OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.

DISCLAIMER

FAIR USE POLICY

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna International Centre, P.O. Box 300, 1400 Vienna, Austria
Tel: (+43-1) 26026-0 · www.unido.org · unido@unido.org

We regret that some of the pages in the microfiche copy of this report may not be up to the proper legibility standards, even though the best possible copy was used for preparing the master fiche

08724

Distr.
LIMITED

ID/WG.285/6
7 March 1979

ENGLISH

United Nations Industrial Development Organization

Sub-Regional Workshop on Shipbuilding,
Shiprepair and Design for
Mediterranean Countries

Valletta, Malta, 23 - 27 April 1979

REPORT ON THE SHIPBUILDING INDUSTRY OF TURKEY*

by

Mahir Barutçu**

* The views and opinions expressed in this paper are those of the author and do not necessarily reflect the views of the secretariat of UNIDO. This document has been reproduced without formal editing.

** Senior Expert, State Planning Organization, Ankara, Turkey.

I. INTRODUCTION

The roots of the Turkish shipbuilding Industry go back to year 1455 where first two shipbuilding arsenals were established in Golden Horn, İstanbul by the Ottoman Sultan, Mehmet the Conquerer. These two shipyards, namely HALİÇ and TAŞKIZAK are still in operation which are now owned and operated by the State Maritime Bank and the Navy, respectively.

Although several small shipbuilding and shiprepair facilities could be found around the Mediterranean and Black-sea coast of Asia Minor which were established by the Anotolian Seljukian Empire during XII. and XIII. Centuries (e.g. Alaiye Shipyard and Sinop Shipyard), the full fledged facilities were never founded at that time.

A new and dynamic era of economic and social development took place after the establishment of Turkish Republic in the year 1923. A comprehensive redevelopment and reconstruction process was initiated. However the expected progress in the shipping and shipbuilding industries was never fully realized during the first three decades of the new Republic mainly due to the inadequacy of capital, scarcity of know-how and limited amount of skilled man power.

Turkey has entered the "planned economy" period after the 1960's in which a balanced and rapid growth were envisaged in all economic and social sectors. The transport sector was given high priority in the Development plans since healthy and well co-ordinated development efforts could only go hand in hand with a well prepared and implemented transport plan.

Betterment of transport services and transport infrastructure together with the expansion and Modernization of the fleet has been one of the major goals during the last two decades. Although the Development plans - which are prepared by the state Planning Organization, submitted to Government and later enacted by the Parliement- could bring forward imperative measures and investment targets to be implemented by the Public Sector, they can only decribe promotive incentives for the private sector, which is a normal procedure in a democratic society. Within the framework of 5-Year Development Plans, most of the targets have been realized in the maritime field both in the public and the private sectors.

Turkish shipping and shipbuilding industries can still be considered in their infant stage. The amount of exported goods carried by Turkish flag ships can hardly exceed 20 % percent of the total. The situation is only slightly better in the import of goods to Turkey, which is only about 25 to 30 %. If one considers that almost 90 % of the Turkey's imported and exported goods are carried by ships, it would be easy to conclude that still much to be done in the Maritime Sector in Turkey in order to maximize benefits from this field. And in shipbuilding side the picture is not much different. Turkey still imports more than two-thirds of its fleet from abroad.

Turkey now aims to carry 40 % of her export and import commodities by Turkish flag ships through Modernizing and expanding the existing fleet, and to achieve this goal it is envisaged to modernize the present shipbuilding and shiprepair facilities and establish new capacity

II. EXISTING FACILITES

The existing shipbuilding and shiprepair facilities can be broadly classified into 3 categories according the the type of owner. These are;

a.	Facilities owned and operated by The				MARITIME BANK (A State Economic Enterprice)
b.	"	"	"	"	THE NAVY,
c.	"	"	"	"	The PRIVATE SECTOR.

a. The Shipyards owned and operated by the Maritime Bank.

The Maritime Bank is a State Economic Enterprise under the Ministry of Transport, established in 1951 (although it was first established in 1843 under the name of OTTOMAN INTERESTS) and authorized to operate passenger lines, cargo lines (later organized as a separate shipping lines under the name of D.B. CARGO LINES), ferry services shipbuilding and repair facilities and to act as a banking, marine insurance and financing company, and to carry out other relevant functions. There are now studies underway to reorganize the Maritime Bank in order to create a functional set-up, e.g., a holding Company or similar. The aim is to give almost full autonomy tho the new organizations under the Maritime Bank. One ofthem would possibly be labeled as "The shipbuilding Agency" and hopefully function much more efficiently.

Below given a list of shipyards owned and operated by the Maritime Bank, together with some operational characteristics.

SHIPYARDS OWNED AND OPERATED BY THE MARITIME BANK

NAME	LOCATION	TOTAL AREA (sq.meter)	no.of SLIPWAYS	SIZES OF SLIPWAYS (Meter)	ANNUAL SHIPBUILDING CAPACITY (DWT)	LARGEST SHIP TO BE BUILT (DWT)	no.of Workers	no.of Engineers/ Technicians and/administrative Personnel
CAMIALTI	İSTANBUL	72 000	2	91,7x16,5 140x24	34 000	20 000	1 358	43/26/41
HALIC	İSTANBUL	69 101	2	56x18 70x23	5 600	4 000	1 740	40/51/63
ISTINYE (1)	İSTANBUL	25 772	1 2 Floating Docks	80x20	3 400	4 000	1 020	15/13/41
HASKOY	İSTANBUL	11 335	2	53x11,3 52x11	2 700	1 700	351	8/5/32
ALAYBEY (1)	İZMİR	44 340	2	49x3,1 32x2,8	2 000	2 500	403	20/14/48
PENDIK	İSTANBUL	580 000	Drydock	-	150 000	230 000	2 000	

Note: 1. Dominant function of HALIC AND ALAYBEY Shipyards is shiprepair. ALAYBEY shipyard is in the midst of an enlargement and modernization process and will be equipped with shipyard system to enable to repair 12 ships up to 12 500 DWT simultaneously.

2. PENDIK Shipyard is under construction and is expected to inaugurate late 1981.

b. The Shipyards owned and operated by the NAVY.

There are 2 shipyards owned by the NAVY, namely, GÖLCÜK (in İZMİT) and TAŞKIZAK (in ISTANBUL) shipyards. They are mainly constructing vessels for the NAVY although their spare capacity is allocated to build merchant ships. GOLCUK shipyard, being the largest and most modern shipyard in TURKEY (except the PENDIK Shipyard which is under construction) can build ships up to 20 000 DWT, and TAŞKIZAK shipyard can build ships up to 7 500 DWT.

c. The shipyards owned and operated by the Members of Shipbuilding Association of Turkey (Privately owned Shipyards).

There are about 22 shipyards, situated mainly in the MARMARA SEA region, of different size and capacity. The bigger ones which were established in the last decade, can built almost all kind of ships (dry cargo, bulk carrier, tanker, LPG, Ro/Ro and like) up to 25 000 DWT. The total annual shipbuilding capacity of all privately owned shipyards is about 195 000 DWT/year.

Below given a list of privately owned shipyards, together with some operational characteristics.

SHIPYARDS OWNED AND OPERATED BY THE MEMBERS OF SHIPBUILDING ASSOCIATION
OF TURKEY (Privately owned shipyards)

NAME	LOCATION	TOTAL AREA (sq. Meter)	NO. of SLIPWAYS	SIZES OF SLIPWAYS (Meter)	ANNUAL SHIPBUILDING CAPACITY (DWT)	LARGEST SHIP TO BE BUILT (DWT)	No. OF WORKERS	No Of Engineers/ technicians
ANADOLU	İSTANBUL	4200	2	75x14 75x14	5000	4000	130	3/3
ATILIM	İSTANBUL	4000	1	110x7	8000	8000	45	1
ÇELİK TEKNE	İSTANBUL	2400	2	70x6 65x5	6900	5000	120	7/1
DEGAŞ	İZMİR	4200	2	75x21 75x21	10000	10000	57	2/8
DERAN	İSTANBUL	2400	2	60x13 40x12	1500	1500	60	1/1
ÇELİKTRANS	İSTANBUL	2100	2	80x14 60x12	2500	1800	25	2

NAME	LOCATION	TOTAL AREA (s q Meter)	No. Of SLIPWAYS	SIZES OF SLIPWAYS (Meter)	ANNUAL SHIPBUILDING CAPACITY (DWT)	LARGEST SHIP TO BE BUILT (DWT)	No. Of WORKERS	No. Of Engineres/ technicians
DÖKEREL	İSTANBUL	4200	2	75x15 75x15	3000	3500	51	1
GEMAK	İSTANBUL	2400	1	45x12	3000	1200	42	2/2
GEMİ-İŞ	İSTANBUL	1550	2	70x8 70x8	3750	3500	30	1
GEMİ İNŞAAT KOLL. ŞTİ.	İSTANBUL	16000	2	80x12 80x12	3750	2500	55	1
GÜNSEN	İSTANBUL	2600	3	60x12 50x12 50x12	6400	3000	54	1
HIDRIDİNAMİK	İSTANBUL	4000	2	60x14 60x14	6000	3500	50	2
GELİBOLU	ÇANAKKALE	40000	2	90x20 120x26	4500	4500	30	2
KIYI	ÇANAKKALE	30000	1	200x30	25000	10000	300	25/35

NAME	LOCATION	TOTAL **AREA** (sq Meter)	No. Of. SLIPWAYS	SIZES OF SLIPWAYS (Meter)	ACTUAL SHIPBUILDING CAPACITY (DWT)	LARGEST SHIP TO BE BUILD (DWT)	No. Of. WORKERS	No. Of. Engineres/ technicians
MARMARA	İZMİT	33000	4	110x22 80x24 8x18 14x22	32400	17000	190	[illegible]/4
[illegible]	İSTANBUL	9000	2	115x18 70x10	10000	4000	130	[illegible]/3
PROJİTO	İSTANBUL	15000	2	75x13 60x13	1000	3000	70	2/2
SEDEF	İZMİT	72000	4	105x18 170x22 46x12 250x40	30400	20000	350	18/3

Note : Other small privately owned shipyards having less than 2000 sq. meter total are not included in the table.

III. PLANS FOR THE FUTURE DEVELOPMENTS

The IV. Five Year Development Plan envisages an increase of about 1 million DWT ships of different type and size, added to the present merchant fleet of 1,8 million DWT to reach the capacity of 2,8 million DWT by the end of 1983, thus anabling to carry 40 % of Turkish export-import commodities by Turkish Flag ships.

It is also intended to build the majority of these ships locally. The additional shipbuilding capacity will be provided through PENDIK shipyard (which is expected to inaugurate late 1981) and through the shipyards to be erected in the TUZLA shipbuilding site. TUZLA Bay (near PENDIK) was prepared by the GOVERNMENT and organized in such a way that the 19 available pieces of land would be allocated to selected investors on long term lease contract basis. The sizes of these lands vary from 20.000 sq.meter to 80.000 sq. meter. In the meantime the GOVERMENT decided to prepare and make available the site behind the TUZLA bay for the ancillary industrie Most of the shipyards at the TUZLA site are expected to be completed by the end of 1982.

The Turkish Government also decided to establish a joint venture marine diesel engine factory to be erected behind the PENDIK shipyard site. The low speed engines which will be manufactured in this factory will range from 4350 BHP to 14 400 BHP. In the meantime medium and high speed engines up to 5000-6000 BHP will be manufactured in the ESKİŞEHİR locomotine and engine factory of Turkish Railways (engines up to 2400 BHP are now manufactured in this factory). Plans are made available to enable PENDIK factory to manufacture engines up to 26800 BHP in future.

The local content in the Turkish shipbuilding industry is now roughly 50 %, but with the erection of new marine diesel engine factory, new electronic and electric equipment and component manufacturing facilities and other revolant developments in the ancillary industries will eventually lead to a much higher local content during the next V. year Development Plan periods.

Educational and training facilities are offered by the Institute of Shipbuilding, Techinical University of İstanbul and newly established Faculty of Shipbuilding in the University of Ege, İzmir. Model test laboratory and other facilities are also available in the Technical University of Istanbul.

Turkey and Libya, within the context of regional cooperation, now aim to establish a new joint venture shipyard in Libya, to be realized in the next 4-5 years.

One of the major drawbacks of Turkish shipbuilding industry is the lack of a central design bureau which will develop and prepare technical designs of ships to be built in Turkey and make available the outcome to potential users. Turkey will appreciate the help of UNIDO especially in this field.

B-83

80.02.05