ABSTRACT: An inward-oriented strategy was adopted for the Turkish maritime sector from 1923 – the foundation date of the Republic of Turkey – to 1952. A partially liberal policy was experienced beginning from 1952, and a planned development period has started since 1962. This study is aimed at investigating the principles and targets for the maritime sector beginning from the first five-year development plan to the current plan including 2013, and evaluating whether the stated targets have been achieved or not. Moreover it is also planned to investigate the maritime transportation and to state the new opportunities and current issues about Turkey briefly.

1 INTRODUCTION
Activities concerning the Turkish shipping industry and shipyard management in Black Sea, Mediterranean and Marmara Sea coasts were first seen during the Seljuk Empire. Earliest Turkish shipyards – founded at Sinop in the Black Sea in 1214 and at Alanya in the Mediterranean in 1227 – built the 80 or 100–ton boats which were important at that time. Then the Izmir Shipyard belonged to the Aydin Principality was founded in 1326 (Kadioglu, 1997). At the beginning of the Ottoman Empire Izmit, Karamursel, Gemlik, Aydincik and Gelibolu shipyards, and then Istanbul, Suveys, Sinop and shipyards were founded. The ships built in these shipyards were very important for the commerce in the Mediterranean.

The public bodies concerning the Turkish maritime transportation were first founded when the steamboats arrived in Turkey. For the reason that the transportation previously were carried out by the rowboats and sailboats, the history of the maritime transportation starts earlier.

The maritime policies of the Modern Turkey are as following: the period between 1923 and 1952, the Maritime Bank period between 1952 and 1984, and the period beginning from the Turkish Maritime Organizations and the other maritime attempts become independent, and up to now.

The maritime policy of the Turks during the Ottoman Empire period has completely been changed since the foundation of the Republic in 1923. Although Atatürk – the founder of the Republic – wanted the maritime issue to be adopted as a “national ideal”, it is seen that Turkey didn’t make almost any investments on the maritime issue. The passenger and load transportation were carried out by the classically-built passenger ships between 1923 and 1952 in Turkey damaged in the First World War too much.

From 1923 – the year of the Turkish Republic was founded – to 1950 mostly the railway and maritime line-oriented policies were adopted. As a result of these policies the railway transportation ratio was 55% and the maritime transportation ratio was 27,8% in 1950. The road transportation ratio was only 17,1% in 1950. The maritime line share at passenger transportation was about 7,5% between 1923 and 1952 in Turkey (SPO, 1962).

When the multi-party system has been started in Turkey since 1952, the liberal policies were partially adopted. A planned development plan has been adopted and five-year development plans have been arranged since 1962 in Turkey.

When Turkey arranged and carried out the development plans, there have seen many improvements in the maritime sector as the same in the other sectors.

When the maritime bodies became independent according to the law entered in force in 1984, the Turkish Maritime Organizations (TDİ) to solve the administrative issues concerning the maritime sector and to control it under unique structure, the Turkish Shipping Industry (TGS) to undertake the ship building, Denizbank especially to solve the financial
problems of the maritime sector, and finally the Maritime Transportation Company firstly to make the transportations of the public sector were found. Soon the employment increased in these bodies, the expectations about the autonomy and effectiveness couldn’t be met. And then all these bodies were privatized.

2 FIRST FIVE-YEARS DEVELOPMENT PLAN (1963-1967)

For the reason that Turkish economical structure was not strong enough, main principles and general targets of the First Five-Year Development Plan were to benefit best from the current capacity without investing more, and thus to supply passenger and load transportation, and to make services better by decreasing the cost.

Moreover the management targets such as “to collect the harbors under one umbrella” and to build free zones or harbors which will mostly work for transit trade were determined (SPO, 1962).

The Turkish-flag ships to carry at least half of the export goods of Turkey was included in the short-term targets, and “to create a newer and modern merchant marine which will compete with the foreign-flag ship in the international waters” was included in the long-term targets.

3 SECOND FIVE-YEARS DEVELOPMENT PLAN (1968-1972)

In the Second Five-Year Development Plan period (1968-1972) it was aimed at “coordinating all the transportation areas on one hand” and “displaying the general policy of the transportation” (SPO, 1967).

It was the first time it was included to decide for renewing the maritime sector and “competing under the same conditions” with the competitors, and also the “support” in the plan. However it is a conflict that it was both included the “support” and adopting “the ones using system in the transportation sector should make contribution for building and maintenance cost to meet the amortization, maintenance and sustainment cost.

In the second plan it was stated that for the maritime sector to have a progressive, dynamic and keeping abreast of the conditions, “the complete modernization” including management, administration, organization, planning and search subjects in addition to the technical features in the maritime sector was necessary.

4 THIRD FIVE-YEARS DEVELOPMENT PLAN (1973-1977)

For the reason that during the earlier two development plan periods the main targets concerning the administrative regulations about the maritime sector couldn’t be carried out, mostly it was again focused on making planning and project studies, and collecting the services under one umbrella at the Third Five-Year Development Plan period (1973-1977).

And so, the targets about balancing the distribution of the transportation between the subsystems, detecting the correlations in issues such as site selection, industrialization and ground use, preparing a project study in order to expand the capacity of at least one harbor in each region in the Mediterranean, the Black Sea and the West regions of Turkey for the industrial transportations were determined.

During the plan period especially in parallel with the increase in fuel prices, it was pointed out that the taxation at transportation, tariff, cost and subvention issues had to be handled and solved in accordance with the new conditions of Turkey.

The Third Five-Year Development Plan period (1973-1977) was the period at which the first concrete target concerning the Turkish maritime sector was seen. In conformity with this target, it was aimed at operating the totally 5,000-capacity 4 ships and 2 trailers in 1975 (SPO, 1972).

5 FOURTH FIVE-YEARS DEVELOPMENT PLAN (1979-1983)

As a result of the petrol prices increased rapidly in the world, carrying out the transportation services with less fuel consumption and the most suitable transportation systems for Turkey, and thus minimizing the foreign-source dependency at the sector were the most important target in the Fourth Five-Year Development Plan (1979-1983). In order to achieve this target, the required measures would be carried out to focus on the mass transportation by directing load transports of the industry to railway and maritime transportation, and the maritime transportation share with the 9.5% ratio in 1977 would be increased to 10.7% in 1983 (SPO, 1978).

Strengthening the infrastructure of the maritime transportation and pipeline transportation, and also the integration was first expressed in the fourth plan period.

In the plan it is emphasized that while preparing the transportation policies, the real cost of the transport in the transportation systems should be detected in order to arrange the tariffs by taking into account the real cost as well as the correlations and effects of the transportation infrastructure systems.
During the Fourth Five-Year Development Plan period (1979-1983) Turkey has understood that the maritime sector would be effective on paying the external debts of Turkey. During the plan period it was claimed that the facilities arisen from the Turkish geographical position should be evaluated and the maritime policies should be determined. Thus it was aimed the importance of being the international causeway to be evaluated for increasing the development and making contribution in order to pay the external debts (Guner & Kadioglu & Coban, 1997).

During the Fourth Five-Year Development Plan (1979-1983) it was aimed the incentive laws, which would encourage the high-capacity load and passenger transport systems, to be entered into force, the big and integrated project concept to be developed, the training, control and engineering services required for the transportation security to be improved firstly, and the zone complexes including the transit circulation and ship maintenance shipyards if necessary to be built while carrying out the new harbor capacities.

The concrete targets about the Turkish merchant marine have been determined also in the fourth plan period. Since the targets of plan were initially to decrease the freight and external debts of Turkey, it was aimed that the Turkish merchant marine to be increased as 800,000 DWT more in the five-year period during the Fourth Five-Year Development Plan (1979-1983) and to be reached 2,600,000 DWT in 1983.

Also in the fourth plan period it was emphasized that the importance of pipeline transportation should be evaluated carefully.

6 FIFTH FIVE-YEARS DEVELOPMENT PLAN (1985-1989)

The targets on the maritime sector to be strengthened, the effectiveness to be increased, the current capacity to be used in the most effective way, the service capacity to be improved, and to make safer were included in the Fifth Five-Year Development Plan (1985-1989).

The road transportation was mostly preferred for the long distance load transport between 1952 and 1985 in Turkey. Since the fuel prices increased and environmental conscious improved, the studies for directing the domestic transports to the maritime transportation – of the unit price was cheaper – was also included in the fifth plan.

According to the concerned target the road transportation share in the domestic transportations would be decreased from 80.9% to 65.7% at the end of the Fifth Five-Year Development Plan period (1985-1989), on the contrary the maritime transportation share would reach 11.5% at the end of 1989 and pipeline transportation share would reach 4.4% (SPO, 1984).

The projects making the traffic safer would be prioritized and the companies working for the maritime transportation would have the lion’s share from the international transportation.

Moreover the current harbor invests would be completed during the period, it would be made investment for a new harbor in the Marmara Region of Turkey and the projects would be prepared for building the container terminals at some of the most important Turkish harbors at the international transportation. Firstly important harbors at the international transportation would be improved technically and administratively, and modernized. Thus it was aimed at increasing the harbor capacities and advancing the service level.

It was aimed at making the Turkish Merchant Marine suitable for the international maritime transportation and modern management concept, and the tonnage of Turkish Merchant Marine to be reached 6.2 million tons at the end of Fifth plan. In conformity with those targets it was pointed out “improving” the passenger ships which would make transportation for touristic purpose and local passenger transport.

7 SIXTH FIVE-YEARS DEVELOPMENT PLAN (1989-1994)

During the Sixth Five-Year Development Plan (1989-1994) the maritime sector has also been considered as a transportation system supporting the development of the country without causing any bottleneck because of the growing external debt of Turkey, making the international commerce easier and making contribution for the payment balance of Turkey most.

During the Fifth Five-Year Development Plan period (1985-1989) 22% of the total public investments were shared for the transportation system, and thus it was aimed at spending almost the total of the investments for the current projects and so making contribution for the economy rapidly (SPO, 1988).

During the Sixth plan period it was first expressed “integration with the EU” and aimed at conforming to the European Union on the transportation policies.

It was adopted to prioritize the staff training at “infrastructure” and “management” issues in order to follow the international developments closely and to make services concerning the maritime sector in Turkey as required.
It was also pointed out at this plan period that in order to benefit from the Turkish harbors more at transit transportations carried out over Turkey, it was necessary to make arrangements encouraging this transit at harbor superstructures and tariff systems.

At the end of sixth plan period it was aimed the Turkish Merchant Marine to be reached 6.5 million DWT via construction and import of the ships appropriate for the international technological developments.

During the plan period it was predicted the Turkish Merchant Marine share to be increased 8.1% at domestic load transportation and 4.8% at international load transportation. Besides, it was expected the inflow of foreign currency from the transportation between the third countries to be supplied and the share of the Turkish-flag ships from the transit transportation to be reached 3 million tons.

Sixth Five-Year Development Plan period (1989-1994) has been a period especially emphasizing ship building industry capacity of Turkey. It was expressed that the necessary financial facilities should be supplied for evaluating the ship building industry capacity of Turkey, renewing the merchant marine and meeting the additional ship requirement.

During the sixth plan period it was expressed a study would be prepared which would detect the social, economic and environmental features of the Turkish coasts at industrial, commercial and touristic points, the current harbor capacities, and the potential coasts of the sector suitable for developing.

The Sixth Five-Year Development Plan period (1989-1994) was the period when the privatization studies for harbors started. In this plan period it was aimed at starting for the “autonomic harbor management” application in order to make some of the important foreign trade harbors of Turkey more effective.

In this context it was aimed at making the administrative arrangements in order to privatize the activities at public harbors according to their subject, and applying with the “pilot projects”.

8 SEVENTH FIVE-YEARS DEVELOPMENT PLAN (1996-2000)

During the Seventh Five-Year Development Plan period (1996-2000) it was initially expressed “an environment-friendly transportation infrastructure” and also carrying out the transportation infrastructure required for the economic and international relations with the Independent Turkish States for the state’s benefits in conformity with the current facilities.

In the plan it was again aimed at – as in earlier plans – increasing the effectiveness, using the current capacities effectively, making the legal and corporate arrangements and infrastructure to direct the domestic transports generally carried out by the road transportation to the maritime transportation.

For the reason that a “Transportation Policy”, which was in conformity with the economic and social progress of the state in addition to the integrated and stable structure for the transportation systems, couldn’t be determined, it was decided to prepare a “Master Transportation Plan” in the Seventh Five-Year Development Plan (1996-2000).

The privatization at the maritime sector was clearly expressed in the 6th plan period. In the plan it was adopted the privatization programs and control mechanisms suitable for the maritime sector to be carried out. It was aimed at making investments for the maritime sector to be with “Build-Operate-Transfer” model as also in the other investments. Moreover it was decided to improve the programmed investments in the harbors and to carry out new capacities if required (SPO, 1995).

In order to comply with the global maritime trade conditions totally it was pointed out conforming to the maritime policies of the EU and making arrangements for the national regulation about the marine insurance, environment, financial rent, shipping agency regulation and constituting the maritime specialized court. And thus it was aimed at constituting a “dynamic policy” which would follow the global maritime sector closely and make arrangements complying with the growing national and international conditions.

The idea as “the harbor management, which has not been totally completed, to be under the autonomic structure or else to be prepared for the international competence by privatizing was included in the Seventh Five-Year Development Plan (1996-2000).

9 EIGHTH FIVE-YEARS DEVELOPMENT PLAN (2001-2005)

It was predicted that the combine transportation – one of the most importation transportation in the 21st century – would affect also Turkey, which is a transit country, for harbors and the other transportation infrastructures during the Eighth Five-Year Development Plan (2001-2005).

It was aimed at improving, modernizing and increasing the capacities of Turkish harbors according to the “National Harbors Master Plan” completed in 2000 in order to attribute Turkey as a transit lane of the transit transportation (SPO, 2000).
During the Eighth Five-Year Development Plan (2001-2005) it was especially emphasized that the required policies should be followed in order to make transportation services economic and safe, to balance the transportation types in conformity with the requirements of Turkey, to provide the security of life and property during the transportation, to minimize the damages to the environment, to benefit best from the information and technologies.

For the reason that the coastal shipping monopoly has to be expired if Turkey becomes a member of the EU, it was decided that necessary measures should be followed to support the load and passenger ships – carrying out the coastal shipping – for harbor services and fuel in order to direct the load and passenger transportation in Turkey to the maritime transportation. In order to be ready for a possible the European Union competition it was aimed at strengthening the coaster fleet.

It was aimed at making the necessary legal regulation changes to arrange the maritime regulation in accordance with the international regulation, to enable the entrepreneur to acquire and manage the ship by the financial renting, to apply the indirect supports -in force in the international area- for building a new ship.

It was again aimed the harbor management to be under an autonomic structure and to be prepared for the international competition.

It was aimed Turkey -a bridge between Europe and Asia- to become a combine transportation terminal for the transit transportation between these two continents.

It was pointed out the international crude oil and natural gas pipeline investments, which is very important for the maritime sector and will attribute Turkey one of the most important energy distribution center, should be paid attention. And so, Baku-Tbilisi-Ceyhan Pipeline projects, which will transfer the crude oil manufactured in Kazakhstan, Turkmenistan and Azerbaijan in Caspian Basin, to the Mediterranean and than to the world markets by pipeline, was completed in the 8th Plan period.

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11  CONCLUSION AND PROPOSALS

The dwt-based shares of the Turkish Merchant Marine with 7.2 million are as 46,92% for the Bulk Carriers, 20,30% for the Dry Cargo Vessels and 15,51% the Petrol Tankers, respectively. The dwt-based share of the other types of ships is 17,27%.

Figure 1: Change of Turkish Merchant Marine Fleet (1980-2007)
The division of the tonnage and age groups of the Turkish Merchant Marine as following;

In the fleet with totally 1473 ships and 7,244,062 Dwt; 374 ships with 2,700,763 Dwt are at age group of 0 to 9 years, 275 ships with 601,925 Dwt are at age group of 10 to 19 years, 412 ships with 2,858,223 Dwt are at age group of 20 to 29 years and 412 ships with 1,083,151 Dwt are at age group of 30 years and over.

There have been increases and decreases at dwt share of the Turkish Merchant Marine at 5.7% in 1998 and 1999, at -8.1% in 1999 and 2000, at -1.9% in 2000 and 2001, at -6.9% in 2001 and 2002, at -12.0% in 2002 and 2003, at -7.5% in 2003 and 2004, at 7.8% 2004 and 2005, at -4.3% 2005 and 2006 and at -0.2% in 2006 and 2007 (Fig. 1).

37% of the Turkish Merchant Marine are at age group of 0 to 9 years, 8% of are at age group of 10 to 19 years, 40% of are at age group of 20 to 29 years and 15% of are at age group 30 years and over.

In 2007 the Turkish Merchant Marine was composed of 1473 ships, 47% of (693 ships) were registered in the National Registration and 53% of (780 ships) were registered in the International Ship Registration of Turkey(TUGS).

The 10% of dwt share of the Turkish Merchant Marine was registered in the National Registry and the 90% of dwt share was registered in the TUGS; the 14.7% of grt share was registered in the National Registry and the 85.3% of grt share was registered in the International Ship Registration of Turkey(TUGS).

Shares of the most important export items of maritime lines – 67.5 million tons in 2007 – were 10.6% for the Construction Iron, 5.7% for the Feldspar and 4.3% for the Fuel Oil. And shares of the most important import items of maritime lines – 152.3 million tons in 2007 – were 15.6% for the Coal, 14.5% for the Crude Oil and 10.9% for the Junk.

<table>
<thead>
<tr>
<th>Year</th>
<th>Shipment</th>
<th>Emptying</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>16,480,210</td>
<td>20,847,595</td>
</tr>
<tr>
<td>2001</td>
<td>13,647,620</td>
<td>12,633,778</td>
</tr>
<tr>
<td>2002</td>
<td>13,044,511</td>
<td>12,213,078</td>
</tr>
<tr>
<td>2003</td>
<td>13,511,217</td>
<td>12,833,551</td>
</tr>
<tr>
<td>2004</td>
<td>14,539,714</td>
<td>14,678,638</td>
</tr>
<tr>
<td>2005</td>
<td>14,238,305</td>
<td>13,858,655</td>
</tr>
<tr>
<td>2006</td>
<td>13,595,664</td>
<td>14,682,817</td>
</tr>
<tr>
<td>2007</td>
<td>16,364,074</td>
<td>18,741,552</td>
</tr>
</tbody>
</table>

The foreign trade transportation of Turkey in 2004 was totally 173.6 million tons. The 151.8-million ton- part of those loads i.e. 87,4% was carried out by maritime transportation (COS, 2006).

Although it was aimed at transporting at least 50% of the Turkish foreign trade goods in the First 5-Year Development Plan period, this aim has not been achieved yet (COS, 2008).

In Turkey the number of the training institutes to educate a seafarer and the graduated students of those institutes has substantially increased. And also first private maritime university of Turkey was founded.
Table 2: Change of Turkish Merchant Marine Fleet for Turkish Foreign Trade (Million Ton)

<table>
<thead>
<tr>
<th>Year</th>
<th>Turkish Flag</th>
<th>Foreign Flag</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>33.6</td>
<td>66.4</td>
</tr>
<tr>
<td>1999</td>
<td>31.2</td>
<td>68.8</td>
</tr>
<tr>
<td>2000</td>
<td>32.1</td>
<td>67.9</td>
</tr>
<tr>
<td>2001</td>
<td>34.6</td>
<td>65.4</td>
</tr>
<tr>
<td>2002</td>
<td>36.1</td>
<td>63.9</td>
</tr>
<tr>
<td>2003</td>
<td>30.3</td>
<td>69.6</td>
</tr>
<tr>
<td>2004</td>
<td>25.3</td>
<td>74.7</td>
</tr>
<tr>
<td>2005</td>
<td>25.1</td>
<td>74.9</td>
</tr>
<tr>
<td>2006</td>
<td>23.2</td>
<td>76.8</td>
</tr>
<tr>
<td>2007</td>
<td>17.7</td>
<td>82.3</td>
</tr>
</tbody>
</table>

The important part of the structural problems of the maritime sector blocking the international competition has been solved.

A safe and detailed database has been established for the maritime sector.

In 1987 there were 21 harbors handling domestic and foreign trade goods at the public administration. Moreover totally 69 harbors -6 of them were operated by the industrial bodies and 32 small harbors and seaports were operated by the municipalities and the other bodies - were active

There are 160 harbors and seaports in Turkey in 2008 that 6 of them are operated by the TDİ (Turkish Maritime Organizations) and 6 of them are operated by the TCDD/Turkish State Railways. If we examine in terms of operated bodies, there are 25 public harbors, 27 municipality harbors and 108 private harbors (Kadioglu & Bas, 2008).

For the reason that the Turkish harbors couldn’t follow the technologic developments, the infrastructure is not adequate and the railway connections which will integrate into the harbors are not sufficient, Turkey couldn’t benefit from the transit transportation enough.

In 2007 it is observed that the transit transportation became more important when the Baku-Tbilisi-Ceyhan (BTC) pipeline which has been entered into service since July 2006 and has transferred the Azerbaijani petrol first to Ceyhan by the pipeline and then especially to Europe and the Middle Eastern States by the maritime lines. 210,352,000 barrels of petrol were transferred by the BTC pipeline in 2007.

288,083,916 ton loads were handled in harbors and seaports of Turkey in 2007. Division as following:

- 67,597,739 tons of export including 23.4%
- 152,313,601 tons of import including 52.9%
- 35,105,626 tons of freight including 12.2%
- 33,066,950 tons of transit including 11.5%

The Turkish ship building industry is one of the sectors improving quickly.

In Turkey the ship building capacities in 1987 were 25,000 DWT – the largest one – in one-piece for military purpose, 75,000 DWT for Turkish Shipping Industry of public and 30,000 DWT for the private sector. The iron working capacities of those shipyards were 117,380 tons per year and the ship building capacities were 306,060 DWT per year.

The number of the shipyards was 27 in 1982 and today there are 84 active shipyards from the Mediterranean to the Black Sea by detecting new building areas and modernizing the facilities. In 2013 the number of shipyards will be 140 together with the current projects (SPO, 2006).

The Turkish ship building industry has the possibility and capacity as 10 Million DWTs for maintenance, 1 Million 800 thousand DWTs for new ship building, 600 thousand tons for steel working and up to 80 thousand DWTs for new ship building.

The Turkish shipyards having the capacity and employment increase especially for the last 3 years was ranked 23rd in 2002, reached to the 8th rank in 2006 by the 1.8 million-DWT ship and yacht order and reached to 6th rank by the 239 ship and yacht order with 3.05 Million DWT. The sector breaking records on the amount and tonnage of ships built in export in 2008 was at top 5 at ship building order market (COS, 2007).

Now Turkish shipyards are at number 1 at small-tonnage chemical tanker building and at number 3 at mega yacht building. Medium and small-sized ship projects have been sent to Turkey especially since 2002.

The studies about conforming to the European Union still continue (Kadioglu & Deniz 1997).

REFERENCES

Kadioglu M., Bas M. (2008), “Port management strategy of Turkey(Turkey)”, 11th International Conference on Transport Science, 28th and 29th May 2008, Portoroz, Slovenia.


