
ALIAGA	3.935.001	1.619.408	5.554.409	10,59%
AMBARLI	1.306.654	2.903.907	4.210.561	8,02%
ISKENDERUN	2.779.544	703.821	3.483.365	6,64%
ISTANBUL	100.860	2.521.193	2.622.053	5,00%
BOTAS(CEYHAN)	2.322.360	82.685	2.405.045	4,58%
CANAKKALE	2.105.490	45.778	2.151.268	4,10%
KARADENIZ EREGLI	580.849	1.503.564	2.084.413	3,97%
GEMLIK	957.197	1.120.419	2.077.616	3,96%
TUZLA	482.854	1.579.828	2.062.682	3,93%
TEKIRDAG	544.325	1.294.051	1.838.376	3,50%
KARABIGA	974.226	859.900	1.834.126	3,50%
SAMSUN	949.317	785.417	1.734.734	3,31%
ANTALYA	239.925	1.073.863	1.313.788	2,50%
MERSIN	354.811	930.985	1.285.796	2,45%
MARMARA A.	1.218.834	1.450	1.220.284	2,33%
UNYE	504.538	156.759	661.297	1,26%
BANDIRMA	515.860	138.180	654.040	1,25%
TRABZON	199.992	445.651	645.643	1,23%
IZMIR	101.087	465.022	566.109	1,08%
YALOVA	501	560.898	561.399	1,07%
RIZE	200	557.472	557.672	1,06%
BARTIN	322.263	226.899	549.162	1,05%
TIREBOLU	3.000	355.998	358.998	0,68%
ZONGULDAK	82.132	240.707	322.839	0,62%
HOPA	130.680	113.269	243.949	0,46%
INEBOLU	212.529	150	212.679	0,41%
GULLUK	147.048	10.150	157.198	0,30%
GOCEK	0	108.504	108.504	0,21%
SILIVRI	0	61.000	61.000	0,12%
MUDANYA	50.340	8.180	58.520	0,11%
AMASRA	40.354	0	40.354	0,08%
GIRESUN	15.900	17.300	33.200	0,06%
ERDEK	2.009	30.895	32.904	0,06%
TASUCU	29.191	0	29.191	0,06%
CESME	0	27.154	27.154	0,05%
VAKFIKEBIR	0	25.150	25.150	0,05%
MARMARIS	0	16.936	16.936	0,03%
FATSA	0	15.200	15.200	0,03%
DIKILI	2.650	6.242	8.892	0,02%
KUSADASI	0	4.000	4.000	0,01%
SURMENE	1.550	1.750	3.300	0,01%
ALANYA	0	873	873	0,00%
BODRUM	0	144	144	0,00%
GOKCEADA	0	50	50	0,00%
BOZCAADA	0	25	25	0,00%
TOTAL	**25.894.384**	**26.578.284**	**52.472.668**	**100,00%**

Source: Republic of Turkey Ministry of Transport, Maritime Affairs and Communications

TABLE (28) 2006-2015 Cabotage Transportation Vehicle Number

Years	Vehicle Number	Annual Change %	Vehicle Number x Mile	Annual Change %
2006	7.773.689	11,7	51.978.669	22,9
2007	8.161.999	5	59.942.527	15,3
2008	8.866.797	8,6	82.950.808	38,4
2009	9.315.772	5,1	82.580.396	-0,4
2010	9.400.735	0,9	83.607.444	1,2
2011	10.402.917	10,7	83.283.519	-0,4
2012	10.710.645	2,9	77.785.568	-6,6
2013	11.318.561	5,7	85.096.902	9,4
2014	12.166.505	7,5	89.322.962	5
2015	13.042.399	7,2	95.505.115	6,9

Source: Republic of Turkey Ministry of Transport, Maritime Affairs and Communications

In table 28, the changes in transportation of vehicles in cabotage between the years 2006 and 2015 are being shown. The most significant increase is seen in 2006; with an increase of 11.7% in vehicle numbers and an increase of 22.9% in vehicle / mile. The number of vehicles increased 68 % in total between 2006 and 2015.

GRAPH (21) 2006-2015 Cabotage Transportation Vehicle Number

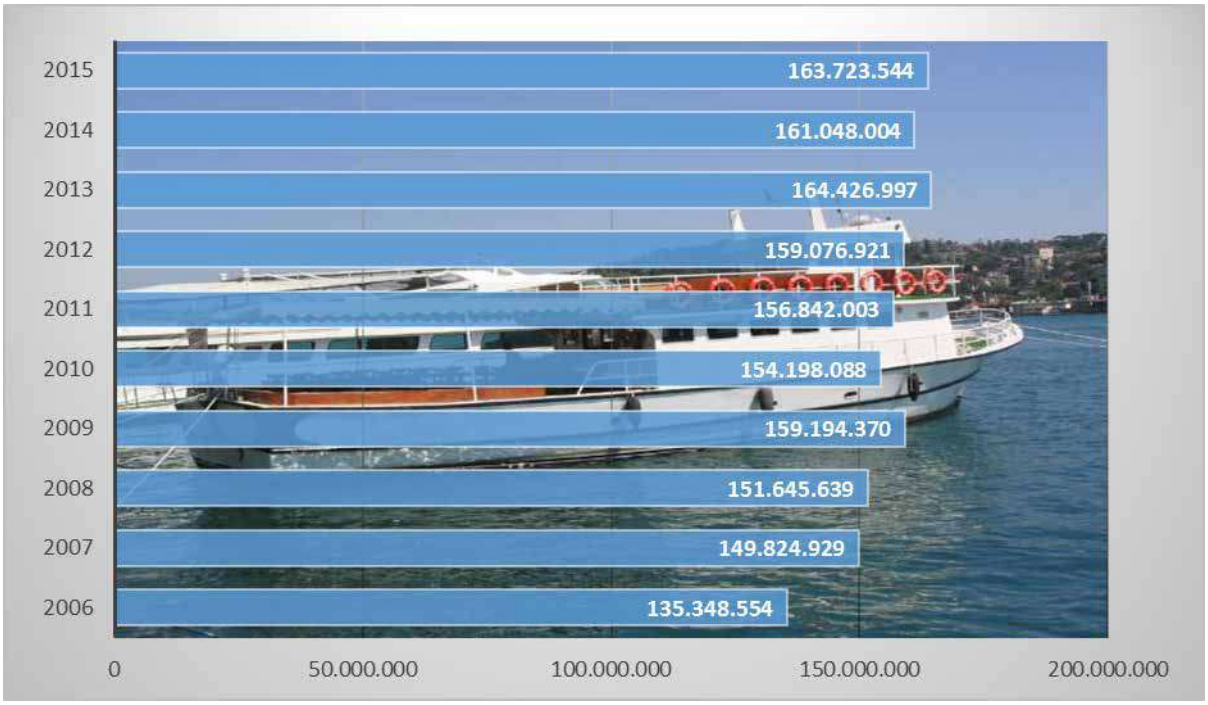
The Table about the numbers of passengers carried in cabotage transportation shows that the biggest increase was in 2007 with 10.7 % and then, in 2013 the increase became 3,4 %. In the years 2006-2015 an increase of 21 % in passengers' number was realized.

TABLE (29) 2006-2015 Cabotage Transportation Passenger Number

Years	Passenger Number	Change %	Vehicle Number x Mile	Change %2
2006	135.348.554	10,3	752.889.731	12,2
2007	149.824.929	10,7	842.975.355	12
2008	151.645.639	1,2	847.917.253	0,6
2009	159.194.370	5	886.609.389	4,6
2010	154.198.088	-3,1	847.715.977	-4,4
2011	156.842.003	1,7	854.909.150	0,8
2012	159.076.921	1,4	787.572.051	-7,9
2013	164.426.997	3,4	900.226.869	14,3
2014	161.048.004	-2	974.923.011	8,3
2015	163.723.544	1,7	992.592.392	1,8

Source: Republic of Turkey Ministry of Transport, Maritime Affairs and Communications

GRAPH (22) 2006-2015 Cabotage Transportation Passenger Number



Developments in International Sea Transportation

International sea transportation includes the transit cargoes belonging to other countries, being loaded and unloaded in the harbors of Turkey, besides export and import goods.

TABLE (30) Development of the Seaborne Trade (2006-2015) Tons

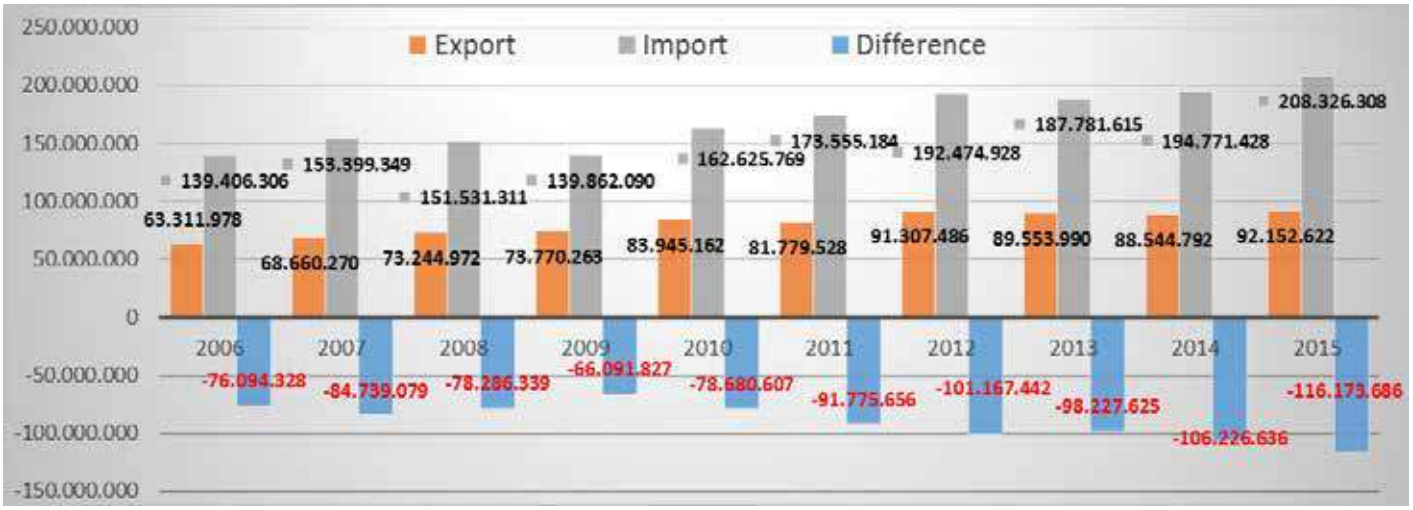
Years	Seaborne Trade Total	Export	Import	Turkish Flag	TF %	FF %
2006	202.718.284	63.311.978	139.406.306	42.615.725	21	79
2007	222.059.619	68.660.270	153.399.349	36.992.141	17	83
2008	224.776.283	73.244.972	151.531.311	31.791.383	14	86
2009	213.632.353	73.770.263	139.862.090	29.965.566	14	86
2010	246.570.931	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**

Source: Republic of Turkey Ministry of Transport, Maritime Affairs and Communications

In 2015 export shipments increased to 92,1 million tons, import shipments increased to 208,3 million tons when compared with the previous year. The share of Turkish flag vessels transporting foreign trade cargoes have been realized as 12 % on the average.

As a whole, the share of the Turkish flag vessels transporting foreign trade cargoes between 2006-2015 have been realized as 14.6 % on the average.

GRAPH (23) Development of the Seaborne Trade (Tons)



The transportation of foreign trade cargoes; 11 % of the import transportation totaling 208,3 million tons have been carried by Turkish flag vessels. 15 % of the export transportation totaling 92,2 million tons have been carried by Turkish flag vessels.

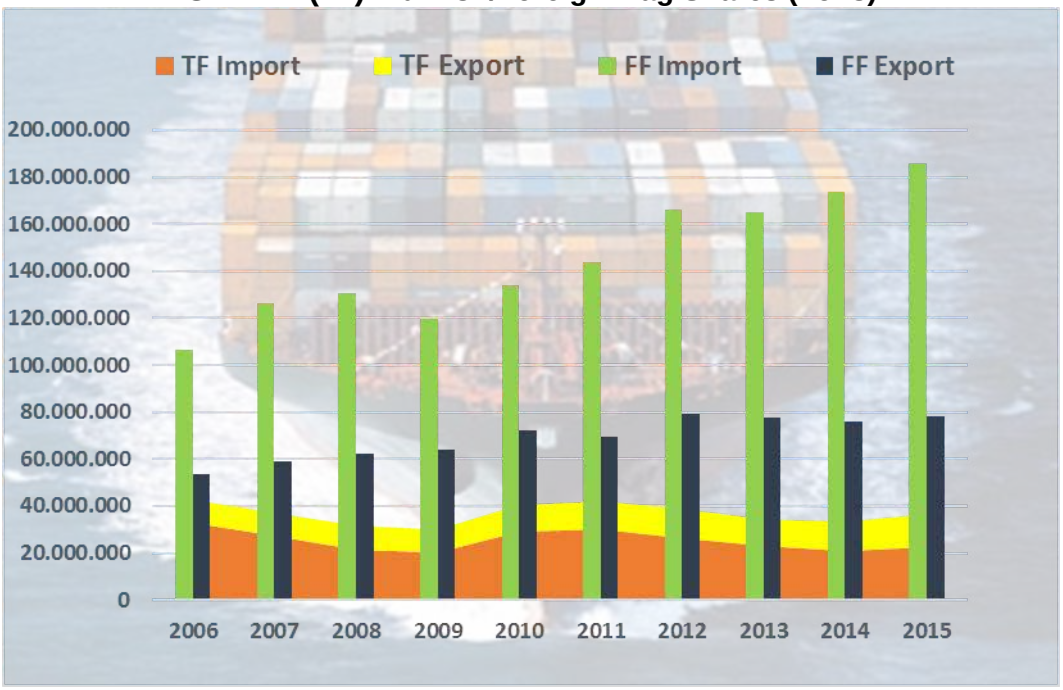
TABLE (31) Foreign Trade Transportation by Flags

Year	Turkish Flag (mton)				Foreign Flag (mton)				Total (mton)	
	TF Import	%	TF Export	%	FF Import	%	FF Export	%	TF Seaborn Trade	FF Seaborn Trade
2006	32.794.143	24	9.821.582	16	106.612.163	76	53.490.396	84	42.615.725	160.102.559
2007	27.187.904	18	9.804.237	14	126.211.445	82	58.856.033	86	36.992.141	185.067.478
2008	21.136.641	14	10.654.742	15	130.394.670	86	62.590.230	85	31.791.383	192.984.900
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**

Source: Republic of Turkey Ministry of Transport, Maritime Affairs and Communications

The transportation of seaborne foreign trade cargoes increased to 264 million tons when compared with 2015 (160,1 million tons). Import goods increased to 208 million tons, (139,4 million tons) export goods increased to 92,1 million tons (63,3 million tons) when compared with 2006 with the same period.

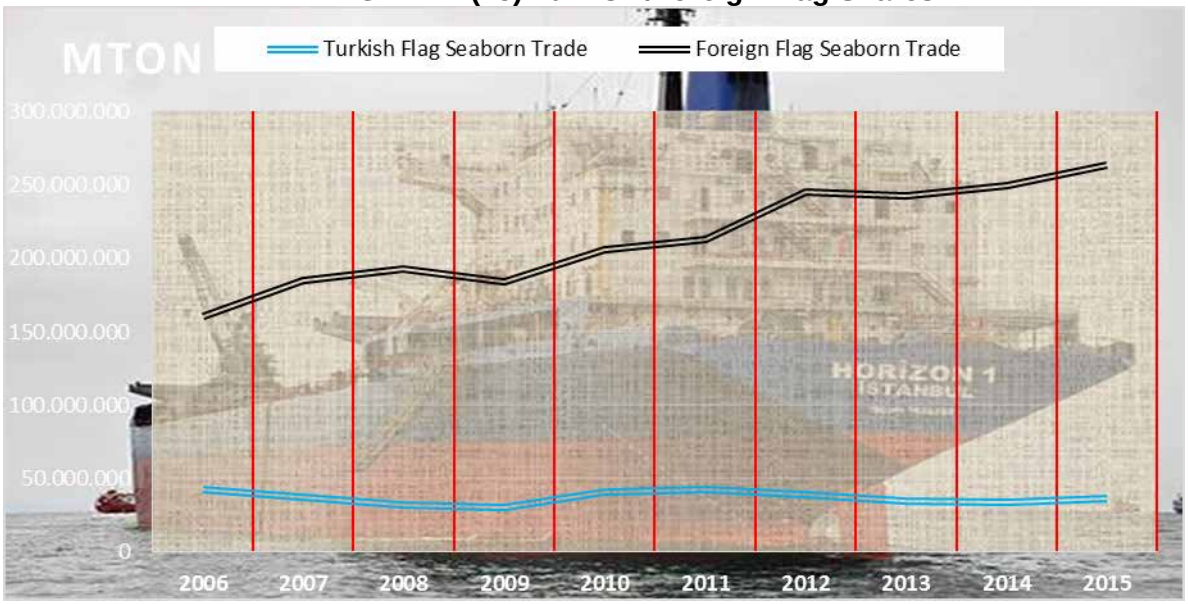
GRAPH (24) Turkish/Foreign Flag Shares (Tons)



The share of Turkish flag vessels, in total foreign trade transportation, in export basis increased to 13,7 million tons and in Import basis decreased to 22,7 million tons in 2015, when compared with 9,8 and 32,8 million tons in 2006.

The share of foreign flag vessels, in total foreign trade transportation, in export basis increased to 78,4 million tons and in Import basis increased to 185,6 million tons in 2015, when compared with 53.5 and 106,6 million tons in 2006.

GRAPH (25) Turkish /Foreign Flag Shares



Development in Foreign Trade Transportation by Types of Cargoes

The major segments of the exports and transit loading goods in 2015, which realized totally as 150,7 million tons are % 45,40 Liquid Bulk cargo, 28,59 % Container, 12,41 % general cargo, 10,74 % dry bulk cargo and % 2,85 vehicle. Major segments of the imported and transit unloading goods in 2015, which realized totally as 239,4 million tons are 36,97 % dry bulk cargo, 27 % Liquid bulk Cargo, 17,89 % Container, % 16,30 General Cargo and % 1,85 vehicle.

TABLE (32) By Types Cargo Handling Export And Transit Loading

LOADING						
Cargo Types	EXPORT			Transit Loading	Total Loading	%
	Turksih Flag	Foreign Flag	Total			
DRY BULK CARGO	2.668.863	13.407.559	16.076.422	114.876	16.191.298	10,74%
GENERAL CARGO	1.646.769	17.026.935	18.673.704	41.421	18.715.125	12,41%
LIQUID BULK CARGO	245.806	14.444.348	14.690.154	53.768.153	68.458.307	45,41%
CONTAINER	5.885.330	32.534.595	38.419.925	4.672.754	43.092.679	28,59%
VEHICLE	3.308.042	984.375	4.292.417	0	4.292.417	2,85%
TOTAL	13.754.810	78.397.812	92.152.622	58.597.204	150.749.826	100,00%

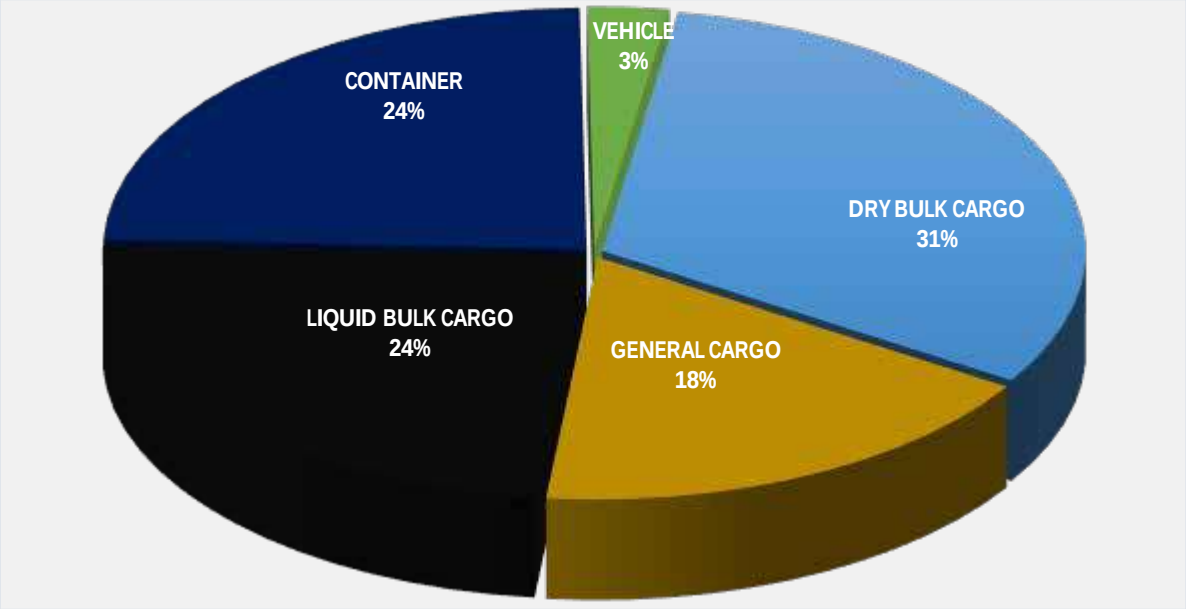
Source: Republic of Turkey Ministry of Transport, Maritime Affairs and Communications

TABLE (33) By Types Cargo Handling Import And Transit Unloading

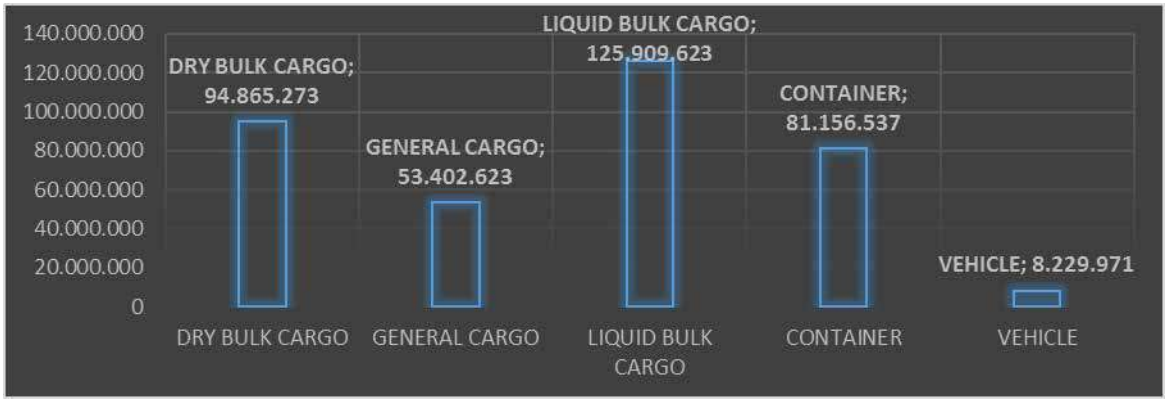
UNLOADING						
Cargo Types	IMPORT			Transit Unloading	Total Unloading	%
	Turkish Flag	Foreign Flag	Total			
DRY BULK CARGO	5.748.747	72.768.957	78.517.704	156.271	78.673.975	36,97%
GENERAL CARGO	4.273.146	30.297.743	34.570.889	116.609	34.687.498	16,30%
LIQUID BULK CARGO	5.131.726	52.160.473	57.292.199	159.117	57.451.316	27,00%
CONTAINER	4.178.181	29.829.781	34.007.962	4.055.896	38.063.858	17,89%
VEHICLE	3.392.976	544.578	3.937.554	0	3.937.554	1,85%
TOTAL	22.724.776	185.601.532	208.326.308	4.487.893	212.814.201	100,00%

Source: Republic of Turkey Ministry of Transport, Maritime Affairs and Communications

GRAPH (26) Import and Transit Unloading by the Types of Cargoes



GRAPH (27) Seaborn Trade andTransit Loading/ Unloading



The Progress in Seaborne Trade by Country Groups

In the year 2015, 46,6 million tons of export and 65.1 million tons of import, totally (loading-unloading) 40,2 million tons of transportation have been realized to the OECD countries. Table 34 shows the export and import values to the OECD countries.

TABLE (34) Seaborne Trade to OECD Countries Tons (2015)

OECD country	EXPORT				Transit Loading	Total
	Turksih Flag	OECD Country Flag	Foreign Flag	Total Export		
ITALY	4.990.959	287.026	7.369.115	12.647.100	30.495.658	43.142.758
SPAIN	634.796	4.500	5.808.804	6.448.100	872.904	7.321.004
GREECE	1.512.015	173.974	4.672.575	6.358.564	613.239	6.971.803
U.S.A.	195.811	5.123	4.701.184	4.902.118	1.041.285	5.943.403
ISRAEL	1.094.064	23.323	2.618.251	3.735.638	271.248	4.006.886
BELGIUM	20.596	0	3.253.898	3.274.494	136.329	3.410.823
ENGLAND	52.389	51.123	2.685.442	2.788.954	165.326	2.954.280
FRANCE	692.836	0	1.136.742	1.829.578	3.087.103	4.916.681
HOLLAND	37.803	266.488	763.375	1.067.666	379.373	1.447.039
PORTUGAL	11.931	553	827.682	840.166	1.461.295	2.301.461
GERMANY	0	0	628.509	628.509	7.151	635.660
SWEDEN	0	0	530.254	530.254	60	530.314
KOREA	0	4.100	476.528	480.628	63	480.691
CANADA	0	0	324.466	324.466	21.232	345.698
POLAND	0	0	247.166	247.166	0	247.166
SLOVENIA	42.523	0	99.710	142.233	898	143.131
DENMARK	0	0	75.861	75.861	0	75.861
IRELAND	6.650	0	63.735	70.385	84.062	154.447
CHILE	0	0	68.500	68.500	110	68.610
FINLAND	0	0	60.145	60.145	0	60.145
ICELAND	6.500	0	38.900	45.400	0	45.400
JAPAN	0	0	40.143	40.143	0	40.143
MEXICO	0	0	18.266	18.266	0	18.266
NORWAY	0	0	16.000	16.000	60	16.060
ESTONIA	0	0	11.000	11.000	0	11.000
AUSTRALIA	0	0	1.486	1.486	154	1.640
HUNGARY	0	0	0	0	309	309
NEW ZEALAND	0	0	0	0	110	110
SWITZERLAND	0	0	0	0	0	0
AUSTRIA	0	0	0	0	0	0
CZECH REPUBLIC	0	0	0	0	0	0
LUXEMBOURG	0	0	0	0	0	0
SLOVAK REPUBLIC	0	0	0	0	0	0
TOTAL	**9.298.873**	**816.210**	**36.537.737**	**46.652.820**	**38.637.969**	**85.290.789**

Source: Republic of Turkey Ministry of Transport, Maritime Affairs and Communications

The first 3 major countries as Turkey's export & transit loading foreign trade partners among OECD countries are Italy with 50,5 %, Spain 8,6 %, Greece 8,2 % shares.

TABLE (35) Seaborne Trade to OECD Countries Tons (2015)

OECD Country	IMPORT				Transtit Unloading	Total
	Turkish Flag	OECD Country Flag	Foreign Flag	Total Import		
UNITED STATE	856.740	1.902	11.540.889	12.399.531	91.463	12.490.994
ITALY	3.413.310	779.224	4.026.248	8.218.782	300.284	8.519.066
GREECE	1.794.477	227.306	5.884.317	7.906.100	431.966	8.338.066
ISRAEL	334.880	0	5.458.893	5.793.773	23.078	5.816.851
BELGIUM	115.215	0	5.646.662	5.761.877	150.989	5.912.866
ENGLAND	133.972	70.958	4.187.241	4.392.171	2.971	4.395.142
AUSTRALIA	0	0	2.801.408	2.801.408	555	2.801.963
NETHERLANDS	101.403	115.078	2.277.546	2.494.027	55.572	2.549.599
SPAIN	215.203	25.731	2.229.152	2.470.086	143.771	2.613.857
CANADA	0	0	2.282.080	2.282.080	0	2.282.080
FRANCE	901.625	0	1.378.582	2.280.207	5.269	2.285.476
NORWAY	1.500	204.482	1.952.332	2.158.314	0	2.158.314
KOREA	48.926	0	1.861.750	1.910.676	114.138	2.024.814
FINLAND	21.239	53.575	1.106.866	1.181.680	765	1.182.445
GERMANY	41.395	0	717.408	758.803	25.012	783.815
DENMARK	0	7.492	558.832	566.324	0	566.324
SWEDEN	10.525	0	394.733	405.258	207	405.465
JAPAN	148.892	0	208.800	357.692	149.346	507.038
PORTUGAL	22.580	2.618	269.966	295.164	56.735	351.899
ESTONİA	2.058	0	259.097	261.155	75	261.230
POLAND	3.600	0	191.079	194.679	6.864	201.543
MEXICO	0	0	91.094	91.094	1.965	93.059
SLOVENIA	15.251	0	62.713	77.964	1.215	79.179
IRELAND	0	0	10.869	10.869	28	10.897
CHILE	0	0	2.910	2.910	0	2.910
SWITZERLAND	0	0	0	0	0	0
ICELAND	0	0	0	0	0	0
HUNGARY	0	0	0	0	0	0
NEW ZEALAND	0	0	0	0	0	0
AUSTRIA	0	0	0	0	0	0
CZECH REPUBLIC	0	0	0	0	0	0
LUXEMBOURG	0	0	0	0	0	0
SLOVAK REPUBLIC	0	0	0	0	0	0
TOTAL	**8.182.791**	**1.488.366**	**55.401.467**	**65.072.624**	**1.562.268**	**66.634.892**

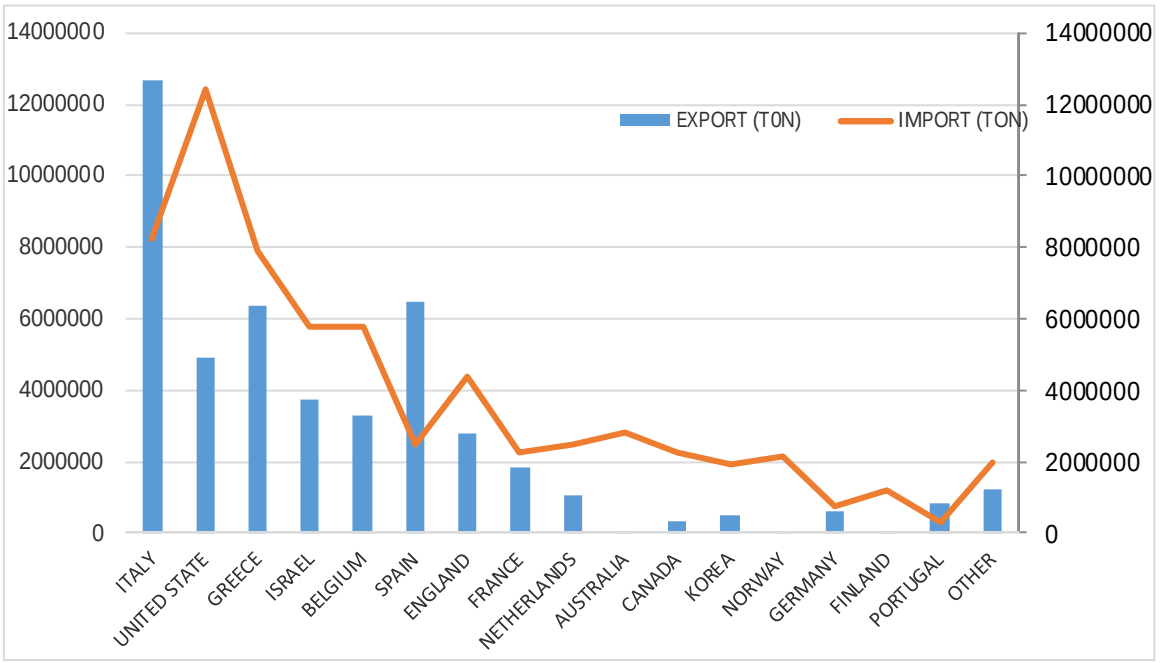
Source: Republic of Turkey Ministry of Transport, Maritime Affairs and Communications

Among OECD countries, the first three that Turkey imports from / that conducts transit unloading in Turkey are U.S.A. (18,7%), Italy (12.7%) and Greece (12.3%).

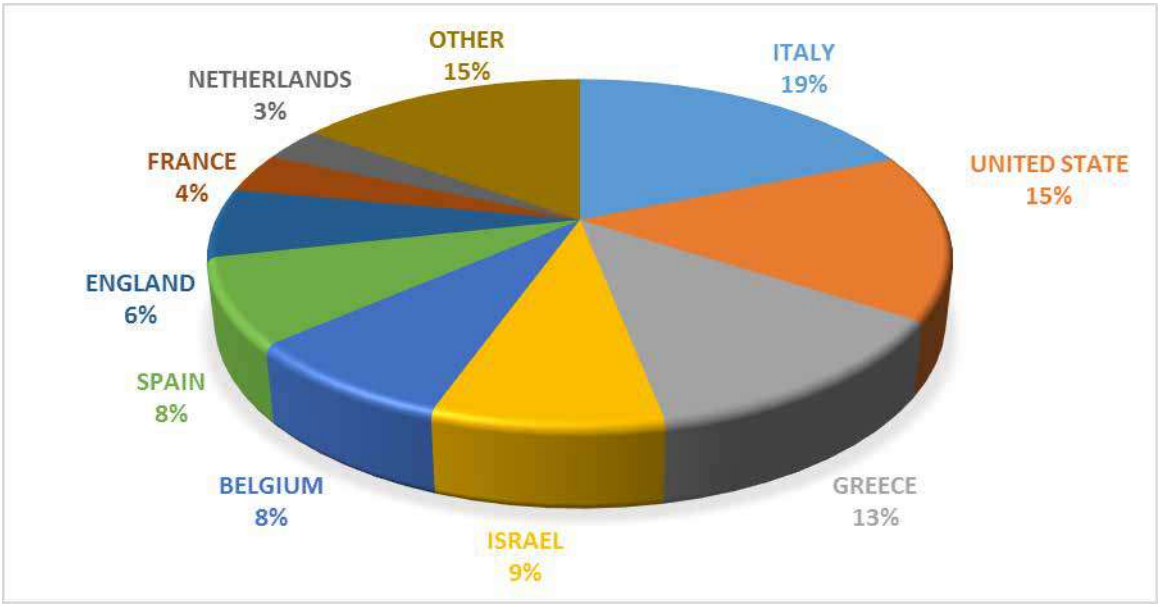
In the year of 2015, the seaborne trade volume between Turkey and the OECD countries was 151.925.681 metric tons. 111.725.444 million metric tons of this amount was import –export while 40.200.237 million metric tons was transit cargoes.

The seaborne trade share of the Turkish flag vessels was 15.6 % and foreign flag vessels' was 84.4%.

GRAPH (28) Export-Import Seaborn Trade to OECD Countries (2015)



GRAPH (29) Seaborn Trade OECD 2015



In the year 2015, 43 million tons of export and 50.9 million tons of import, totally 93.9 million tons of seaborne transportation have been realized to the EU countries.
The first 3 major countries as Turkey's export & transit loading foreign trade partners among EU countries are Italy with 52.9 %, Spain with 9 %, Greece with 8.5 % shares.

TABLE (36) Seaborne Trade(Export) to EU Countries (Tons) (2015)

EU Countries	Export (Ton)				Transit Loading	Total Loading
	Turkish Flag	EU Country Flag	Foreign Flag	Total Flag		
ITALY	4.990.959	287.026	7.369.115	12.647.100	30.495.658	43.142.758
SPAIN	634.796	4.500	5.808.804	6.448.100	872.904	7.321.004
GREECE	1.512.015	173.974	4.672.575	6.358.564	613.239	6.971.803
MALTA	8.250	935.882	2.680.932	3.625.064	68.368	3.693.432
BELGIUM	20.596	0	3.253.898	3.274.494	136.329	3.410.823
UNITED KINGDOM	52.389	51.123	2.685.442	2.788.954	165.326	2.954.280
FRANCE	692.836	0	1.136.742	1.829.578	3.087.103	4.916.681
ROMANIA	413.371	0	1.212.820	1.626.191	158.134	1.784.325
NETHERLANDS	37.803	266.488	763.375	1.067.666	379.373	1.447.039
PORTUGAL	11.931	553	827.682	840.166	1.461.295	2.301.461
GERMANY	0	0	628.509	628.509	7.151	635.660
BULGARIA	326.562	729	288.506	615.797	437.440	1.053.237
SWEDEN	0	0	530.254	530.254	60	530.314
POLAND	0	0	247.166	247.166	0	247.166
SLOVENİA	42.523	0	99.710	142.233	898	143.131
CROTİA	500	0	78.510	79.010	551.000	630.010
DENMARK	0	0	75.861	75.861	0	75.861
IRELAND	6.650	0	63.735	70.385	84.062	154.447
FINLAND	0	0	60.145	60.145	0	60.145
LETONYA	0	0	13.606	13.606	0	13.606
ESTONİA	0	0	11.000	11.000	0	11.000
LATVIA	0	0	3.954	3.954	88.917	92.871
S.CYPRUS	0	0	0	0	66	66
HUNGARY	0	0	0	0	309	309
AUTRIA	0	0	0	0	0	0
CZECH REPUBLIC	0	0	0	0	0	0
LUXEMBURG	0	0	0	0	0	0
SLOVAKİA	0	0	0	0	0	0
Total	**8.751.181**	**1.720.275**	**32.512.341**	**42.983.797**	**38.607.632**	**81.591.429**

Source: Republic of Turkey Ministry of Transport, Maritime Affairs and Communications

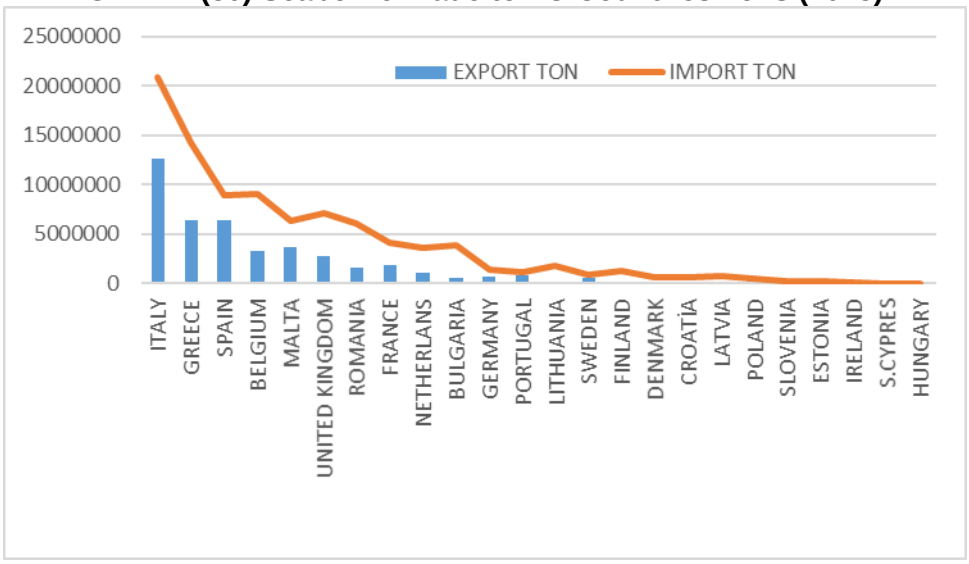
The first 3 major countries as Turkey's import & transit unloading foreign trade partners among EU countries are Italy with 16.1 %, Greece 15.7 % and Belgium 11.1 % shares.

TABLE (37) Seaborne Trade (Import) to EU Countries (Tons) (2015)

EU Countries	IMPORT				Transit Unloading	Total Unloading
	Turkish Flag	UE Country Fag	Freign Flag	Total		
ITALY	3.413.310	779.224	4.026.248	8.218.782	300.284	8.519.066
GREECE	1.794.477	227.306	5.884.317	7.906.100	431.966	8.338.066
BELGIUM	115.215	0	5.646.662	5.761.877	150.989	5.912.866
ROMANIA	1.378.721	0	3.128.523	4.507.244	561.037	5.068.281
UNITED KINGDOM	133.972	70.958	4.187.241	4.392.171	2.971	4.395.142
BUGARIA	883.320	76.791	2.344.907	3.305.018	442.317	3.747.335
MALTA	7.790	615.450	2.125.241	2.748.481	9.277	2.757.758
NETHERLANDS	101.403	115.078	2.277.546	2.494.027	55.572	2.549.599
SPAIN	215.203	25.731	2.229.152	2.470.086	143.771	2.613.857
FRANCE	901.625	0	1.378.582	2.280.207	5.269	2.285.476
LITHUANIA	53.297	0	1.752.579	1.805.876	0	1.805.876
FINLAND	21.239	53.575	1.106.866	1.181.680	765	1.182.445
GERMANY	41.395	0	717.408	758.803	25.012	783.815
LATVIA	3.150	0	679.356	682.506	0	682.506
DENMARK	0	7.492	558.832	566.324	0	566.324
CROTİA	148.906	0	393.468	542.374	320	542.694
SWEDEN	10.525	0	394.733	405.258	207	405.465
PORTUGAL	22.580	2.618	269.966	295.164	56.735	351.899
ESTONIA	2.058	0	259.097	261.155	75	261.230
POLAND	3.600	0	191.079	194.679	6.864	201.543
SLOVENIA	15.251	0	62.713	77.964	1.215	79.179
IRELAND	0	0	10.869	10.869	28	10.897
S.CYPRES	0	0	0	0	0	0
HUNGARY	0	0	0	0	0	0
AUSTRİA	0	0	0	0	0	0
CZECH REPUBLIC	0	0	0	0	0	0
LUXEMBOURG	0	0	0	0	0	0
SLOVAKIA	0	0	0	0	0	0
TOTAL	**9.267.037**	**1.974.223**	**39.625.385**	**50.866.645**	**2.194.674**	**53.061.319**

Source: Republic of Turkey Ministry of Transport, Maritime Affairs and Communications

GRAPH (30) Seaborne Trade to EU Countries Tons (2015)



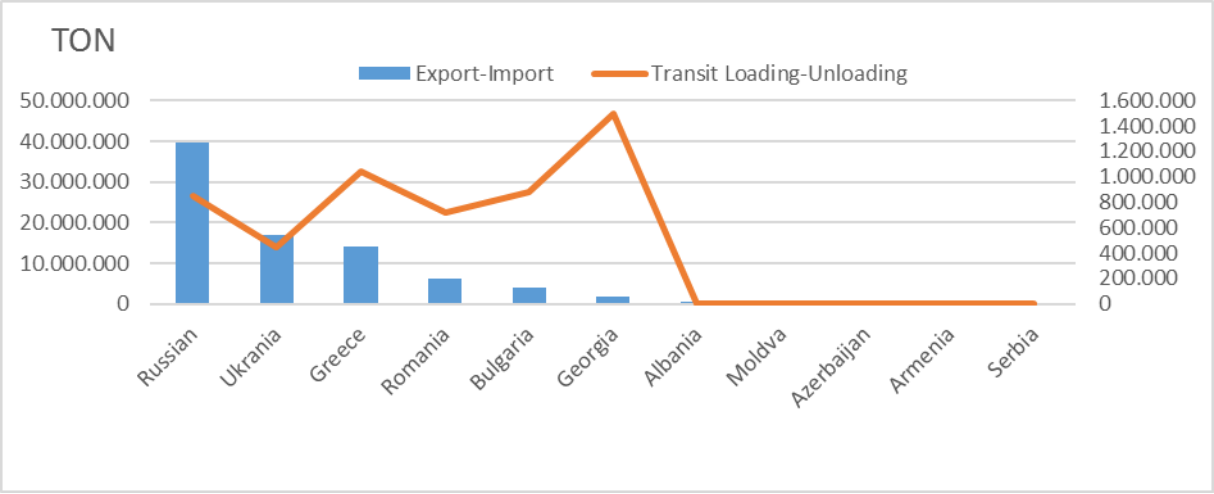
In the year 2015, 13.6 million tons of export and 69.5 million tons of import, totally 83.1 million tons seaborne transportation have been realized to the BSEC countries.
The first 3 major countries as Turkey's export & transit loading foreign trade partners among BSEC countries are Greece with 42 %, Russia with 22 %, Romania with 11 % shares.

TABLE (38) Seaborne Trade to BSEC Countries (Tons) 2015

BSEC COUNTRY	EXPORT				Transit Loading	Total
	Turkish Flag	BSEC Country Flag	Foreign Flag	Total		
Greece	1.512.015	173.974	4.672.575	6.358.564	613.239	6.971.803
Russian	310.650	263.839	2.295.325	2.869.814	387.057	3.256.871
Romania	413.371	0	1.212.820	1.626.191	158.134	1.784.325
Ukraine	169.339	85.699	886.597	1.141.635	136.014	1.277.649
Georgia	573.151	0	233.866	807.017	1.103.656	1.910.673
Bulgaria	326.562	729	288.506	615.797	437.440	1.053.237
Albania	59.120	0	199.500	258.620	3.000	261.620
Azerbaijan	525	0	4.637	5.162	2.660	7.822
Moldova	0	30	0	30	0	30
Armenia	0	0	0	0	0	0
Serbia	0	0	0	0	0	0
Total	**3.364.733**	**524.271**	**9.793.826**	**13.682.830**	**2.841.200**	**16.524.030**

Source: Republic of Turkey Ministry of Transport, Maritime Affairs and Communications

GRAPH (31) Seaborne Trade and Transit Loading-Unloading to BSEC Countries



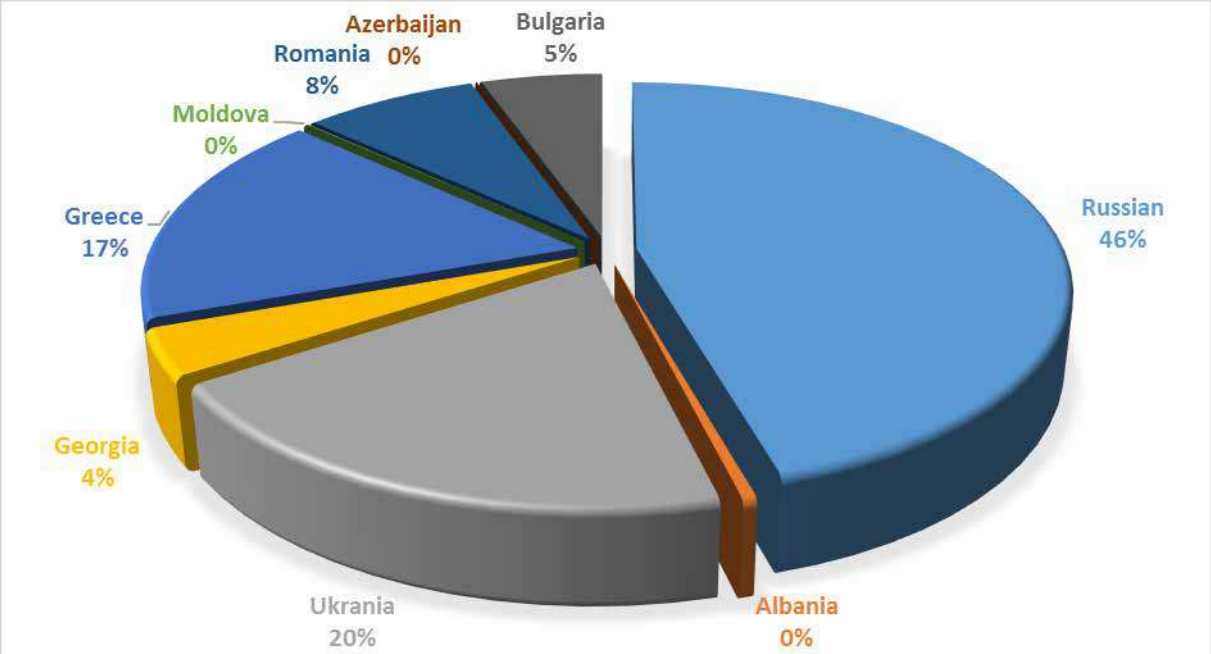
The first 3 major countries as Turkey's import & transit unloading foreign trade partners among BSEC countries are Russia with 52 %, Ukraine with 23 % and Greece with 12 % shares.

TABLE (39) Seaborne Trade to BSEC Countries (Tons)

BSEC COUNTRY	IMPORT				Transit Loading	Total
	Turkish Flag	BSEC Country Flag	Foreign Flag	Total		
Russian	3.250.766	4.366.493	29.096.538	36.713.797	464.588	37.178.385
Ukraine	3.331.325	898.517	11.676.732	15.906.574	313.297	16.219.871
Greece	1.794.477	227.306	5.884.317	7.906.100	431.966	8.338.066
Romania	1.378.721	0	3.128.523	4.507.244	561.037	5.068.281
Bulgaria	883.320	76.791	2.344.907	3.305.018	442.317	3.747.335
Georgia	491.439	0	460.333	951.772	388.716	1.340.488
Albania	53.305	0	85.912	139.217	0	139.217
Moldova	16.569	4.169	30.341	51.079	0	51.079
Azerbaijan	0	0	0	0	0	0
Armenia	0	0	0	0	0	0
Serbia	0	0	0	0	0	0
Total	**11.199.922**	**5.573.276**	**52.707.603**	**69.480.801**	**2.601.921**	**72.082.722**

Source: Republic of Turkey Ministry of Transport, Maritime Affairs and Communications

GRAPH (32) Seaborne Trade to BSEC Countries Foreign Trade



World Container Fleet by Country of Domicile

The “country of domicile” examination (including container ships of 1.000 GRT and over) shows that at the beginning of 2015, 18.189.000 TEU of the container capacity was not registered in the country of domicile of the owner, but flagged out.

TABLE (40) World Full Container Fleet by Country of Domicile (1000 grt and over) 2015

TEU Rank	Countries	National Flag			Foreign Flag			Total Fleet Controlled			
	No		1000 DWT	1000 TEU	No	1000 DWT	1000 TEU	No	1000 DWT	1000 TEU	Av.Age
1	Germany	166	11.261	914	1.460	55.658	4.370	1.626	66.919	5.284	9,1
2	Greece	18	1762	148	378	19.317	1540	396	21.079	1.897	11,2
3	Denmark	109	10145	863	158	9.774	741	267	19.919	1.604	46,2
4	Chine	180	6284	470	203	9.365	781	383	15.649	1.251	11,7
5	Japan	2	103	9	290	15.011	1231	292	15.114	1.241	7,9
6	Italy	0	0	0	174	12.934	1022	174	12.934	1.022	14,3
7	Singapore	167	9051	732	70	3.223	250	237	12.274	982	9,6
8	Taiwan	34	1602	124	208	10.123	816	242	11.725	940	11,0
9	Korea Rep.of	80	1156	82	127	7.338	610	207	8.494	692	11,1
10	France	25	2227	186	77	4.744	389	102	6.971	575	9,1
11	Canada	1	15	1	81	5.984	505	82	5.998	506	7,0
12	Hong Kong	64	4809	415	14	542	43	78	5.351	458	9,1
13	U.K.	18	1176	101	48	2.432	190	68	3.608	291	9,7
14	U.S.	26	752	55	65	2.311	176	91	3.063	230	17,8
15	Kuwait	2	231	20	26	2.420	209	28	2.651	229	8,7
16	Israel	3	185	15	35	2.347	188	38	2.532	203	7,7
17	Norway	0	0	0	46	2.302	187	46	2.302	187	8,1
18	Indonesia	164	1604	106	10	154	11	174	1.758	118	17,9
19	**Turkey**	**44**	**776**	**57**	**43**	**523**	**42**	**87**	**1.299**	**99**	**13,1**
20	Iran	26	1043	80	2	167	13	28	1.210	93	10,4
	Word	**1.317**	**56.384**	**4.543**	**3.761**	**171.053**	**13.646**	**5.078**	**227.437**	**18.189**	**10,8**

Source: ISL May/June 2015

As regards the owner countries, German ship owners controlled by far the largest part of the world container fleet, namely 5.3 mill. TEU (1.626 container vessels) followed by Greece 1.9 mill TEU (396 container vessels) and Denmark 1.6 mill TEU (267 container vessels).

GRAPH (33) World Full Container Fleet by Country of Domicile (1000 grt and over) 2015

Container handling in Turkey in the years 2006 and 2015 are shown in Table …. below on the basis of public and private sectors.

When the container transportations in 2015 is examined as cabotage, exports, imports and transit cargoes; on the basis of TEU, exports became 3.4 million TEU, imports 3.5 million TEU, cabotage loading-unloading 527.064 TEU and transit 754.238 TEU.

Transportation volume of Turkey's container transports by sea way was 3.9 million TEU in 2006; in 2015 it became 7.5 million TEU, at the same period imports cargoes increased to 3.5 million TEU from 1.8 million TEU and the exports cargoes increased to 3.4 million TEU when compared with 1.8 million TEU in 2006.

TABLE (41) Container Handling 2006-2015 (TEU)

	LOADING (TEU)			UNLOADING (TEU)			SEABORN TRADE (TEU)			
Year	Cabotage	Export	Total	Cabotage	Import	Total	Export-Import	Transit	Total	Change %
2006	14.008	1.809.433	1.823.441	6.913	1.840.649	1.847.562	3.671.003	184.921	3.855.924	14,60%
2007	34.005	2.152.014	2.186.019	27.128	2.224.653	2.251.781	4.437.800	120.427	4.558.227	70,20%
2008	86.867	2.429.820	2.516.687	82.934	2.474.773	2.557.707	5.074.394	117.353	5.191.747	13,90%
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	**-15,20%**
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	30,40%
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	8,30%
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	8,06%
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	9,50%
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	6,40%
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%**
2015 Container Handling 8.146.398 TEU										

Source: Republic of Turkey Ministry of Transport, Maritime Affairs and Communications

Graph (34) Container Handling 2006-2015 (TEU)

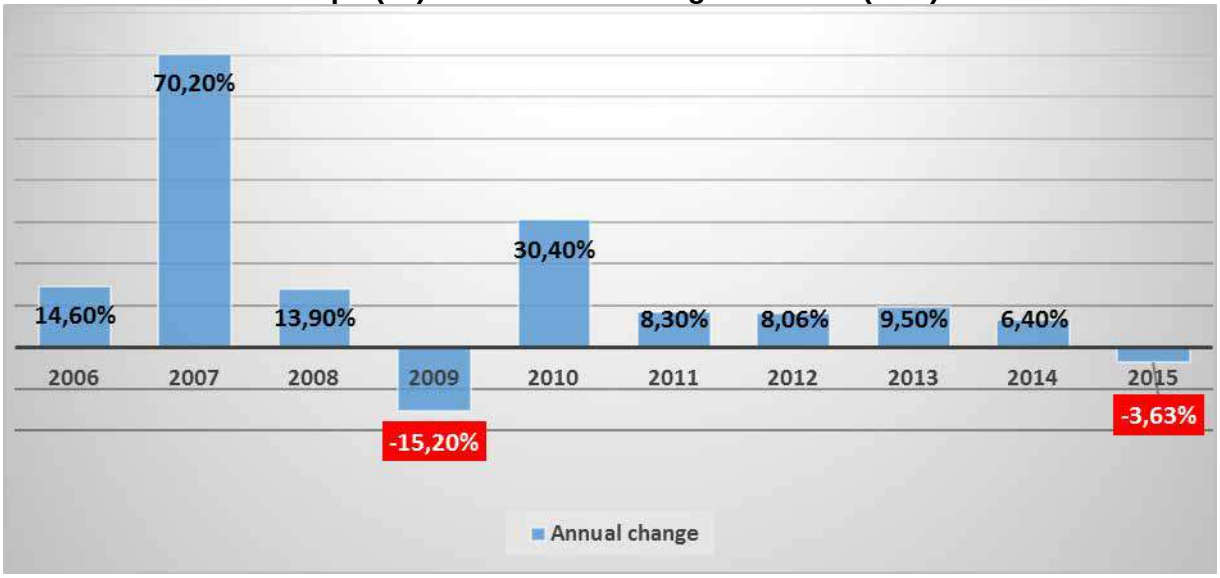


TABLE (42) Position at the 20 Country Container Foreign Trade Handling (TEU) 2015

Country	Export TEU	Import TEU	Transit TEU	Total TEU
Egypt	457.055	690.970	38.570	1.186.594
Greece	438.940	507.292	46.081	992.313
Italy	281.492	203.358	33.509	518.358
Belgium	226.914	267.629	19.583	514.126
Israel	161.728	197.501	14.670	373.898
Malta	139.429	213.584	1.177	354.189
Chine	171.601	129.825	46.378	347.804
Spain	259.125	56.995	16.622	332.742
Lebanon	68.574	226.899	5.147	300.620
Georgia	59.091	99.809	118.612	277.512
Romania	98.810	95.267	61.063	255.140
U.K.	185.197	41.462	11.706	238.365
Russia	88.634	92.771	52.238	233.643
Sibgapore	23.595	130.265	110	153.970
Bulgaria	39.528	36.648	62.679	138.855
Korea Re.of	49.670	69.133	8.673	127.476
Libya	47.401	72.533	5.695	125.628
Saudi Arabia	92.687	17.238	8.798	118.724
Ukrania	45.193	29.109	30.936	105.237
Saudi Arabia	88.392	1.782	7.005	97.179
Other	371.454	274.279	102.230	747.962
Total	**3.394.508**	**3.454.345**	**691.481**	**7.540.335**

Source: Republic of Turkey Ministry of Transport, Maritime Affairs and Communications

As of 2015, the countries which Turkey performed foreign trade with / conducted transit container transportation are as follows: Egypt (15.7%), Greece (13.2%) and Italy (6.9%). The data of the foreign trade / transit container transportation of top 20countries are shown in the Table 42.

Vehicle Transportation through Ro-Ro Lines

Ro-Ro lines of Turkey in 2008-2015 are shown below.
Table 43. above shows the amounts of the transported full vehicles (export and import) in the years 2008-2015.

TABLE (43) Ro-Ro Lines Transported Vehicles (2008- 2015)

Region	Ro-Ro Lines	2008	2009	2010	2011	2012	2013	2014	2015
Marmara	Pendik/Haydarpaşa-Tri	149,062	111,401	116,815	139.270	121.742	167.201	175.117	188.378
	Haydarpaşa-İlyıcheysk	0	0	0	0	0	18.343	34.945	24.003
	Derince-Poti	0	0	0	0	0	646	1.571	1.482
	Ambarlı-Trieste	39,998	30,372	37,627	18.017	15.618	7.595	0	0
	Ambarlı-Toulen				0	37.505	14.893	0	0
	Pendik/Haydarpaşa-Ma	0	0	7480	2.130	0	0	0	0
	Tekirdağ-Toulon	0	0	9269	0	0	0	0	0
	Tekirdağ-Trieste	0	0	0	0	0	1.466	1.067	0
	Tuzla-Toulen	0	0	0	0	0	0	43.305	56.061
	Regional Total	**189060**	**141,773**	**171,191**	**159.417**	**174.865**	**210.144**	**256.005**	**269.924**
Mediterranean	Taşucu-Girne	32,305	31,032	36,071	36.316	34.168	34.153	34.497	29.640
	Taşucu-Tripoli	0	0	0	0	0	8.292	8.613	14.758
	Taşucu-Tartous	0	0	0	0	0	5.437	3.026	1.180
	Mersin-Magosa	23,766	19,966	19,107	18.275	14.669	18.901	22.138	20.760
	Mersin-Trieste	0	12019	28,571	37.093	39.748	34.848	35.849	37.538
	İskenderun-Port Said	0	0	0	0	5.673	6.146	5.463	2.822
	İskenderun - Haifa	0	0	0	0	0	3.194	2.287	109
	Mersin-Damıetta	0	0	0	0	0	7.071	0	0
	Mersin-İskenderiye	0	0	0	253	790	638	1.607	113
	Regional Total	**56,071**	**63,017**	**84,638**	**91.937**	**95.048**	**118.680**	**113.480**	**106.920**
Aegean	Çeşme-Trieste	30,039	24,808	27,179	43.058	44.106	45.764	47.797	50.825
	İzmir-Dedeağaç	0	0	0	0	0	0	0	0
	Regional Total	**30,039**	**24,808**	**27,179**	**43.058**	**44.106**	**45.764**	**47.797**	**50.825**
Blacksea	Zonguldak-Yevpatoria	23,632	20,476	19,573	23.540	25.126	27.007	5.378	159
	Zonguldak Sevastopol	0	0	0	0	0	4.477	2.246	250
	Zonguldak-Skodovsk	0	0	0	0	0	8.001	438	0
	Zonguldak-Ilyichevsky	0	0	0	0	0	2	11.110	12.237
	Samsun-Novorossisky	21,148	9280	15,145	10.742	7.670	14.682	16.491	10.297
	Samsun-Kavkaz	0	0	0	1.383	1.236	895	662	441
	Samsun - Tuapse	0	0	0	0	0	2.964	4.687	4.382
	Samsun-Gelincik	0	0	0	0	0	3.634	6.821	13.853
	Trabzon-Sochi	10150	7,066	5,078	637	518	228	440	2
	Regional Total	**54930**	**36,822**	**39,796**	**36.302**	**34.550**	**61.890**	**48.273**	**41.621**
	Total	**330.100**	**266.420**	**322.804**	**330.714**	**348.569**	**436.478**	**465.555**	**469.290**

Source: Republic of Turkey Ministry of Transport, Maritime Affairs and Communications

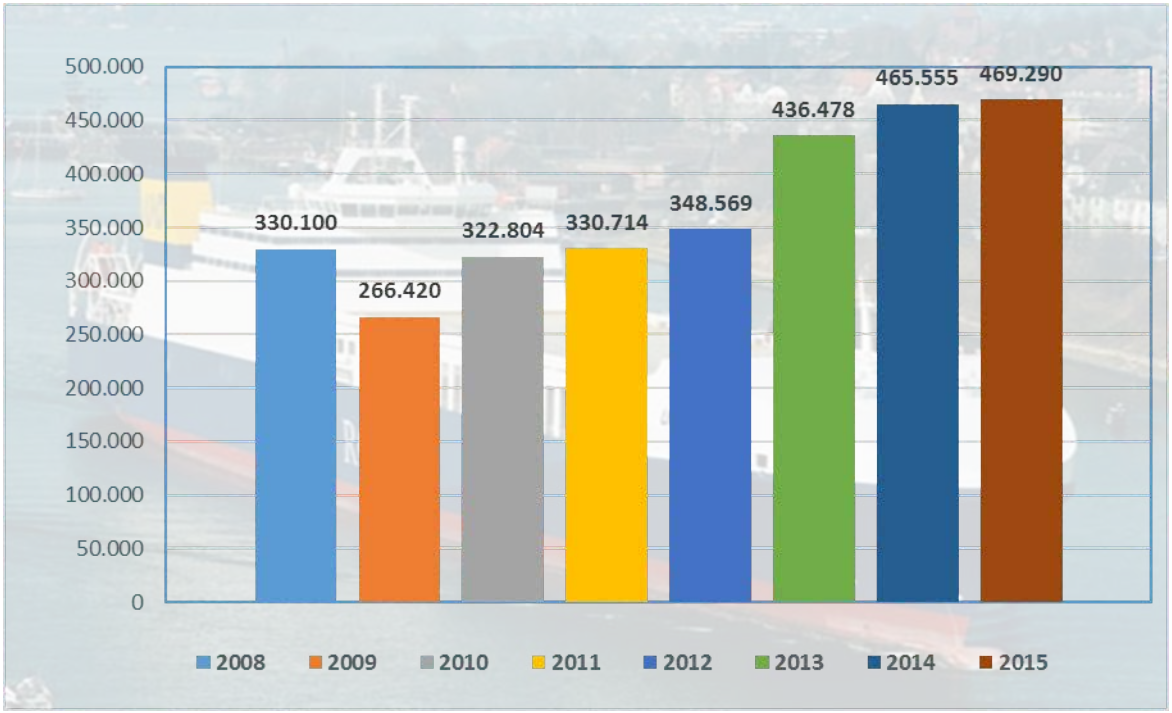
In The Black Sea region; 159 vehicles on Zonguldak-Yevpatoria line, 10.297 vehicles on Samsun-Novorossiysk line, 250 vehicles on Zonguldak- Sevastopol line, 13.853 vehicles on Samsun Gelincik line, 4.382 vehicles on Samsun Tuapse line, 441 vehicles on Samsun-Kavkaz line, 2 vehicles on Trabzon-Sochi and 12.237 vehicles on Zonguldak –Ilichevsk line, totally regional 41.621 vehicles have been transported in 2015.

In The Marmara Sea region; 24.003 vehicles have been carried on Haydarpaşa-Iıyıcheysky line, 188.378 vehicles on Pendik/Haydarpaşa-Trieste line, 56.061 vehicles on Tuzla-Toulen line and 1.482 vehicles on Derince-Poti line, totally regional 269.924 vehicles have been transported in 2015.

In The Aegean Sea region; 50.825 vehicles have been carried on Çesme-Trieste line, totally regional 50.825 vehicles have been transported in 2015.

In The Mediterranean region; 29.640 vehicles have been carried on Taşucu-Girne line, 20.760 vehicles have been carried on Mersin-Magosa line, 37.538 vehicles have been carried on Mersin-Trieste line, 14.758 vehicles have been on Taşucu-Tripoli line, 2.822 vehicles have been carried on İskenderun-Port Said line, 1.180 vehicles have been carried on Taşucu-Tartous line, 109 vehicles have been carried on İskenderun-Haifa line, 113 vehicles have been carried on Mersin-Iskenderiye line, totally regional 106.920 vehicles have been transported in 2015.

GRAPH (35) Ro-Ro Lines Transported Vehicles (2008- 2015)



The majority of the transported vehicles by Regions are, 57 % the Sea of Marmara Region, 9 % Black Sea Region, 23 % Mediterranean Region and 11 % The Aegean Sea Region in 2015.

GRAPH (36) RO-RO Lines Transported Vehicles (2015)

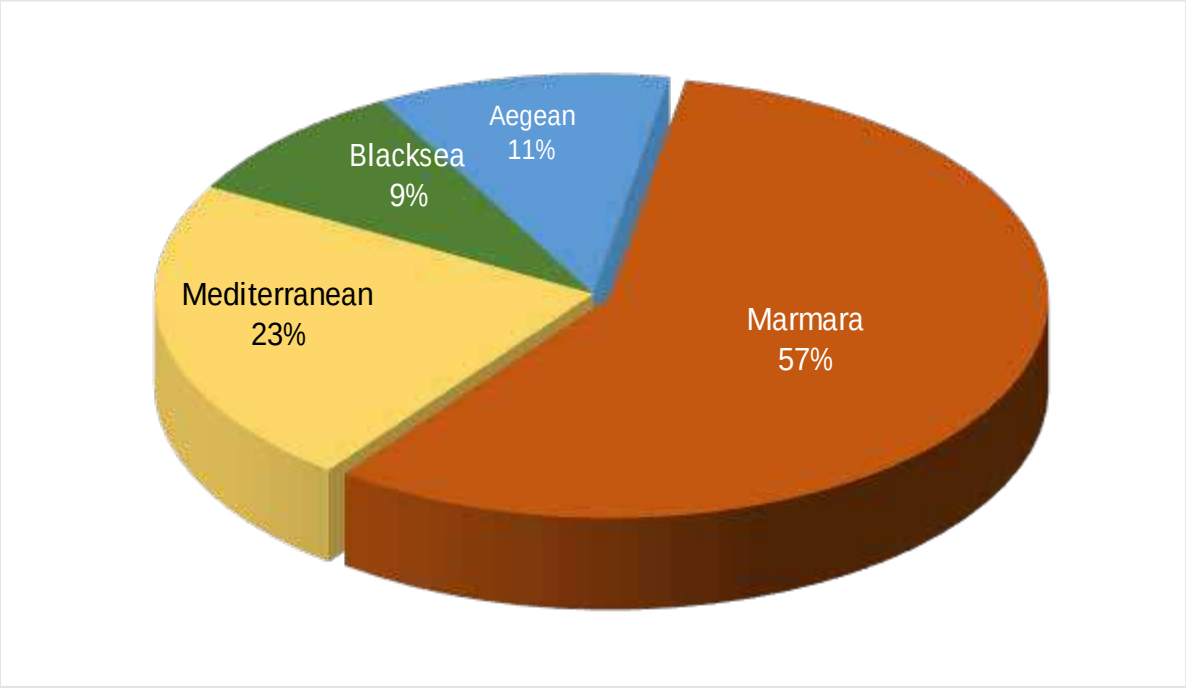


TABLE (44)2015 Ro-Ro Ships on Regular Line with Carrying Vehicle Number

Ro-Ro Lines	The Number of Incoming Ships (Ro-Ro)	Incoming Vehicle	Outgoing Vehicle	Total
PENDİK/HAYDARPAŞA - TRİESTE	486	97.124	91.254	188.378
TUZLA-TOULEN	151	28.377	27.684	56.061
ÇEŞME - TRİESTE	147	24.359	26.466	50.825
MERSİN - TRİESTE	103	18.709	18.829	37.538
TAŞUCU - GİRNE	342	14.384	15.256	29.640
HAYDARPAŞA-ILYICHEVSKY	183	12.533	11.470	24.003
MERSİN - MAGUSA	338	10.477	10.283	20.760
TAŞUCU-TRİPOLİ	316	7.440	7.318	14.758
SAMSUN-GELİNCİK	152	7.071	6.782	13.853
ZONGULDAK-ILYICHEVSKY	94	6.917	5.320	12.237
SAMSUN - NOVOROSSİYSK	201	2.791	7.506	10.297
SAMSUN-TUAPSE	187	1.138	3.244	4.382
İSKENDERUN-PORT SAID	19	1.543	1.279	2.822
DERİNCE-POTİ	10	0	1.482	1.482
TAŞUCU-TARTOUS	33	431	749	1.180
SAMSUN-KAVKAZ	36	164	277	441
ZONGULDAK-SEVASTOPOL	20	123	127	250
ZONGULDAK-YEVPATORIA (EVPATORI)	33	76	83	159
MERSİN - İSKENDERİYE	4	113	0	113
İSKENDERUN-HAIFA	2	43	66	109
TRABZON - SOCHİ	1	0	2	2
Total	**2.858**	**233.813**	**235.477**	**469.290**

Source: Republic of Turkey Ministry of Transport, Maritime Affairs and Communications

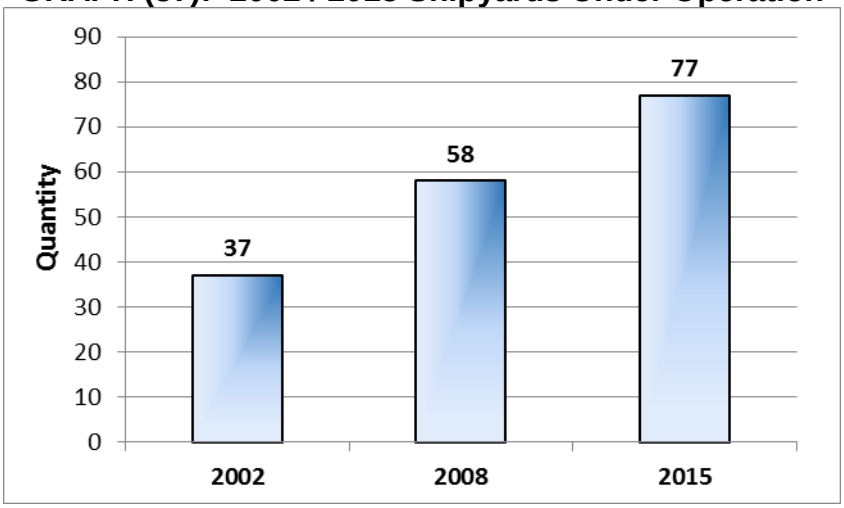
CHAPTER III

SHIPBUILDING INDUSTRY

General Outlook of Turkish Shipbuilding Industry

The shipyards, according to the facility definition in the local regulations, under operation raised up to 77 as of April 2016 while it was just only 37 in 2002. The quantity of shipyards under construction are 49 by the end of 2015.

GRAPH (37): 2002 / 2015 Shipyards Under Operation



Source: Ministry of Transport, Maritime Affairs and Communications 04/2016

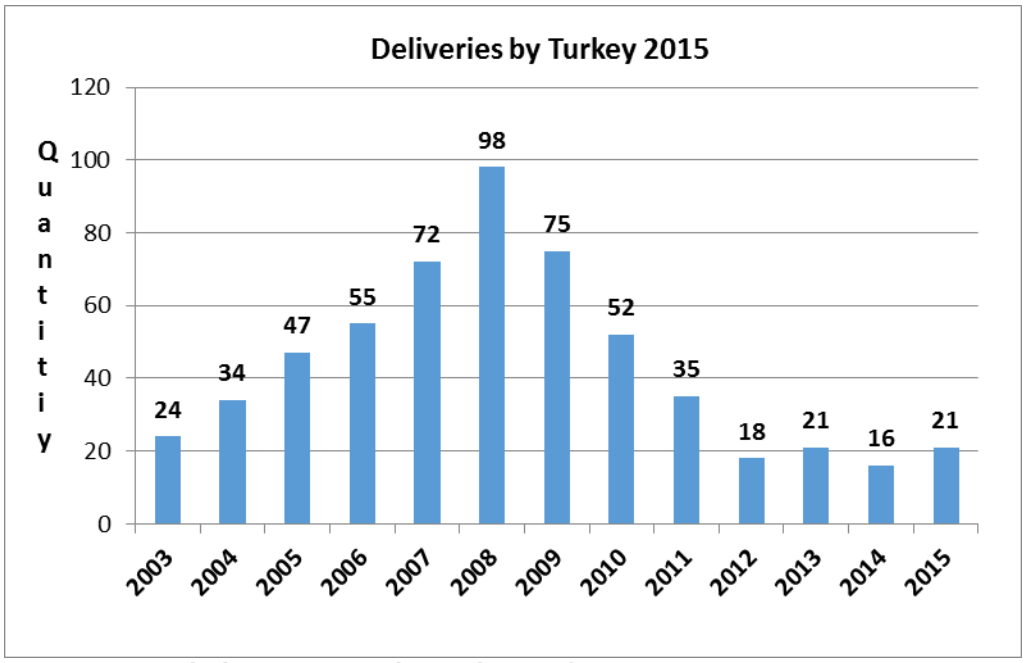
Shipbuilding industry is a branch of heavy industry which provides;

- § Progress in sub-industry
- § Increase in employment and the population of the neighbourhood
- § Rising the standards of quality of sub-industry
- § Increase of qualified productive power
- § Progress in growth and strength of regional trade
- § Rising the living circumstances and the cultural level of labour
- § Employment in ratio 1 to 7 including sub-industry.

Turkish Shipyards delivered 166 ships, DWT of 836.000, between 1995-2001. Also, between the years 2002 and 2007, 443 ships with total DWT of 3.051.000 have been delivered.

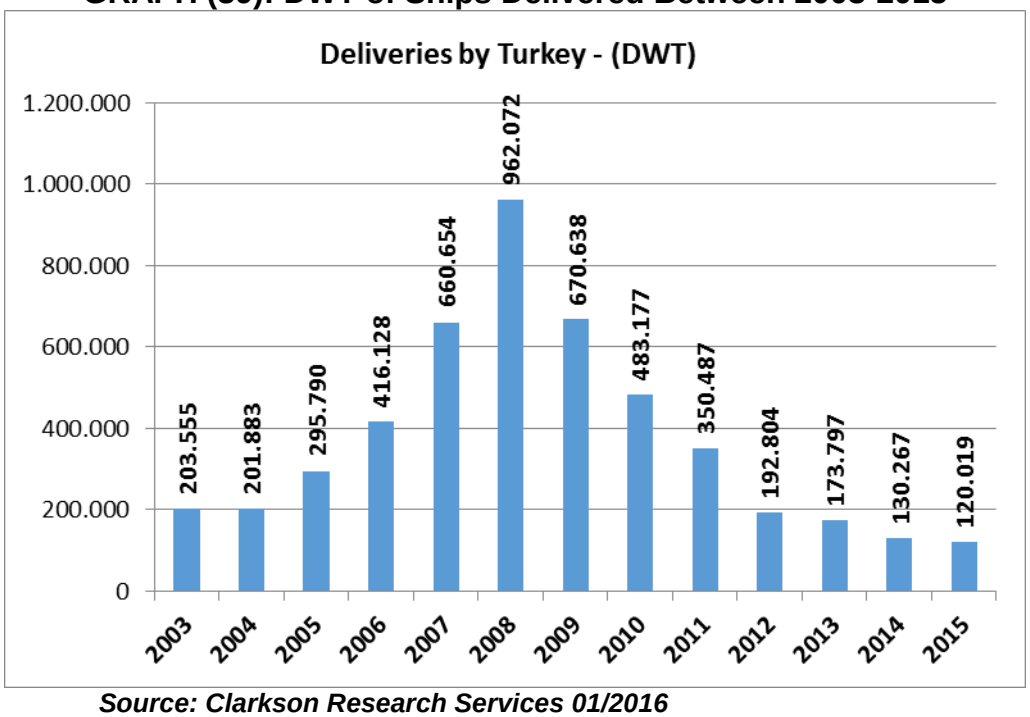
In 2015, 21 ships DWT of 120,019 tons had been delivered.

GRAPH (38): Number of Ships Delivered Between 2003-2015



Source: Clarkson Research Services 01/2016

GRAPH (39): DWT of Ships Delivered Between 2003-2015

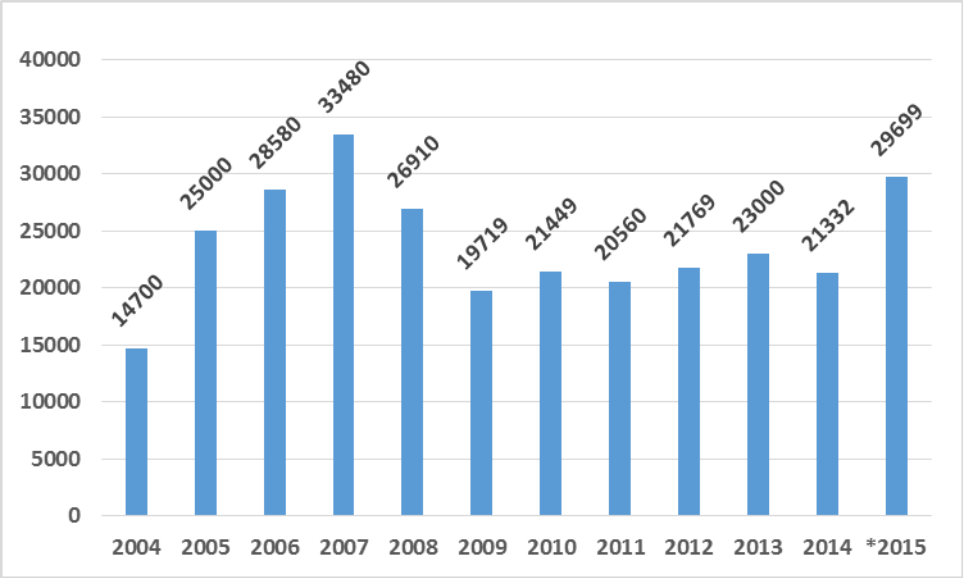


Source: Clarkson Research Services 01/2016

Some of the operative shipyards in Turkey still continue the modernization and extension operations but on the other hand, due to the global economic crisis, some of them suspend or cancel their modernization or extension projects because of the sanctions applied by the banks on the shipyards.

Furthermore, 49 shipyards which are under construction in different cities of Turkey, have been affected from the global economic crisis, too.

GRAPH (40): Employee Numbers in Turkish Shipyards by 2015



(*2015 data includes harbor launch and manufacture place workers)

Source: Ministry of Transport, Maritime Affairs and Communications 04/2016

TABLE (45): List of Operative Shipyards According to Cities

1	ADANA	AKDENİZ GEMİ İNŞA SAN. VE TİC. A.Ş.
2	ÇANAKKALE	GELİBOLU GEMİ İNŞ. SAN. VE TİC. A.Ş.
3	ÇANAKKALE	İÇDAŞ ÇELİK ENERJİ TERSANE VE ULAŞIM SAN. VE TİC. A.Ş.
4	HATAY	İSTER TERSANESİ
5	İSTANBUL	DENTAŞ İNŞAAT VE ONARIM SAN. A.Ş.
6	İSTANBUL	TORGEM GEMİ İNŞ. SANAYİ VE TİC. A.Ş.
7	İSTANBUL	GİSAN GEMİ İNŞA SAN. VE TİC. LTD. ŞTİ.
8	İSTANBUL	ÇEKSAN GEMİ İNŞA SAN. VE TİC. A.Ş.
9	İSTANBUL	YARDIMCI GEMİ İNŞA A.Ş.
10	İSTANBUL	TORLAK DENİZCİLİK SANAYİ VE TİC. A.Ş.
11	İSTANBUL	ADA DENİZCİLİK VE TERSANE İŞL. A.Ş.
12	İSTANBUL	DEARSAN GEMİ İNŞAAT SANAYİ A.Ş.
13	İSTANBUL	SELAH MAKİNA VE GEMİCİLİK END. A.Ş.
14	İSTANBUL	TUZLA GEMİ ENDÜSTRİSİ A.Ş.
15	İSTANBUL	SEDEF GEMİ İNŞAATI A.Ş.
16	İSTANBUL	RMK MARİNE GEMİ YAPIM SAN.
17	İSTANBUL	ÇELİK TEKNE SANAYİ VE TİCARET A.Ş.
18	İSTANBUL	YILDIZ GEMİ VE MAKİNA SAN. TİC. A.Ş.
19	İSTANBUL	TÜRKTER TERSANE VE DENİZ İŞL. A.Ş.
20	İSTANBUL	DENİZ ENDÜSTRİSİ A.Ş.
21	İSTANBUL	ANADOLU DENİZ İNŞAAT KIZAKLARI SANAYİ VE TİC. A.Ş.
22	İSTANBUL	İSTANBUL DENİZCİLİK GEMİ İNŞA SAN.
23	İSTANBUL	SNR GEMİ İNŞA SANAYİ A.Ş.
24	İSTANBUL	KPT TERSANE İŞLETMECİLİĞİ A.Ş.
25	İSTANBUL	DESAN DENİZ İNŞAAT SANAYİ A.Ş.
26	İSTANBUL	GEMAK GEMİ İNŞAAT SANAYİ VE TİC. A.Ş.

27	İSTANBUL	HİDRODİNAMİK GEMİ SAN. VE TİC. A.Ş.
28	İSTANBUL	GEMSAN GEMİ VE GEMİ İŞLETMECİLİĞİ SAN. VE TİC. LTD. ŞTİ.
29	İSTANBUL	ÇİNDEMİR MAKİNA GEMİ ONARIM VE TERSANECİLİK A.Ş.
30	İSTANBUL	ERKAL ULUSLARARASI NAKLİYAT VE TURİZM A.Ş.
31	İSTANBUL	DESAN 5442 NO.LU PARSEL
32	İSTANBUL	HALİÇ TERSANESİ
33	KASTAMONU	CİDE GEMİ VE YAT SAN. TİC. A.Ş.
34	KOCAELİ	MARMARA TERSANESİ A.Ş.
35	KOCAELİ	UM DENİZ SANAYİ A.Ş.
36	KOCAELİ	TÜRKERLER YAPIM SANAYİ VE TİCARET A.Ş.
37	KOCAELİ	UZMAR GEMİ İNŞA SANAYİ A.Ş.
38	KOCAELİ	ÇİMTAŞ ÇELİK
39	KOCAELİ	ARMADA GEMİ A.Ş.
40	ORDU	KARADENİZ GEMİ İNŞA SANAYİ VE TİC. A.Ş.
41	SAKARYA	GÜNDOĞDU GEMİ YAN SANAYİ VE DENİZ LTD. ŞTİ.
42	SAMSUN	TERME TERSANESİ LTD. ŞTİ.
43	TRABZON	BAŞARAN GEMİ SAN. VE TİC. LTD. ŞTİ
44	YALOVA	KUZEYSTAR SHİPYARD (A-2)
45	YALOVA	AYKIN TERSANECİLİK (A-4)
46	YALOVA	GİSAN ALTINOVA (A-5)
47	YALOVA	KOCATEPE DENİZCİLİK
48	YALOVA	BEŞİKTAŞ GEMİ (A-10)
49	YALOVA	SANMAR DENİZCİLİK MAKİNA VE TİC. A.Ş.
50	YALOVA	DENTA DENİZCİLİK
51	YALOVA	DÜZGİT YALOVA GEMİ İNŞA (A-14)
52	YALOVA	SELTAŞ DENİZCİLİK (A-15)
53	YALOVA	ARİF KALKAVANOĞULLARI (A-18)
54	YALOVA	YAŞARSAN GEMİ (A-19)
55	YALOVA	HATSAN İNŞAAT (A-20)
56	YALOVA	ALTINTAŞ MERMER VE TERSANECİLİK (A-21+A-22)
57	YALOVA	TÜRKOĞLU GEMİ (B–6)
58	YALOVA	KURBAN GEMİ (B–7)
59	YALOVA	HERÇELİK
60	YALOVA	GEMAK
61	YALOVA	YÜKSEL TERSANECİLİK (B–8)
62	YALOVA	CEMRE MÜHENDİSLİK (B–11+12)
63	YALOVA	ALTINOVA YAT İNŞAACILAR SAN. VE TİC. A.Ş.
64	YALOVA	TERSAN TERSANECİLİK SAN. VE TİC. AŞ
65	YALOVA	ÖZATA TERSANECİLİK SAN. VE TİC. LTD. ŞTİ.
66	YALOVA	SEFİNE DENİZCİLİK TERSANECİLİK SAN. VE TİC. LTD. ŞTİ.
67	YALOVA	GRUP ICT YAT SAN TURİZM VE TİC. A.Ş.
68	ZONGULDAK	USTAOĞLU YAT VE GEMİ SAN. TİC. A.Ş.
69	ZONGULDAK	USTAMEHMETOĞLU GEMİ TERSANESİ
70	ZONGULDAK	USMED GEMİ İNŞA SAN. VE TİC. A.Ş.
71	ZONGULDAK	UMO GEMİ SAN. TİC. LTD. ŞTİ.
72	ZONGULDAK	MED-YILMAZ GEMİ İNŞA SAN. VE TİC. A.Ş.
73	ZONGULDAK	MADENCİ GEMİ SAN. LTD. ŞTİ.

74	ZONGULDAK	EREĞLİ GEMİ İNŞA SAN. VE TİC. A.Ş.
75	ZONGULDAK	AZİM OTEL TURİZM DENİZ. METAL SAN. VE TİC. LTD. ŞTİ.
76	ZONGULDAK	CANSU DENİZ NAKLİYAT VE GEMİ SAN. VE TİC. LTD. ŞTİ.
77	ZONGULDAK	DEMİR GEMİ TERSANESİ

Source: Ministry of Transport, Maritime Affairs and Communications 04/2016

Before 2003; maximum tonnage of 16.000 DWT ship orders (as in one piece) could be taken. By 2007, it has raised up to 180.000 DWT but unfortunately the construction did not start due to the economic crisis.

Most of the ships constructed in Turkish shipyards are being built for export. Especially between 2002-2009, almost the total amount of these ships exported to the EU member countries.

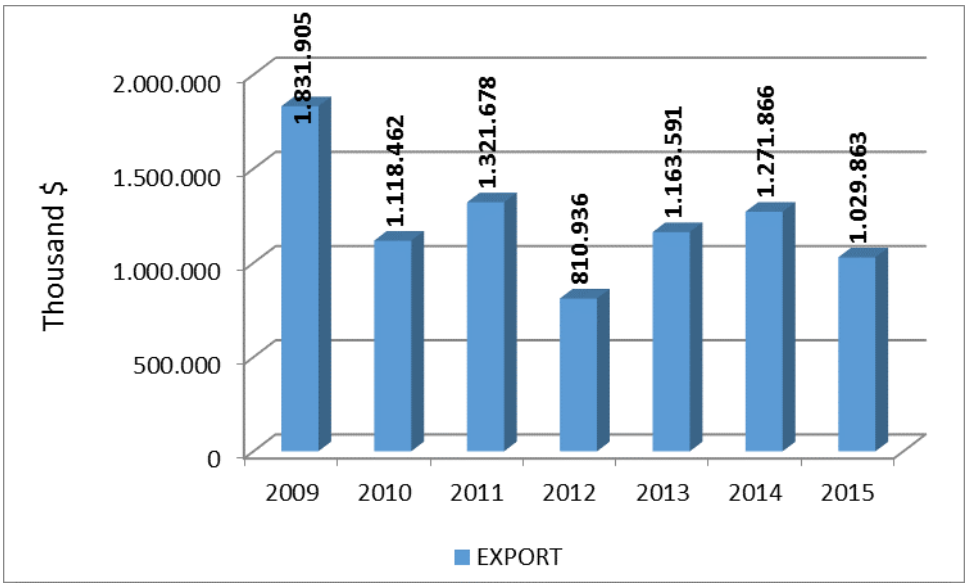
By the end of 2012, orders was decreased to 0, 5 Million DWT. Due to lack of new orders, the shipyards are now mostly concern with repair and maintenance facilities. In 2013 in Turkish shipyards 15.755.206 DWT of repair and maintenance had been done. As of 2014, it was estimated as 20.000.000 DWT and in 2015 it raised up to 21.000.000 DWT as an estimated value.

TABLE (46): Repair and Maintenance Facilities According To Regions 2014

NO	REGION	REPAIR/MAINTENANCE (Ship Quantity)
1	TUZLA	1203
2	YALOVA	406
3	TRABZON	87
4	BALIKESİR	30
5	BURSA	28
6	KASTAMONU	22
7	ORDU	10
8	HATAY	9
9	ÇANAKKALE	6
10	İZMİT	0
11	ZONGULDAK	0
12	ADANA	0
13	SAKARYA	0
14	SAMSUN	0
15	MERSİN	0

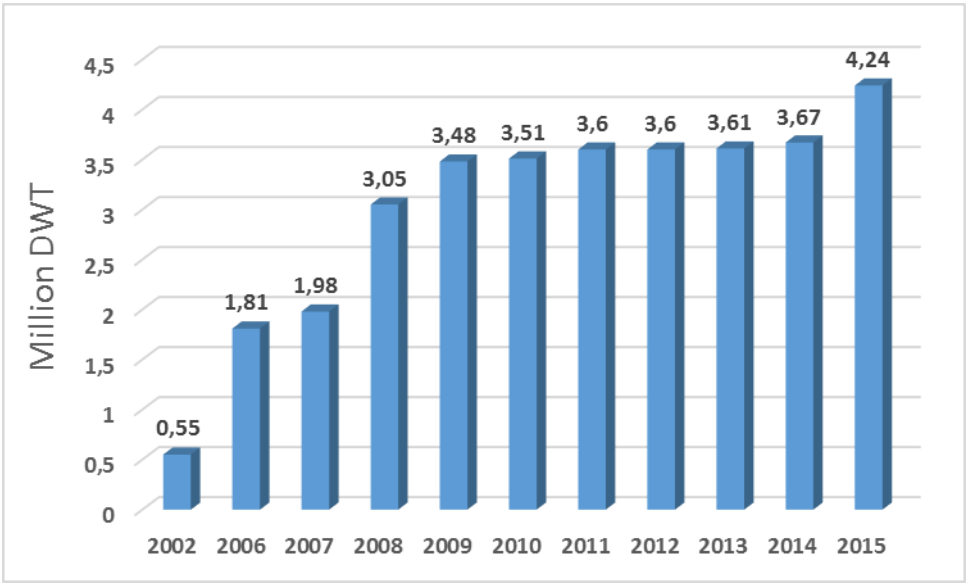
Source: Deniz Ticareti Magazine January 2015

GRAPH (41): Export Figures of Turkish Shipbuilding Industry (2009-2015)



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

GRAPH (42): Shipyards Project Capacities between 2002-2015



Source: Ministry of Transport, Maritime Affairs and Communications 04/2016

In 2002, our shipyards founded capacity was 550.000 DWT.In 2016 it has reached up to 4,2 million DWT which means a growth more over 6 times then 2002.

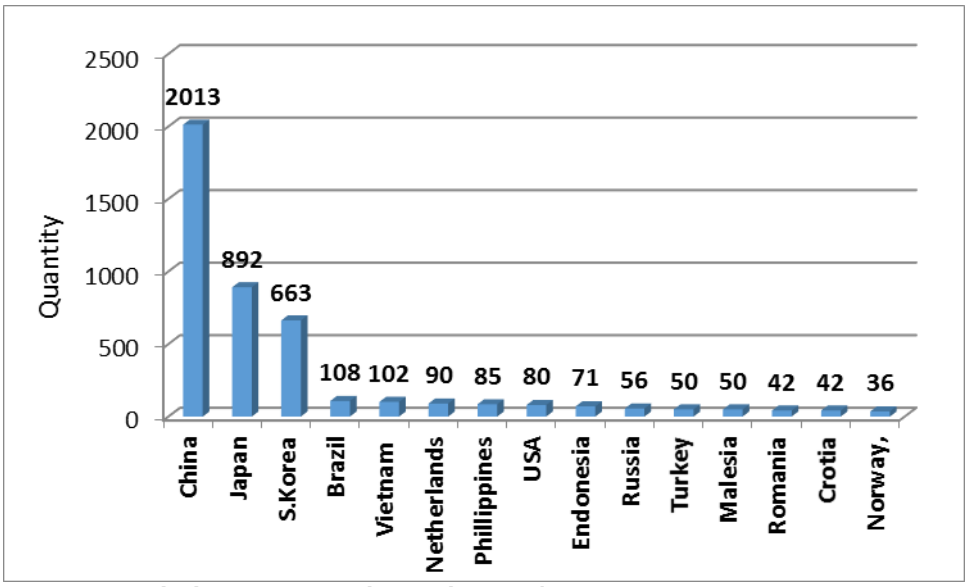
As of December 2014, 24 floating docks, 6 dry docks and 1 syncrolift are operative in Turkey.

TABLE (47): Repair and Maintenance Facilities According To Regions

NO	Shipyard Name	Dock Details
1	ERKAL Uluslararası Nakliyat ve Ticaret A.Ş.	350x80 m 100.000 T
2	GEMSAN Gemi ve Gemi İşlet. San. ve Tic. Ltd. Şti.	230x45 m 20.000 T
3	HİDRODİNAMİK Gemi San. ve Tic. A.Ş.	115x22 m 2.750 T
4	GEMAK Gemi İnşaat Sanayi ve TİC.A.Ş.	233x37 m
5		170x26 m
6	DESAN Deniz İnşaat Sanayi A.Ş.	230x40 m
7		186x27 m
8	İSTANBUL Denizcilik Gemi İnşa San. ve Tic. A.Ş.	93x28 m 4.200 T
9	DENİZ ENDÜSTRİSİ A.Ş.	210x37 m KURU
10	SEDEF Gemi İnşaatı A.Ş.	315x50 m KURU
11	TUZLA GEMİ Endüstrisi A.Ş.	300x53 m KURU
12	DEARSAN Gemi İnşaat Sanayi A.Ş.	67x28 m 2500 T
13	TORLAK Denizcilik Sanayi ve Tic. A.Ş.	195x40 m 40.000 DWT
14	YARDIMCI Gemi İnşa A.Ş.	155x36 m 8.500 T
15	ÇEKSAN Gemi İnşa San. Ve Tic. A.Ş.	130x29 m 7.000 T
16	DENTAŞ İnşaat ve Onarım San. A.Ş.	128x30 m 5.000 T
17	ÇINDEMİR Mak. Gemi Onarım ve Tersanecilik A.Ş.	118x28 m 5.000 T
18	DALSAN Liman İnş. Tarama, Gemicilik San.	82x27 m 3.700 T
19	UZMAR Gemi Yapım Sanayi A.Ş.	67x37 m 5000 T
20	BEŞİKTAŞ Gemi İnşa A.Ş.	230x40 m 50.000 DWT KURU
21		227x35 m 16.500 T
22		227x35 m 16.500 T
23	SEFİNE Denizcilik Tersanecilik Tur. San. ve Tic. Ltd. Şti.	240x42 m KURU
24	TERSAN Tersanecilik San. ve Tic. A.S.	178x35 m 9000 T
25	HATSAN İnş. M.T. Gemi İnşa ve Deniz San. ve Tic. A.Ş.	180x30 m
26	İSTER İskenderun Liman ve Tersane İşl. Ltd. Şti.	42x22 m 1400 T SENKROLİFT
27	TERSAN TERSANECİLİK VE TAŞIMACILIK AŞ.	130x30 m 7.100 T
28	URSA GEMİCİLİK BAKIM ONARIM TERSANECİLİK SAN.VE TİC. A.Ş.	56x14 m KURU
29	PROTEKSAN TURKUAZ YAT SANAYİ A.Ş	54x20 m 1.100 T
30	İNEBOLU Tersanecilik Sanayi ve Ticaret A.Ş.	117x20 m 4500DWT
31	YATCHLEY Gemi Yapım San. ve Tic. A.Ş.	150x20 m

Source:Deniz Ticareti Magazine January 2015

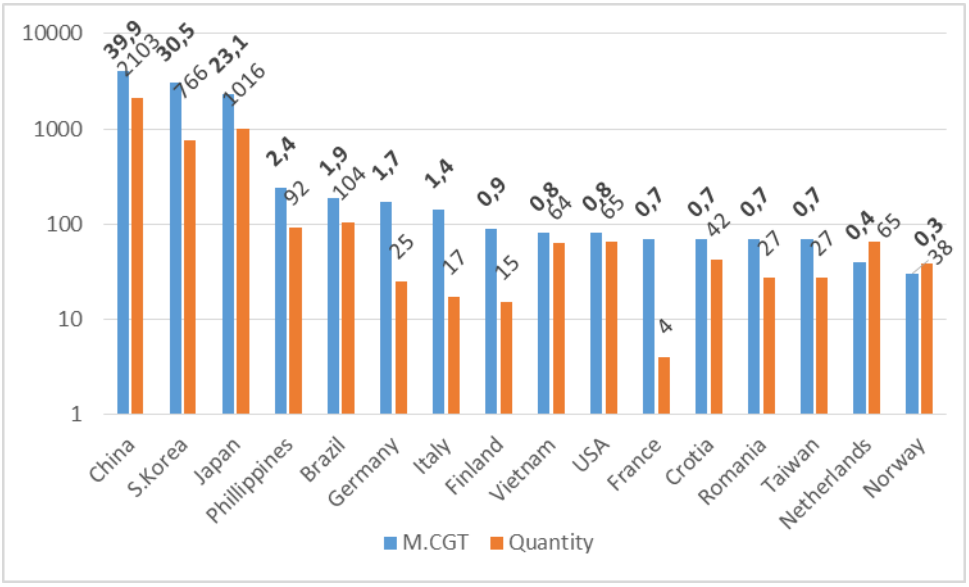
GRAPH (43): Order book by Builder Country (Quantity)



Source: Clarkson Research Services 04/2016

According to quantity Turkish yards are in the 11th place in world ranking

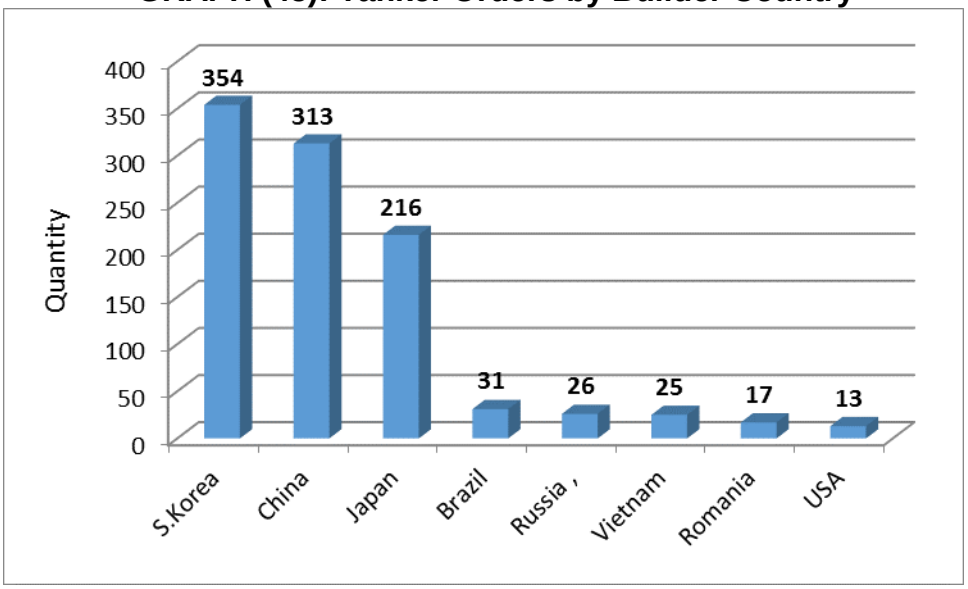
GRAPH (44): Order book by Builder Country (Quantity /Tonnage- Million CGT)



Source: Clarkson Research Services 01/2016

Our shipyards have a good reputation in building of small and medium tonnage chemical tankers. By March 2015, Turkey was in the 7th place among the countries which take tanker orders.

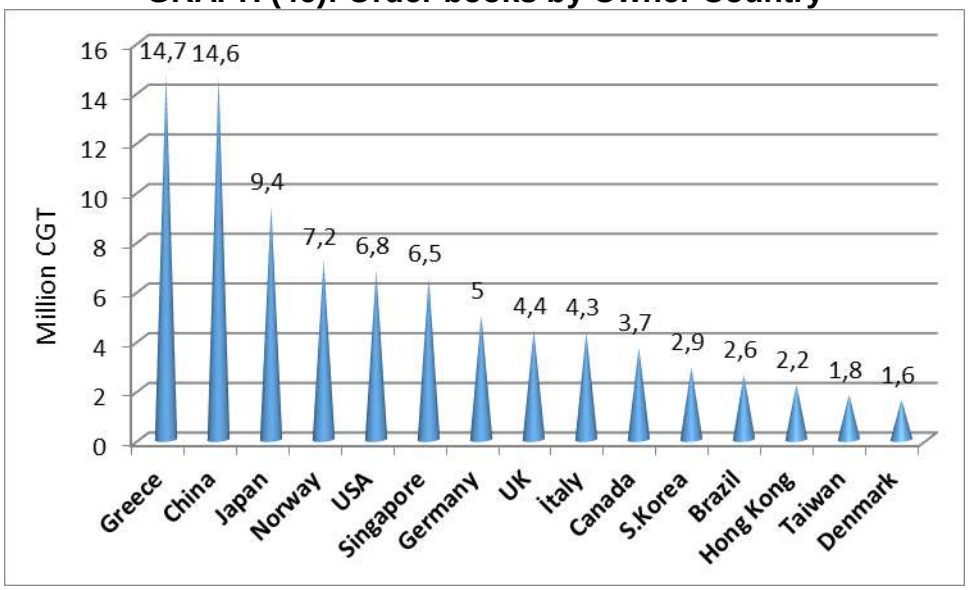
GRAPH (45): Tanker Orders by Builder Country



Source: Clarkson Research Services 01/2016

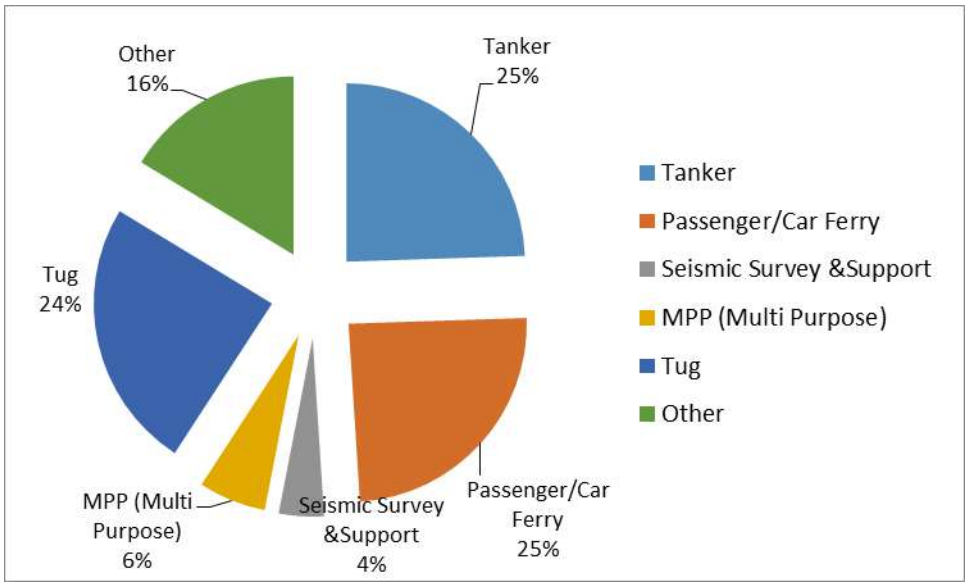
Turkish ship-owners worldwide orders consist of 43 ships about 0,6 million CGT as of March 2016.

GRAPH (46): Order books by Owner Country



Source: Clarkson Research Services 01/2016

GRAPH (47): Distribution of Orders According to Ship Type



Source: Clarkson Research Services 03/2016

Yacht and Boat Building Industry

Yacht and boat building is one of the most important sectors with its high accretion value, high export ratio and it provides employment. This industry is combination of sectors in yards which deals 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 less investments, areas and time are needed. Boat &yacht building comparatively do not need very big investments but has a big accretion value.

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

If we 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 sub industry with quality
- Technology basis production
- Closeness to international markets
- Appropriate climate
- Our country's potential in boat&yacht building

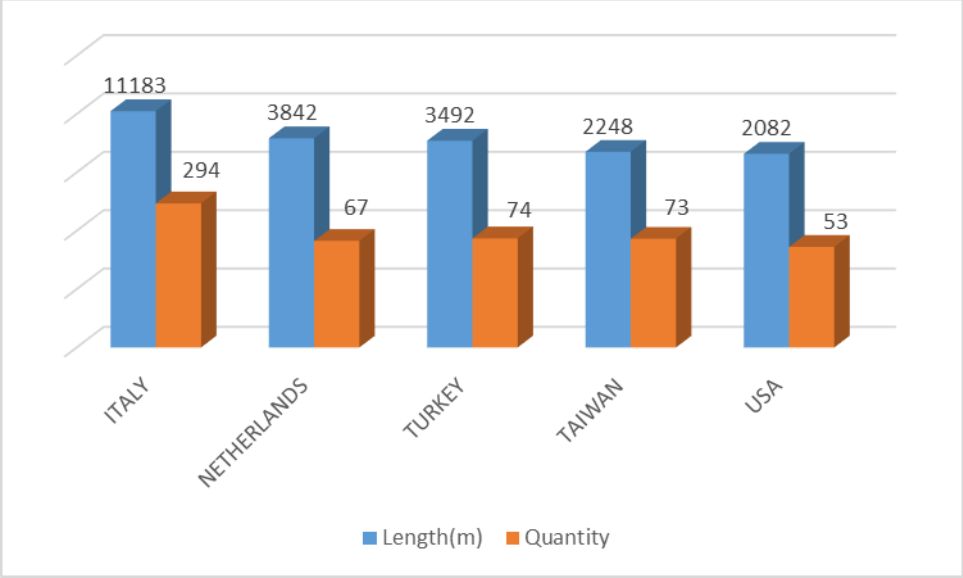
Main disadvantages are;

- Heavy taxes of special consumption, value added and motor vehicle collected from boats.

- Long bureaucratic procedures during the registering operations.
-

The 195, 30 meter+ superyachts, delivered in 2010 were built in 24 different countries.
Turkey is keeping the third place in global order book by 74 superyachts with the total length of 3492 meters by the end of 2015.

GRAPH (48): 24 meters and above Yacht Orders by Country (Length/Quantity)



Source: Boat International (www.boatinternational.com)

Sub- Industry

With parallel to the improvements in the recent years, Turkish sub-industry is in progress but still some of the items are imported by the shipyards due to the lack of production. Sub-industry which is 20% of the ship's price, is one of the most important branches in shipbuilding industry. It has the highest employment value in sub-sectors. Employment in sub-industry is 33.000 persons in Japan, 65.000 persons in S. Korea and 262.000 persons all over the Europe. Main problem of sub-industry in Turkey is to be made by local and small enterprises which cause problems about standardizing and approving the products.

Turkish sub-industry regarded as one of the best in supplying anchor, chain, bollard, electric cables, and hydraulic units but in electronic equipment especially in navigational systems due to their producer are a few basic worldwide, sector needs to obtain from import resources. Steel sheet production in Turkey can also meet the small amount of the requests.
Turkish Sub-industry is able to produce;
Anchor, chain, bollard, locking equipments - windlass and equipments - valves and central heating systems - electric panels and tables - fire fighting systems -pumps - isolation equipments - pipes – refrigerated units - hatch covers - diesel generator – boiler - carpenter and furnishings. Main items which are imported in sub-industry can be summarize as; Sheet steel/iron and profiles – holland profiles – telecommunication systems –rudder systems – bow /stern thrusters. Sub-industry creates employment as 1 to 3. In 2002 employment in sub-industry was 30.000 people and it raised to 103.500 but unfortunately due to the global economic crisis it decreased to 57.537 by the end of 2009. By the end of 2014 it's estimated around 50.000 person working in the sub-industry.

TABLE (48): Order book of Turkish Shipyards as of March 2015

	Hull No.	Type	Dwt	GT	Size	Unit	CGT	Builder	Contract Date	Owner	Owner Group
1	N/A	Maintenance		2.400	58	LOA	5.734	Cemre Shipyard	2015-Ara-08	ESVAGT	ESVAGT
2	107	Chem & Oil	6.850	5.100	6.850	DWT	9.192	RMK Marine Shipyard	2015-Eki-30	Pritchard-Gordon Co.	Pritchard-Gordon Co.
3	105	Asp.& Bit.	9.400		9.400	DWT	9.768	RMK Marine Shipyard	2015-Ağu-05	Tarbit Shpg. AB	Tarbit Shpg. AB
4	106	Asp.& Bit.	9.400		9.400	DWT	9.768	RMK Marine Shipyard	2015-Ağu-05	Tarbit Shpg. AB	Tarbit Shpg. AB
5	118	Pass/Car F.	950	8.200	1.208	Passengers	12.018	Ada Shipyard	2015-Tem-01	Wightlink Ltd.	Wightlink Ltd.
6	116	Pass/Car F.	400	2.000	199	Passengers	4.413	Ada Shipyard	2015-Oca-30	Fjord1 AS	Fjord1 AS
7	117	Pass/Car F.	400	2.000	199	Passengers	4.413	Ada Shipyard	2015-Oca-30	Fjord1 AS	Fjord1 AS
8	1056	Chem & Oil	6.366	4.696	6.366	DWT	8.784	Tersan Shipyard	2015-Oca-01	Gefo Gesellschaft	Gefo Gesellschaft
9	NB 46	Pass/Car F.	1.350	7.700	600	Passengers	11.493	Cemre Shipyard	2014-Ara-31	Basto Fosen A/S	Torghatten ASA
10	NB28	Pass/Car F.	1.350	7.700	600	Passengers	11.493	Sefine Shipyard	2014-Ara-31	Basto Fosen A/S	Torghatten ASA
11	NB29	Pass/Car F.	1.350	7.700	600	Passengers	11.493	Sefine Shipyard	2014-Ara-31	Basto Fosen A/S	Torghatten ASA
12	N/A	Pass/Car F.	6.750	10.000		Passengers	13.836	Sedef Gemi (Tuzla)	2014-Kas-19	Seaspan Marine	Seaspan
13	N/A	Pass/Car F.	6.750	10.000		Passengers	13.836	Sedef Gemi (Tuzla)	2014-Kas-19	Seaspan Marine	Seaspan
14	60	Asp.& Bit.	15.100		15.100	DWT	12.679	Besiktas Shipyard	2014-Kas-06	Groupe Desgagnes	Groupe Desgagnes
15	61	Asp.& Bit.	15.100		15.100	DWT	12.679	Besiktas Shipyard	2014-Kas-06	Groupe Desgagnes	Groupe Desgagnes
16	NB26	Pass/Car F.		7.500	600	Passengers	11.280	Sefine Shipyard	2014-Eki-15	Port of Tallinn	Port of Tallinn
17	NB27	Pass/Car F.		7.500	600	Passengers	11.280	Sefine Shipyard	2014-Eki-15	Port of Tallinn	Port of Tallinn
18	95	Tug		100		HP	799	RMK Marine Shipyard	2014-Eki-05	Unknown	Unknown
19	96	Tug		100		HP	799	RMK Marine Shipyard	2014-Eki-05	Unknown	Unknown
20	1068	PSV	4.500		4.500	DWT	7.226	Tersan Shipyard	2014-Ağu-07	Troms Offshore	Tidewater Marine
21	75	MSV		4.000	98	LOA	7.871	Besiktas Shipyard	2014-Haz-01	Myklebusthaug Manag.	Mikkel Myklebusthaug
22	H70	PSV	4.000		4.000	DWT	6.716	Selah Shipyard	2014-Oca-01	Marnavi	Marnavi
23	009	Chem & Oil	5.350	3.800	5.350	DWT	7.819	Hat San Shipyard	2014-Oca-01	Kaptanpasa Deniz	Kaptanpasa Deniz
24	N/A	MPP	5.014	2.930	5.014	DWT	4.468	Icdas Shipyard	2014-Oca-01	Icdas Celik Enerji	Icdas Celik Enerji
25	45	Tug		248		HP	1.403	Sanmar Ltd	2014-Oca-01	Unknown	Unknown
26	46	Tug		248		HP	1.403	Sanmar Ltd	2014-Oca-01	Unknown	Unknown

27	H69	PSV	4.000		4.000	DWT	6.716	Selah Shipyard	2014-Oca-01	Marnavi	Marnavi
28	N/A	Tug		460		HP	2.059	Geta Shipyard	2014-Oca-01	Unknown	Unknown
29	N/A	Tug		160		HP	1.069	Eregli Shipyard	2014-Oca-01	Med Marine	Med Marine Group
30	N/A	Tug		160		HP	1.069	Eregli Shipyard	2014-Oca-01	Med Marine	Med Marine Group
31	N/A	Tug		160		HP	1.069	Eregli Shipyard	2014-Oca-01	Med Marine	Med Marine Group
32	N/A	Tug		160		HP	1.069	Eregli Shipyard	2014-Oca-01	Med Marine	Med Marine Group
33	N/A	Tug		160		HP	1.069	Eregli Shipyard	2014-Oca-01	Med Marine	Med Marine Group
34	N/A	Chem & Oil	7.114	4.684	7.114	DWT	8.772	Armada Shipyard	2013-Ara-23	Palmali Shipping	Palmali Shipping
35	N/A	Seis. Support	2.800	3.086	69	LOA	6.701	Cemre Shipyard	2013-Eki-24	Norfield Shipping	Norfield Shipping
36		Chem & Oil	7.114	4.684	7.114	DWT	8.772	Armada Shipyard	2013-Eyl-18	Palmali Shipping	Palmali Shipping
37	N/A	Chem & Oil	7.114	4.684	7.114	DWT	8.772	Armada Shipyard	2013-Eyl-18	Palmali Shipping	Palmali Shipping
38	1063	MSV	6.639	12.383	128	LOA	15.860	Tersan Shipyard	2013-Tem-04	Volstad Shipping	Volstad Shipping
39	6	Work/Repair Vsl.	276	180			1.150	Almar Ship Building	2013-Oca-01	Unknown	Unknown
40	61	Pass/Car F.		1.441	450	Passengers	3.496	Ceksan Shipyard	2013-Oca-01	Izmir Met. Municipal	Izmir Met. Municipal
41	62	Pass/Car F.		1.441	450	Passengers	3.496	Ceksan Shipyard	2013-Oca-01	Izmir Met. Municipal	Izmir Met. Municipal
42	31	Seis. Survey		5.000	86	LOA	9.038	Istanbul S.Y.	2012-Nis-24	Govt of Turkey	Govt of Turkey
43	11	Products	1.500	800	1.500	DWT	2.167	Akdeniz Gemi	2012-Oca-01	Unknown	Unknown
44	12	Chem & Oil	3.800		3.800	DWT	5.936	Duzgit Yalova	2012-Oca-01	Duzgit Shipholding	Duzgit Group
45	N/A	Tug		310		HP	1.612	Torgem Shipyard	2012-Oca-01	Unknown	Unknown
46	N/A	Ore/Oil	8.050	5.795	8.050	DWT	7.105	Gelibolu Shipyd	2011-Eyl-01	Albros Shipping	Albros Shipping
47	48	MPP	12.107	9.000	12.107	DWT	9.163	Gelibolu Shipyd	2011-Oca-01	Albros Shipping	Albros Shipping
48	55	Tug		450		HP	2.031	Sanmar Ltd	2011-Oca-01	Unknown	Unknown
49	13	MPP	6.500	4.600	6.500	DWT	5.963	Karadeniz Shipyd.	2008-Oca-01	Kanlar Denizcilik	Kanlar Denizcilik

Source: Clarkson Research Ser. 03/2016

CHAPTER IV

PORT DEVELOPMENTS

Ports Information in General

The coastline of Anatolia is 8333 Km long. Total numbers of ports are 179 along the coastline. 6 ports are operated by Turkish Maritime Administrations and 2 out of 7 railway connected ports are operated by Turkish State Railways.

According to regions determined by Republic of Turkey Ministry of Transport, Maritime Affairs and Communications; Ports are operated by;

GOVERNMENT	**21 PORTS**
MUNICIPALITY	**23 PORTS**
PRIVATE	**135 PORTS**

The major part of international trade is being realized through maritime transportation in Turkey. 86 % of goods (import-export) have been maritime transported in 2015.

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	**31.471.560 Tons**

The goal of Turkey is to become a centre for transit cargoes in the region. The strategical position of Turkey is increasing after the pipe lines like Baku-Tiflis-Ceyhan, and projects like South Corridor (TANAP) and South East Anatolia Project (GAP). Privatized and modernized ports will also add strength to its position.
The major problems beyond the insufficient ratio of transit cargo movements, are in disharmony with technological developments and insufficient railway integrations to ports that will supply cargoes to be distributed fast and on time.
Turkish ports should go into an expertising process on certain types of cargoes and/or new port projects for container handling so as to become more competitive in the Mediterranean and Black Sea markets. Recently private container terminals increased specially in the Marmara Region.
Turkish ports hold stratejic position within the Eastern Mediterranean and Black Sea Shipping Lines and 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 to different transportation nets. The Mediterranean and Aegean Sea ports are located with little miss distance and have ability to attract Asian-European main shipping lines' cargoes passing through the Mediterranean. Specially, the Mediterranean ports are in a position to operate as transshipment/transit ports for delivering cargoes coming from main shipping lines to 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 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 have increased.

416.036.695 tons of cargo is realized at Turkish ports in 2015.
Ø 22,1 % of handling is export with 92.152.622 tons.
Ø 50,1 % of handling is import with 208.326.308 tons.
Ø 12,6 % of handling is cabotage with 52.472.668 tons.
Ø 15,2 % of handling is transit with 63.085.097 tons.

Table below shows total cargo handled at Turkish ports according to type of transportation in the last five years.

TABLE (49): Cargo Handling Figures At Turkish Ports (Acc. to Transport Mode)

MODE OF TRANSPORT		2011	2012	2013	2014	2015
EXPORT	TURKISH	12.273.915	12.235.897	11.660.647	12.739.297	13.754.810
	FOREIGN	69.502.777	79.071.589	77.893.343	75.797.517	78.397.812
	TOTAL	**81.776.692**	**91.307.486**	**89.553.990**	**88.536.814**	**92.152.622**
IMPORT	TURKISH	30.120.033	26.476.350	22.949.887	20.876.309	22.724.776
	FOREIGN	143.426.365	165.998.578	164.831.728	173.837.477	185.601.532
	TOTAL	**173.546.398**	**192.474.928**	**187.781.615**	**194.713.786**	**208.326.308**
CABOTAGE	LOADING	21.257.193	22.869.458	26.076.342	24.982.892	25.894.384
	UNLOADING	22.387.290	24.049.929	27.861.596	25.746.316	26.578.284
	TOTAL	**43.644.483**	**46.919.387**	**53.937.938**	**50.729.208**	**52.472.668**
TRANSIT	LOADING	58.603.055	50.767.011	46.930.435	44.278.082	58.597.204
	UNLOADING	5.776.095	5.957.420	6.726.780	4.833.478	4.487.893
	TOTAL	**64.379.150**	**56.724.431**	**53.657.215**	**49.111.560**	**63.085.097**
GR.TOTAL	LOADING	161.636.940	164.943.955	162.560.767	157.797.788	176.644.210
	UNLOADING	201.709.783	222.482.277	222.369.991	225.293.580	239.392.485
	TOTAL	**363.346.723**	**387.426.232**	**384.930.758**	**383.091.368**	**416.036.695**

Source: Republic of Turkey Ministry of Transport, Maritime Affairs and Communications

GRAPH 49: Cargo Handling Figures According To Years

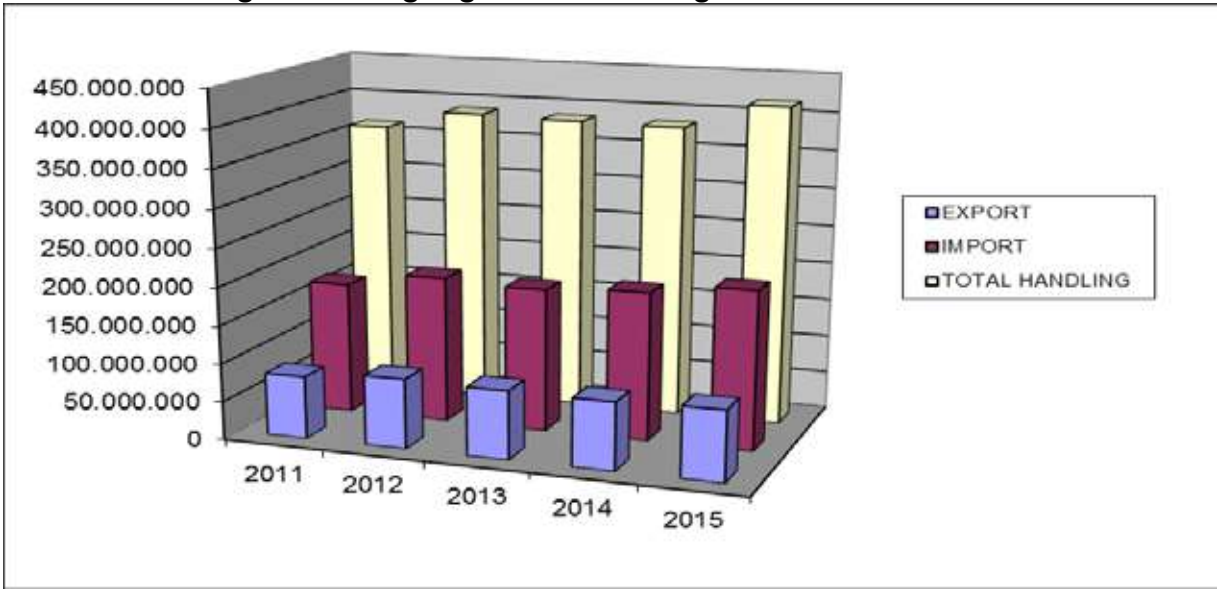
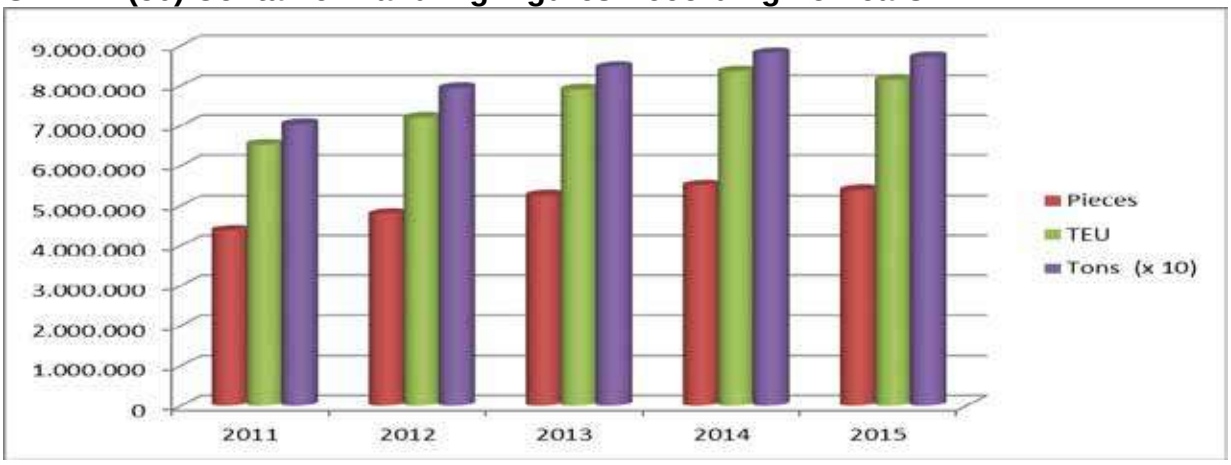


TABLE (50): Container Handling Figures At Turkish Ports

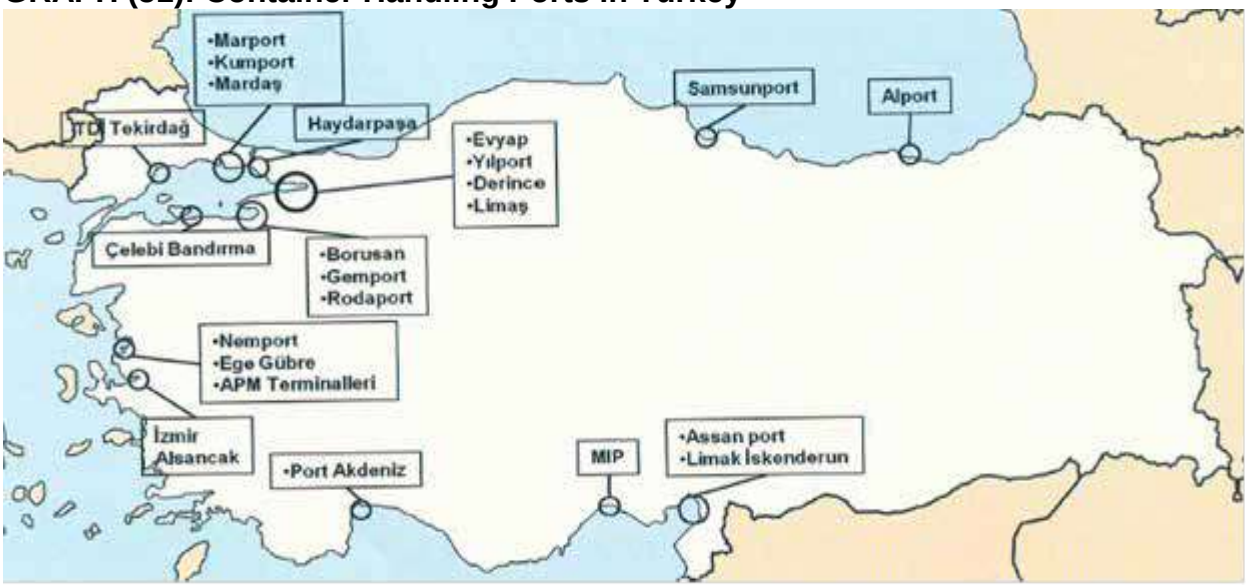
MODE OF TRANSPORT		2011	2012	2013	2014	2015
EXPORT	PCS	1.798.545	1.910.075	2.088.031	2.269.118	2.198.508
	TEU	2.690.889	2.879.122	3.165.653	3.487.949	3.394.508
	TONS	30.010.607	33.199.345	35.456.728	39.106.361	38.419.925
IMPORT	PCS	1.851.026	1.953.229	2.121.533	2.335.795	2.248.636
	TEU	2.770.190	2.942.562	3.199.969	3.581.809	3.454.345
	TONS	28.409.300	29.871.028	30.715.331	34.790.524	34.007.962
CABOTAGE	PCS	215.942	342.604	397.602	390.510	454.012
	TEU	305.256	472.345	544.496	526.798	606.064
	TONS	2.890.088	4.758.088	5.732.348	4.934.786	5.869.320
TRANSIT	PCS	514.014	589.019	651027	513.195	481.454
	TEU	757.171	898.368	989.815	754.216	691.481
	TONS	9.071.262	11.482.912	12.751.785	9.305.368	8.728.650
GRAND TOTAL	PCS	**4.379.527**	**4.794.927**	**5.258.193**	**5.508.618**	**5.382.610**
	TEU	**6.523.506**	**7.192.396**	**7.899.933**	**8.350.772**	**8.146.398**
	TONS	**70.381.257**	**79.311.373**	**84.656.192**	**88.137.039**	**87.025.857**

Source: Republic of Turkey Ministry of Transport, Maritime Affairs and Communications

GRAPH (50) Container Handling Figures According To Years



GRAPH (51): Container Handling Ports in Turkey



Port sector is a very dynamic sector in Turkey as it is in all World. Developments in World economy, directly influence goods and service trade and specially expectations on goods' trade effect investment plans of ports that are most important transportation infrastructures. Increasing expactations on goods and service trade in medium and long term speed up port investments as well as decline in these expectations may cause to postpone investments.

Nowadays ports, in classic terms are not the loading/discharging point of ships, they have become Logistic Centers where, with 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 crisis. Thus in crisis period many port operators suspended their investments in Turkey. But since the last quarter of 2009 increase in goods and service trade, encouraged port operators to make investments. There are two options for increasing the capacity of Ports, 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 back fields,
- Increasing handling capacity of port by having new equipments.

Both options ultimately provides increase of port's cargo and ship reception capacity. Within these two coverages, explained capacity and improvings 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
DP World	Container	-	1,300,000 TEU
Petkim Container Terminal (Petlim)	Container	-	1,500,000 TEU *(might be increased to 4,000,000 TEU subject to cargo demand in the area in future)*

State Investments

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

- Northern Aegean Çandarlı Port is under construction whereas others are at the stage of research and projection. Located at İzmir/Bergama, 1500 meters long breakwater's construction was completed, realizing remaining substructures and superstructures gradually first stage is foreseen to be completed by 2018 at Northern Aegean Çandarlı port. Çandarlı Port construction was divided into two phase. 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 boundries of Zonguldak/west Black Sea region, Filyos Port will serve to the industrial zone which is planned to be assembled on the background. Upon completion, port will be able to handle 700.000 TEU container 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 privatizated.)*

- Capacity of İzmir Port is planned to reach 2.500.000 TEU after privatization.

Asyaport

Asyaport is a new Greenfield container terminal located in Barbaros / Tekirdağ, built by Asya Port Liman A.S, located in Barbaros / Tekirdağ (40 54' N ; 27 28' E) on 30 Ha of reclamed land as a container terminal. The construction has started in 2010 and completed for operations in July 2015.

Having two kilometers of wharf length and 20 meters of depth, the port is also serve as Turkey's first transit container port with a handling capacity of 2,5 million TEU which makes it a world scale port.

Electric energy is used to power the ports' 11 ship-to-shore gantry cranes and 33 rubber tyre gantry cranes to sustain an environmental approach.

Turkey in "Doing Business 2015" Report

189 countries are sorted acc. to "doing business facility" taking into 10 criterias in "Doing Business" 2014 Report. Criterias used in sorting consists of elements that facilitate doing business are; starting business, obtaining building licence, getting electricity service connected, making ownership records, loan contracted facility, investor protection, taxes, cross border trade potential, practibility of business agreements and solving of problems arising from bankrupt. Singapore is at the top of 2015 list as 2014. followed by Hong Kong, New Zealand, USA, Denmark, Malaysia, Korea, Georgia, Turkey's 2015 economic profile was evaluated in report where Turkey upgraded by 14 steps according to last report and located at 55th place.

Sortings determining the location of Turkey in Doing Business Report taking into account 10 criterias are below;

Criteria	Turkey's Location	Best Country
General Sort	55	Singapore
Starting Business	79	New Zealand
Obtaining Building Licence	136	Hong Kong
Getting Electricity Service Connected	34	South Korea
Ownership Record	54	Georgia
Loan Facility	89	New Zealand
Investor Protection	13	New Zealand
Taxes	56	UAE
Cross Border Trade Potential	90	Singapore
Practibility of Business Agreements	38	Singapore
Problem Solving of Bankruptcy	109	Finland

Turkey in Logistic Performance Index 2015 Report

Published by World Bank every 2 years since 2007, countries taken into evaluation has increased by 5 and reached up to 160 in Logistic Performance Index 2014 Report. Germany obtained first place while Somali ranked as last in the report whereas Turkey is located at 30th place.

Logistics Performance of Countries are measured by getting 6000 persons and 1000 entities give points to 6 different criterias by grading between 1 and 5. Gradings are oriented at 8 countries that persons and entities mostly do business with.

Criterias are;

1. Effectiveness of customs clearance and other border processes
2. Quality of infrastractures related to transportation such as ports, railways in terms of logistics.
3. Ease of arrangement and costs of international shipments
4. Quality of logistic services and competence.
5. Follow up and monitoring of shipments
6. Timely delivery of shipments to receivers.

Turkey has taken 34th, 39th, 27th and 30th places by sequence in the 2007, 2010, 2012 and 2014 lists.

Status of Turkey in Logistic Performance Index 2014 Report

Criterias	Turkey's Location 2014		Turkey's Location 2012		Best Countries 2014	Best Countries 2012
	Rank	Score	Rank	Score		
General Sort	30	3.50	27	3.51	Germany	Singapore
Custom	34	3.23	32	3.16	Norway	Germany
Infrastructure	27	3.53	25	3.62	Germany	Hong Kong
Arrangement of shipment	48	3.18	30	3.38	Luxemburg	Finland
Quality and competence	22	3.64	26	3.52	Norway	Finland
Follow up and monitoring	19	3.77	29	3.54	Germany	Singapore
Timing	41	3.68	27	3.87	Luxemburg	Singapore

TDI Ports and Privatizations

TABLE (51): 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)	PASSANGER CAPACITY (person/years)
SARAYBURNU Pier 1 and 2	242,00	(-8,-12)	-	-	-	-	-
ÇANAKKALE	90,00	(-6,-7)	300	365	-		110.000
KABATEPE	295,00	(-4,-5)	-	365	-		90.000
GÖKÇEADA (Port of Kuzu)	900,00	(-6,-7)	400	700	200		200.000
GÖKÇEADA (Uğurlu Pier)	76,00	(-6,-8)	-	365	-		-
TEKİRDAĞ	2.100,00	(-8,-12)	3.000	2.000	-	300.000	-
TOPLAM	**3.703,00**		**3.700**	**3.795**	**200**	**300.000**	**400.000**

Source: TDI

- In 1997, Ports of Tekirdağ *(operational rights transfered back to TDI on 13 March 2012)*, 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,

have been privatized,by the method of conveying the right of exploitation for 30 years.

TCDD Ports and Privatizations

Table 52: Specifications and Capacities of TCDD Ports

Ports	Total Wharf Length (m)	Port Area (*1000 m2)	Max. Draught (m)	Number of Workers	Total Ship Receipt (Ship/Year)	Total Handling Capacity (*1000 Tons/Year)	Total Wharf Capacity (*1000 Tons/Year)	Capacity of Container Wharf Equipment (*1000 TEU)	Storage Capacity (*1000 Tons/Year)	
									General Cargo	Cont.
Ports Operated By TCDD;										
Haydarpasa	2765	320	-12	600	2651	5889	8558	407	689	269
Izmir	3386	525	-13	682	3640	6419	11100	549	884	343
Privitazed Ports;										
Mersin (MIP)	4725	1097	-14	1550	4692	8606	10967	695	8500	371
Samsun (Samsunport)	1756	338	-12	146	1130	2380	4300	40	5471	50
Bandırma (Çelebi)	2706	250	-12	180	4280	2771	7008	40	2013	50
Iskenderun	1426	750	-12	341	640	3247	6097	20	9286	146
Derince	1092	366	-15	308	862	2288	2991	40	2984	100
TOTAL	**17.856**	**3.646**		**3.807**	**17.895**	**31.600**	**51.021**	**1.791**	**29.827**	**1.329**

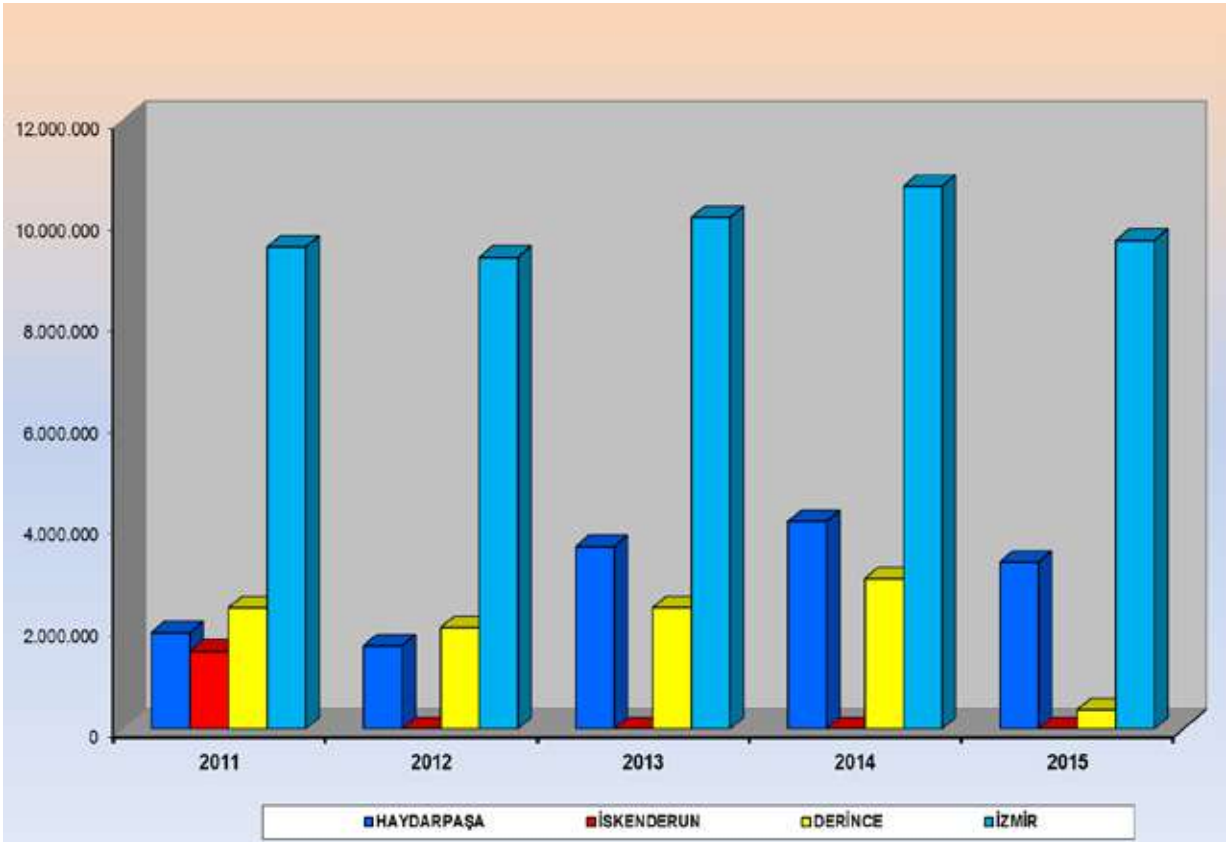
Source: TCDD

Table (53): TCDD Ports 2011-2015 Handling Figures Acc. To Cargo Groups

PORT	YEAR	GENERAL CARGO	CONTAINER	DRY BULK	LIQUID BULK	TOTAL
HAYDARPAŞA	2011	297.365	1.600.626	0	0	1.897.991
	2012	417.729	1.219.778	0	0	1.637.507
	2013	1.909.774	951.634	733450	0	3.594.858
	2014	2.759.000	762.088	568900	0	4.089.988
	2015	2.630.004	661.552	0	0	3.291.556
İSKENDERUN	2011	485.202	0	325.688	721.856	1.532.746
	2012	0	0	0	0	0
	2013	0	0	0	0	0
	2014	0	0	0	0	0
	2015	0	0	0	0	0
DERİNCE	2011	1.264.824	10.143	1.005.367	106.203	2.386.537
	2012	1.127.186	9.817	756.782	102.107	1.995.892
	2013	1.372.533	10.655	936.987	69.812	2.389.987
	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
İZMİR	2011	523.849	6.754.509	2.020.321	205.418	9.504.097
	2012	558.627	6.674.362	1.764.131	304.436	9.301.556
	2013	484.394	7.058.202	2.263.054	284.493	10.090.143
	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
TOTAL	2011	2.571.240	8.365.278	3.351.376	1.033.477	15.321.371
	2012	2.103.542	7.903.957	2.520.913	406.543	12.934.955
	2013	3.766.701	8.020.491	3.933.491	354.305	16.074.988
	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

** İskenderun Port was handed over to Limak A.Ş. on 30.12.2011*
** Derince Port 2015 Tonnage is till end of February*

GRAPH (52): TCDD Ports 2011 – 2015 Handling Figures



GRAPH (53): 2015 TCDD Ports Handling Acc. To Cargo Groups

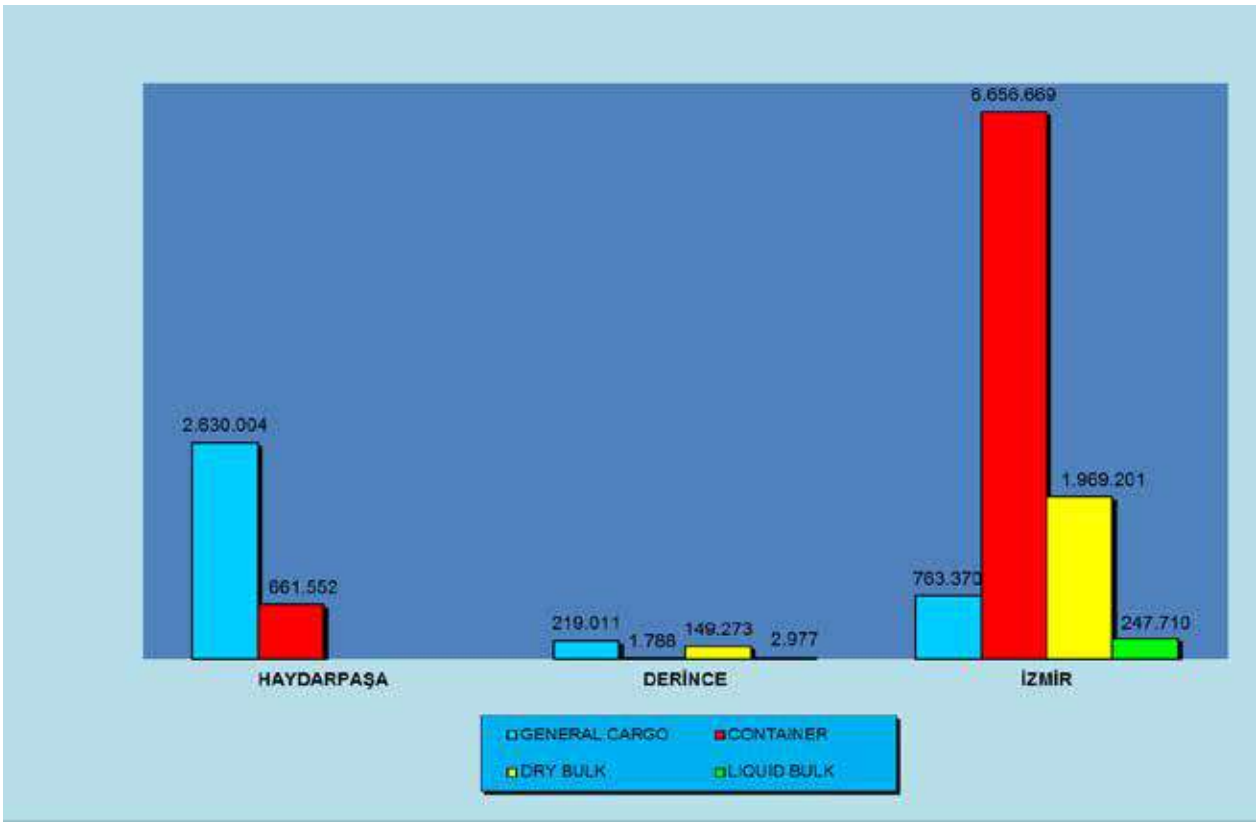
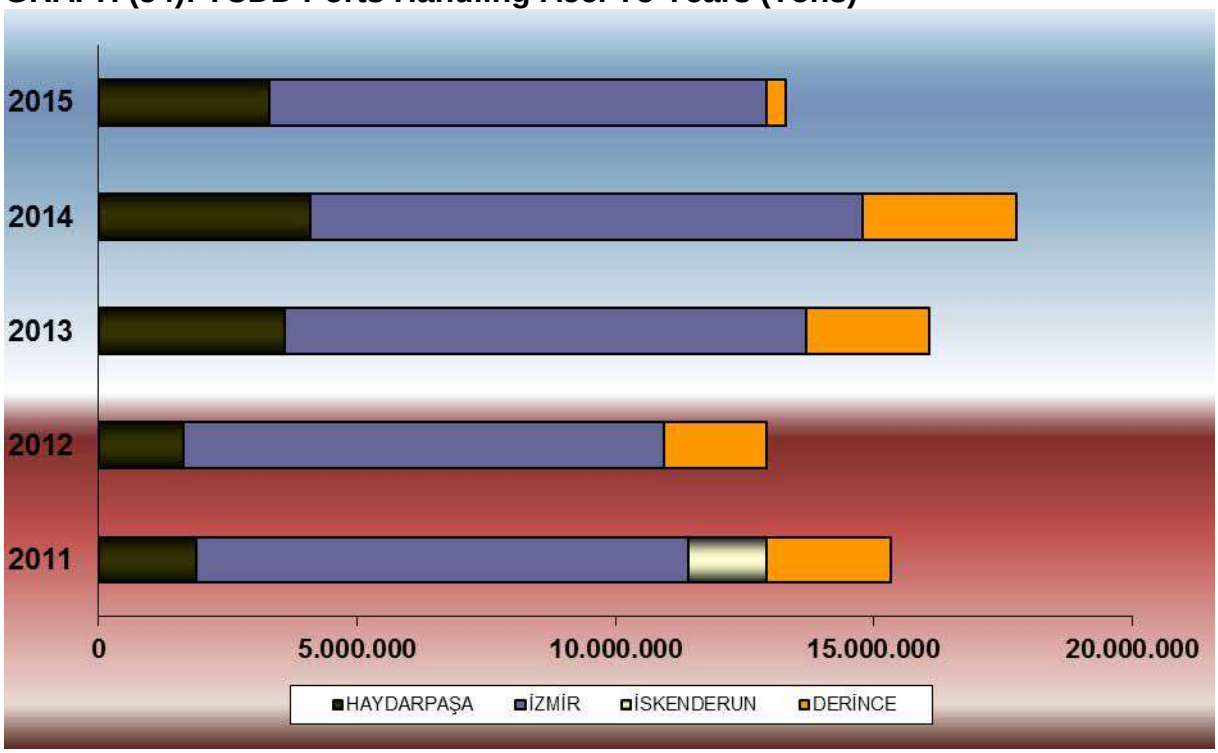


Table (54): TCDD Ports Loading And Unloading Figures

YEARS	LOADING			UNLOADING			TOTAL
	EXPORT	DOMESTIC	TRANSIT	IMPORT	DOMESTIC	TRANSIT	
HAYDARPAŞA							
2011	612.846	0	0	1.285.145	0	0	1.897.991
2012	602.875	1.639	0	1.032.993	0	0	1.637.507
2013	1.178.979	733.450	0	1.682.429	0	0	3.594.858
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**
İZMİR							
2011	5.488.035	0	0	3.725.904	290.158	0	9.504.097
2012	5.238.767	48.667	0	3.841.169	172.953	0	9.301.556
2013	5.616.969	12.802	0	4.181.129	279.243	0	10.090.143
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**
İSKENDERUN							
2011	465.918	21.025	1.676	304.453	729.548	10.126	1.532.746
2012	0	0	0	0	0	0	0
2013	0	0	0	0	0	0	0
2014	0	0	0	0	0	0	0
2015	**0**	**0**	**0**	**0**	**0**	**0**	**0**
DERİNCE							
2011	1.327.729	6.164	96	1.040.057	12.491	0	2.386.537
2012	1.275.142	15.287	0	668.618	36.845	0	1.995.892
2013	1.422.032	12.618	1.265	844.844	109.218	10	2.389.987
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**
TOTAL							
2011	7.894.528	27.189	1.772	6.355.559	1.032.197	10.126	15.321.371
2012	7.116.784	65.593	0	5.542.780	209.798	0	12.934.955
2013	8.217.980	758.870	1.265	6.708.402	388.461	10	16.074.988
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

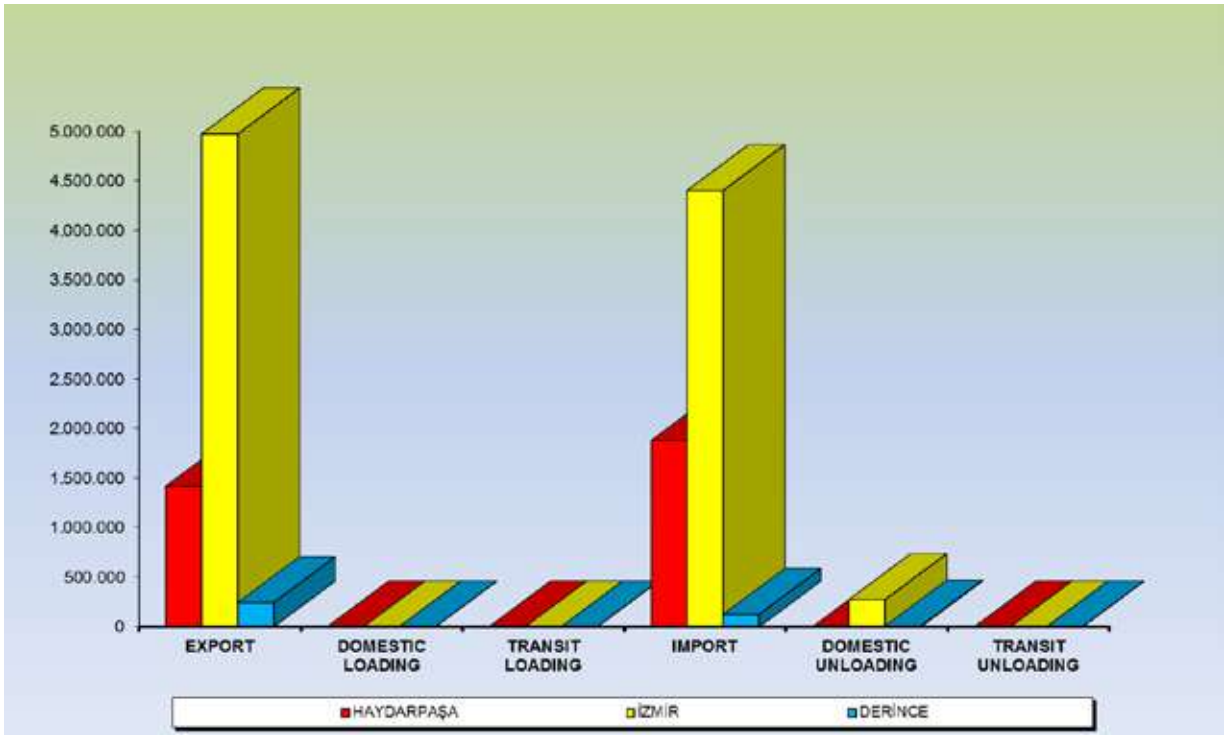
** İskenderun Port was handed over to Limak A.Ş. on 30.12.2011*
** Derince Port 2015 Tonnage is till end of February*

GRAPH (54): TCDD Ports Handling Acc. To Years (Tons)



Source: TCDD

GRAPH (55): 2015 TCDD Ports Cargo Handling Acc. To Transportation Modes



Source: TCDD

Haydarpaşa Port

Haydarpaşa Port is in the province of İstanbul which is 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 aspect.

Haydarpaşa port has all modes of transport such as sea, rail and land road. It renders services 24 hours, the length of berths 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 as a vital function in the Turkish exports.

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

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

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	25.02.2015	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.

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 makes it an ideal transit port for trade to the Middle East and Black Sea regions. With its modern infrastructure and equipments, efficient cargo handling, vast storage areas and its proximity to the Free Trade Zone, Mersin is one the most important ports in 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 Black Sea. Parallel to the development of 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 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.

Access by highway

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

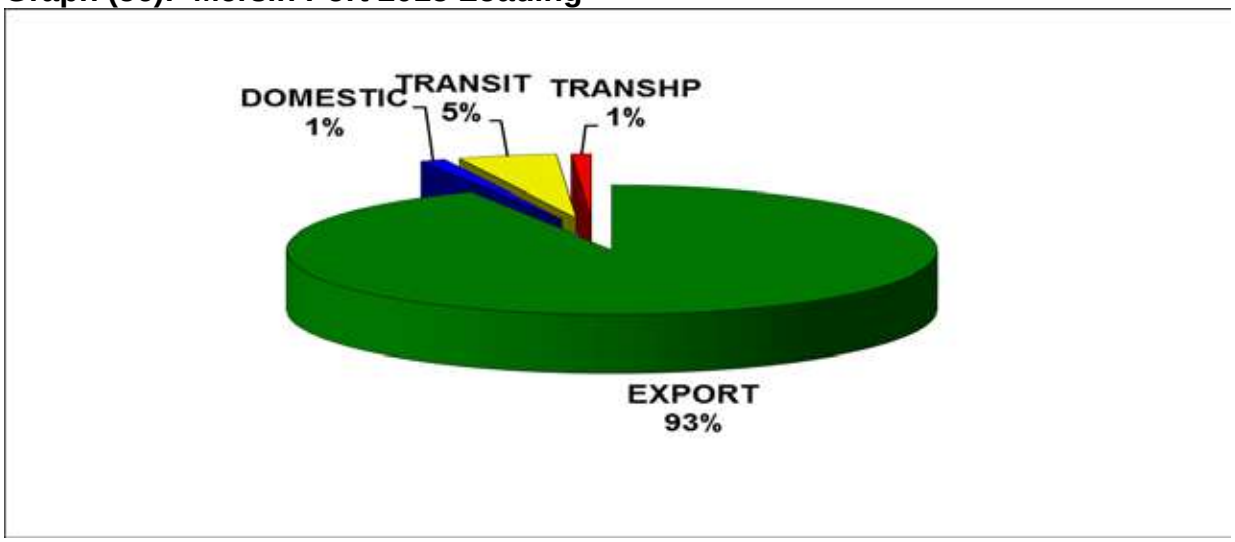
Free Port Zone

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

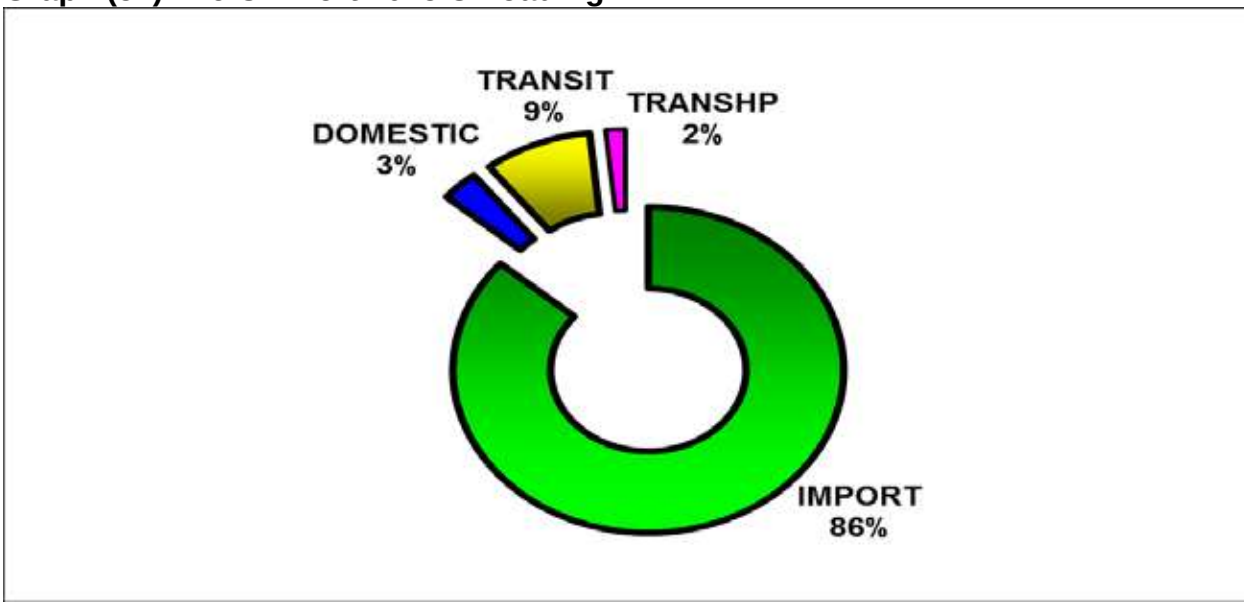
Table (55): Handling Figures – Port of Mersin (2015)

PORT OF MERSİN									
TYPE OF CARGO	LOADING (Tons)				UNLOADING (Tons)				TOTAL
	EXPORT	DOMESTIC	TRANSIT	TRANSHP	IMPORT	DOMESTIC	TRANSIT	TRANSHP	
CEMENT	1.391.677	58.904	33.731		4.576		58		1.488.946
CEREALS	155.794	34.423	745	2.477	1.235.297		3.895	3.700	1.436.331
CHEMICALS	928.585	25	13.856	18.966	2.105.870	9.130	29.051	20.137	3.125.620
CITRUS	130.586		5.303		73.657		2.501		212.047
CNTR			321.398				412.617		734.015
CONST. MACHINERY	8.428		93	83	19.266		4.624	194	32.688
COTTON	82.024	16	2.553	100	243.458		610	99	328.860
FERTILIZERS	104.098	28.089	351	1.032	250.652	73.802	7.777	823	466.624
FOOD STUFF	1.444.534	96	27.800	6.227	784.305	95	73.136	6.802	2.342.995
FROZEN MEAT	3.839		317	16	11.719		39.503	745	56.139
FRUITS	202.246		657	263	217.112		578.115	236	998.629
GENERAL CARGO	2.539.080	5.384	132.075	69.187	2.890.283	27.624	344.186	76.458	6.084.277
GLASS	126.986		183	429	28.530		2.057	429	158.614
LEGUMES	262.199		592		1.017.593	24	10.588	20	1.291.016
LIVESTOCK	126			36	37.266		3.138	36	40.602
MACHINERY	99.269	3	2.694	1.531	111.369	23	8.429	1.663	224.981
MINERALS	1.834.159	2.709	2.934	3.342	277.009	2.750	8.578	186.135	2.317.616
PETR. PRODUCTS	591.224	18.043	6	1.365	4.788.005	472.285	50.607	361	5.921.896
RICE	117.542		3.614	47	360.308		8.704		490.215
SODIUM CARB.	452.731		9.766	16	397				462.910
SUGAR	7.642		5.661		23.643			20	36.966
TEXTILE	434.215		5.667	6.426	713.366		41.049	8.196	1.208.919
TIMBER	10.500		4.137	376	131.170		5.750	702	152.635
VEGETABLE OIL	66.423		1.013	4.601	953.999	23	31.234	4.673	1.061.966
VEHICLES	21.325		4.083	373	130.758	26	33.469	366	190.400
TOTAL	11.015.232	147.692	579.229	116.893	16.409.608	585.782	1.699.676	311.795	30.865.907

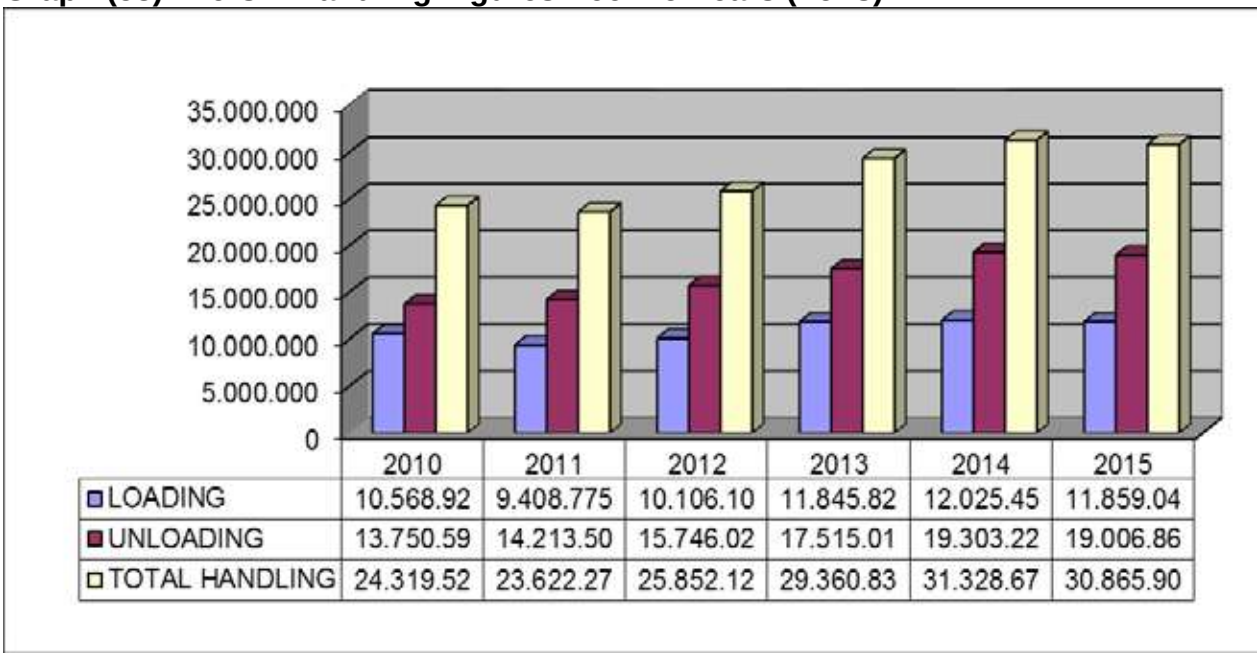
Graph (56): Mersin Port 2015 Loading



Graph (57): Mersin Port 2015 Unloading



Graph (58): Mersin Handling Figures Acc. To Years (Tons)



	2010	2011	2012	2013	2014	2015
LOADING	10.568.92	9.408.775	10.106.10	11.845.82	12.025.45	11.859.04
UNLOADING	13.750.59	14.213.50	15.746.02	17.515.01	19.303.22	19.006.86
TOTAL HANDLING	24.319.52	23.622.27	25.852.12	29.360.83	31.328.67	30.865.90

Source: Mersin DTO, MIP

Samsunport (Samsun)

Samsun port carries out sea transport with Georgia's ports of Batumi, Poti and Suchumi; 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 have connections with Istanbul and all world ports.

Samsunport is the biggest port of Turkey in Black Sea region and also it has a large hinterland. Because of this feature, the said port is a popular place for cargoes which come from and will go to 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 park, making the revision of the present vehicles, construction of new warehouses, silos and liquid tanks.
Storage and port services are provided within 350.000 sqm port area of 445.000 sqm. In Samsun port, there are 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 7,5 to 10 meters.
Dock number 9 has a length of 400 meters and a draft of 6 meters.

Industry Dock

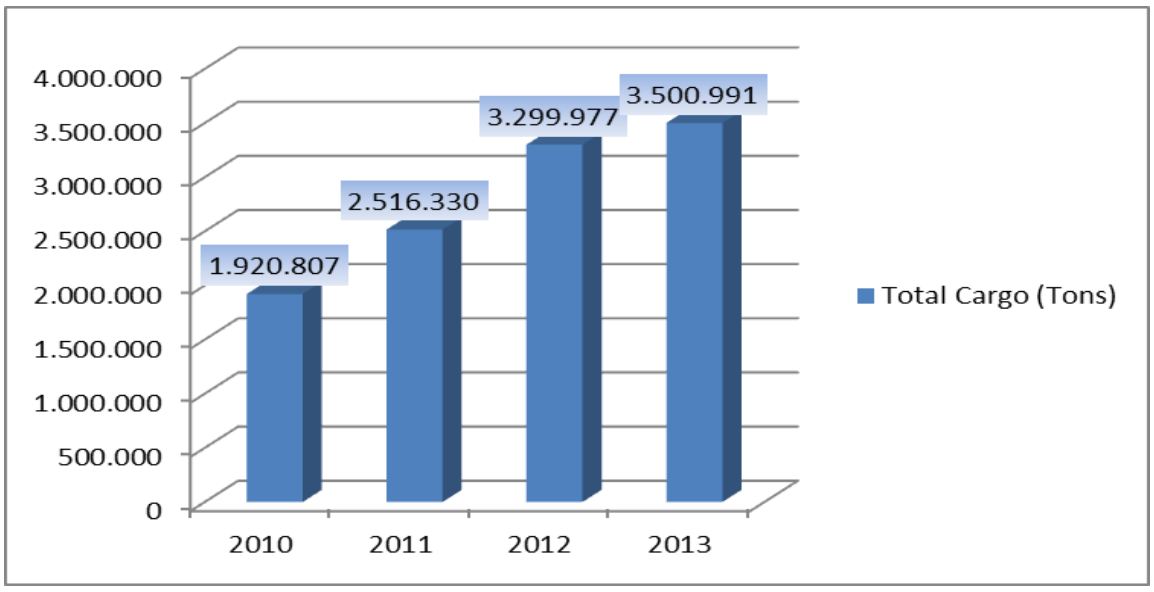
Dock numbers 6-7 have a total length of 400 meters and a draft of 11 meters.
Dock number 8 is Rail ferry Ramp, suitable for 1520 mm rail cars.
1391 vessels called Samsun Port in 2012. Handling Figures of Samsun Port according to cargo groups are as below;

Table (56): Handling Figures of Samsun port Acc. To Years

Year	Dry Bulk (Tons)	Liquid Bulk (Tons)	General Cargo (Tons)		Container (Tons)	Ro-Ro (Tons)	Wagon Ferry (Tons)	**Total (Tons)**
2013	1.657.680	61.558	761.662		486.623	491.547	41.921	3.500.991
2012	1.543.651	55.742	716.700		393.184	528.682	62.018	3.299.977
2011	1.064.298	14.848	805.635		82.212	527.013	22.324	2.516.330
2010	844.993	32.008	637.415		4.015	402.376		1.920.807

Source: Samsunport

Graph (59): Samsun Port Handling Figures Acc. To Years (Tons)



Çelebi Bandırma Port

Port Features	
Coordinates	40 º 21’ 45’’ N - 027º 57’ 50’’ E
Elleçlenen Yük	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
Equipment Parking Area	1.500 m²
CFS	8.000 m²
Total Dock Length	2.973 m

Cargo Capacity	
Containers (Teu/Year)	350.000
Bulk (Tons/Year)	10.000.000
General (Tons/Year)	1.000.000
Liquid Bulk (Tons/Year)	1.000.000
Storage Capacity	
Containers (TEU)	4.195
Bulk / Open Area (Tons)	165.000
Bulk / Closed Area (Tons)	35.000
General (Tons)	110.000
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.

At the port’s 20 docks with a total length of 2,973 meters and with depths ranging from 6 to 11.5 meters, the facility handles 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 system.

The port has two breakwaters, one with a length of 1,000 meters and the other 500 meters, with a clearing of 225 meters between.

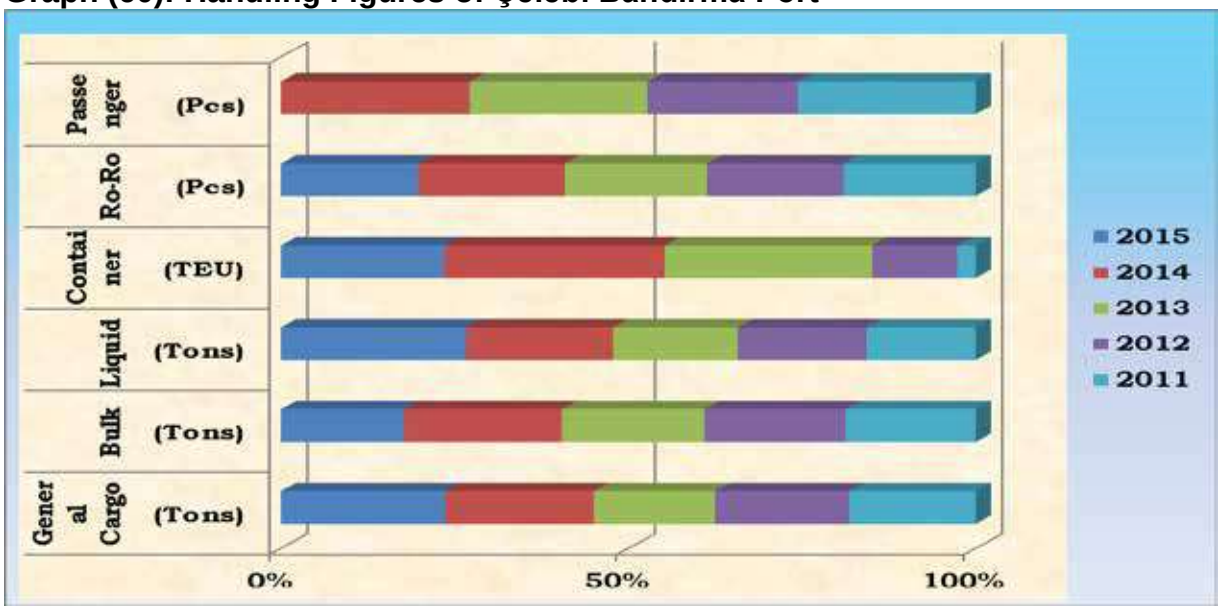
The port of Bandırma boasts the capability to meet the needs of all types of cargoes with 2 Reggiane MHC 200, 1 Gottwald HMK 170, 1 Sennebogen 870 Special, 2 Sennebogen 835R Special, 2 Sennebogen 835M Special, 1 Hyster Block Marble loader with capacity 32 tons, five forklifts with capacities of 3 – 42 tons, two stackers with carrying capacities of 45 tons, one side lifter with a capacity of 8 tons, three mini-loaders, two loaders and other equipment.

Table (57): Handling Figures of Çelebi Bandırma Port Acc. To Years & Cargo Groups

Year	General Cargo (Tons)	Bulk (Tons)	Liquid (Tons)	Container (TEU)	Ro-Ro (Pcs)	Passenger (Pcs)
2015	449.275	3.035.469	324.024	18.613	205.890	
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

Graph (60): Handling Figures of Çelebi Bandırma Port



Limakport İskenderun

Coordinates	36° 36' N, 36° 11' E
Port Field Area	752.000 (m2)
Berthing Place Lengths	1.630 (m)
Berthing Place Depths	Maks. 10-15.5 (m)

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 territories. In this regard it occupies an important place as a transit port. The Port has a breakwater of 1400 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, serves different type of commodities and cargo groups such as general cargo, dry/liquid bulk, container handling, and Ro-Ro vessels.

Table (58): Handling Figures of Limakport İskenderun

Bulk Cargo / General Cargo / Container

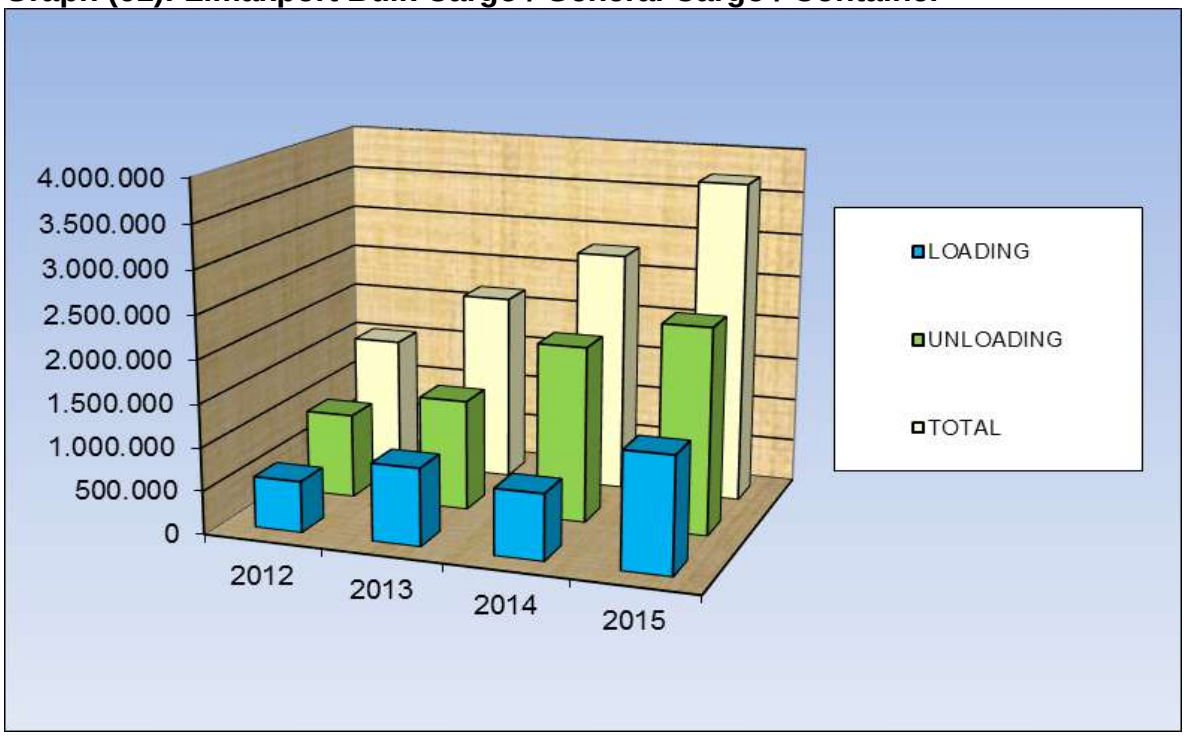
Year	Loading (Tons)	Unloading (Tons)	**Total (Tons)**
2012	594.158	984.486	**1.542.642**
2013	898.509	1.284.899	**2.183.408**
2014	764.444	2.035.390	**2.799.834**
2015	1.338.443	2.378.422	**3.716.865**

Ro-Ro / Ro-Pax

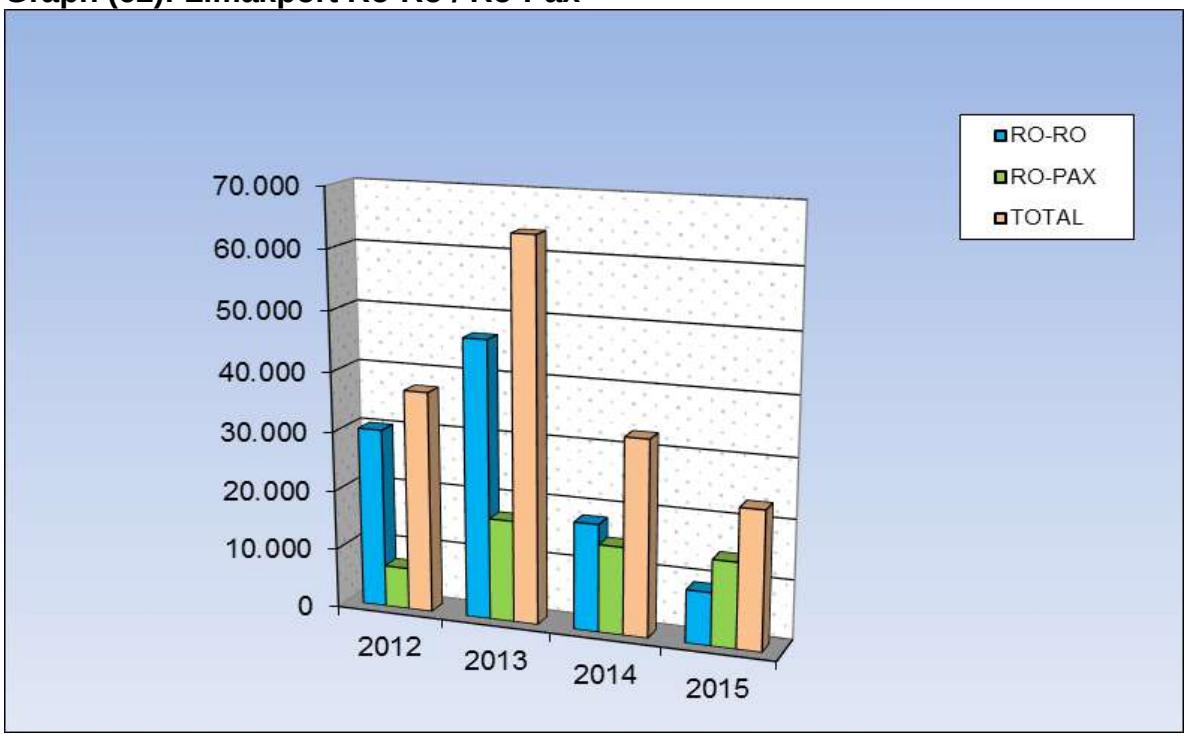
Year	Ro-Ro	Ro-Pax	**Total**
2012	30.208	6.982	**37.190**
2013	46.602	17.087	**63.689**
2014	18.066	14.736	**32.802**
2015	8.888	14.355	**23.243**

Source: Limakport İskenderun

Graph (61): Limakport Bulk Cargo / General Cargo / Container



Graph (62): Limakport Ro-Ro / Ro-Pax



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

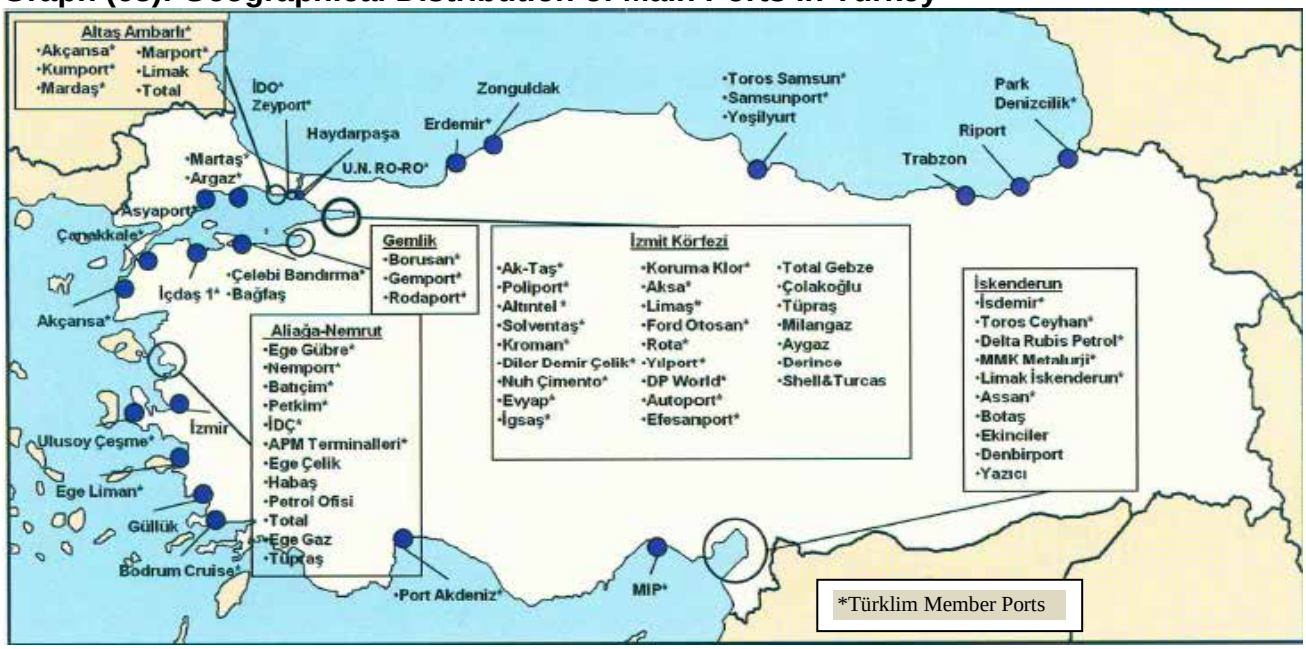
Table (59): Private Ports List
1) ALİDAŞ ALANYA LİMANI 2) ANTALYA LİMANI SERBEST BÖLGE RIHTIMI 3) ÇEKİSAN ŞAMANDIRASI 4) MOİL ŞAMANDIRA PLATFORMU 5) ORTADOĞU ANTALYA LİMAN İŞLETMELERİ A.Ş. (PORT AKDENİZ) 6) POAŞ ANTALYA ŞAMANDIRA TERMİNALİ
7) AKÇANSA ÇANAKKALE LİMANI 8) BAGFAŞ İSKELESİ 9) ÇELEBİ BANDIRMA LİMANI 10) BORUSAN LİMANI 11) BP GEMLİK TERMİNALİ 12) GEMLİK GÜBRE LİMANI 13) GEMPORT 14) RODA LİMANI 15) İÇDAŞ İSKELESİ 16) DOLAMİT MADENCİLİK RIHTIMI 17) ÖZGÜMÜŞ MADENCİLİK RIHTIMI
18) ASYAPORT 19) AUTOPORT LİMAN İŞLETMELERİ A.Ş. 20) AKÇANSA AMBARLI LİMANI 21) AMBARLI DEPOLAMA TESİSLERİ 22) ANADOLU ÇİMENTO TESİSLERİ 23) LİMAK AMBARLI TERMİNALİ 24) AYGAZ LPG DEPOLAMA VE DOLUM TESİSLERİ 25) ÇEKİSAN ÇEKMECE DEPOLAMA 26) KUMPORT LİMANI 27) MARDAŞ 28) MARPORT 29) PETROL OFİSİ HARAMİDERE TESİSLERİ 30) TOTAL HARAMİDERE İSKELESİ 31) ANADOLU YAKASI KUMCULARI İSKELELERİ 32) MOBIL OIL SERVİBURNU İSKELESİ 33) PETROL OFİSİ ÇUBUKLU TESİSLERİ 34) ZEYPORT 35) AKÇANSA YALOVA ÇİMENTO TERMİNALİ İSKELESİ 36) AKSA AKRİLİK KİMYA SANAYİ A.Ş. 37) AKTAŞ TERMİNALİ 38) ALEMDAR DİLİSKELESİ 39) ALTINTEL İSKELESİ 40) AYGAZ YARIMCA DOLUM TESİSİ 41) ARGAZ LPG AKARYAKIT DOLUM VE DEPOLAMA TESİSİ 42) ÇOLAKOĞLU METALURJİ TESİSLERİ 43) DİLER LİMAN TESİSLERİ 44) EVYAP DENİZ İŞLETMECİLİĞİ LOJİSTİK VE İNŞAAT A.Ş. 45) FORD OTOSAN YENİKÖY İSKELESİ 46) GÜBRETAŞ TESİSLERİ 47) HABAŞ TERMİNALİ 48) İGSAŞ İSTANBUL GÜBRE SANAYİ A.Ş. 49) EFESAN PORT

50) KIZILKAYA LİMANI
51) KORUMA KLOR ALKALİ SAN. VE TİC. A.Ş.
52) KROMAN ÇELİK LİMAN TESİSLERİ
53) LAFARGE ASLAN ÇİMENTO İSKELESİ
54) LİMAŞ İZMİT TERMİNALİ
55) MARMARA TRANSPORT İSKELESİ
56) MİLANGAZ ŞAMANDIRA TESİSLERİ
57) NUH ÇİMENTO SAN. A.Ş. (NUHPORT)
58) OPAY PLATFORM İSKELESİ
59) PETLINE PLATFORMU
60) PETROL OFİSİ DERİNCE İSKELESİ
61) POLİPORT
62) SEDEF KONTEYNER TERMİNALİ VE LİMAN İŞLETMELERİ
63) SHELL DERİNCE TESİSLERİ
64) SOLVENTAŞ
65) TOTAL GEBZE TERMİNALİ
66) TURKUAZ İSKELESİ
67) TÜPRAŞ İZMİT RAFİNERİ TESİSLERİ
68) TÜPRAŞ KÖRFEZ SIVI YÜK İSKELESİ
69) YALOVA ELYAF İSKELESİ
70) YARIMCA ROTA LİMANI
71) SAFİ DERİNCE LİMANI
72) DP WORLD YARIMCA LİMANI
73) ERDEM EREĞLİ ÇİMENTO ÖZEL LİMANI
74) ERDEMİR LİMANI
75) EREN HOLDİNG LİMANI
76) BÜTANGAZ TERMİNALİ
77) OPET MARMARA TERMİNALİ İSKELE VE PLATFORMU
78) SALIPAZARI KRUVAZİYER LİMANI
79) MARTAŞ MARMARA EREĞLİSİ LİMAN TESİSLERİ
80) ÇAYIROVA CAM SANAYİ İSKELESİ
81) GİSAŞ TUZLA İSKELESİ
82) U.N. RO-RO PENDİK LİMANI
83) YILPORT

84) AKDENİZ KİMYA NEMPORT LİMANI
85) EGE ÇELİK LİMANI
86) EGE GÜBRE LİMANI
87) EGE GAZ LNG TERMİNALİ
88) HABAŞ İSKELESİ
89) BATIÇİM A.Ş. BATI LİMAN TESİSLERİ
90) İDÇ LİMANI
91) PETROL OFİSİ ALİAĞA TESİSLERİ
92) TOTAL OIL İSKELESİ
93) TÜPRAŞ LİMANI
94) PETKİM LİMANI
95) PETLİM KONTEYNER LİMANI
96) BODRUM CRUISE PORT
97) GÜLLÜK LİMANI
98) ÇEŞME LİMANI
99) DİKİLİ İSKELESİ
100) MOPAK İSKELESİ
101) KUŞADASI YOLCU LİMANI
102) MARMARİS LİMANI

103) LİMAKPORT İSKENDERUN **104) TOROS CEYHAN TERMİNALİ** **105) SAVKA MERSİN TERMİNALİ** **106) ADVANSA SASA POLYESTER TESİSLERİ** **107) ÇEKİSAN ŞAMANDIRASI** **108) GÜBRETAŞ SARISEKİ İSKELESİ** **109) İSDEMİR LİMANI** **110) DELTA PETROL LİMANI** **111) ORHAN EKİNCİ İSKELESİ** **112) YAZICI İSKELESİ** **113) ATAŞ TERMİNALİ** **114) MERSİN LİMANI** **115) MMK ATAKAŞ DÖRTYOL LİMAN İŞLETMESİ** **116) MESBAŞ RIHTIMI** **117) SAVKA PLATFORMU** **118) SANKO LİMAN TESİSİ** **119) ENERJİ MERSİN TERMİNALİ**
120) SAMSUNPORT **121) TOROS TARIM SANAYİİ SAMSUN LİMAN İŞLETMESİ** **122) SÜRSAN ŞAMANDIRASI** **123) ORDU LİMANI** **124) AYGAZ ŞAMANDIRALARI** **125) PETROL OFİSİ ŞAMANDIRALARI** **126) TOTAL OIL ŞAMANDIRASI** **127) YILDIZ ENTEGRE AĞAÇ SAN. ŞAMANDIRASI** **128) SİNOP LİMANI** **129) YEŞİLYURT LİMANI**
130) GİRESUN LİMANI **131) PARK DENİZCİLİK HOPA LİMAN İŞLETMELERİ A.Ş.** **132) RİPORT** **133) ÜNYE ÇİMENTO TESİSİ LİMANI** **134) POAŞ ŞAMANDIRA TESİSLERİ** **135) TRABZON LİMANI**

Graph (63): Geographical Distribution of Main Ports in Turkey



Source: TURKLIM

CHAPTER V

THE TURKISH STRAITS AND MARITIME TRAFFIC SYSTEMS

The region consisting of the Turkish Straits, called İstanbul and Çanakkale Straits and the Sea of Marmara, is one of the regions that has the highest concentration of maritime traffic in the World.

Turkish Straits consist of the Istanbul Strait 17 nm in length, 110 nm the vessels navigating area in Marmara Sea and Çanakkale Strait in length 37 nm. Total length of the Turkish Straits is 164 nm and it is opened to international maritime vessel traffic under the Turkish governmental control.

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 given high importance both from geomorphological and hydrographical aspects, especially for having 12 sharp turning points with 45º in front of Istanbul Strait-Kandilli and 80º in front of Yeniköy and with complex currents which reach to a relative speed of 4-5 knots.
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 movement alone in the Strait of Istanbul is more than 2500. More than 2.5 million people are daily in a movement at sea crossing from one side to another in Istanbul. 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 number of vessels that passed through the Turkish Straits between the years 2000-2015 are shown in Tables (60) and (61).

In the year 2015, 43,544 ships in total have passed through the Istanbul Strait with a monthly average of 3628 ships; 43.230 ships in total have passed through the Çanakkale Strait with a monthly average of 3602 ships. Daily averages are 120 ships for İstanbul Strait and 120 ships for Çanakkale Strait.

In addition to these figures, approximately more than two million people pass across the İstanbul Strait daily by small passenger vessels. This value is four times higher than Suez Channel and three times than Panama Channel. This density of traffic between Asia and Europe increases by the population of İstanbul which has reached nearly 15 million. The statistics of ships passing through İstanbul and Çanakkale Straits, according to length, piloting and on country basis are shown in the following Tables (62) and (63). Tables (64) and (65) also show the segments of the ships passing through the straits according to monthly averages.

TABLE (60): Ressume of Statistics of Ships Passing Throught İstanbul Strate

Years	Total Ships	Danger Goods	%	(Tonnes)
2000	48.079	6.093	13	91.045.040
2001	42.637	6.516	15	101.000.000
2002	47.283	7.427	16	122.953.338
2003	46.939	8.097	17	134.603.741
2004	54.564	9.399	17	143.448.164
2005	54.794	10.027	18	143.567.196
2006	54.880	10.153	19	143.452.401
2007	56.606	10.054	18	143.939.432
2008	54.239	9.303	17	140.357.231
2009	51.422	9.299	18	144.656.744
2010	50.871	9.273	18	146.748.375
2011	49.798	9.113	18	138.496.245
2012	48.328	9.027	19	140.411.265
2013	46.532	9.006	19	141.411.390
2014	45.529	8.745	19	133.961.223
2015	43.544	8.633	20	141.525.506

TABLO (61): Ressume of Statistics of Ships Passing Throught Çanakkale Strate

Years	Total Ships	Danger Goods	%	(Tonnes)
2000	41.561	7.529	18	102.570.322
2001	39.249	7.064	18	109.000.000
2002	42.669	7.627	18	130.866.598
2003	42.648	8.114	19	145.154.920
2004	48.421	9.016	19	139.203.656
2005	49.077	8.813	18	148.951.376
2006	48.915	9.567	20	152.725.701
2007	49.913	9.271	18	149.320.062
2008	48.978	8.758	18	149.052.174
2009	49.453	9.567	19	152.105.494
2010	46.686	9.250	20	156.928.857
2011	45.379	8.828	19	156.327.711
2012	44.613	8.998	20	161.612.965

2013	43.889	9.299	21	159.827.684
2014	43.582	9.250	21	152.285.618
2015	43.230	9.524	22	162.224.530

TABLE(62): State Statistics for Ships with Pilot by Months and by Their Dimensions (İstanbul Strait 2015) x: With Pilot #:Total

Months	Bigger Than 300 mt.		Between250-300mt.		Between200-25mt.		Between150-200mt.		Between100-150 mt.		Smaller than 100mt.	
	#	X	#	x	#	x	#	x	#	x	#	x
Jan.	0	0	107	107	213	213	845	700	1.293	597	1.041	322
Feb.	0	0	95	95	189	188	834	711	1.260	633	942	313
March.	0	0	119	119	222	222	868	722	1.395	639	1.144	339
April	0	0	105	105	209	208	829	679	1.318	608	1.079	286
May	0	0	99	99	211	209	827	662	1.393	668	1.231	335
June	0	0	105	105	200	198	805	662	1.386	638	1.170	347
July	0	0	104	104	251	250	831	657	1.318	666	1.207	316
Aug.	0	0	112	112	242	241	922	742	1.244	525	1.044	297
Sept.	0	0	109	109	220	218	877	701	1.254	508	1.021	277
Oct.	0	0	112	112	240	236	874	730	1.456	606	1.067	313
Nov.	0	0	113	113	210	206	807	660	1.366	557	1.207	303
Dec.	0	0	103	103	240	240	916	759	1.495	661	1.048	298
Total	0	0	1283	1283	2647	2629	10235	8385	16178	7306	13201	3746

X: With Pilot #: Total ships

TABLE(63): State Statistics for Ships With Pilot by Months and by Their Dimensions

(Çanakkale Strait 2015) x: With Pilot #:Total

Months	Bigger Than 300 mt.		Between250-300mt.		Between200-25mt.		Between150-200mt.		Between100-150 mt.		Smaller than 100mt.	
	#	X	#	X	#	X	#	X	#	X	#	X
Jan.	10	10	159	151	239	192	1042	608	1033	291	691	163
Feb.	12	12	162	156	247	207	1030	591	1014	298	672	136
March.	10	10	178	167	271	235	1107	620	1212	383	825	179
April	8	8	187	183	269	218	1087	646	1164	378	817	204
May	17	17	194	184	281	231	1156	652	1145	355	868	199
June	13	13	208	200	265	209	1102	595	1162	353	905	210
July	17	17	202	198	319	242	1098	573	1062	314	878	196
Aug.	15	15	201	197	326	252	1173	607	1147	346	878	204
Sept.	10	10	201	200	314	235	1176	610	1148	333	897	158
Oct.	10	10	211	209	314	248	1206	695	1257	364	907	199

Nov.	**11**	**11**	**177**	**174**	**287**	**217**	**1095**	**609**	**1161**	**317**	**863**	**157**
Dec.	**10**	**10**	**175**	**173**	**312**	**246**	**1215**	**672**	**1293**	**365**	**922**	**196**
Total	**143**	**143**	**2255**	**2192**	**3444**	**2732**	**13487**	**7478**	**13798**	**4097**	**10123**	**2201**

TABLE (64): The Segments of the Ships Passing Through the İstanbul Strait According to Monthly Averages.

TYPE	Jan.	Feb.	March	April	May	June	July	Aug	Sept.	Oct.	Nov.	Dec.	total
BARGE CARRIER	0	0	1	1	0	0	2	2	6	0	0	1	17
BULK CARRIER	581	567	561	571	565	555	616	724	699	709	646	691	7,485
CEMENT CARRIER	0	0	0	0	0	2	0	2	4	0	0	0	8
CONTAINER SHIP	244	207	264	226	240	223	198	210	204	215	196	237	2,664
FERRY	0	0	2	,	0	0	0	0	0	0	0	0	2
GENERAL KARGO SHIP	1,768	1,686	1,880	1,826	1,978	1,932	1,933	1,777	1,750	1,906	2,022	1,954	22,412
LIVESTOCK CARRIER	25	23	18	42	41	41	42	44	46	32	38	42	434
NAVAL	14	17	23	15	27	25	29	31	32	46	26	33	318
PASSENGER SHIP	25	24	26	39	38	38	40	47	46	51	38	32	444
REFRIGERATED CARGO CARRIER	1	3	2				2	2	2	5	4	3	24
ROLL ON ROLL OF VESSEL	23	27	35	32	43	40	38	22	25	41	29	22	377
OTHER TANKER, TTA	527	460	558	491	509	493	505	435	426	451	463	507	5,825
CHEMICAL TANKER, TCH	130	144	157	146	115	135	125	118	103	132	123	148	1,576
LIQUEFIED PETROLEUM GAS -NATURAL GAS TANKER, LPG LNG	113	123	150	92	108	102	89	79	97	98	84	97	1,232
TUG	10	11	29	25	44	33	31	34	16	15	15	19	282
VEHICLE CARRIER	6	4		1	1			3	2				17
OTHER	32	24	42	33	52	47	61	34	23	44	19	16	427
TOPLAM	3,499	3,320	3,748	3,540	3,761	3,666	3,711	3,564	3,481	3,749	3,703	3,802	43,544

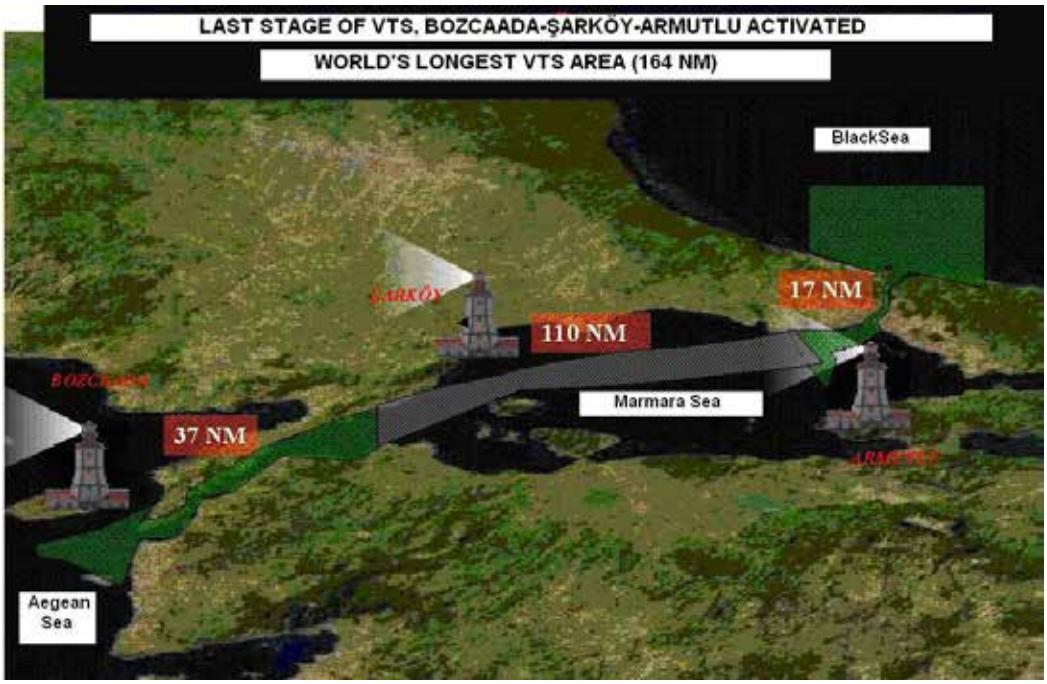
TABLE (65): The Segments of the Ships Passing Through the Çanakkale Strait According to Monthly Averages.

TYPE	OCAK	ŞUBAT	MART	NİSAN	MAYIS	HAZİRAN	TEMMUZ	AĞUSTOS	EYLÜL	EKİM	KASIM	ARALIK	TOTAL
BARGE CARRIER	1	0	4	1	6	5	0	2	7	4	3	1	34
BULK CARRIER	591	575	587	580	575	578	636	748	735	732	662	715	7,714
CEMENT CARRIER	1	2		1									4
CONTAINER SHIP	329	334	388	378	392	364	337	341	343	372	359	409	4,346
FERRY		3	2	3	1	0	0	1	3	1	0		14
GENERAL KARGO SHIP	1,195	1,152	1,355	1,309	1,375	1,400	1,304	1,428	1,357	1,459	1,422	1,526	16,282
LIVESTOCK CARRIER	28	26	20	38	46	48	46	47	56	37	39	47	478
NAVAL	14	17	23	19	32	25	34	30	34	49	26	38	341
PASSENGER SHIP	11	7	13	90	102	103	104	92	124	108	26	3	783
REFRIGERATED CARGO CARRIER	7	7	5	2	10	4	8	11	9	8	13	7	91
ROLL ON ROLL OF VESSEL	163	163	213	208	213	209	200	183	205	209	200	207	2,373
OTHER TANKER, TTA	513	486	563	505	510	526	484	469	487	478	462	526	6,009
CHEMICAL TANKER, TCH	177	178	216	214	191	196	214	206	195	244	202	246	2,479
LIQUEFIED NATURAL GAS TANKER, LNG	11	11	11	12	11	7	8	6	9	7	12	16	121
LIQUEFIED PETROLEUM GAS TANKER, LPG	63	103	110	72	75	77	64	59	71	67	73	81	915
TUG	24	13	24	32	42	22	31	39	26	22	28	25	328
VEHICLE CARRIER	26	40	30	33	33	33	35	26	35	45	36	43	415
OTHER	18	15	37	32	47	58	71	50	45	63	31	36	503
TOTAL	3,172	3,132	3,601	3,529	3,661	3,655	3,576	3,738	3,741	3,905	3,594	3,926	43,230

Turkish Straits Vessel Traffic Services - Additional Traffic Monitoring Stations

Turkish Straits Vessel Traffic Services (VTS) was put into service on 30 December 2003 with the purpose of lessening the risks of maritime accidents which may happen and directing the maritime traffic in the area with continuous observations made and increasing the safety of life, properties and the environment in the Turkish Straits and in the Sea of Marmara. The construction and infrastructure works of three Traffic Monitoring Stations (TMS), Armutlu TMS, Bozcaada TMS and Şarköy TMS and the mounting of the electrical - electronic systems and equipments on the TMS Towers were completed and the system was put into service on 2 July 2008.

The Sea of Marmara has been integrated into the main system as of 2009 and the whole of the area within the Traffic Separation System in the Sea of Marmara and also an area of 20 sea miles West and South of Bozcaada have been taken into coverage. As of 2010 it is possible to make a continuous detecting of ships sailing from the Aegean Sea to the Black Sea.



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 sub system of data processing and also with the purpose of adding to the system the necessary applications, additional equipments, operational and management characteristics, plans have been made for adjudication concerning the said work.

Vessel Traffic Management System (VTMS) Project

Within the scope of the Project for Vessel Traffic Management System (VTMS) the installation of which is continued by the related Ministry, it is planned that Regional Vessel Traffic Services (VTS) be built in order to increase the navigation safety in İzmit, İzmir, Iskenderun and Mersin regions in which vessel traffic is intense and risky. İzmit and İzmir VTS will become operational in 2014.

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 protecting 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 Surveillance Posts and 3 Vessel Traffic Services Centers.
Via the Vessel Traffic Management Center (VTMC) to be established in Ankara, the following shall be ensured

- Creating a single territory image by combining and integrating the sea images created in Regional VTS Centers (Istanbul VTSC, Canakkale VTSC, İzmit VTSC, Izmir VTSC, Mersin VTSC) with the other systems (such as LRIT, OTS, e-maritime software etc.)
- Monitoring and following up the movements of vessels and cargoes (all movements and operations as from their first notification before arrival to their leave from the port area) in all ports throughout the country in order to ensure them to be used in a safer and more efficient way.
- Oil pollution follow-up in Izmit Bay, which has been selected as pilot area
- Crisis management in emergencies (SAR)
- Ensuring that all ports and other users included in the system can, as a part of the system, receive and enter information from/in the system
- Entire or a part of the territory image which can be monitored and managed by high-level officers in their place of duty.

All organizations such as Port Authorities, VTS', Agencies, Port Facilities, Pilotage Organizations, Tug boating Organizations can send and receive data to/from VTMC and carry out operations via VTMC.

In addition, such institutions as Navy, Coast Guard Command, General Directorate of Security Affairs, Ministry of Customs and Trade etc. Can also send and receive data to/from VTMC and carry out operations via VTMC. The Factory Acceptance Tests for the electrical and electronic equipment and software of the system has been completed, the devices to be used in the system have been shipped in the country: 24 TMS and 3 VTMC construction progress are completed.

Automatic Identification System (AIS)

The Headquarters of Automatic Identification System (AIS) was inaugurated on 9 July 2007 with the aim of increasing the safety of navigation, life, properties and environment and also, to lessen the occurrence risk of the maritime accidents and to control the maritime traffic continuously.

By the AIS Base Stations established throughout the shores of Turkey, the vessels can be investigated automatically, therefore, it is possible to control effectively the ships navigating in the seas surrounding our country.

The VHF Channels to be used in the AIS System were determined by IMO as the Channels 87 and 88, these Channels which had double characteristics previously have been changed to simplex; their frequencies being 161,975 MHz and 162,025 MHz

- ü OTS Base Stations (Stations based at the coast, through which data of the vessels are automatically received)
- ü OTS Main Center (Center where data received from all OTS Base Stations are collected, viewed and processed)
- ü Onboard OTS Terminals (Terminals with which the vessels will be equipped based on a certain operation calendar)
- ü OTS User Centers (Agencies and bodies receiving OTS data through linking with OTS Main Center)

OTS Main Center is the unit where data received from all coastal base stations are collected and transferred to relevant agencies and bodies such as Turkish Naval Forces, Turkish Coast Guard Command and Directorate General of Coastal Safety through a Network infrastructure. In such unit, all vessels within the coverage of OTS Base Stations and equipped with such terminals can be monitored close to real time (with 2 – 6 seconds delay) by means of the electronic map imaging system and the OTS software and digital maps operating on that system.

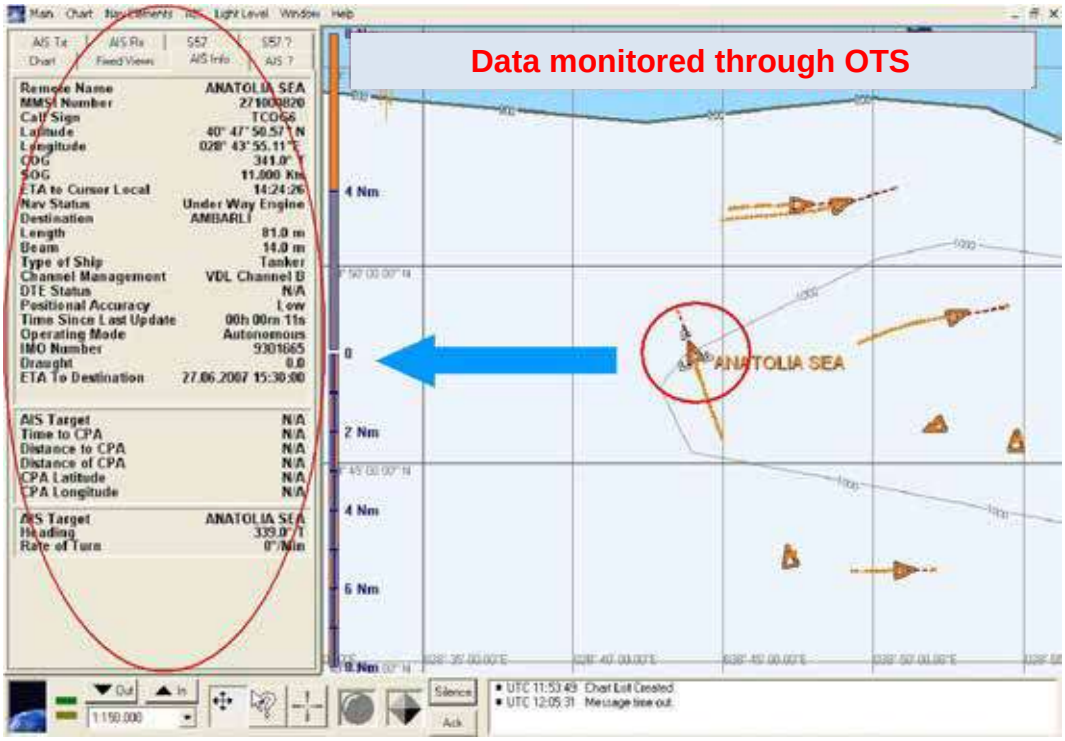
It is very important that the system infrastructure is installed on an elevated location in order to allow that the OTS Base Stations to be used between the vessels and the land have an effective coverage. Since such system operates on VHF band, it is essential that the antennas have optical sight of each other during communication between the vessels and the land. Unless the territorial OTS Base Stations are not at sufficient elevation, it is very difficult to achieve unproblematic communication particularly at indented coastal band.

The data that can be sent by the onboard OTS terminals to the coastal base and control stations, as well as those that can be transferred to relevant agencies and bodies through the coastal stations are summarized in the following headings and items.

Data Monitored Through OTS

Static Data

MMSI number
IMO (International Maritime Organization) number
Name of vessel and call sign
Type of vessel
Length and width of vessel
Tonnage of vessel
Antenna position of onboard AIS terminal



Dynamic Data

Location of vessel
Time
Route to ground (real route)
Speed to ground
Relative route
Status (underway, anchored, etc.)
Rate of turn

Navigational Data

Draught of vessel
Cargo
Port of destination and ETA (estimated time of arrival at the port)
Other Data of Vessels that may be required;
Starting port
Port of destination
Time of start of navigation
If anchored, anchoring location
Purpose of anchoring
Other necessary data

Transmission of text messages between the vessel and the coast is also possible owing to OTS. Thus, it is possible to send and receive official and private messages through the existing system infrastructure.

One of the most important issues regarding OTS is that in case of any emergency of the vessel (fire, conflict, grounding, accident, etc.), she can urgently inform the

situation to the coastal stations and that coastal stations can intervene at short notice because the vessel's location is known.

OTS has an open architecture regarding its coastal infrastructure; it is possible to transmit the collected data to the desired agencies and bodies and private firms, when necessary, within certain authorizations owing to Networks technology. Thanks to this feature, it is also possible to commercially utilize and make revenues through OTS.

In conclusion, OTS, the standards and activity calendar regarding installation on vessels of which was decided upon by IMO, of which Turkey is also a member, is a system designed to meet the needs of agencies and bodies in the naval sector of our country in technical terms.

OTS, which our country having coasts can use for interrogating the vessels navigating on surrounding seas and narrow waters such as straits and inland waters and for automatically receiving data on identifications, speeds, positions, etc. of such vessels, can also be effectively used by relevant agencies and bodies for state security. Real-time monitoring of unmilitary vessels in order to effectively and economically carry out particularly missions and operations such as naval search and rescue operations, combat with trafficking and prevention of marine pollution is considered as an indispensable necessity. Numerous objectives such as;

- ü Rendering our coasts more secure and safer for navigation,
- ü Being able to prevent maritime accidents and to contribute to urgent intervention to maritime accidents,
- ü Becoming more effective in Search and Rescue operations,
- ü Being capable of preventing trafficking and illegal migration,
- ü Being able to take fishing activities under control,

were achieved through OTS.

OTS Class-B CS

It is also one of our most important objectives to make maximum use of all capabilities provided by OTS, which was established in order to promote safety of navigation and maritime security in our country. It becomes possible to monitor all Vessels and marine vessels equipped with OTS device through this system. It is brought to the agenda during IMO meetings that vessels and marine vessels not subject to SOLAS should also be monitored; however, as IMO cannot impose compulsory rules for such vessels, the member states implement their own regulations. Arrangements were also made by the EU through directive no. 2244/2003 for satellite monitoring of fishing boats, and studies were initiated to ensure that fishing boats with a length of 15 meters and more are equipped with OTS devices, because satellite monitoring is very costly. International manufacturing and standardizing studies for OTS Class-B device, which has more limited features and is to be used by vessels out of SOLAS (Safety of Life At Sea) scope, have been commenced along with those for OTS Class-A device used by vessels within the scope of SOLAS. Studies were initiated in Turkey in 2005 by our Telecommunications Authority in order to encourage the manufacture of OTS

Class-B device. Presently, Turkish firms have completed the manufacturing studies for OTS Class-B device incorporating additional national functions, and the communiqué regulating the types and sizes of vessels where OTS Class-B CS device is to be installed and the procedures and principles that should be fulfilled has entered into effect upon publication in the Official Gazette no. 26640 dated 11/09/2007.

Long Range Identification and Tracking (LRIT) System

Under the studies initiated at IMO upon maritime security becoming one of the most prioritized issues after the terrorist attacks in the USA on 11 September 2001 and AIS allowing tracking of vessels sailing within a certain range from the coast, IMO has started to establish a “Long Range Identification and Tracking System” (LRIT) as the necessity of tracking vessels at longer ranges (out of the coverage of AIS) was acknowledged and the terrorists started to target maritime transportation.

The intense studies carried out by the Maritime Safety Committee (MSC) of IMO for this system planned to track vessels at long distances through satellites were eventually finalized upon working on and completing the LRIT performance standards and functional requirements developed by COMSAR Sub-committee during the 81st Period Meeting held in May, and the LRIT System was accepted. Thus, the following vessels navigating internationally can be tracked:

- ü Cruise liners including high-speed passenger boats
- ü 300 GT and higher capacity cargo vessels including high-speed boats
- ü Mobile offshore drilling units

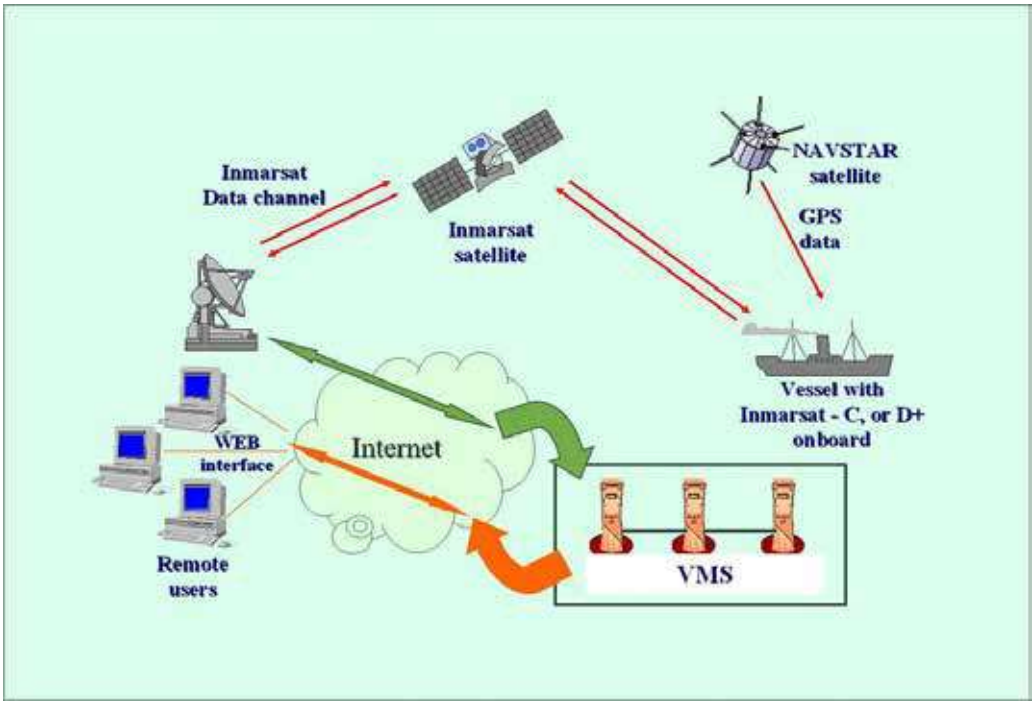
IMO member states will be able to receive long range identification and tracking information of the vessels with respect to security and other issues agreed by IMO. The responsibilities of countries as flag, port and coast states are defined.

Owing to LRIT, the countries can interrogate;

- ü Vessels flying their flag
- ü Vessels arriving at and leaving their ports
- ü Vessels passing from up to 1000 miles from their coasts
- ü Vessel/s aimed at search and rescue

within the framework of rules set by IMO.

LRIT System is presently planned to be activated using Inmarsat Satellites. The cost of requested LRIT information shall be fully borne by the requesting State Party; no cost shall be burdened to the vessels. The units of State Parties providing Search and Rescue Services shall be able to receive the LRIT information for Search and Rescue purposes free of charge.



Operating Principle of LRIT

Each Administration shall decide on choosing the LRIT Data Center where it shall provide the LRIT information of the vessels under its flag. Each administration shall inform the following data of the vessels under its flag, identified to provide the LRIT information of to the LRIT Data Center it chooses, and shall keep such information up-to-date.

- ü Vessel name
- ü IMO number
- ü Call sign and
- ü MMSI number

The vessels shall only transmit LRIT data to the LRIT Data Centers nominated by their respective administrations.

Pursuant to SOLAS Section V, Rule 19/1; all cargo vessels with 300 GT and higher capacity, cruise liners, high-speed boats and offshore drilling units navigating internationally shall be equipped with LRIT. In this context, the vessels built after 31 December 2008 shall directly comply with this system and those built before 31 December 2008 shall comply with the system incrementally until the first radio survey after 01 July 2009.

LRIT Current Situation

Global data sharing has been launched in LRIT System as from 30.09.2009. The National LRIT Data Center of our country was installed by TÜRKSAT A.Ş. in the physical environment of Radio Operation Directorate of the General Directorate of Coastal Security. In this context, the companies to carry out LRIT compatibility test on the vessels flying Turkish flag to be traced via the system in question have been authorized by our Directorate and the tests of vessels flying Turkish Flag have been completed and these vessels certified.

The National LRIT Data Center of our country has successfully passed the testing process coordinated by International Maritime Organization (IMO) and mandatory for data centers for integration with global LRIT system on 08/03/2010.

It has been possible with LRIT system to monitor the vessels flying Turkish flag everywhere in the world and vessels flying foreign flags for a distance of up to 1000 nautical miles from the coast. LRIT system operates by using INMARSAT satellites and the cost of the LRIT information requested is completely covered by the requesting Signatory States and there is no cost burden on vessels. The Signatory States' units providing Search and Rescue Services can obtain LRIT information with no charge for Search and Rescue purposes.

Main Search and Rescue Coordination Center (MSRCC)

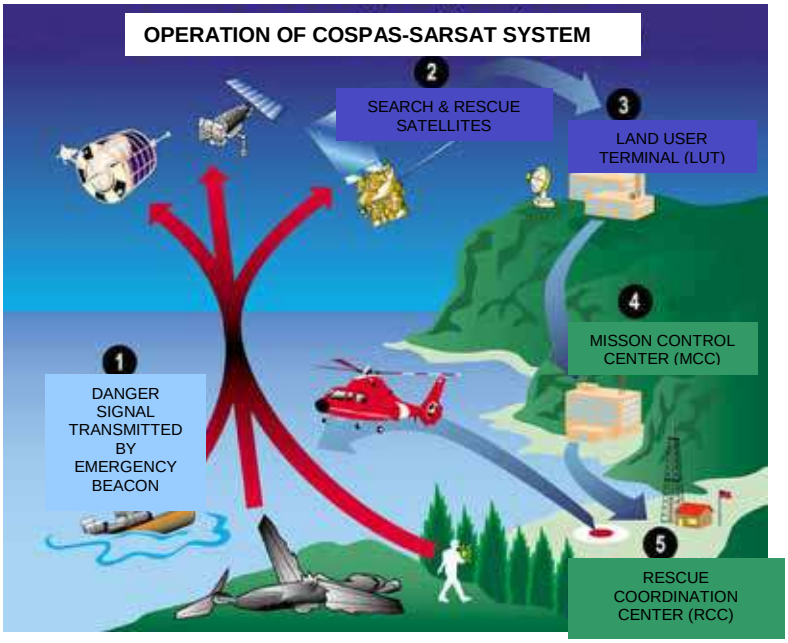
The Cospas-Sarsat System

The Cospas-Sarsat system is an international system ensuring detection via COSPAS and SARSAT satellites of the location of accident where any vessel, aircraft or persons have been engaged in an accident which notified by signals they transmitted via 406 MHz frequency, and promptly taking of action for rescue required.

The COSPAS-SARSAT system consists of two basic units; space segment and ground segment;

The space segment consists of COSPAS, SARSAT and Geosynchronous satellites. The ground segment consists of transmitters / beacons (EPIRB, ELT, PLB) transmitting the danger signal, LUTs (Local User Terminal), MCC (Mission Control Center) and RCC (Rescue Coordination Centre).

Operation of the system can be summarized as follows: An emergency signal is transmitted by the beacon in every direction at the time of accident, and this signal is received and sent to the earth by the satellites. These signals transmitted by the satellites are received by LUTs, and reflected to MCC with identity, location and other data. The MCC collects and evaluates these signals from LUTs and sorts necessary data (position, identity) and transmits them to relevant RCC. The RCC takes necessary search and rescue action in line with the data received.



Each country may have as many LUT as it desires, but not more than one MCC.

Cospas-Sarsat System in TURKEY

The system serves in Turkey with 3 LUTs, 1 MCC and 4 RCCs.

2 Units of LEOLUT and 1 Unit of GEOLUT Unit:

Installed at Esenboğa Airport.

LEOLUT

It is a terrestrial receiver station. It receives accident signals (460 MHz) transmitted by satellites by tracing the satellites, and establishes the Doppler curves by separating the signals from the noise. It calculates the satellite locations using the Doppler curves to locate the accidents (A&B solutions). It sets the parameters of accident warning device and sends the device parameters to MCC.

GEOLUT

It is an earth receiver station. It receives the accident signals (460 MHz) and, if entered, the position data transmitted by the satellite, by tracing a stationary Geosynchronous satellite, it sets the actual frequency of the accident warning device and sends the device parameters to MCC.

Turkish Mission Control System (TRMCC)

It is installed at the Main Search and Rescue Coordination Center of Directorate General of Maritime and Inland Waters regulation.

It monitors and controls the LUT operations. It analyses and filters the data received from LUTs and other MCCs. It sends these processed data to relevant RCCs and, if required, other MCCs. It ensures uninterrupted communications with other MCCs for 24 hours.

4 units of RCC Units:

1 unit of RCC is installed at the Main Search and Rescue Coordination Center of The Ministry of Transportation, Maritime Affairs and Communications.

1 unit of RCC is installed at the Turkish Coast Guard Command
1 unit of RCC is installed at Atatürk Airport
1 unit of RCC is installed at Esenboğa Airport.

MEOSAR System

MEOSAR (Medium-Altitude Earth Orbiting Satellite System for Search and Rescue) system, which is also known as the next generation of COSPAS-SARSAT System, will be implemented by MEO satellites which are planned to be used within COSPAS-SARSAT System as located at medium altitude (20.000 km).

Compared to the existing ones, MEO satellites provide a global coverage by moving so that it can cause a larger footprint and enable LUT to monitor multiple MEO satellites simultaneously and to locate the beacon position in a more rapid and sensitive way relative to the existing system.

In order for our country to benefit from the MEOSAR system, as result of the cooperation with the general Directorate of State Airports Operations, the purchasing process has been started and the installation of the system was completed in August 2010. Our country is the 6th country which installed this system.

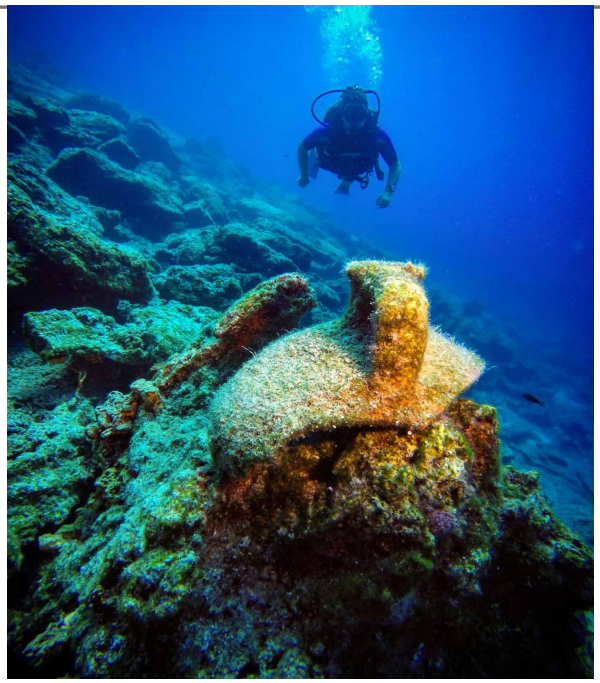
In addition to MEOSAR system, the existing COSPAS-SARSAT system was expanded and the system will have been modernized in the forthcoming decades.

With the MEOSAR system fully commissioned,

- All earth will be within the coverage,
- Any point on the earth can be viewed by multiple satellites at the same time,
- Localization even with only one signal will be possible,
- There will be only one resolved localization rather than A and B localizations which are caused due to Doppler shift calculation in the existing system,
- Localization and monitoring of a moving beacon will be possible.

With scope of MEOSAR System satellites are being launched by USA (GPS/DASS), European Union (GALILEO) and Russia (GLONASS) (*it is planned to use about 80 satellites when the system becomes fully operational*) and through the instrumentality of such satellites, the countries which have established their MEOLUTs has already started to collect analytic data.

MEOSAR System is expected to replace the Cospas-Sarsat system completely by the end of 2010s.



THE DEVELOPMENT OF TURKISH SHIPPING

SEA TOURISM

CHAPTER VI

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 chest of 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 hospitable 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 an appreciation of nature. From some of the turquoise coast's unspoilt and sheltered bays mountain peaks rising to almost 3.000 meters above sea level can be seen.

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

Marine tourism revenue is 20 % percentage in the General Tourism

Place; GOCEK In Fethiye (12 Islands)

As from the 1970's, taking into consideration, firstly the contributions made to the Turkish economy by the yacht tourism and then by 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 and Marmaris 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 define and to establish the concept of “Maritime Tourism” which has not been mentioned sufficienrtly in the Shipping Sector and also at various platforms and specially almost not mentioned at all in the public sector.

- **Yacht Tourism**

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.
Apart from the traditional wooden yachts we also provide other types of boat building in Turkey
For example Antalya has been announced as the 5th city in the world for Composit Boat Building in 2008
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 boats even in their back yards.

SEA TOURISM INVENTORY

A) SEA TOURISM FACILITIES		**Qty**
Yacht Ports		**84**
Cruise Ports		**24**
B)SEA TOURISM VEHICLES		
Yachts (Schooners, etc.)		**1529**
Bare-Boat		
(Ministry of Culture&Tourism approved, foreign-flag)		**871**
Daily Excursion Boats		**1051**
Floating Restaurants		**47**
Inland Waters Excursion Boats	(approx.)	**1000**
Diving Enterprises		**263**
Surface Enterprises		**697**

C)PRIVATE MARINE VEHICLES

Private Boats (Turkish Flagged)		**38.838**

A) SEA TOURISM VEHICLES

Yachts (Schooners, etc.)		**1529**
Bare-Boat (hired without crew)		**571**
Daily tour boats		**1051**
Floating Restaurant		**47**
Inland Waters Boat	(approx.)	**1000**
Diving Enterprises		**263**
Surface Enterprises		**697**

B) SPECIAL SEA VEHICLES

Special Boats		**38,838**

- **Blue Voyage**

“Blue Voyage" is the most authentic mode of travelling in Turkey. The Gullet Tourism, other than bareboat concept, is a travel and vacation type that is derived from Blue Voyage tradition and peculiar to Turkey, which 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 classical, 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 classical 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 60’s we protect/ sustain the building of these traditional boats in many areas on our coasts. In the 60’s the sponge fisherman used to use the same boats for fishing purposes. The first blue cruises that were done by the Fisherman of Halicarnassos and his friends, the esteemed intellectuals of the time, went on cruises where there was no electricity no bathroom and kitchen

As you know we have the famous ‘Blue Cruises’ in our country. This is a concept that began in the 60’s with our famous storyteller 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 cruises 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 cruise, 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 expecially favorite with the flat stern allowing space for two extra cabins at the rear.

The route of the Blue Voyage from Kusadasi down to Antalya covers and area of 350 sea miles. This route is shortened or lengthened according to the wish of the guests from aboard. By choosing the most convenient cruise 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.

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 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 Küçük Çatı 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. english 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 over land 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. Dişliceada 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 to standards set by the Ministry of Cultur 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.

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 (66): Marine Tourisim Facility with Tourism Administration Certificate (2015)

Business Tourism Documentation of Yacht Harbour

			CAPACITY	
PORT NAME	**TYPE**	**CITY OF**	**AT SEA**	**ON SHORE**
1-Setur Kuşadası Yacht Port	Main Yacht Port	Kuşadası / AYDIN	310	-
2-Ataköy Yacht Port	Secondary Yacht Port	Ataköy / İSTANBUL	700	40
3- Kemer G- Marina	Secondary Yacht Port	Kemer / ANTALYA	150	150
4-Yalova Marinas	Main Yacht Port	YALOVA	240	80
5-Alacati Yacht Port	Main Yacht Port	Alacati / İZMİR	260	100
6-Marinturk Gocek Village Port	Main Yacht Port	Gocek/MUGLA	116	200
7-Marmaris Yacht Port	Main Yacht Port	Marmaris / MUĞLA	676	122
8-Club Marina	Yacht Berthing Space	Göcek / MUĞLA	121	-
9-Çelebi Marina	Secondary Yacht Port	ANTALYA	200	150
10-Ayvalık Marina	Secondary Yacht Port	Ayvalık / BALIKESİR	100	-
11-Kumlubükü Yacht Port	Yacht Berthing Space	Marmaris / MUĞLA	10	-
12-Turgutreis Yacht Port	Main Yacht Port	Turgutreis/MUĞLA	455	100
13-Ece Marina	Yacht Berthing Space	Fethiye/MUĞLA	230	-
14-Milta Bodrum Yacht Port	Secondary Yacht Port	Bodrum/MUĞLA	348	50
15-My Marina Yacht Berthing Space	Yacht Berthing Space	Marmaris/MUĞLA	48	15
16-D-Marine Didim Yacht Port	Main Yacht Port	Didim/AYDIN	619	650
17-D-Marine Port Göcek Marina	Main Yacht Port	GocekMuğla	116	200
18- West İstanbul Marinas	Main Yacht Port	Beylikdüzü/İSTANBUL	600	370
19- IC Cesme Marinas	Main Yacht Port	Cesme /IZMIR	377	100

20-Scopea Marinas	Main Yacht Port	Gocek/MUĞLA	80	-
21- Port Iasos Marinas	Main Yacht Port	Milas/MUĞLA	100	-
22- Teos Marinas	Main Yacht Port	Seferihisar/IZMIR	480	80
23- Alanya Marinas	Main Yacht Port	Alanya/ANTALYA	287	160
TOTAL			**6,962**	**2,467**
			9,429	

Business Tourism Documentation of Yacht Slipway

1-Neta Marinas	Yacht Slipway Facility	Bodrum/MUGLA	-	21
2-Ayvalık Marinas	Yacht Slipway Facility	Ayvalık / BALIKESİR	-	140
3-Albatros Marinas	Yacht Slipway Facility	Marmaris / MUĞLA	40	48
4-Yat Lift	Yacht Slipway Facility	Bodrum/MUĞLA		400
5-Ağanlar	Yacht Slipway Facility	Bodrum/MUĞLA	**-**	200
6-Göcek Marinas	Yacht Slipway Facility	Fethiye/MUĞLA	-	156
TOTAL			**40**	**965**
GRAND TOTAL			**1,005**	

Yacht Harbour Investment Tourism Documantation

1-Alacatur Turistik Tesisleri Yacht Port	Secondary Yacht Port	Turgutreis / MUĞLA	40	12
2-Meersea Körmen Yacht Port	Secondary Yacht Port	Datça / MUĞLA	246	56
3-Martı Marina ve Yat İşletmeleri A.Ş.	Secondary Yacht Port	Marmaris / MUĞLA	301	70
4-Kalkedon Marina	Secondary Yacht Port	Bodrum / MUĞLA	200	200
5-Bodrum Yalıkavak Yacht Port Palmarin	Main Yacht Port	Bodrum / MUĞLA	336	100
6-Ataport Yacht Port	Main Yacht Port	Zeytinburnu/İSTANBUL	1000	100
7-Mandalya Yacht Berthing Space	Yacht Berthing Space	Milas/MUĞLA	50	-
8-Burhaniye Yacht Port	Secondary Yacht Port	Burhaniye/BALIKESİR	210	100
9- Palmiye İskelesi	Yacht Berthing Space	Marmaris/MUGLA	50	-
10- Gokova Oren Marinas	Main Yacht Port	Milas /NUGLA	200	55
11-Gulluk Yacht Port	Main Yacht Port	Milas/MUĞLA	270	-
TOTAL			**3,277**	**733**
GRAND TOTAL			**4,010**	
Location of Documents Yacht Slipway Tourism Investment				
1-Marmarin Marina	Yacht Slipway Facility	Marmaris/MUĞLA	-	703
2-Yacht Marin	Yacht Slipway Facility	Marmaris/MUĞLA	-	352
3-Ege Yacht	Yacht Slipway Facility	Milas/MUĞLA	-	15
GRAND TOTAL				**1,070**
Source:Ministry of Culture and Tourism 03.12.2014			-	

TABLE (67): Yacht Mooring Capacities

NO	FACILITY NAME			CAPACITY			
		TOWN	CITY	SEA	LAND	TOTAL	LIFT (Ton)
1	**Atakoy Marinas**	Bakırköy	İstanbul	**700**	**100**	**800**	45
2	**West Istanbul Marınas**	Beylikdüzü	İstanbul	**600**	**350**	**950**	75
3	**Guzelce Marınas**	Büyükçekmece	İstanbul	**250**	**120**	**370**	500
4	**Marina Istanbul**	Büyükçekmece	İstanbul	**600**	**120**	**720**	130
6	**Setur Kalamıs & Fenerbahce Marinas**	Kadıköy	İstanbul	**1.290**	**220**	**1.510**	75
7	**ISTMARINA**	Kartal	İstanbul			**0**	
8	**Marinturk City Port**	Pendik	İstanbul	**750**	**100**	**850**	200
9	**ISTMARINA Istinye**	Sarıyer	İstanbul	**180**	**0**	**180**	
10	**ITMARINA Tarabya**	Sarıyer	İstanbul	**208**	**0**	**208**	
11	**Viaport Tuzla Marinas**	Tuzla	İstanbul	**540**	**0**	**540**	
12	**Ataport**	Zeytinburnu	İstanbul	**1.000**	**100**	**1.100**	-
13	**Atabay Marinas**	Darıca	İzmit	**0**	**100**	**100**	30-150
14	**Setur Yalova Marinas**	Merkez	Yalova	**240**	**80**	**320**	100
15	**Bozcaada Marinas**	Bozcaada	Çanakkale	**30**	**0**	**30**	
16	**Canakkale Marinas**	Merkez	Çanakkale	**230**	**0**	**230**	
17	**Setur Ayvalik Marinas**	Ayvalık	Balıkesir	**200**	**150**	**350**	80
18	**Burhaniye Marinas**	Burhaniye	Balıkesir	**250**	**0**	**250**	
19	**Levent Marinas**	Balçova	İzmir	**45**	**20**	**65**	300
20	**Dalyankoy**	Çeşme	İzmir	**100**	**0**	**100**	
21	**Setur Altinyunus Marinas**	Çeşme	İzmir	**180**	**60**	**240**	80
22	**IC Cesme Marinas**	Çeşme	İzmir	**385**	**100**	**485**	80
23	**Port Alacati Marinas**	Çeşme	İzmir	**260**	**100**	**360**	100
24	**Foca Marinas**	Foça	İzmir	**150**	**0**	**150**	
25	**Teos Marinas**	Seferihisar	İzmir	**530**	**80**	**610**	75
26	**D-Marin Didim Marinas**	Didim	Aydın	**580**	**600**	**1.180**	400-75
27	**Setur Kusadasi Marinas**	Kuşadası	Aydın	**457**	**140**	**597**	80
28	**Port Atami**	Bodrum	Muğla	**40**	**0**	**40**	
29	**Palmarina Yalikavak**	Bodrum	Muğla	**620**	**140**	**760**	100-260
30	**D-Marin Turgutreis Marinas**	Bodrum	Muğla	**550**	**150**	**700**	100
31	**Alacatur Yacht Ports**	Bodrum	Muğla	**40**	**12**	**52**	-
32	**Milta Bodrum Marinas**	Bodrum	Muğla	**425**	**35**	**460**	70

33	**Bodrum Yacht Port**	Bodrum	Muğla	**220**	**0**	**220**	
34	**Aganlar Marinas**	Bodrum	Muğla	**50**	**300**	**350**	450-100-40
35	**Yat Lift**	Bodrum	Muğla	**0**	**400**	**400**	70-20
36	**Kalkedon Marinas**	Bodrum	Muğla	**200**	**200**	**400**	-
37	**ATM rickshaw**	Bodrum	Muğla	**0**	**20**	**20**	
38	**Neta Marinas**	Bodrum	Muğla		**21**	**21**	
39	**Ege rickshaw**	Bodrum	Muğla	**0**	**15**	**15**	
40	**Meersea Körmen Yacht Ports**	Datça	Muğla	**246**	**0**	**246**	-
41	**Yacht Hotel Club &Marinas**	Fethiye	Muğla	**32**	**0**	**32**	
42	**Marinturk Gocek Exclusive**	Fethiye	Muğla	**100**	**0**	**100**	
43	**Marinturk Gocek Village Ports**	Fethiye	Muğla	**220**	**250**	**470**	200
44	**Iltur Club Marinas**	Fethiye	Muğla	**205**	**0**	**205**	
45	**Skopea Marinas**	Fethiye	Muğla	**80**	**0**	**80**	
46	**Port Iasos**	Fethiye	Muğla	**150**	**0**	**150**	
47	**Gocek Yachts Ports**	Fethiye	Muğla	**150**	**0**	**150**	
48	**D-Marin Gocek Marinas**	Fethiye	Muğla	**379**		**379**	70
49	**Göcek richshaw**	Fethiye	Muğla		**156**	**156**	
50	**Fethiye Belediye Limanı**	Fethiye	Muğla	**120**	**0**	**120**	
51	**Ece Marina**	Fethiye	Muğla	**350**	**0**	**350**	
52	**Letoonia Jetty**	Fethiye	Muğla	**10**	**0**	**10**	
53	**Atapark**	Fethiye	Muğla	**10**	**0**	**10**	
54	**Fethiye Fishing shelter**	Fethiye	Muğla	**60**	**0**	**60**	
55	**Marina Vista**	Fethiye	Muğla	**30**	**0**	**30**	
56	**Yes Marinas**	Fethiye	Muğla	**50**	**0**	**50**	
57	**Yacht Hotel**	Fethiye	Muğla	**30**		**30**	
58	**My Marinas Yacht Club Ekincik**	Köyceğiz	Muğla	**48**	**0**	**48**	
59	**Global Sailing Butik Marinette**	Marmaris	Muğla	**20**	**0**	**20**	
60	**Bozburun Yacht Port**	Marmaris	Muğla	**10**	**0**	**10**	
61	**Martı Marinas**	Marmaris	Muğla	**300**	**100**	**400**	60
62	**Palmiye Yacht Port**	Marmaris	Muğla	**50**	**0**	**50**	
63	**Kumlubuku Yat Club**	Marmaris	Muğla	**10**	**0**	**10**	-
64	**Netsel Marmaris Marinas**	Marmaris	Muğla	**720**	**130**	**850**	110-20
65	**Albatros Marinas**	Marmaris	Muğla	**40**	**88**	**128**	200-20
66	**Pupa Yacht Marinas**	Marmaris	Muğla	**40**	**0**	**40**	
67	**Marmarin richshaw**	Marmaris	Muğla	**0**	**200**	**200**	-

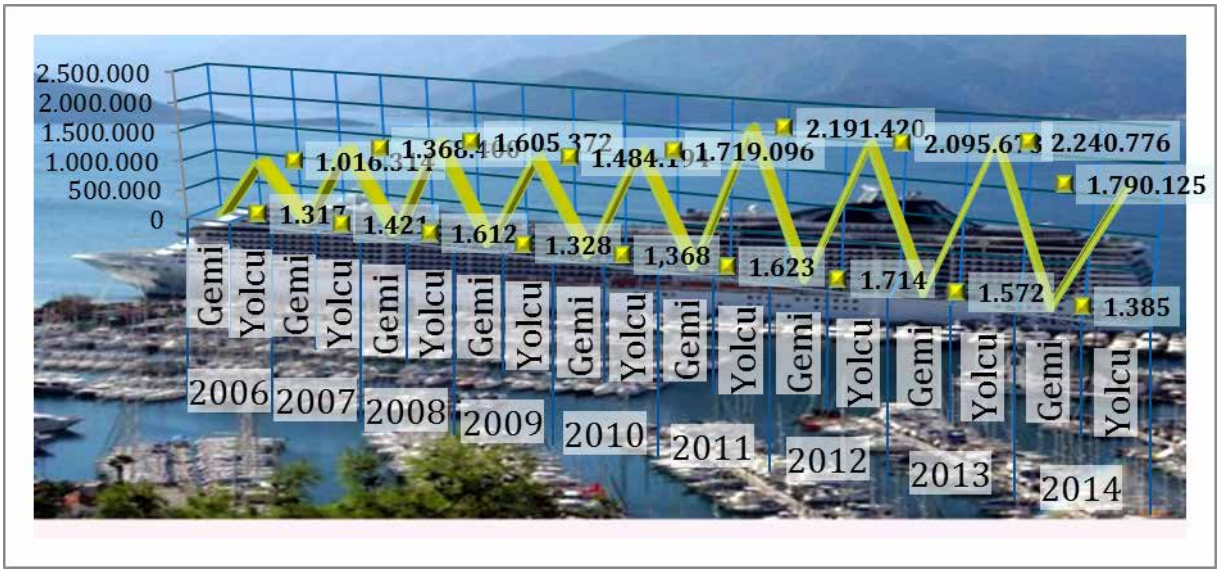
68	**Marmaris Yacht Marinas richshaw**	Marmaris	Muğla	**650**	**1.000**	**1.650**	330-70-60
69	**Marmaris Club Marinas**	Marmaris	Muğla	**120**	**100**	**220**	
70	**Martı Marinas Karacasogut**	Marmaris	Muğla	**16**	**0**	**16**	
71	**Marmaris Yacht Port**	Marmaris	Muğla	**50**	**0**	**50**	
72	**Gokova Oren Marinas**	Milas	Muğla	**420**	**130**	**550**	
73	**Mandalya Yacht Port**	Milas	Muğla	**50**	**0**	**50**	-
74	**Guluk Yacht Port**	Milas	Muğla	**270**	**0**	**270**	
75	**Kalkan Yacht Port**	Kaş	Antalya	**75**	**0**	**75**	
76	**Makmarin Kas Marinas**	Kaş	Antalya	**472**	**160**	**632**	100
77	**Kas Yacht Port**	Kaş	Antalya	**100**	**0**	**100**	
78	**Setur Finike Marinas**	Finike	Antalya	**350**	**110**	**460**	80
79	**G Marina Kemer**	Kemer	Antalya	**150**	**150**	**300**	60-20
80	**Setur Antalya Marinas**	Merkez	Antalya	**235**	**150**	**385**	200-75
81	**Kaleici Yacht Port**	Muratpaşa	Antalya	**65**	**0**	**65**	
82	**Alanya Marinas**	Alanya	Antalya	**287**	**160**	**447**	100
83	**Mersin Marinas**	Merkez	Mersin	**500**	**500**	**1.000**	100
84	**Kumkuyu Marinas**	Erdemli	Mersin	**270**	**250**	**520**	

Cruise Tourism in Turkey

Cruise Tourism, which is one of the new industries in shipping sector, has emerged as a result of the rising demands of people 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 is located in a suitable region for crusing sector, which is the Mediterranean Basin.

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

GRAPH 64: Statistics of Cruises and Passengers Arrived at Turkish Ports Between 2006-2014



In 2015, 1451 cruise ships visited our ports, with 1,885,510 foreign passengers

Cruise Ports of Turkey

- İstanbul
- İzmir
- Kuşadası
- Fethiye
- Marmaris
- Bodrum
- Antalya
- Alanya
- Mersin
- Sinop
- Samsun
- Trabzon

In order to open İstanbul, one of the most important touristic centers of Turkey, to Cruise and Mega Yacht Tourism Services, great efforts are being exerted 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 68 Number of Transit Passengers Coming by Cruise Ships (Source: Minister of Transport, Maritime Affairs and Com.)

PORT NAME	2006		2007		2008		2009		2010		2011		2012		2013	
	SHIP	PASSENGER	SHIP	PASSENGER	SHIP	PASSENGER	SHIP	PASSENGER	SHIP	PASSENGER	SHİP	PASSENGER	SHIP	PASSENGER	SHIP	PASSENGER
Alanya	114	80.440	124	93.937	84	57.000	73	50.285	2	1.071	22	25.743	22	25.743	53	40.843
Antalya	32	13.015	34	15.680	41	25.057	23	12.549	41	103.859	64	127.250	55	159.430	64	163.575
Anamur	0	0	0	0	0	0	0	0	0	0	4	351	1	63	0	0
Bartın	-	-	-	-	8	957	10	941	4	555	2	208	9	882	15	2.071
Bodrum	66	10.478	63	9.892	126	52.862	87	38.414	89	31.700	82	46.031	131	52.832	114	28.546
Çanakkale	24	5.008	23	5.207	31	8.776	33	8.712	17	7.670	23	4.371	25	4.184	36	7.467
Çeşme	-	-	-	-	3	1.819	1	817	16	9247	1	89	25	4.787	54	62.741
Datca	-	-	-	-	1	207	3	1.041	3	778	0	0	0	0	0	0
Dikili	23	3.990	13	2.631	29	10.424	13	6.592	26	15.401	34	17.485	24	4.865	21	7.655
Fethiye	67	3.566	4	948	13	4.217	8	2.615	5	879	5	1.975	11	1.969	4	1.067
Göcek	-	-	-	-	6	1.121	10	1.532	16	2.274	7	1.216	6	1.038	2	252
Güllük	-	-	-	-	19	2.747	5	1.172	1	279	3	1.692	7	1.079	7	476
İskenderun	-	-	-	-	3	819	2	1.884	1	106	5	1.308	0	0	0	0
İstanbul	306	273.553	340	422.896	404	489.544	313	476.541	342	508.246	420	627.897	382	596.027	381	689.417
İzmir	105	184.797	122	287.357	133	318.451	129	315.454	159	378.266	262	493.533	288	552.764	190	486.493
Kaş	-	-	-	-	6	600	4	1.341	8	1.317	3	507	7	1.018	3	1.152
Kemer	-	-	-	-	1	37	0	0	6	602	0	0	0	0	0	0
Kuşadası	471	368.696	613	466.677	601	518.872	506	462.746	517	493.911	568	662.456	464	564.317	428	577.685
Marmaris	83	65.265	64	60.039	70	101.874	74	81.472	84	146.531	84	170.021	88	110.279	112	152.685
Mersin	-	-	-	-	4	941	3	1.583	1	106	3	416	2	774	3	1.381
Mudanya	-	-	-	-	1	482	4	1.309	1	24	5	922	0	0	2	414
Samsun	9	2.661	8	186	5	596	9	1.524	4	825	3	208	7	1.190	12	1.281
Sinop	-	-	-	-	6	3.136	14	7.861	7	7.098	9	4.088	10	3.708	16	7.460
Taşucu	-	-	-	-	1	18	3	440	2	201	4	805	4	709	0	
Trabzon	17	4.845	13	2.950	15	4.813	18	7.369	14	7.952	13	6.267	18	8.015	24	8.115
Tuzla	-	-	-	-	1	2	0	0	2	0	0	0	0	0	1	0
Yalova	-	-	-	-	-	-	-	-	-	-	-	-	1	0	0	0
TOTAL	1.317	1.016.314	1.421	1.368.400	1.612	1.605.372	1.328	1.484.194	1.368	1.719.098	1.623	2.191.420	1.587	2.095.673	1.572	2.240.776

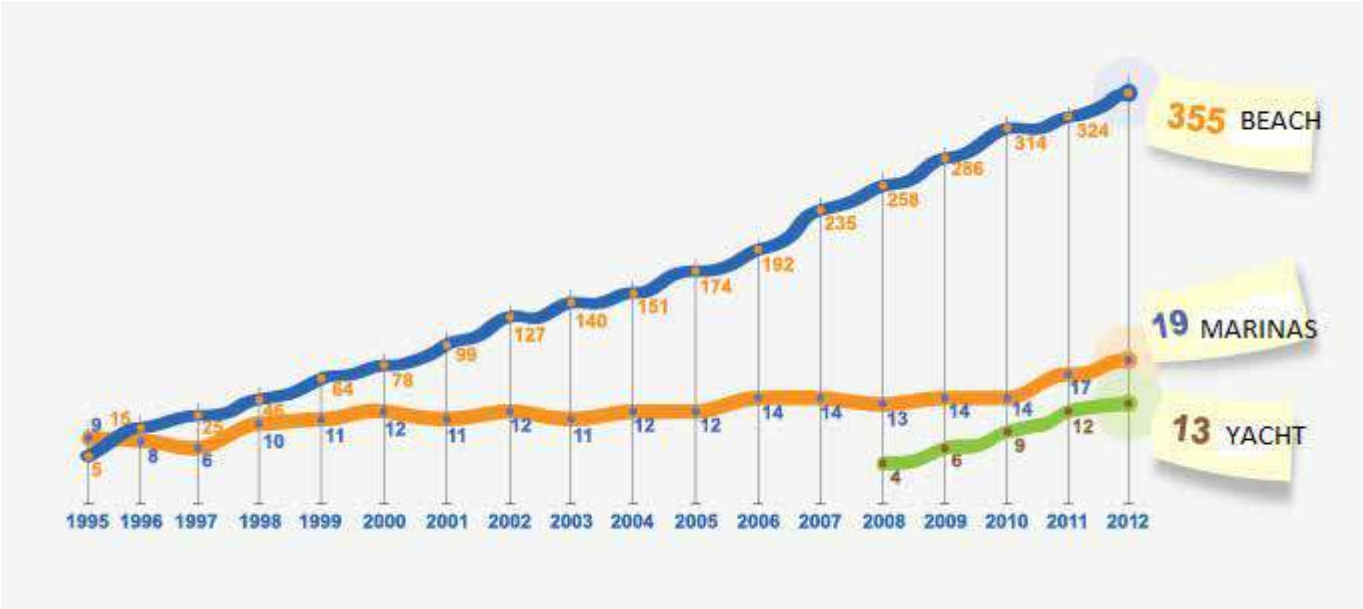
TABLE (69): Statistics of Cruises and Passengers Arrived at Turkish Ports (2014)

Harbour Masters	CRUISE SHIP				CRUISE PASSENGER			
	CRUISE SHIP	PASSENGER SHIP	OTHERS SHIP	TOTAL	IN COMING	OUT GOING	TRANSIT	TOTAL
ALANYA	20	3	0	23	37	32	18.487	18.556
ANTALYA	19	39	0	58	83.821	84.318	7.639	175.778
BARTIN	17	3	0	20	1	1	2.822	2.824
BODRUM	61	17	0	78	139	193	32.547	32.879
ÇANAKKALE	32	10	0	42	5	18	9.976	9.999
ÇEŞME	51	6	0	57	24.962	25.419	11.734	62.115
DİKİLİ	29	3	0	32	196	181	7.537	7.914
FETHİYE	8	0	0	8	2	0	1.936	1.938
GÖCEK	3	0	0	3	0	0	380	380
GÜLLÜK	1	2	0	3	0	0	329	329
İSTANBUL	239	78	0	317	74.941	74.822	369.172	518.935
İZMİR	86	38	0	124	4.238	3.951	249.044	257.233
KAŞ	2	1	0	3	0	0	625	625
KUŞADASI	388	60	0	448	13.720	24.705	518.320	556.745
MARMARİS	66	16	0	82	29.419	28.034	50.271	107.724
SAMSUN	13	4	0	17	43	0	1.515	1.558
SİNOP	26	4	0	30	608	2	16.908	17.518
TAŞUCU	2	1	0	3	0	0	937	937
TRABZON	33	4	0	37	24	19	16.095	16.138
TOTAL	1.096	289	0	1.385	232.156	241.695	1.316.274	1.790.125

Blue Flag Compaign

The Blue Flag Compaign 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 cleanliness of water, environmental concerns, security, safety and services.

GRAPH (65): Number of Turkish Beaches, Marinas and Yachtes with Blue Flags by Years



Source: TURÇEV

TABLE (70) : Number of Internatioanal Blue Flags by Years 2012

BEACHES			MARINAS		
1	**Spain**	540	**1**	**Germany**	110
2	**Greece**	394	**2**	**Spain**	99
3	**France**	358	**3**	**Holland**	88
4	**Turkey**	**355**	**4**	**France**	84
5	**Portugal**	275	**5**	**İtaly**	62
6	**Denmark**	253	**6**	**Denmark**	58
7	**Italy**	247	**7**	**Sweden**	38
			8	**Turkey**	19
	Other 30 Country	667	**12**	**Other 27 Country**	63
	TOTAL	**3089**		**TOTAL**	**621**

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)

Underwater Diving

In the seas of Turkey, divers can discover a fascinating submerged 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.
Above the water and diving off the coast of our country engaged in tourism business we have around 800 certified and authorized

Equipped Diving Rules

Forbidden Zones All kinds of diving 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 to 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 guide skin diver is obligatory. Foreign divers should take guide skin diver during diving. Also, protection of cultural and natural wealth, maintaining of 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 is 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 in land 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 test 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.

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 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.

THE DEVELOPMENT OF TURKISH SHIPPING

FISHING SECTOR

CHAPTER VII

TURKISH FISHING SECTOR

Turkey has a rich water products potential.The seas around Anatolia has variant and distinct ecological characteristics. The area of natural lakes is 178,000 km², and the area of dams is 3,442 km². Our Seas are 500 fish species. Turkey has a share of 0.04 % in the total world water production.

60-80 % of Turkey's water products consist of pelajic fish. Pelajic fishes are mainly anchovy (Engraulis 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), species shrimp (Penaeidae) and species squid (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.

Quantitiy of Captured Sea Products (2014)

Production of water products, specially in 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 strenght of catch.The production of fish products realized approximately as 180.000 tons has increased above 600.000 tons.

In 2014;

Fishery production decreased by 11.6% in 2014

Fishery production decreased by 11.6% in 2014 with respect to the previous year and occured as 537 thousand 345 tonnes. The total fishery production was composed of sea fish by 43%, other sea products by 6.5%, inland water products by 6.7% and aquaculture products by 43.8%.

In 2014, while capture of fishery products was decreasing by 19.2%, aquaculture increased by 0.7%

While the production made by capture was 302 thousand 212 tonnes, aquaculture production occurred as 235 thousand 133 tonnes. While the capture of marine production decreasing by 21.5%, capture of inland water production increased by 3% with respect to the previous year. 46% of the amount of aquaculture production took place at the inland waters and 54% at the seas. Within all the production of marine products by capture, East Black Sea region was the first by the ratio of 48.6%. The regions West Black Sea by 22%, Aegean and Marmara by 12.6% and Mediterranean by 4.2% followed this region.

TABLE(71): Quantity of fishery products, 2014

(Tonnes)

	2013	Share (%)	**2014**	Share (%)	Change (%)
Fishery products	**607 515,2**	**100,0**	**537 344,6**	**100,0**	**-11,6**
Fishery products by catching	**374 121,3**	**61,6**	**302 211,6**	**56,2**	**-19,2**
Sea fish and other sea products	**339 046,9**	**55,8**	**266 077,6**	**49,5**	**-21,5**
Sea fish	295 167,9	48,6	231 058,3	43,0	-21,7
Other sea products	43 879,0	7,2	35 019,3	6,5	-20,2
Inland water products	**35 074,4**	**5,8**	**36 134,0**	**6,7**	**3,0**
Aquaculture	**233 393,9**	**38,4**	**235 133,0**	**43,8**	**0,7**

Source ; TurkStat, Fishery Products, 2014

TABLE (72): Fishery by Years

	Sea Products **(**Tons)	Aquaculture Production **(**Tons)	Freshwater Products **(**Tons)
2002	522 744	61 165	43 938
2003	463 074	79 943	44 698
2004	504 897	94 010	45 585
2005	380 381	118 277	46 115

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

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

Fishing Fleet and Catching Water Products

Our fleet is using high-tech equipments and our fishing reserves are more than our yearly fishing capacity.
At present, we have 18.942 (2015 year) 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)
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 end of 2008, there are 128 fisherman shelters, 44 smaller type of fisherman shelters and 58 slips.
Corporate bodies and persons should have fishing certificates according to Water Products Law Number 1380. The Ministry of Agriculture may restrict the certificates in order to protect of fishing potential. There are 18,790 certificated fishing vessels in Turkey and 1,010 are of big sizes. Dredging and encircle fishing is done by the fishing vessels longer then 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 16,650 fishing vessels in total and 83 % of these boats consists 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.

Water Production Facilities

According to Article 13 of the Law of Water Products, No:1380, water products farming in Turkey is made by the permission of the Ministry of Agriculture and Village Affairs. In

order to arrange more orderly practicing of water products farming, to keep its effects on environment at minimum level, to achieve healthy and quality fish production ; instead of applying the Circular called “Methods and Principles of Water Products Farming” dated 11.10.1999 and serial number 8300, No:SUDB/1999-1, within the frame of rules of harmonization of the European Union Joint Shipping Products Policy Acquirements; “The Regulation of Water Products” was published in the Official Products Gazette dated 29.06.2004, No.25507 and was carried into effect.

In 1971, there was only one water product facility, whereas at the end of 2002 there were 1840 certified facilities, 1,417 of them are inland water and 423 of them are seaborn production facilities. Head Sea Bream and the Sea Bass facilities are located generally at Southern Agean and West Mediterranean. Trout facilities are generally located in The Black Sea Region . Cultivated fishing production was 4,100 tons in 1988 whereas at the end of 2008 this production reached 152.186 tons.

Put into production at the country's current potential for the development of the fisheries is of great significance. The baby needed to aquaculture, collected from nature or produced in hatcheries can be imported from abroad are provided.

Aquaculture production in 2008 at a rate of 8.8% compared to the previous year has increased. Aquaculture production in marine and Inland Waters in 2008, an increase by 8.8% over the previous year was approximately 152 thousand tons.

Aquaculture production in 2008 as the amount of 43.73% of daily Inland Waters, 56.27% 's were carried out in the sea. According to the previous year in 2008, the aquaculture production in the sea at a rate of 5.92%, Aquaculture production in the inland waters has increased at a rate of 12.75%.

Inland Waters 43.32% with the most important species reared trout, sea bass with 32.37%, 20.81% is with the largemouth.The most important species reared trout Inland Waters with 41.8%, with 30% in sea bass, sea bream is 24%.

Foreign Trade in Water Products

Exports

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 in water products is realized to Japan by 28 %.

26,860 in 2002 (tons), 115,381 in 2014 the exports (tons), reaching the last elevan years, according to the amount of exports increased nearly 170 % has been achieved. Seafood export figures available are examined, the amount and value of our exports in the past year has continued to increase with benchmarks.

As regards 2010 in our country's exports of fish products Japan has the biggest share, being followed by Holland, Greece, Italy, Spain, German, France and Lebanon . Although the markets to which our water products exportation is directed are mostly those of the European Union, we also export fish to all the regions of the world.

In 2014, as regards our country's exports of fish products, Japan has the biggest share, being followed by Holland, Greece, Italy, Spain, Germany, France and Lebanon . Although the markets to which our water products exportation is directed are mostly those of the European Union, we also export fish to the whole world.
The amount of exports has been increased 276% in the last eleven years. Exports reached 115.381 tons in 2014; although it was 26860 tons in the year 2002.

GRAPH 65: Exports of Water Production (2000-2014)

Amount (Ton)

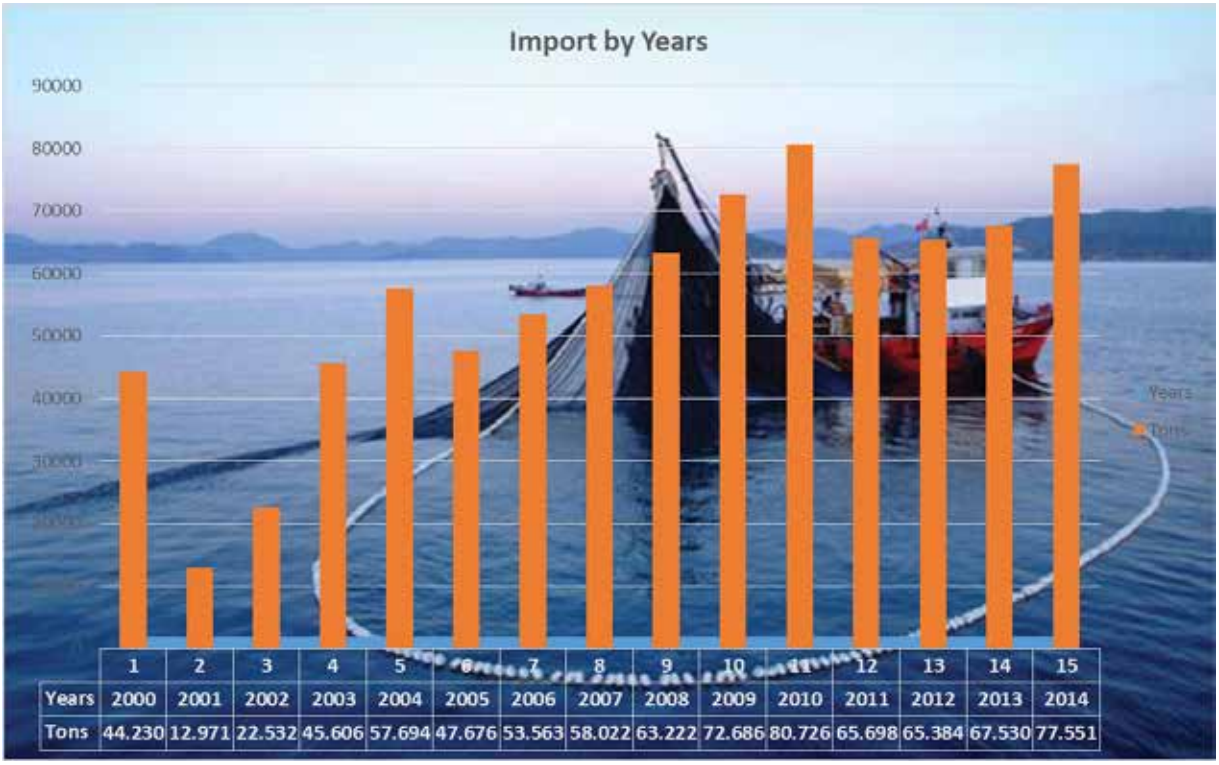
Imports

There is an increase in sea food imports. 90 % of sea food imports consists of frozen fish. An important share in import is from The Danube where Tuna fish comes. Import of this fish is made from the European Union countries (especially Holland, UK, and Norway), also from some of the African countries (Ghana) and the Far Eastern countries (Singapore,Thailand)

22,532 in 2002 (tons), 77,551 In 2014 the exports (tons), reaching the last eleven years, according to the amount of exports increased nearly 100 % has been achieved.

As regards 2014, in our country's imports of fish products Norway has the biggest share, being followed by France, India, USA, Morocco , Georgia and Greece

GRAPH 66:Imports of Water Products 2000-2014 Amount (Ton)



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Tons	44.230	12.971	22.532	45.606	57.694	47.676	53.563	58.022	63.222	72.686	80.726	65.698	65.384	67.530	77.551

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 in order to comply with the provisions of Water Products Law No: 1380, Water Products Regulation and European Union Directives.

CHAPTER VIII

MARITIME EDUCATION IN TURKEY

Turkish Ministry of Transport, Maritime Affairs and Communications is the main authority in Turkey in the field of Maritime Shipping. The Ministry issued Regulations for Seafarers in 2002, in order to raise the maritime training in the country to IMO standards and the equality of the Turkish certificates and diplomas have been accepted by IMO.

The Turkish Republic has maintained its place in the "White List" as regards Maritime Education in the MSC.Circ. 1164 / Rev 7, the Circular published by IMO. Also, following the inspections made by EMSA (European Maritime Safety Agency), the graduates of the Maritime Schools in Turkey are able to work in the ships under the flags of EU Member States.

Turkish Chamber of Shipping, which is one of the most important NGO's of the Turkish Maritime Sector, strongly supports the Maritime Education and considers maritime training as one of its main functions and duties. Within this framework; the First Priority: has been given to the "Lack of Officers Problem" and the main objective has been to provide a solution to it in the long and medium terms. The Second Priority: has been given to the training of highly qualified and sufficient numbers of Maritime Operators.

Turkish Maritime Education Foundation (TÜDEV) was established in Istanbul in 1993 by 52 founder members, mainly from the Turkish Maritime Sector. Its aim is to assist the Turkish Maritime Shipping's reaching a high level so as to create Shipping Policies which will help to increase the economic strength and productivity of our Country and also to support the development every way of the maritime schools and educational foundations in Turkey.

In our country there are 19 faculties of maritime studies (including one in The Northern Cyprus Turkish Republic) which provides education at Bachelor's level (four years), 9 Anatolian High Schools and 62 Anatolian Technical High Schools.

FACULTIES OF MARITIME STUDIES (21.08.2015)

No	Universities	Faculties
1	ADANA BİLİM VE TEKNOLOJİ ÜNİVERSİTESİ	DENİZCİLİK FAKÜLTESİ
2	BALIKESİR ÜNİVERSİTESİ	BANDIRMA DENİZCİLİK FAKÜLTESİ
3	BURSA TEKNİK ÜNİVERSİTESİ	DENİZCİLİK FAKÜLTESİ
4	ÇANAKKALE ONSEKİZ MART ÜNİVERSİTESİ	DENİZ BİLİMLERİ VE TEKNOLOJİSİ FAKÜLTESİ
5	DOKUZ EYLÜL ÜNİVERSİTESİ	DENİZCİLİK FAKÜLTESİ
6	İSTANBUL TEKNİK ÜNİVERSİTESİ	DENİZCİLİK FAKÜLTESİ
7	İZMİR KÂTİP ÇELEBİ ÜNİVERSİTESİ	GEMİ İNŞAATI VE DENİZCİLİK FAKÜLTESİ
8	KARADENİZ TEKNİK ÜNİVERSİTESİ	SÜRMENE DENİZ BİLİMLERİ FAKÜLTESİ
9	MERSİN ÜNİVERSİTESİ	DENİZCİLİK FAKÜLTESİ
10	MUSTAFA KEMAL ÜNİVERSİTESİ	BARBAROS HAYRETTİN DENİZCİLİK FAKÜLTESİ

11	MUSTAFA KEMAL ÜNİVERSİTESİ	DENİZ BİLİMLERİ VE TEKNOLOJİSİ FAKÜLTESİ
12	ONDOKUZ MAYIS ÜNİVERSİTESİ	GEMİ İNŞAATI VE DENİZ BİLİMLERİ FAKÜLTESİ
13	ORDU ÜNİVERSİTESİ	FATSA DENİZ BİLİMLERİ FAKÜLTESİ
14	PİRİ REİS ÜNİVERSİTESİ	DENİZCİLİK FAKÜLTESİ
15	YILDIZ TEKNİK ÜNİVERSİTESİ	GEMİ İNŞAATI VE DENİZCİLİK FAKÜLTESİ
16	YÜZÜNCÜ YIL ÜNİVERSİTESİ	DENİZCİLİK FAKÜLTESİ
17	BÜLENT ECEVİT ÜNİVERSİTESİ	DENİZCİLİK FAKÜLTESİ
18	İSTANBUL ÜNİVERSİTESİ	DENİZ BİLİMLERİ VE İŞLETMECİLİĞİ ENSTİTÜSÜ
19	DOKUZ EYLÜL ÜNİVERSİTESİ	DENİZ BİLİMLERİ VE TEKNOLOJİSİ ENSTİTÜSÜ

Anatolian Maritime High Schools **(21.08.2015)**

No	Universities	Faculties
1	DOKUZ EYLÜL ÜNİVERSİTESİ	SEFERİHİSAR FEVZİYE HEPKON SOSYAL BİLİMLER MESLEK YÜKSEKOKULU – MARİNA İŞLETME
2	YAŞAR ÜNİVERSİTESİ	MESLEK YÜKSEKOKULU – DENİZ VE LİMAN İŞLETMECİLİĞİ / MARİNA İŞLETMECİLİĞİ
3	ÇANAKKALE ONSEKİZ MART ÜNİVERSİTESİ	DENİZ TEKNOLOJİLERİ MESLEK YÜKSEKOKULU
4	EGE ÜNİVERSİTESİ	URLA DENİZCİLİK MESLEK YÜKSEKOKULU
5	MERSİN ÜNİVERSİTESİ	DENİZ VE TİCARET MESLEK YÜKSEKOKULU
6	MERSİN ÜNİVERSİTESİ	DENİZCİLİK MESLEK YÜKSEKOKULU
7	MUĞLA SITKI KOÇMAN ÜNİVERSİTESİ	BODRUM DENİZCİLİK MESLEK YÜKSEKOKULU
8	MUSTAFA KEMAL ÜNİVERSİTESİ	DENİZCİLİK MESLEK YÜKSEKOKULU
9	PİRİ REİS ÜNİVERSİTESİ	DENİZCİLİK MESLEK YÜKSEKOKULU
10	BAHÇEŞEHİR ÜNİVERSİTESİ	MESLEK YÜKSEKOKULU
11	BARTIN ÜNİVERSİTESİ	BARTIN MESLEK YÜKSEKOKULU
12	GALATASARAY ÜNİVERSİTESİ	MESLEK YÜKSEKOKULU
13	GİRESUN ÜNİVERSİTESİ	TEKNİK BİLİMLER MESLEK YÜKSEKOKULU
14	GİRNE ÜNİVERSİTESİ	MESLEK YÜKSEK OLKULU
15	KOCAELİ ÜNİVERSİTESİ	KARAMÜRSEL MESLEK YÜKSEKOKULU
16	ORDU ÜNİVERSİTESİ	FATSA MESLEK YÜKSEKOKULU
17	RECEP TAYYİP ERDOĞAN ÜNİVERSİTESİ TURGUT KIRAN DENİZCİLİK YÜKSEKOKULU	DENİZCİLİK YÜKSEKOKULU

Anatolian Maritime Technical High Schools (21.08.2014)

No	City	Town	Name of Institute
1	ANTALYA	KONYAALTI	FETTAH TAMİNCE MESLEKİ VE TEKNİK ANADOLU LİSESİ
2	ANTALYA	MANAVGAT	MANAVGAT TİCARET VE SANAYİ ODASI MESLEKİ VE TEKNİK ANADOLU LİSESİ
3	ARTVİN	HOPA	KEMALPAŞA ÇOK PROGRAMLI ANADOLU LİSESİ
4	AYDIN	DİDİM	DİDİM MESLEKİ VE TEKNİK ANADOLU LİSESİ
5	AYDIN	KUŞADASI	ADVİYE-ERTUĞRUL ACUN MESLEKİ VE TEKNİK ANADOLU LİSESİ
6	BALIKESİR	AYVALIK	PAKMAYA KENAN KAPTAN MESLEKİ VE TEKNİK ANADOLU LİSESİ
7	BALIKESİR	ERDEK	KARŞIYAKA ÇOK PROGRAMLI ANADOLU LİSESİ
8	ÇANAKKALE	GELİBOLU	ARMATÖR YAKUP AKSOY MESLEKİ VE TEKNİK ANADOLU LİSESİ
9	ÇANAKKALE	MERKEZ	ÇANAKKALE MESLEKİ VE TEKNİK ANADOLU LİSESİ
10	GİRESUN	BULANCAK	BULANCAK KAPTAN AHMET FATOĞLU MESLEKİ VE TEKNİK ANADOLU LİSESİ
11	GİRESUN	ESPİYE	ESPİYE Ş. CENGİZ SARIBAŞ MESLEKİ VE TEKNİK ANADOLU LİSESİ
12	GİRESUN	TİREBOLU	TİREBOLU PİRİ REİS MESLEKİ VE TEKNİK ANADOLU LİSESİ
13	HATAY	İSKENDERUN	SEFA ATAKAŞ MESLEKİ VE TEKNİK ANADOLU LİSESİ
14	ISPARTA	EĞİRDİR	EĞİRDİR MESLEKİ VE TEKNİK ANADOLU LİSESİ
15	İSTANBUL	ADALAR	HÜSEYİN RAHMİ GÜRPINAR ÇOK PROGRAMLI ANADOLU LİSESİ
16	İSTANBUL	BEŞİKTAŞ	ZİYA KALKAVAN MESLEKİ VE TEKNİK ANADOLU LİSESİ
17	İSTANBUL	BEYKOZ	BEYKOZ BARBAROS HAYRETTİN PAŞA MESLEKİ VE TEKNİK ANADOLU LİSESİ
18	İSTANBUL	PENDİK	PENDİK BARBAROS HAYRETTİN PAŞA MESLEKİ VE TEKNİK ANADOLU LİSESİ
19	İSTANBUL	TUZLA	PİRİ REİS MESLEKİ VE TEKNİK ANADOLU LİSESİ
20	İSTANBUL	ÜSKÜDAR	HACI RAHİME ULUSOY MESLEKİ VE TEKNİK ANADOLU LİSESİ
21	İZMİR	ÇEŞME	ÇEŞME ULUSOY MESLEKİ VE TEKNİK ANADOLU LİSESİ
22	İZMİR	GÜZELBAHÇE	GÜZELBAHÇE İMKB MESLEKİ VE TEKNİK ANADOLU LİSESİ
23	İZMİR	KARABURUN	KARABURUN MORDOĞAN FATMA EMİN KARAAĞAÇ ÇOK PROGRAMLI ANADOLU LİSESİ
24	İZMİR	KONAK	KONAK NEVVAR SALİH İŞGÖREN EĞİTİM KAMPÜSÜ - 4 MESLEKİ VE TEKNİK ANADOLU LİSESİ
25	İZMİR	KONAK	KONAK ÇINARLI MESLEKİ VE TEKNİK ANADOLU LİSESİ
26	İZMİR	KONAK	ŞEHİT İDARİ ATAŞE ÇAĞLAR YÜCEL MESLEKİ VE TEKNİK ANADOLU LİSESİ
27	KASTAMONU	İNEBOLU	PİRİ REİS MESLEKİ VE TEKNİK ANADOLU LİSESİ
28	KOCAELİ	GÖLCÜK	GÖLCÜK MESLEKİ VE TEKNİK ANADOLU LİSESİ

29	KOCAELİ	KÖRFEZ	HEREKE NUH ÇİMENTO MESLEKİ VE TEKNİK ANADOLU LİSESİ
30	MERSİN	AKDENİZ	DENİZ TİCARET ODASI MESLEKİ VE TEKNİK ANADOLU LİSESİ
31	MUĞLA	BODRUM	BODRUM MESLEKİ VE TEKNİK ANADOLU LİSESİ
32	MUĞLA	BODRUM	BODRUM TURGUT REİS MESLEKİ VE TEKNİK ANADOLU LİSESİ
33	MUĞLA	KÖYCEĞİZ	KÖYCEĞİZ MESLEKİ VE TEKNİK ANADOLU LİSESİ
34	MUĞLA	MARMARİS	BOZBURUN DENİZ TİCARET ODASI ÇOK PROGRAMLI ANADOLU LİSESİ
35	MUĞLA	MARMARİS	75. YIL MESLEKİ VE TEKNİK ANADOLU LİSESİ
36	ORDU	FATSA	ATATÜRK MESLEKİ VE TEKNİK ANADOLU LİSESİ
37	RİZE	ARDEŞEN	IŞIKLI MESLEKİ VE TEKNİK ANADOLU LİSESİ
38	RİZE	ÇAYELİ	ÇAYELİ AHMET HAMDİ İSAKOĞLU MESLEKİ VE TEKNİK ANADOLU LİSESİ
39	RİZE	MERKEZ	HASAN KEMAL YARDIMCI MESLEKİ Ve TEKNİK ANADOLU LİSESİ
40	SAMSUN	TEKKEKÖY	NEDİME SERAP ULUSOY MESLEKİ VE TEKNİK ANADOLU LİSESİ
41	SİNOP	MERKEZ	SİNOP MESLEKİ VE TEKNİK ANADOLU LİSESİ
42	TEKİRDAĞ	SÜLEYMANPAŞA	KUMBAĞ MESLEKİ VE TEKNİK ANADOLU LİSESİ
43	TRABZON	ÇARŞIBAŞI	ÇARŞIBAŞI MESLEKİ VE TEKNİK EĞİTİM MERKEZİ
44	TRABZON	OF	OF HACI MEHMET BAHATTİN ULUSOY MESLEKİ VE TEKNİK ANADOLU LİSESİ
45	TRABZON	ORTAHİSAR	TRABZON MESLEKİ VE TEKNİK ANADOLU LİSESİ
46	TRABZON	SÜRMENE	SÜRMENE TÜRK TELEKOM MESLEKİ VE TEKNİK ANADOLU LİSESİ
47	VAN	TUŞBA	VAN PİRİ REİS MESLEKİ VE TEKNİK ANADOLU LİSESİ
48	YALOVA	ALTINOVA	YALOVA ALTINOVA TERSANE GİRİŞİMCİLERİ A.Ş. MESLEKİ VE TEKNİK ANADOLU LİSESİ
49	ZONGULDAK	EREĞLİ	HATİCE ERDEM MESLEKİ VE TEKNİK ANADOLU LİSESİ

PİRİ REİS UNIVERSITY

Piri Reis University was established in 2008 in Tuzla, İstanbul with the aid of every Company in the Turkish Maritime Sector. It has an environment-friendly designed green campus, the first one among the universities in Turkey. ***Piri Reis University, with its high quality training, has been accredited by the international BREEAM Certificate.***

İstanbul & Marmara, Agean, Mediterranean, Blacksea Regions

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