TÜRK LOYDU

2016
ANNUAL REPORT

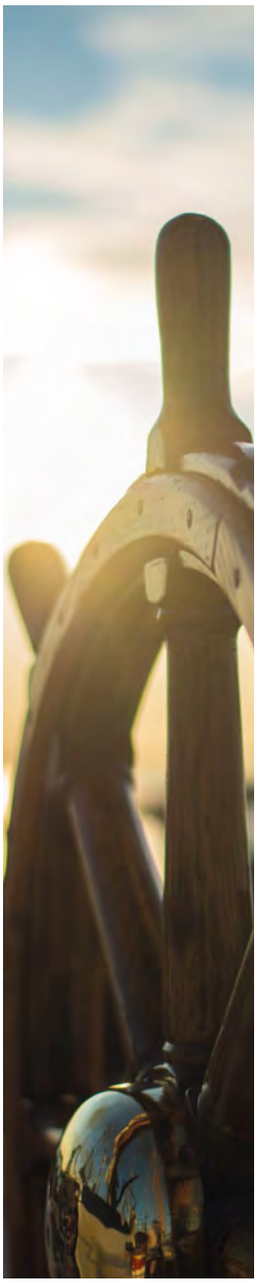
www.turkloydu.org

To become great; you will not compliment anybody, you will not deceive anybody, you will see whatever the real goal is for the country and walk to that destination.

Everybody will be against you; everybody will try to throw you off the track. However, you will resist them, they will put endless obstacles in front of you as well. You will overcome these obstacles accounting yourself little, not great, weak, toolless, nothing and believing that no one will help you.

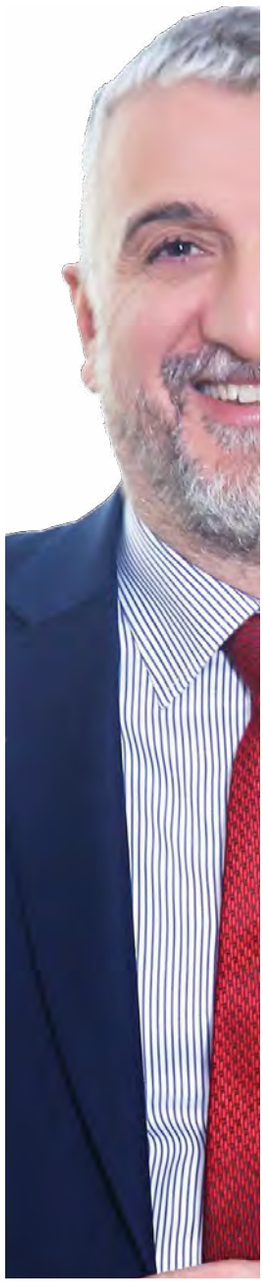
CONTENTS

ABOUT US 04



BOARD OF TRUSTEES 06

HEAD OF BOARD OF TRUSTEES Cem MELİKOĞLU 08



GENERAL MANAGER Alper ERALP 10

MARITIME SECTOR

INDUSTRY AND CERTIFICATION SECTOR

TRAINING SERVICES

TURK LOYDU FOUNDATION'S ACTIVITIES

Our Vision

To become the first preferred international classification and certification society that powered by powered by its own rules and knowledge and expertise.

Our Mission

To provide conformity assessment services in the field of safety of life, property and environment in line with our principles.

Our Values

Independence and Objectivity,
Honesty and reliability,
Continuous improvement,
Generating and sharing the knowledge,
Customer-driven and qualified service,
Esteem for its personnel

Turk Loydu Health, Security, Environment and Quality Policy Türk Loydu is committed to;

- Ensuring independence, impartiality, confidentiality and reliability,
- Complying with "Türk Loydu Code of Ethics",
- Delivering services in accordance with applicable legislation, rules, standards as well as the terms and conditions specified by customers,
- Contributing to safety of life and property and environmental protection by means of the rules developed and services performed,
- Maintaining its national and international recognitions in compliance with Health, Safety, Environment and Quality standards,
- Ensuring customer satisfaction by offering on-time and equally accessible service to all customers according to their expectations,
- Ensuring effective training and qualification system to maintain a high level of technical personnel,
- Managing of risks associated with service processes,
- Providing a healthy and safe environment and adequate resources to personnel in order to prevent injuries, ill health and to ensure their safety,
- Requiring that adequate resources are provided by customers to allow work to be undertaken safely,
- Giving its personnel the right and responsibility to refuse to conduct work in cases endangering their health and safety, until it is safe to do so,
- Providing a high level of occupational safety and health and environment protection awareness to personnel,
- Ensuring that environmental impacts of activities carried out are evaluated and adverse effects are minimised and environment is protected,
- Use of resources sustainably,
- 15. And continually improving the effectiveness of its HSEQ performance, through suitable performance indicators and objectives by performing periodical reviews.

TURK LOYDU FOUNDATION BOARD OF TRUSTEES

Head of Board of Trustees
M. Cem MELİKOĞLU

Deputy Head
Atilla ÇİFTÇİGÜZELİ

Treasurer
Halim METE

Board Members
Erdal GEDİKOĞLU
Kaan TUNÇELLİ
Lütfü SAVAŞKAN
Sevgi UNAN
Mehmet Atilla OKSAY
Ass.Prof.Dr. Serhan GÖKÇAY

Audit Committee
Ali ÖNDER
Derya TURGUT
İsmail YALÇIN

TURK LOYDU FOUNDATION ECONOMIC ENTERPRISE EXECUTIVE BOARD

Head of the Executive Board
M. Cem MELİKOĞLU

Deputy Head
Mehmet Atilla OKSAY

Board Members
Ass.Prof.Dr. Serhan GÖKÇAY
Alper ERALP
Ayfer ADIGÜZEL

Head of Board of Trustees
Cem MELİKOĞLU

Born in 1964. Graduated from ITU, Faculty of Naval Architecture and Marine Engineering in 1988. After working at positions as regional manager for EMEA for ExxonMobil Company for more than 21 years, he worked at senior executive positions for OMV Petrol Ofisi and in TANAP Projects. Cem Melikoglu, who is a graduate of Private Alman High School, has a good command of German and English and has two children.

Deputy Head
Atilla ÇİFTÇİGÜZELİ

Born in 1951. Graduated from Istanbul Technical University, Maritime Faculty (Higher Maritime School) in 1974-1975 term. He worked as expert surveyor for Turk Loydu between 1988 and 1996. He is one of the founders of Defav Foundation, and he took the chair as President between 2002 and 2004. From 1996 to present, he is Chairman of Executive Committee at SNR Holding and İstanbul Shipyard. He is married and has two children.

Treasurer
Halim METE

Born in 1948. He completed his higher education at Istanbul University, The School of Economics. He is Chairman of Mete Kardeşler Şirketler Grubu and shareholder of around 15 companies within and outside of the group. He has been actively taking roles in the Board of TOBB (the Union of Chambers and Commodity Exchanges of Turkey) and numerous organizations. He is married and has three children and five grandchildren.

Board Member
Kaan TUNÇELLİ

Born in 1971. Graduated from Yıldız Technical University, Faculty of Naval Architecture and Marine Engineering in 1993. He worked for private shipyards in Tuzla Shipyards Region until the end of 1994, and he has continued working for DOP Ltd. Şti of which he is shareholder since the end of 1994. He is married and has a daughter.

Board Member
Erdal GEDİKOĞLU

Born in 1970. Graduated as Naval Architect and Marine Engineer from ITU in 1992. He specialized in naval architecture, classification and ship management. He worked at senior manager positions for various domestic and foreign companies. He has taken part in establishment and development of Turkey branch of RINA. He speaks English and Italian. He is married and has a child.

Board Member
Lütfü SAVAŞKAN

Born in 1965. Graduated from Istanbul Technical University, Faculty of Naval Architecture and Marine Engineering in 1986. In 1987, he studied at Vienna Technical University, thereafter took master degree at Sabancı University, Business Management for Executives. After serving for Germanischer Lloyd for 10 years, he worked as General Manager and Member of Executive Committees for Marmara Shipyard, Transal Shipping, Dearsan Shipyard, Dearsan Defence Companies. He is still Board Member at Altinbas Group. He is married and has a child.

Board Member
Sevgi UNAN

Born in 1975. Graduated from Istanbul University, Faculty of Management in 1996. In 1998, she has completed International Management at the Graduate School of Management and Economics which stands in the same place. In 1999, she started her career working as Assistant Expert at Insurance Association of Turkey. From 2015 to present, she has been working as Coordinator at the same organization. She is married and has two children.

Board Member
Mehmet Atilla OKSAY

Born in 1972. Graduated from Istanbul University, Faculty of Political Sciences, Department of Business in 1994. Mr. Oksay who started his career working as researcher at Insurance Association of Turkey, also worked as Expert, Deputy Head of Technical Group, Director of Technical Department within the organization. Mr. Oksay who was nominated as Deputy Secretary General of Insurance Association of Turkey in 2011 also continues his duties as Board Member at Turk Loydu Board of Trustees, Turkish Motor Insurers' Bureau Board of Directors, OSEM Certification AŞ Board of Directors. He is married and has a child.

Board Member
Asst. Prof. Dr.
Serhan GÖKÇAY

Born in 1979. Graduated from Istanbul Technical University, Faculty of Naval Architecture and Marine Engineering in in 2001. He achieved his Doctorate degree at İTÜ Graduate School of Science, Engineering and Technology in 2012. Between 2009 and 2012, he has been in the position of Rule Development Engineer at Turk Loydu. By year 2014, he has been working as Technical Manager for a partner company which is located at Teknopark Istanbul. By year 2015, he has been working as Academician at T.C. Piri Reis University, Faculty of Naval Architecture and Marine Engineering. He has a good command of English. He is married and has two children.

" As Türk Loydu, we have continued our development during 2016 and have not compromised our strategic development goals that we identified at the beginning of the year."

Turk Loydu maintains its development and progress

The year 2016 was a year that we witnessed many changes and transformations in the political, economic and cultural aspects of Turkey and unfortunately struggled with many problems at the same time. Traitor attacks by the members of terrorist groups, political instability in Middle East, various immigrant problems and the coup attempt undergone in July 15 no doubt negatively affected our country's economy and naturally many sectors including maritime.

According to the last data descriptions of TUIK, Turkish economy had recession at the end of 2016 for the first time after successful economic growth performance proven for many years. Additionally, when considered logistic and freight crises arisen in world economies and surplus capacity, we observe that the activities in the maritime industry which is one of the most important sectors of our country have been adversely affected.

Despite all these negative remarks, Turkey is standing firmly with all resistance. In the year 2016, we have maintained our progress as Turk Loydu, we haven't made any compromises about our strategically improvement goals which we determined in the beginning of the year; we continued growing by keeping our staff as far as possible without downsizing, we both expanded and rejuvenated our ships portfolio. We also have continued our successful activities by expanding which we carry on apart from maritime field. Our long-term works in international market have continued uninterruptedly and this process will also continue in 2017. We will expand Turk Loydu's boundaries even further.

> "No stopping, Continue for striving"

In our country, especially the mega transportation and infrastructure projects carried out by Ministry of Transport, Maritime Affairs and Communications and the defense industry investments carried out by the Under Secretariat for Defense Industries are the works in which Turk Loydu clenched its success in the fields that Turk Loydu provide services.

In 2016, the Osman Gazi Bridge for which the Gulf of Izmit was longing and Turk Loydu was proud of contributing, the Yavuz Sultan Selim Bridge which is the third pearl of Istanbul Strait, and some part of the Northern Belt Highway were put into service. We wait excitedly continuation of these projects which speed up the transportation network of our country, the Canakkale Bridge and the Marmara Ring which hence will improve our transportation ways even better.

Some developments in the world and economical indicators give signals for us to be careful for the year 2017. However, no stopping, we have to continue for striving. Despite all the obstacles and difficulties, Turk Loydu will continue its progress and improvement with its renewed system, challenging and assiduous staff.

I would like to thank warmly to all Turk Loydu staff that worked very hard and contributed through difficult periods in the year 2016, and I wish that 2017 will bring success and happiness to our country, our organization and all stakeholders.

Cem MELİKOĞLU
Türk Loydu Foundation Head of Board of Trustees

Alper ERALP
General Manager,
Turk Loydu Foundation
Economic Enterprise

The year 2016 was very difficult for Turkey and the world for several reasons. We, as Turk Loydu, have maintained our activities successfully and closed 2016 financial year with profit. We have kept the growth trend for the last 10 years. Turk Loydu doubled its permanent staff by increasing its sectorial activities and expanding service areas in the last 10 years. We have made no compromises from the strategical improvement goals which we determined in the beginning of 2016. We continued growing by keeping our staff as far as possible without downsizing in numbers. In other words, we have achieved an extremely difficult goal.

"Classification and Conformity Assessment" areas are the fields where cutthroat competition raised as same as all sectors. We have to compete against not only with the global leaders but also small companies that start competing by offering low quality and prices. Moreover, we have to achieve this without sacrificing quality, but raising the level and overcoming the price competition. As Turk Loydu team, we are proud of achieving this despite all the economic uncertainty and security problems which happened in 2016.

The easiest way of competition is lowering the prices. We aimed to support stakeholders of our industry by expanding the range of our products, increasing the quality of our service and maintaining our position in which the prices are already reasonable. As an organization in Turkey where we aimed to be primary solution partner for all fields we provide service.

We have managed to increase our ship portfolio in terms of number and tonnage in maritime industry. While increasing the number and tonnage of the ships, we have focused to the performance of the ships in our fleet that was evident during the Port State Control inspections. For Turk Loydu, one important success of 2016 is that we have reached to our target of Class related "0" deficiencies until today and we kept our position in the category of "High Performance" for the last 10 years in accordance with the Paris MoU PSC inspections.

> "Turk Loydu has achieved an extremely difficult goal in 2016"

We are adhered strictly to our IACS membership objectives without deviation in line with the development plan. We look forward to 2017 IACS audits with supervision, following the interim audits which were carried out successfully in 2016. Towards the end of 2017, we are going to get favorable results of our work for IACS preparation.

We have rapidly continued to work with national duty awareness for military projects which will provide power and reputation in the international arena. We have started to work on control services for multipurpose strategical amphibious transport dock vessel TCG Anadolu, which is known as mini aircraft carrier, but it is in fact much better than a mini aircraft carrier. Some of very important defense industry projects which will change balances on seas, on favor of Turkey, already started and the tender process for some of them are in progress.

Our works are in progress for new business fields, new markets, and new authorizations in terms of Flags, especially the Flags that recently in the white list of PSC regimes. Turkish flag which white list status was obtained by great efforts of our country, suffered "the danger of dropping to grey flag list" due to unfortunate increase on the number of PSC detentions this year. In this period, by means of our devoted works in the leadership of Turkish Administration, we tried to prevent detentions by providing surveys free of charge in a short time for many vessels departing for international voyages. Our works gave the positive results and it became definite that Turkish Flag will be in Paris MoU white list in 2017 as well. It is very important for our esteemed flag of which we proud, to stay in white list to mark the status of our country's quality in maritime field. We all together, firstly shipowners, Administration and recognized classification societies, have to work with the collective consciousness in order to protect our flag's status in white list because of that provides a better operational means for our vessels on international voyages.

The year 2016 was a difficult year for also Industry and Certification Sector in accordance with the economic data and economic growth results. Despite the domestic and global developments which negatively affected our country, we had a year that important improvement occurred in the conformity assessment field, starting with construction sector investments, defense industry, energy sector and public infrastructure investments are ongoing in our country.

We have increased our global existence for over the sectors we provide services; particularly energy, construction, manufacturing, chemistry, transportation and logistics sectors; besides we have designed and offered new service areas for our customers.

We started to provide service in the field by being authorized as "Verification Body" in order to conduct the verification service for monitoring of greenhouse gas emissions in industrial plants on behalf of the Turkish Ministry of Environment and Urbanization.

We completed our works to provide service by preparing guidance documents regarding asbestos, PCB, lead, detection and inventory of similar dangerous materials, and dispose safely which can be formed during the demolition period of urban transformation, that is a project closely connected to community health care.

We started to provide service as authorized certification body in compliance with the obligation of acquiring "Professional Competence Certificate" for the occupational groups including dangerous and very dangerous occupations imposed by Turkish Ministry of Labour and Social Security. We included some professions of which its national competences were published by Vocational Qualification Authority (MYK) addition to staff certification services which have been carried out for maritime and industrial fields since the Turk Loydu was established. In 2017, we are going to continue these activities by including new occupational groups.

We tried to expand the range of our services by signing new contracts in order to provide conformity assessment services in energy project investments which showed an increase in recent years in our country. We completed our project for superintending steel construction of Yavuz Sultan Selim Bridge, the third pearl of Istanbul Strait in 2016 and the most important superintending steel construction projects which Turk Loydu carried out. We started to provide service for superintending construction on the 3rd Airport project of Istanbul which is one of the most important infrastructure investments of our country.

We became the most important partner of TOBB in audit and training areas by means of our competent auditors and trainers within the scope of Chamber and Exchange

Accreditation Project of the Union of Chambers and Commodity Exchanges of Turkey (TOBB). We have contributed to the strengthening of their brand value by introducing Türk Loydu in wide network with qualified service we have provided.

It is understood that 2017 is going to more difficult than the year 2016. Addition to the developments in Turkey, especially the uncertainties which settle the world economy and slowdown in industrial investment have participated to the crisis which couldn't recover itself since 2008, on the contrary it has deepened. As Turk Loydu, we know that our stakeholders in "Maritime" and "Industry" which are the two primary activities of us expect a year in which they are requested to be more productive. Although it is a natural reaction to descent into desperation, to have worry for the future, "the thing to be done" is to increase the productivity by focusing on targets. If the crises are gained favor, they also can provide great opportunities for restructuring, self-development. All the procedures are reviewed one by one, the ways are seek to increase productivity, new markets are researched, and some of the old practices are abandoned.

Crises are very good opportunities for the organizations to make improvements against its employees. Wrongly, companies assume that personnel trainings are the first thing to make compromise in the crises. It should not be forgotten that the ones stand up and managed to make changes in crises, will leap forward after the crisis. Besides, no better time can be found to prepare the employees for the term after the crisis that those have a less workload. To maintain these employees with few works after their usual workload decreased due to several reasons will cause to endeavor for the employees to recover after the crisis term. As Turk Loydu, addition to professional and technical trainings, we provide trainings about quality management systems, business management, corporate development by the most experienced trainers in their areas, in our two floors classrooms equipped with computers. We invite all our stakeholders to take the advantage of training facilities located just beside, or trainings special to each company in their properties and overcome the difficult times together. As Turk Loydu, we are going to beside all our stakeholders by means of quality and accessible training opportunities of which we provide in a wide range.

In accordance, the period of restructuring for which we set off, we understood while we maintain our progress without downsizing that our strategic target about "to become profit making company" which was decided last year to overcome the prejudice about the staff due to our foundation profile was such a sound and timely decision.

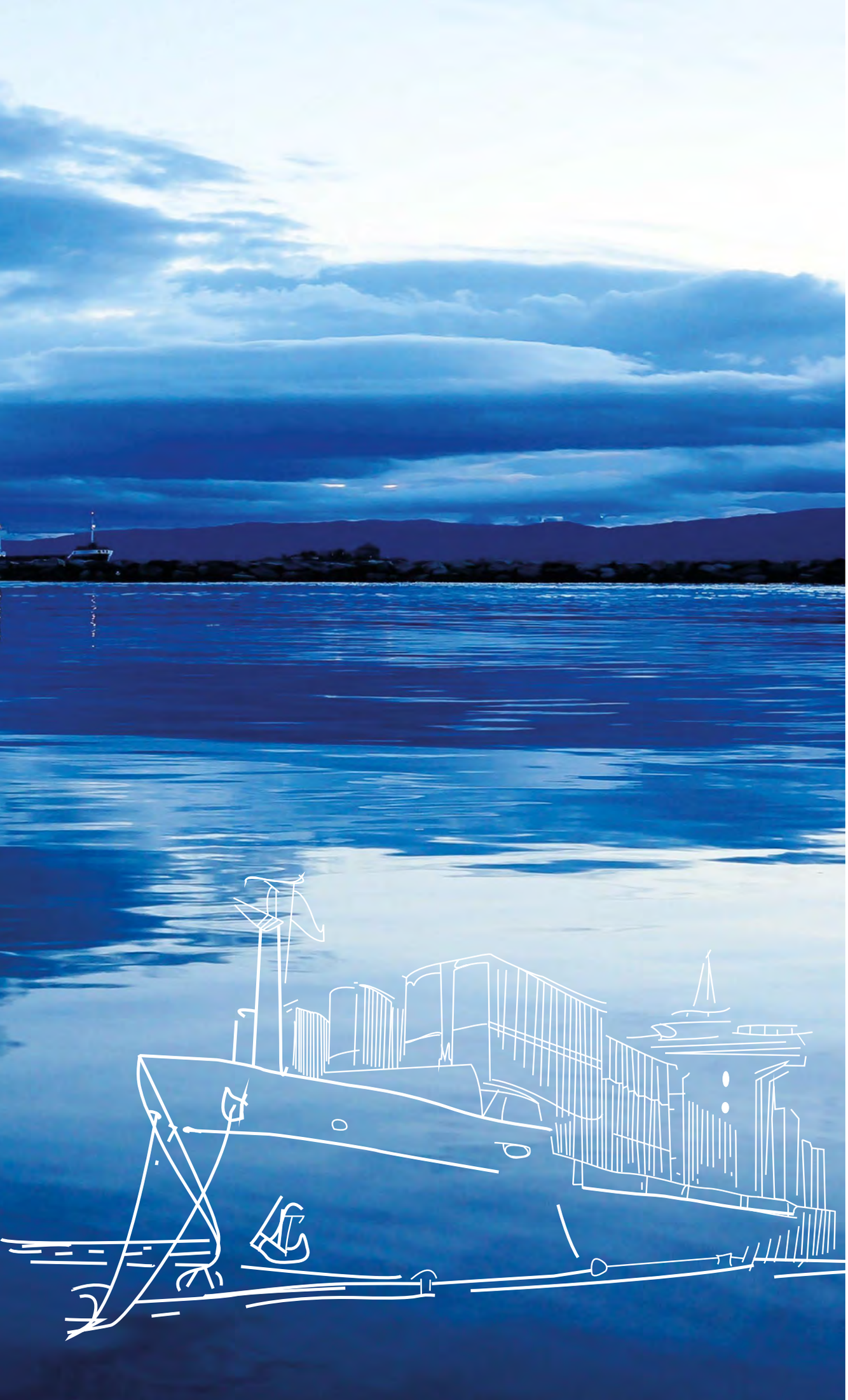
Again, Turk Loydu will seem that it will interact with our stakeholders more by means of "Customer-focus" notion that we set as strategical target this year. We will look for solution to overcome economic problems by standing next to our clients.

In 2017; to further increase our number and tonnage for newbuilding ships and vessels in service, defense industry and energy projects, to take active roles especially in nuclear energy projects, to develop further in transportation sectors including transportation models such as railway and airline, successfully complete our IACS membership process, to open regional representations in countries where new employment and investments can be provided are among our goals. We are striving to become a preferred classification society in 2017.

In 2016, the whole Turk Loydu family worked hard, made a great effort. We will also continue to work with dedication in 2017. We will reach our strategic goals all together.

The most important treasury and difference of Turk Loydu than other organizations is the qualified and high-class personnel that it has trained. I would also like to thank the Turk Loydu family for their extraordinary efforts and valuable contributions they have shown in 2016.

Lastly, I would like to thank all my friends those who contributed, foremost Mr. Mehmet Avcı, Manager of External Relations Department, who provided the coordination in the preparation of the 2016 Work Report, and Miss. Gokce Palandöken, Marketing Assistant who we have made important contributions to visual design of this report.



TÜRK LOYDU
1962
İSTANBUL

MARINE SECTOR

Okan ÇETİN
Director of Marine Sector

> “While the number of vessels increased, average age of the fleet dropped in 2016.

We are leaving behind a very difficult year for the maritime industry due to terrorism-related security problems in our country and in the world, economic fluctuations due to the exchange rate and the lower global growth rates than expected. Unfortunately, the maritime industry was particularly affected in this period when the number of new projects decreased and the average freight rate went down.

As Turk Loydu, despite the economic uncertainties and security problems experienced, we have continued our work with success this year. We managed to increase our portfolio for the newbuilding ships and vessels in-service in terms of number and tonnage. We are also focusing on the performance of the vessels in our fleet during the PSC inspections, while also increasing the number and tonnage of the vessels. Turk Loydu has been announced by the Paris Memorandum as a high-performance Classification Society also in 2016, as

it has been announced for the past 10 years. Within this scope, no responsible detainable deficiencies were recorded in the PSC inspections carried out on vessels in our fleet during 2016.

Our new construction department has continued to increase its equipment and product certification activities for vessels as well as various naval and merchant vessel projects that we started and completed in 2016. Our ship in service department has managed to increase their fleet in terms of tonnage and number, even though it has been a difficult year. The activities of the New Newbuilding and Vessels in Service Department are explained in detail in the further sections of our report.

In addition to these developments, we consider many new rules will be in force for the prevention of pollution from vessels that entered into force in 2016 and its affects will be more intense in the near future, and that new shipbuilding projects will increase with the continuation of the increase in freight rates experienced at the end of 2016.

With the awareness of being a sole national Classification Society settled in Turkey, addition to ship classification services provided since 1962 which is the year of establishment, Turk Loydu successfully carries out the classification of both wooden boats and yachts built traditionally in the past and special purpose crafts and yachts which nowadays were built by all kinds of boat building materials with a team of 10 experts in the Antalya and Marmaris as well as Istanbul head office.

Turk Loydu successfully continues the service of the classification of these special type crafts built for the whole world market, both in Turkey and also in the Middle East market by keeping its successful cooperation with these manufacturers as it always has been.

In addition, the activities for development of special rules for such special crafts made by Turk Loydu has accelerated in recent years and continues today in line with the demand of the market

The year 2016 was a year in which the first results of work were taken after the restructuring of the Turk Loydu organization. We have begun to perform our activities more efficiently and more effectively by uniting the Marine Division and Plan Approval & Rule Development Division. We welcome the feedback we have obtained about this structure, which is composed as PSC Department, Ships in-service, Newbuilding Ships, Plan Approval, Rule Development, Training-Qualification Departments.

We have carried out our activities in 2016 without moving away from the goals of being a member of IACS and Recognized Organization by European Union which are among the main strategic targets of Turk Loydu.

Surveys and inspections made without compromising our service quality while the activities are continuing

in line with the implementation of the strategic plans determined for IACS membership are leading the Turk Loydu brand in the national and international maritime industry.

Going through the necessary audits with success for IACS membership in 2017 is one of the most important strategic goals of Turk Loydu. In 2017, we will be preparing with all our power for the audits to be carried out for membership purposes. However, as well as the technical competence required for the membership, the activities of communication and co-operation with the IACS member Classification Societies and the IACS Secretariat continue at full speed.

Within this scope, during the year 2016, high-level visits have been made to the IACS Permanent Secretariat and head offices of some of the IACS member organizations, introducing Turk Loydu and exchanging views about IACS membership goals.

In order for these co-operations to become concrete during these negotiations, we have agreed to cooperate with maritime and other industrial areas, including joint ship classification services, development of class rules and technical cooperation processes in various fields, and to support Turk Loydu in the course of IACS membership application, by concluding cooperation agreements with some IACS member Classification Societies. In addition to the existing co-operation agreements, in 2016, co-operation agreement was signed with Korean Register and Polish Register which are IACS member.

The Polish Register (PRS) established in 1936, first became member of the IACS in 1972, but quit membership in 2000. With the changing IACS membership criteria, the PRS which became member once again in 2011, evaluated as an organization with high level of experience and knowledge in the IACS membership process.

The Korean Register (KR) established in 1960, despite the fact that it was a new Classification Societies, became a member of the IACS in 1988, after growing in parallel with the developments parallel to Ship Building facilities based in South Korea.

Through the agreements made with both the Korean Register and the Polish Register, it is aimed to increase the capacity of the Turk Loydu to carry out project and activity in international field.

Within the scope of promotion and cooperation activities; the Maritime Headquarters of DNV GL and Class NK, which are the greatest Classification Societies of the world, were visited and Turk Loydu was introduced to these organizations and opinions about IACS membership goals were exchanged.

Rule Development and Statutory Legislation Division, established as a separate division with the new organizational structure under Turk Loydu Marine Sector Directorate, continued rule development activities also in 2016. Turk Loydu which updated its primary rules in Turkish and English twice a year in accordance with the changes in international rules, changes in standards, and feedbacks received from the sector, also updated the rules in 2016.

In 2016, Turk Loydu started activities for the Technical Committee to review and validate the classification rules better, and for this purpose began works for the first technical committee to be organized under the title of Deep Sea Support Vessels. In 2017, it is aimed to increase technical committee members and at the same time to create technical committees in other issues.

Another important project we carried out in 2016 was Turk Loydu Electronic Plan Approval Project (TL EPAS). The purpose of the TL EPAS project is to increase the quality and speed of service related to Turk Loydu plan approval processes, to share the data of plan approval processes easily and quickly with the designers, manufacturers and shipbuilders. TL EPAS project added additional value to Turk Loydu and our customers at the point of reducing transfer costs associated with plan approvals and making approval procedures faster and more controlled way.

Within the scope of the TL EPAS project;
Approval processes for plans
Remarks entered in plans, viewing feedbacks
Monitoring project processes interactively with all parties involved.

The plan approval status information can be monitored from the system by sending in paper format to Turk Loydu as well as the paper plans may be uploaded electronically to the EPAS system. All users can only access their own projects according to their authority levels.

As a result, on behalf of the Turk Loydu Marine Sector, I wish that the year 2017 in which very high goals were set such as becoming a member of IACS and a recognized organization by the EU, will meet the expectations of the whole maritime sector.

NEW BUILDING

Turk Loydu New Building Division, which is actively moving the Turkish shipbuilding industry forward, provided new building classification service for naval ships which will serve within the Turkish Naval Forces and friendly and allied nations' fleet and also merchant vessels built for domestic or foreigner shipowners in various types and sizes in 2016.

In addition to the ongoing projects started in 2016, contract preparations have been made for many projects which are expected to be launched in 2017 and contracts have been signed for 19 new project.

NAVAL SHIPS

In recent years, with the support of Undersecretariat for Defense Industries, Turkey's actualizing national military projects such as MILGEM, TCG Anadolu, TCG Sancaktar, TCG Bayraktar, TCG Alemdar and TCG Işın and so forth has created great business volume and experience by providing great support to the sector. Turk Loydu, which is involved in all naval projects built in Turkey, is rapidly continuing its works with the awareness of national duty in these naval projects which will provide power and reputation to our country in the international arena.

In 2016, classification activities have been started for multipurpose strategical amphibious transport dock vessel TCG Anadolu, which is also known as mini aircraft carrier, but it is in fact will be much more than a mini aircraft carrier. Coordination between Turk Loydu and Sedef Shipyard and other stakeholders is continuing for

this gigantic project which is expected to be completed in 2021.

Turk Loydu Certificate of Classification was delivered in the beginning of 2017 to Turkey's first submarine rescue ship TCG Alemdar, of which classification activities started with the contract signed between Turk Loydu and Istanbul Denizcilik and the Undersecretariat for Defense Industries in 2011. TCG Alemdar which will be the main ship of the Submarine Rescue Fleet with a length of 90 meters was built in such a manner that she can commence a rescue operation at maximum 72 hours in any unfavorable situation in Turkish territorial waters. TCG Alemdar which will fulfill its duties together with TCG Işın and TCG Akin which are scheduled to be delivered in 2017 is expected to be a source of trust for all vessels in national and international waters. The vessel, which has superior maneuvering and rescue capability, is the first vessel built in its class for the Turkish Naval Forces and Undersecretariat for Defense Industries under the supervision of Turk Loydu.

The classification contract of 8 LCVPs (military personnel and wheeled vehicle carrier) was signed in 2016 which will be located onboard TCG Sancaktar and TCG Bayraktar that were built in the Anadolu Shipyard (ADIK) by the Undersecretariat for Defense Industries in line with the requirements of the Turkish Naval Forces. It is expected that the 8 LCVPs will be delivered to the Turkish Naval Forces in 2017 along with TCG Sancaktar and TCG Bayraktar landing crafts, which will provide power to navy by means of high speed and manoeuvre capabilities. Addition to experience and success of Turk Loydu in the classification of naval vessels built in Turkey, classification certification services were successfully completed for many naval projects built for naval forces of friendly nations.

THE PREFERENCES OF TURKMENISTAN NAVAL FORCES WAS TURK LOYDU

Under the agreement signed between Turk Loydu and Dearsan - Gülhan Partnership, the construction of the last three pieces of naval vessels built for Turkmenistan Naval Forces was completed in 2016. Classification period of 2 fast-response boats and 1 crew boat were completed and the certificates of classification were delivered in the period of December 2016.

CO-OPERATION BETWEEN ARES AND TURK LOYDU CONTINUES

The cooperation of Turk Loydu-ARES which started with the agreement signed in 2014 for the classification of 17 high-speed of Hercules series also continued in full speed during 2016. Classification activities of 3 pieces of Ares 27 Hercules and 2 pieces of Ares 110 Hercules were completed in 2016 inclusive of the agreement which foresee classification of 5 more pieces with 24 meters, 10 pieces with 34 meters and 2 pieces with 48 meters of high-speed composite boats.

The Fast Patrol Boats and the Deep Sea Patrol Boats Project, which have been classified for the Qatar Coast Guard, has the characteristic of being the largest export of navy ships with a single contract in its class in the Republic of Turkey. These special vessels built under the classification of Turk Loydu are planned to continue providing classification service in Qatar too.

The classification service of ongoing 2 Ares 75 Hercules and 2 Ares 110 Hercules is expected to be completed and delivered to the Qatar Coast Guard in 2017.
Body construction started for 48 meters Ares 150 Hercules whose mold manufacturing was completed in 2016.

MERCHANT VESSELS

MED MARINE RENEWED ITS FLEET WITH TURK LOYDU

Med Marine Company, which provides pilotage and tugboat services in Turkish territorial waters, preferred to work with Turk Loydu in the renovation project in the fleet which started in 2016. With the contract signed in 2015, the cooperation of Turk Loydu-RINA was established at Med Marine's facility located in Eregli, Karadeniz, Eregli Shipyard. Classification services of 6 tugboats of 60 TBP, with a length of 24 meters, which will serve in İzmit and İskenderun Gulf, were completed in 2016.

TURK LOYDU CARRIED OUT THE CLASSIFICATION OF THE BIGGEST FERRY OF TURKEY

Construction of Sultan Alparslan train ferry which is the biggest ferry built in Turkey was completed in 2016 with a length of 136,5 metres, a beam of 24 meters, and a capacity of 50 wagons, 35 passengers, which the ferry was ordered to Nursoy Insaat for use in the Lake Van by the Turkish State Railways, and whose classification service was started to provide upon the agreement signed in 2000.

The ferry built in Tatvan was the vessel to which Turk Loydu classed at the furthest point within the Turkish Republic borders. The main engines are also the first local marine type diesel engines manufactured by Eskişehir Tülomsaş in Turkey. Type Approval Certificate is provided by Turk Loydu for the main engines of the ferry after necessary inspections carried out.

It is expected that the construction of Idris-i Bitlisi which is the sister vessel of Sultan Alparslan, will also be completed in 2017.

CLASSIFICATION OF THE FIRST DOMESTIC UNDERWATER OBSERVATION VESSEL

The building of the underwater observation vessel named as Semisubmarine, which is the first in Turkey with its design, has been completed under the supervision of the surveyors and the projects examined by the expert staff of Turk Loydu. Semisubmarine, which is the first underwater observation and restaurant vessel in Turkey with the aim of being able to see the hidden paradises existing under the water of Aegean and Mediterranean coasts and to support our tourism activities, contributed also to the country's economy by being constructed entirely with domestic resources.

The vessel which was designed by Ayden Marine and built in Türkter Shipyard is expected to provide service for local and foreigner tourists during four seasons in Marmaris.

Exterior lighting was added in order to allow for night viewing from the vessel by which a very safe navigation is provided thanks to pressure-resistant glazing. The water-tightness and safety of the doors and hatches of the underwater part of the vessel were certified by Turk Loydu as a result of detailed works. The part of the vessel that is underwater was designed to prevent the water ingress to other parts of the vessel in case of possible flooding. In addition to its unusual design, fast evacuation is ensured by means of two-way emergency exit doors located in the underwater section of the vessel in which emergency alarms are equipped and high-safety precautions are taken. Semisubmarine with a total length of 26 meters and width of 8 meters and a passenger capacity of 148 passengers which was entirely constructed with steel and classed by Turk Loydu is also the first semi-submarine vessel that is 100% Turkish built.

KASTELLORIZO WAS COMPLETED IN SHORT TIME AND PUT INTO SERVICE

Turk Loydu completed the classification services of the Kastellorizo passenger ship in 2016 that the ship was built in Tuzla in order to carry passengers between Turkey and Kızılhisar-Meis Island. The construction of Kastellorizo which is the youngest ship to cruise in the region with a length of 24 meters and a capacity of about 250 passengers was completed almost within a year. The vessel, which was supposed to contribute to Turkish tourism, was one of the 3 passenger ships that Turk Loydu provided classification service in 2016.

THE PREFERENCE OF IZMIR METROPOLITAN MUNICIPALITY WAS TURK LOYDU

Izmir Metropolitan Municipality with which Turk Loydu had an intensive cooperation preferred Turk Loydu for the pontoon of passenger terminal which was built in Ceksan Shipyard. The design of Agamemnon named pontoon with the dimensions of "15m x 12m" was undertaken by Soyaslan Design.

The pontoon which was designed in such a way that the high speed passenger vessels owned by the Izmir Metropolitan Municipality and classed by the Turk Loydu, was delivered to the Izmir people at the end of 2016.

TURK LOYDU ALSO PROVIDES CLASSIFICATION FOR WOODEN PASSENGER BOATS

32 metres wooden passenger boat named as S. Nur Taylan to which classification service is provided by the Marmaris Office of Turk Loydu was completed in 2016 and commenced to provide service.

TURK LOYDU CLASSED KOPARAN WHICH IS THE WORK OF TURKISH ENGINEERS

Koparan, whose design and construction was totally domestic, became the only dredger whose classification service was completed in 2016 by the Turk Loydu. Koparan, which was built in Turkoglu Shipyard for Aras Deniz Insaat, was completed in a short time like 6 months and was put into service.

Koparan, with a length of 35 metres, was the first ship built by Aras Deniz Insaat in Turk Loydu's class, and she was assigned for the port construction site in Israel in the second half of 2016.

CONSTRUCTION OF GORKEM WAS COMPLETED IN CICEK SHIPYARD

In the responsibility of Turk Loydu, another pontoon built in 2016 was Gorkem. The pontoon which was designed by Barbaros Marine Co. and built at Cicek Shipyard was delivered to the shipowner within a short period of 3 months. It is expected that the pontoon, which attracts attention with its 40-meter height, will serve in the Turkish territories.

BARBOSSA 2 WAS DELIVERED

The construction of the Barbossa 2 passenger boat, whose classification contract was signed in 2015, was completed in Antalya in April 2016. Turk Loydu was chosen for the classification of the 36-meter boat which was built at Cobanyildizi Shipyard for Optimal Tourism.

SUSTAINABILITY

For the sustainability of the existing successful activities, Turk Loydu New Building Division continued to sign contracts for new projects during the year. In 2016 when the efforts for domestic productions were in progress, Turk Loydu started to work for the classification of 19 different projects with signed agreements.

Turk Loydu that tries to move shipbuilding sector forward by staying always next to Turkish shipowners, Turkish Shipyard owners and Turkish designers, is going to take place in many different projects from product tankers to fishing vessels in 2017 as well.

The construction process started with the signing of the classification contract of M.Akif Turkmen product tanker and her sister vessel which are supposed to provide service in Turkish territorial waters. It is aimed with the first vessel which is expected to be delivered in 2017 to carry petroleum products from refineries to vessels. The tanker which is being built at Arkadas Shipyard will be about 60 meters long.

Turk Loydu, who has been providing the classification services for years for the vessels engaged in passenger transportation in the Sea of Marmara, has signed the classification contracts for 3 passenger vessels which are expected to be completed in 2017. With these contracts signed in 2016, surveys and plan approval services have been started to provide for Cakırlar, Dedetas 2 and Hepgul passenger vessels, which are being built in Yalova.

New building classification contracts have been signed in 2016 for Carpe Diem 1 and Sadiye Hanim yachts and the wooden passenger boat named Queen of Salmakis. Type approval contract was signed with RHIBTECT for two Rhib Boats, whereas new building classification contract was signed with Gozuyilmaz Muhendislik AS for two 14 meters long and three 12 meters long HDPE Patrol boats. Construction of two of HDPE patrol boats is about to be completed by the end of 2016.

The new building classification contracts were signed between the contractor company Yutek and Turk Loydu in December 2016 for two 49,5-metre mud barges and a 30-metre dredger which will be built in Hercelik Shipyard for Istanbul Metropolitan Municipality.

Two new mud dubs of 49.5 meters in height and a new construction contract of 30 meters in length for the Istanbul Metropolitan Municipality were signed between the contractor firm Yütek and Türk Loydu in December 2016. It is foreseen that these three vessels should be delivered to Istanbul Metropolitan Municipality in 2017 and start their activities.

It is expected that Asyaport D2 pontoon will be delivered in the first months of 2017, which was designed by FCM Marine for Asyaport which is the largest ports in Marmara Region and started construction in Bandirma by the contract signed in 2016.

MATERIAL AND PRODUCT CERTIFICATION

As the effects of the economic crisis in the shipbuilding sector began to decline in 2016, it was observed that material and product certification activities were also intensified. Turk Loydu which expanded its type approval product and company range in 2016, provided certification services in approximately 50 countries.

In 2016, there have been some prominent developments in material and product certification.
The type and manufacturer approval process has started in Metinvest's Ukrainian worksite, one of the world's leading steel producers.

The thrusters for the intended 14 passenger vessels that have being built at Hercelik Shipyard for Dentur which provides passenger transportation in the Istanbul Strait and the tugboats that have been built at GETA Shipyard for Directorate General of Coastal Safety have been certified at the facilities of Schottel GmbH in Germany.

Certification contract has been signed with the Rolls-Royce which is the manufacturer of water jets of 2 ARES 150 Hercules that have being built at Ares Shipyard.

Type and manufacturer approval contracts were signed with many companies mainly Spanish Navantia, Australian water jet producer DOEN, AC Controls and Caterpillar Diesel Engines companies in the United States, South Korean producer EUHA/NOAH, Chinese casting company Alpha Controls, Swedish PMC Cylinder, German engine manufacturer MAN and MTU in 2016. In 2017, it is expected that the certification processes will continue as a single product basis and as type approval extension.

Turk Loydu which has started to provide certification in marine paints and coatings in 2016 has signed a contract with Japanese Nippon Paint Marine Coatings and Jotun which manufactures in Turkey. As a result of the negotiations with Schottel, Rolls-Royce and Caterpillar, the majority of the main product sub-components have been started to be certified by Turk Loydu.

NEW TYPE OF FISHING VESSELS WILL BE CLASSED BY TURK LOYDU

With the regulation changed in November 2015, class supervision became mandatory in the construction of fishing vessels.

It is foreseen that Turk Loydu will eliminate the perturbation in the market by means of the support given to local and national projects by its expert staff.

Turk Loydu which is the number one expert organization in the classification of fishing vessels in Turkey, will continue to be always next to Turkish shipowners, shipyards and designers, as has been since 1962 with the services provided in local and national projects.

Within this scope, it is expected that Ilhan Yilmaz 2 which is the first domestic modern fishing vessel with the Turk Loydu class, and planned to be launched in the second half of 2017, will encourage designers and shipowners who want to take advantage of Turk Loydu's expertise, and bring a fresh breath to the sector.

Türk Loydu, which continues to support local contemporary projects until today, signed the classification contract of the first modern Turkish type fishing vessel designed domestically in 2016. Ilhan Yilmaz 2 with a length of approximately 50 meters, of which its construction will start in 2017 in Ustamehmetoglu Shipyard in Eregli, Karadeniz, will meet local and foreign consumers with unique fish resources in our national territorial waters and international waters. Ilhan Yilmaz 2 will be a pioneer for Turkish fishing vessels with its modern design and performance.

TURK LOYDU'S SUPPORT TO YACHTS WHICH WILL FLY TURKISH FLAG

With the awareness of being a sole national Classification Society settled in Turkey, addition to ship classification services provided since 1962 which is the year of establishment, Turk Loydu successfully carries out the classification of both wooden boats and yachts built traditionally in the past and special purpose crafts and yachts which nowadays were built by all kinds of boat building materials with a team of 10 experts in the Antalya and Marmaris offices as well as Istanbul head office.

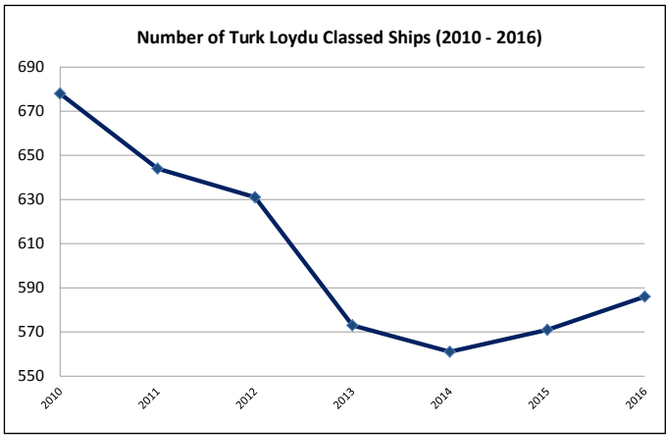
With the Omnibus Bill No. 6770, published in the Official Gazette, it entered into force and opened the way for changing to Turkish flag for Turkish-owned but foreign-flagged ships and yachts. It is estimated that the number of Turkish owned foreign flagged yachts in Turkish territorial waters is around 9,000; It is anticipated that by means of the new study, which eliminates the shortcomings of the previous years' regulations, will increase the demand and around 5000 yachts are expected to transfer to the Turkish flag.

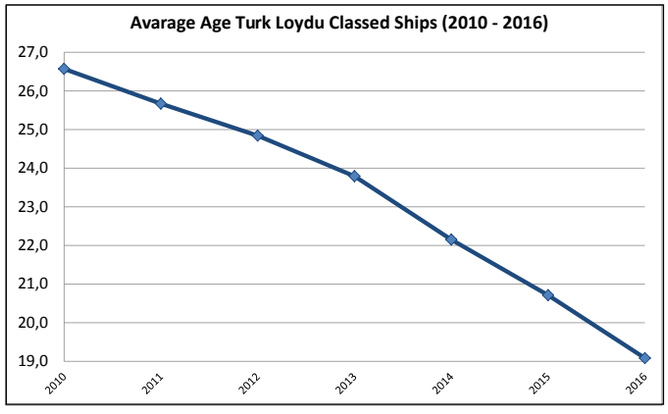
A study was carried out by Turk Loydu and the activities have started for transferring subject yachts to Turkish flag to contribute to and strengthen our national fleet. Turk Loydu to provide some convenience in transferring subject yachts to Turk Loydu class in order to support the work to be carried out in the leadership of the Ministry of Transport, Maritime Affairs and Communications.

SHIPS IN SERVICE

Some problems encountered in our country in 2016 have affected the maritime industry quite deeply. The continuation of the pressures on freight incomes in 2016, some of the international legal regulations that have been put into effect and the increase in the cost of ship operation and crew management and the security problems that have arisen have put pressure on shipowners and ship operators, making it difficult to make new investments.

Despite all these developments, Turk Loydu has increased its fleet by 12% on a tonnage basis by 2015, reaching a total of 828,031 Gt and 586 ships. This growth in the Turk Loydu fleet also had a positive impact on the modernization of the fleet, reducing the average fleet age from 20.71 in 2015 to 19.08.

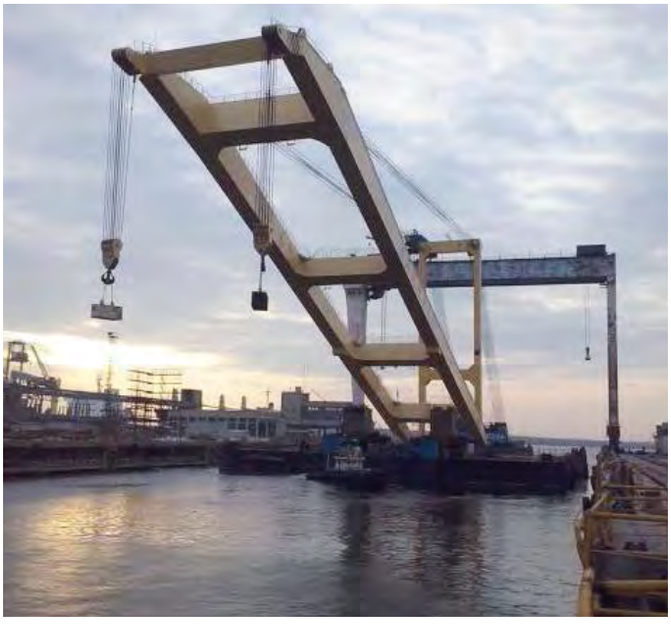




During the year 2016, the classification surveys of many existing ships entering the Turk Loydu class within the scope of the transfer of class or class entry completed and the mandatory surveys on behalf of the flag states that we are authorized by have been made and these vessels have been ensured to serve according to the rules. Some of our services in 2016 came to the forefront in the part of Ships in service.

In 2016, the surveys of the submarine "NEMO PRIMERO", which provides touristic service in the Alanya port, have been successfully carried on and registered to the Turk Loydu class with "1A5 SUBMERSIBLE 72 h 30 m, M S" notation. The third generation touristic submarine Nemo Primero, built in Finland, is shown among the touristic submarines with the most advanced technology and safest system of the world, with the capacity of 24 passengers and 2 pilots.

The surveys of "ZAKHARIY" which is the biggest floating crane that will serve in Turkey, have been successfully completed and registered to the Turk Loydu class with "1A5 L1 FLOATING CRANE, T-M" notation. Although the lifting capacity of the ZAKHARIY floating crane is 680 tons, a weight of 700 tons can be carried on a floating crane. Floating crane Zakhariy differs from other floating crane by this feature. This feature of the floating crane provides a serious advantage both in time and in cost. There is no need for a floating pontoon for the cargo carried; besides the expenses of the tugboat which tows the pontoon and fuel costs are eliminated.



This increase in the number of fleet has increased the diversity of ship types, and the different types of vessels registered and marine vessels have led to further specialization of Turk Loydu technical staff. With the organizational changes made in 2016 in the Vessels in Service Division, we strengthened our service structure further. With the awareness of the responsibilities that our business requires, we have aimed to fulfill all of our services in IACS standards so that Turk Loydu can proceed with more confident steps towards IACS membership. In line with these goals, we also took into account the career development of our colleagues.

During the stakeholder visits, it is possible to exchange ideas about the expectations of maritime industry from Turk Loydu. As Turk Loydu, it has been our duty to enhance customer satisfaction to the highest levels with utmost efforts in the direction of customers' expectations. It is important that Turkish shipowners should support Turk Loydu in all aspects in the process of IACS membership which is very challenging and also very important in terms of Turk Loydu and Turkish shipping sector.

Within this period, having the shipowners and operators who have provided their full support to us, transferred the class of their vessels to Turk Loydu which are under their ownership or management, and opened their vessels to Turk Loydu for the audits in the external audit processes within the scope of IACS membership has given an important excitement and strength to us, Turk Loydu family.

In this period, the bulk carrier M/V Gulluk with 28,718 Gt. that Gulnak Denizcilik owns has become more meaningful by transferring the class to Turk Loydu as

a single class. The IACS preliminary inspection carried out in 2016 onboard M/V Gulluk, which is the largest vessel in the Turk Loydu fleet, has been successfully completed.

We have successfully carried out and are continuing our activities on the classification of floating docks serving in shipyards in addition to existing vessels and marine vessels. The increase in the number of floating docks, growing potential of existing shipyards and becoming a regional power particularly in repair has strengthened our hopes that the maritime industry will be performing better in the coming year.

In addition to the classification and mandatory surveys carried out in 2016, we conducted surveys of condition assessment surveys of many ships which will be purchased or operated by shipowner companies by our expert surveys in accordance with the requests. Shipowner companies' survey requests and trust to the expertise of Turk Loydu before making their final decision about the vessels that they will purchase, is a sign of confirming the accuracy of Turk Loydu as an organization.

In the light of existing working conditions, we have tried to provide technical support in the areas of our expertise to the companies which serve in the maritime industry also in 2016. We have aimed to increase the quality of the vessels and protecting the safety of people, environment and property while providing support.

RULE DEVELOPMENT AND STATUTORY LEGISLATION

The Rule Development and Statutory Legislation Division, which was established as a separate department with the new organizational structure, continue its rule development activities also in 2016 under Turk Loydu, Marine Sector Directorate. Turk Loydu continues to enhance its range of activities by publishing the additional rule at the end of 2016 related to "Part D, Chapter 78, Rules for Classification of Ships Using Gases or Other Low-Flashpoint Fuels" and "Installation of Ballast Management Systems" and intending to publish "Part C, Chapter 36, Rules for Offshore Supply Vessels" in the first quarter of 2017, of which studies were already completed in 2016.

In addition to these new rules, Turk Loydu, which also concentrated the translation works of the Turkish rules in 2016, ensured the rules to be published in Turkish and English by translating and updating "Part C, Chapter 9, Rules for the Construction and Classification of Yachts" and "Part D, Chapter 50, Rules for Lifting Equipment".

Turk Loydu which updates its main rules in Turkish and English twice a year in accordance with the changes in international rules, changes in standards, and feedbacks from the sector has also ensured to update the rules listed below in 2016.

Classifications ve Surveys

- Chapter 1 Hull Construction
- Chapter 2 Material
- Chapter 3 Welding
- Chapter 4 Machinery
- Chapter 5 Electrical Installation
- Chapter 7 High Speed Crafts
- Chapter 8 Chemical Tankers
- Chapter 9 Construction and Classification of Yachts
- Chapter 10 Liquefied Gas Tankers
- Chapter 28 Ventilation
- Chapter 33 Construction of Polar Class Ships
- Chapter 35 Tentative Rules for Ships Less Than 500 GRT
- Chapter 50 Rules for Lifting Equipment
- Chapter 53 Submersibles
- Chapter 70 Multi-mooring Systems
- Chapter 76 Environmental Service System
- Chapter 101 Naval Ship Technology, Classification and Surveys
- Chapter 102 Naval Ship Technology, Hull Structures and Ship Equipment
- Chapter 104 Naval Ship Technology, Propulsion Plants
- Chapter 105 Naval Ship Technology, Electrical Installations
- Chapter 106 Naval Ship Technology, Automation
- Chapter 107 Naval Ship Technology, Ship Operation Installations and Auxiliary Systems

In addition to these rules, 8 additional rules have been updated, changes of international rules and changes in Turk Loydu rules and other developments have been announced by newsletters prepared for the maritime sector.

In 2016, Turk Loydu initiated the work of the Technical Committee to review and validate the rules better, and for this purpose began works for the first technical committee to be organized under the title of Offshore Support Vessels. In 2017, it is aimed to increase technical committee members and at the same time to create technical committees on other subjects.

Turk Loydu, which continues its research and development activities in 2016, has continued to work on the infrastructure of the rules and has applied for projects within the scope of European Union Erasmus+, FTI and Horizon Invitations and the application of NEOCOL (Navigational Equipment Oriented COLREGS Training) under Erasmus+ was accepted. Turk Loydu will start NEOCOL project as project manager together with 5 international partners in January 2017.

MEETINGS AND VISITS

In 2016, Turk Loydu actively participated in international meetings, primarily the International Maritime Organization (IMO) and continued to inform the sector with its preliminary and final meeting reports and newsletters. At IMO, the subcommittees PPR 3, SDC 3, SSE 3, CCC 3 and the main committees MSC 96 and 97 and MEPC 69 and 70 have been participated in 2016.

In addition to the contributions on the IMO preliminary meetings and sub-working groups, Turk Loydu continued to inform the maritime sector about the changes in international rules by the bulletins and IMO summary reports issued after the meeting in 2016 and continued to contribute to the necessary national legislative work.

Also in 2016, Turk Loydu continued to participate in the work of the International INSA (International Naval Safety Association), which developed the Naval Ship Code (ANEP-77) and the Naval Submarine Code, which aim to focus the requirements of safety of life and property of naval ships in peaceful conditions. Turk Loydu is a member of the NSCA (Naval Ship Classification Association) which consists of seven classification societies operating in the military field, as well as contributing to the INSA working groups about "Chapter III Stability WG and Chapter VI Fire Correspondence WG" in 2016.

PORT STATE CONTROLS

The results of the port state control of the ships are constantly monitored by Turk Loydu to ensure that the vessels in our fleet always meet high standards. Within the scope of monitoring activities; all the deficiencies that are recorded during port state control inspections and the data obtained as a result of the research processes are analyzed and corrective and preventive actions are carried out for the vessels in our fleet.

Within the framework of the fleet monitoring process, which was carried out in order to increase the performance of the vessels showed in the port state controls more effectively and to determine the problems that may be experienced in advance, 28 target vessels were selected at the beginning of 2016 and unscheduled surveys were applied to these vessels during the year. These vessels received successful results in the port state controls they were subjected to in 2016.

Within the year 2016, it was determined that there was a significant increase in detentions as a result of PSC inspections carried out onboard vessels as part of the Paris Memorandum and Black Sea Memorandum in particularly in the ports of Romania. Following the detentions in Romania, there has been a meeting between the Authorities of Romanian Maritime Administration, especially the PSC auditors and Turk Loydu.

According to the results of the monitoring and analysis announced in the last issue of the TL Newsletter which is the Technical Bulletin published periodically by Turk Loydu, it has been determined that the detainable deficiencies detected during the PSC inspections in Romania are concentrated in certain areas. In the relevant issue of the TL Newsletter that can be accessed via the Turk Loydu website, the items that should be paid attention most in the Romanian ports, are listed in detail.

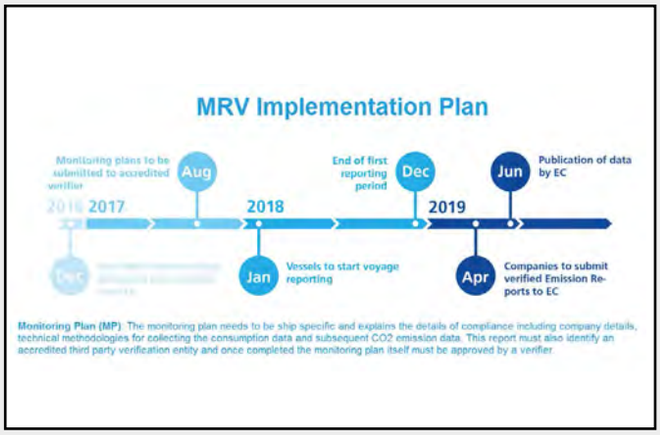
With the aim of increasing the success rate in the Fleet Monitoring and Port State Control Procedures, improvements were made as a result of the feedback received during the year, and the vessels were started to be monitored more effectively with additional criteria.
As a result of these studies, Turk Loydu has been announced as a high performance classification society as it has always been in the performance list of "Classification Societies" by the Paris MOU, which is the most important among the port state controls.

Recognized Organization		Inspections	Detentions	Low/medium limit	Medium / high limit	Excess Factor	Performance level
DNV GL AS		5,992	2	138	102	-1.95	HIGH
Det Norske Veritas	DNV	9,688	6	217	171	-1.92	
American Bureau of Shipping		5,506	3	128	93	-1.92	
Lloyd's Register	LR	12,009	9	266	214	-1.91	
Korean Register of Shipping		1,018	1	28	13	-1.70	
RINA Services S.p.A.	RINA	3,390	7	82	54	-1.69	
Bureau Veritas		11,366	31	252	202	-1.67	
Germanischer Lloyd	GL	11,734	34	260	209	-1.65	
China Classification Society		802	1	23	9	-1.56	
Nippon Kaiji Kyokai	NKK	7,414	27	169	128	-1.54	
Russian Maritime Register of Shipping		3,704	19	89	60	-1.28	
Turkish Lloyd	TL	642	2	19	7	-0.95	
Croatian Register of Shipping		155	0	6	0	0.04	MEDIUM
Polski Rejestr Statkow (Polish Register of Shipping)	PRS	440	4	14	3	0.05	
Other		348	4	12	2	0.19	
Indian Register of Shipping	IRS	67	0	4	0	0.22	

Paris Mou - 2016 Recognised Organisations Performance Table

NEW REQUIREMENTS ABOUT GHG EMISSIONS FOR SHIPS: EU MRV SHIPPING REGULATION

Business Development Division Manager
Mehtap KARAHALLI ÖZDEMİR



Regulation (EU) 2015/757 on the monitoring, reporting and verification of carbon dioxide emissions from maritime transport (EU MRV Shipping) adopted in April 2015. This regulation requires ships above 5 000 gross tonnes irrespective of where the ship or the company is registered calling at EEA States (the EU Member States, Iceland and Norway) ports from 1 January 2018 to monitor their CO2 emissions and other relevant information emitted on journeys to, from and between EEA ports of calls, and also when in EEA ports of call.

For ships visiting EEA ports; companies will have to:

- By 31 August 2017 submit a Monitoring Plan to an MRV Shipping Verifier (Accredited Certification Body) for verification of the plan.
- From 1 January 2018, monitor and report data on each ships' CO2,, fuel consumption and other parameters, such as distance, time at sea and cargo carried, so as to determine the ships' average energy efficiency to an accredited MRV Shipping Verifier;
- From 2019, by 30 April of each year submit verified Emissions Report for each of the ships to relevant Authorities,
- From 2019, by 30 June of each year ensure that, all ships having performed activities in the precedent reporting period and visiting EU ports, carry on board a "Document of Compliance" issued by an accredited MRV Shipping Verifier.

In order to complete the MRV Shipping requirements, the Commission adopted; two Delegated Regulations amending the monitoring methods and rules in Annexes I and II to Regulation 2015/757, and further specifying rules for verification and accreditation of MRV shipping verifiers on 22 September 2016.

Also two Implementing Regulations have been adopted by the Commission and entered into force in November 2016.

- Implementing Regulation (EU) 2016/1928 on determination of cargo carried for categories of ship other than passengers ro-ro and container ships pursuant to Regulation (EU) 2015/757
- Implementing Regulation (EU) 2016/1927 setting templates for monitoring plans, emissions reports and documents of compliance pursuant to Regulation (EU) 2015/757

IMO DATA COLLECTION REQUIREMENTS FOR MRV ADOPTED ON MEPC 70

MEPC (24-28 October 2016) adopted mandatory MARPOL Annex VI requirements for ships to record and report their fuel oil consumption at MEPC 70.

The IMO MRV system will only apply to ships of above 5 000 gross tonnes. Requirements will enter into force in March 2018. In practice, this means ship companies will need to start monitoring and reporting fuel consumption during the 2019 calendar year (being the first full compliance year), although they can voluntarily report data to the IMO under the system before this date.

Under the MRV system companies will have to collect and annually report their fuel consumption data in metric tonnes for each type of fuel they use, following a methodology and process set out in the ship's energy efficiency management plan (SEEMP). This data will be collated by the IMO in the IMO Ship Fuel Consumption Database. It will be collated in anonymised form, to prevent public identification of specific companies or ship data.

The IMO will now develop guidelines regarding the implementation of the system, which are expected to be approved at the next MEPC meeting in May 2017 (MEPC 71).

DIFFERENCES BETWEEN EU AND IMO MRV REQUIREMENTS

The EU MRV Shipping Regulation (from 1 January 2018) will be applied to ships above 5 000 gross tonnage, and will require:

- Monitor and report the verified amount of CO2 emitted on all voyages to, from and between EEA ports and also when in EEA port; and
- Submit to the Commission an annual emissions reports verified by a MRV Shipping Verifier.

Unlike the IMO scheme, EU MRV requirements will also:

- Require companies to monitor and annually report additional parameters, such as distance, time at sea and cargo carried, to enable the determination of a ship's average energy efficiency; and
- make the annual emissions reports submitted by companies publicly available without being anonymised.

Türk Loydu has already reviewed all requirements and developed its own procedures and instructions in order to be ready for accreditation under the scope of EU MRV Shipping Regulation. Additionally, as a Recognised Organisation (RO), Türk Loydu will be authorized by relevant Flag States for IMO MRV requirements.

MARITIME LABOUR CONVENTION (MLC, 2006)

Quality Management Division,
Marine Sector Quality Supervisor
Bengi ŞAN

The Maritime Labour Convention (MLC, 2006) is a legal instrument as much as it is technical on the working and living conditions of seafarers. By means of this convention prepared by the International Labour Organization (ILO), 37 different conventions relating to seafarers' working and living conditions and fundamental rights and principles that have been signed in the past but for which global implementation was not able to be observed due to lack of global enforcement, are now globally applicable.

The scope of convention identifies the minimum standards for minimum age, medical certification, qualification of seafarers, seafarers' employment agreement, the use of recruitment and placement services, hours of work/rest, manning levels, accommodation, recreational facilities on board, food and catering, repatriation, health & safety protection, accident prevention, medical care on board, onboard complaint procedures and payment of wages and aims to pave the way for quality shipping fairly for Flag States, Shipowners/Operators and Seafarers. The convention -in force since 20th August 2013- is now ratified by 80 Member States with 91% of total share in the world GT of ships. And it already has taken its place in the maritime world as a mandatory legislation beside SOLAS, MARPOL and STCW. Although the requirement of certification applies to vessels over 500 GT or vessels engaged in international voyages; the implementation of the convention is sought in all merchant vessels calling in the ports of the signatory countries whether the flag state of the vessel is party to the convention or not.

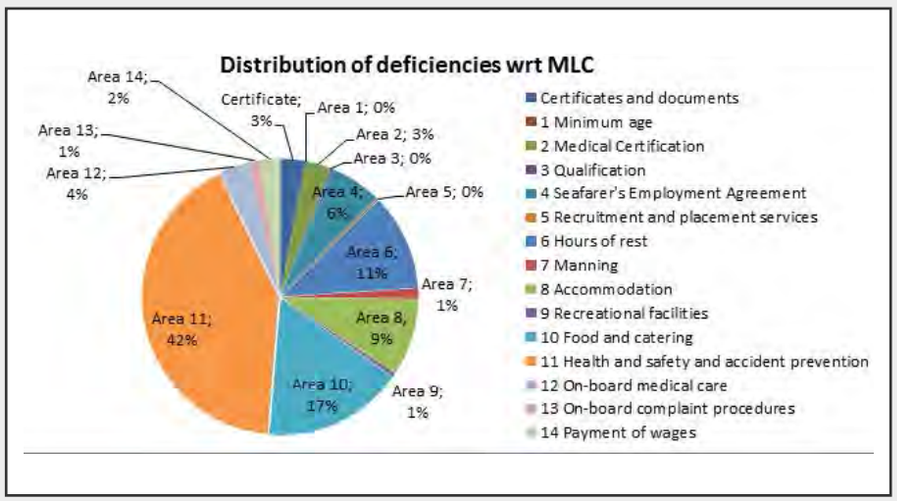
Maritime Labour Convention is in force for about 4 years now, but has the world maritime industry completed its necessary improvement and adaptation? It is possible to answer this question from two different angles. The first will be the report of ILO, CEARC (Expert Committee for the Application of Convention and Recommendations). This report includes a cumulative assessment by the ILO for the MLC application reports received from Member States and emphasizes that systems established at ship level for implementation of the Convention are quite effective and significant practices are being observed globally in a short time but on the other hand, underlines that the records of declaration of compliance (DMLC I and II) which are supplements to the certificate still do have room for improvement. Particularly following issues are identified; the statement of requirements in DMLC I in accordance with national implementing legislations should not be left merely by referencing and that comprehensibility should be increased, the adequacy of adoption of any "substantial equivalence" should be presented to ILO, any exemptions for limiting hours of rest can be provided by the Administrations provided that compensations are identified and finally the recruitment and placement service of any member state if not being fully compatible with the standards of convention will be causing a risk for other flagged ships using such service and that this should be prevented. Our second approach could be with regards to the Port State Control Inspections. By means of the rule of MLC 2006; "All ships can be inspected" when we focus all the ships whether they are party to the convention or not, it is understood that the deficiencies related

	2013		2014		2015	
	Number	Percentage*	Number	Percentage*	Number	Percentage*
MLC, 2006 deficiencies	750	%1.5	3951	%8.5	5002	%11.9

Table I

* Percentage of MLC deficiencies in all deficiencies

to MLC have been increasing compared to whole of deficiencies in the last 3 years during any port state inspection.



According to the report, it was expressed that particularly health care, medical care and social security issues are categorized as being one of the 5 top subjects found with the most deficiencies by a rate of 6.7% in 2015. The distribution of reported MLC defects according to 14 items of the convention is as follows;

The most deficiency developing subjects are; records of seafarers' work/rest hours, electricity, Seafarers' Employment Agreement, access onboard vessel, cold rooms and cleaning of cold rooms and the most detention developing subjects are; wages, Seafarers' Employment Agreement, cleanliness of engine room, cleanliness of toilets and minimum safe manning. When we evaluate these data, our second approach Port State Inspections reveals that the world maritime industry is need of improvement in terms of implementation and record keeping.

PSCs carry out Concentrated Inspection Campaigns focusing on the most deficiency developing subjects for a 3 month duration it can be observed that titles relating to MLC 2006 were focused on. In the year 2014, hours of rest and in the year 2016 working and living conditions onboard, records and inspections were reviewed.

The Convention was amended twice after its global ratification. In the 2014 amendments; the documentation requirement for financial security of seafarers in cases of abandonment and contractual claims for compensation in the event of a seafarer's death or long term disability due to an operational injury, illness or hazard have been introduced. The means for this (i.e. social security, insurance, national fund) is to be determined by competent authority via exercising tripartism. The said amendment will enter into force on January 18, 2017. In the 2016 amendments; protection of seafarers from harassment and bullying and identification of extension to MLC certificates were in roduced. This amendment is expected to enter into force in the year 2018.

As MLC practices continue day by day, flag states that have not yet become parties to the Convention must complete their internal preparations such as national legislation, training and authorization and ensure that working and living conditions of their fleet are improved by international norms in order to sustain or improve their flag state performance.

In this context, Turk Loydu supports the global MLC 2006 process both by providing trainings about the content of the convention for its stakeholders and by providing certification services or voluntary certification services for the vessels flying a flag which is not a party to the Convention yet.

PORT STATE CONTROL (PSC)

External Affairs Division Manager
Mehmet AVCI

Port State Control (PSC) is an inspection carried out at national ports to foreign vessels in order to verify compliance of ships and its equipment with international rules and that the ship is manned and operated with seafarers in accordance with these rules. According to international law, every state has its own authority to inspect. However, there are also countries that mutually work by signing a regional memorandum of understanding to cooperate in port state inspections. In the regional approach, all states which are located in a given geographical area establish the PSC system and inspect the ships providing that signing an agreement (Memorandum of Understanding (MOU)) by uniting together. The regional PSC implementation began first time in the world with the signing of the Paris Memorandum on July 1, 1982.

Paris MoU; consists of 27 Member States located in the North Sea, Baltic and Mediterranean. Initiatives to PSC implementations and European countries' approaches to issues such as the safety of life and property at sea and prevention of maritime pollution at sea (awareness and culture of safety) have resulted in consolidation of the pioneering role of the Paris MoU in PSC implementations. Paris MoU is the best organized and most influential MoU region in the world today. With these features, Paris MoU is guiding the maritime public in the development and adoption of all the procedures in PSC subject. Moreover, it is also particularly important that the ports in which the Turkish flagged vessels and Turkish owned vessels frequently call are Paris MoU ports.

The Paris MoU explains the results of the inspections carried out during the year and related annual analysis by means of annual report published each year. Along with the annual report, Paris MoU also publishes a list in which it evaluates the performance of flag states each year as a result of the inspections. In this list which is called as Black-Grey-White List (BGW), flag states are ranked from the worst (black-very high risk) to the best (White-no risk) according to PSC performances. The Turkish flag has maintained its position on the White Flag list of the Paris MoU for the past seven years.

The list in which the inspections in the last three-year period were taken into consideration also applies to classification societies/recognized organizations. On the list which is shown as High Performance - Medium Performance - Low Performance (High-Medium-Low), Classification Organizations are ranked according to the PSC performances of the vessels in their fleet in accordance with the Recognized Organization Services on behalf of the flag states.

The most important factor determining the performance list of Classification Societies is the situation when the Classification Society is responsible for the deficiency found onboard vessel which had detention and for the deficiency caused detention. Our national classification society, Turk Loydu has been announced as "High Performance" in Paris MoU Performance Lists for the last 10 years. The Turk Loydu classed vessels showed success also in 2016 and there was no detention for which Turk Loydu was responsible throughout the year. You can access the annual reports of the Paris MoU and the accompanying performance tables via the web page:
https://www.parismou.org/

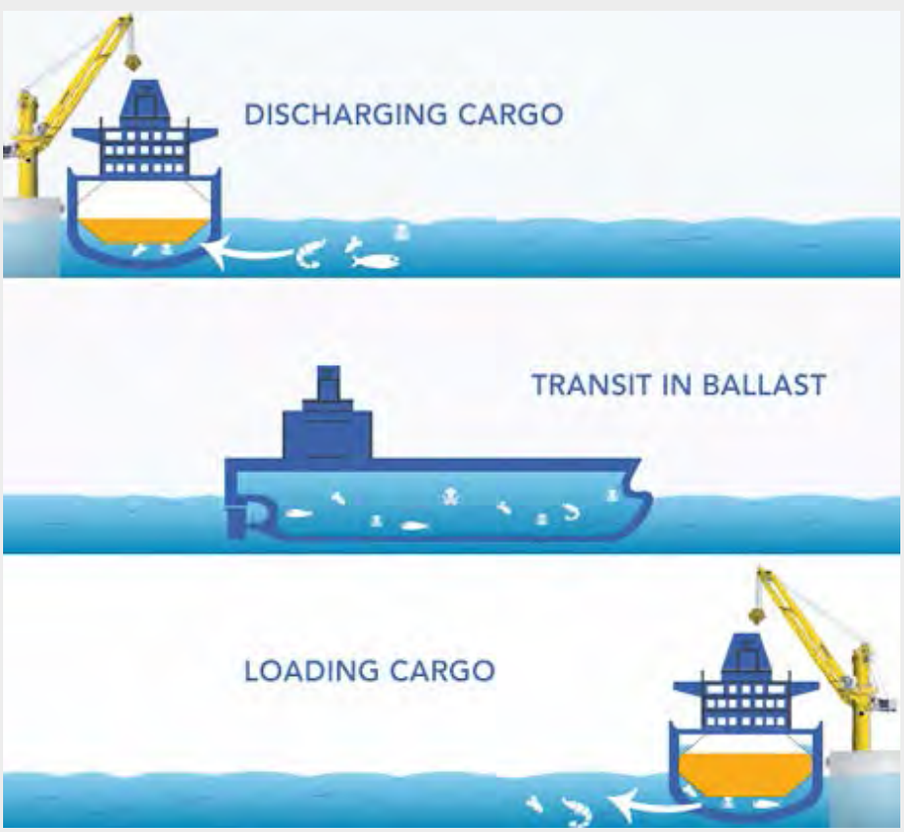
BALLAST WATER MANAGEMENT

Marine Sector, Senior Research and Rule Development Engineer
Aslı YALDIZ ÖZTEKİN

The "International Convention for the Control and Management of Ships' Ballast Water and Sediments", prepared by IMO in 2004, will enter into force on 8 September 2017. In accordance with the convention, all ships of 400 GT or above engaged on international voyages must manage their ballast water and sediments according to the approved Ballast Water Management Plan and keep the ballast water record book and international ballast water management certificate.

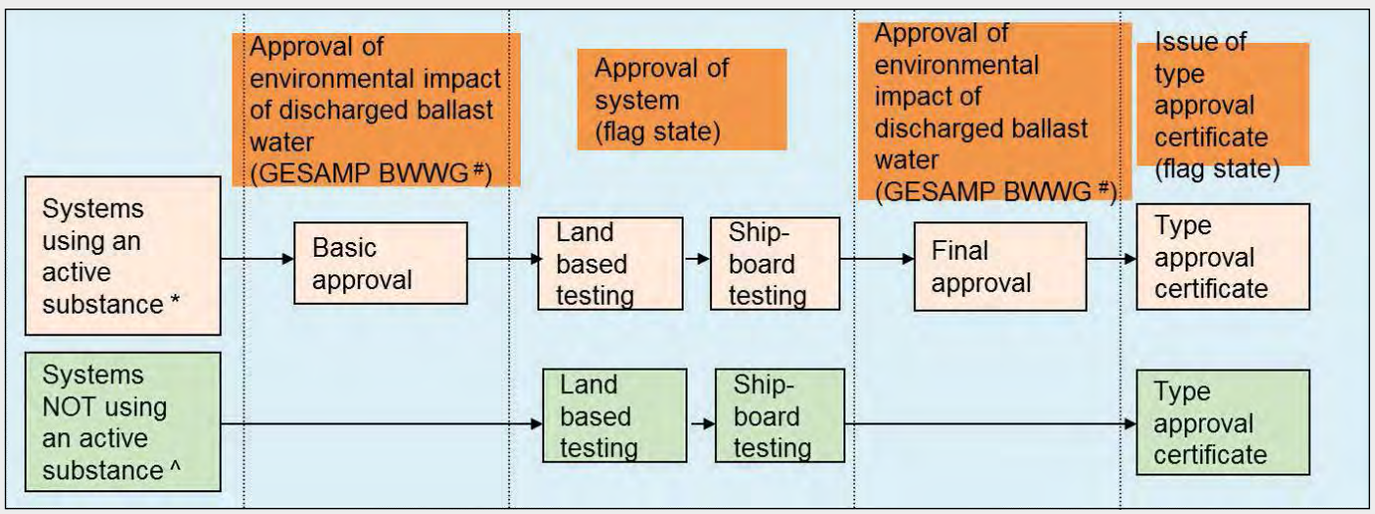
The ships should ensure compliance with the D-2 ballast water performance standards for ballast water management on the first renewal survey of IOPP certificate following September 8, 2017. The ships must perform ballast water management to meet D-1 ballast water exchange standards as outlined in the table below until they meet the D-2 standards.

Ship	D2 Compliance Date
New Ship	Comply with D-2 requirements when ship is delivered
Existing Ship	Comply with D-1 until the first IOPP certification renewal survey before 8 September 2017. Comply with D-2 after the first IOPP certification renewal survey (In accordance with decision A.1088 (28)



The Ballast Water Management Plan (G4) must be approved in accordance with the Ballast Water Management and Guidelines for the Preparation of the Ballast Water Management Plan (MEPC 127 (53)). However, the revision of the Ballast Water Management Plans previously approved in accordance with Resolution A.868 (20) will continue to be valid as necessary due to the equipping of Ballast Water Management system.

Even if the actual application is considered as equipping of the treatment system, the ships of 400 GT and above are obliged to obtain certificate by 08.09.2017. Turk Loydu emphasizes the importance for the ships that do not have a previously approved plan to start the approval and certification process as soon as possible to prevent accumulation.



Ballast Water Treatment System Type Approval Process

There have requests for postponing for the transition of ballast water treatment systems to D-2 standards which is the basis of adaption process for the D-2 Rule of convention due to the fact that "Ballast Water Management Systems Approval Guide (G8)" has been amended in October 2016 and additional requests of United States regarding system approvals. However, since IMO has yet to make a decision in this respect, some of the Flag States open the way for postponing the implementation by separating the renewal of IOPP certification from the Class Renewal Survey. The aim of postponing is to ensure that systems complied with the updated guide can be used although it is allowed to make type approval with the existing guide (MEPC 174(58)) until 28th October, 2018 and to fit ship with the equipments approved in accordance with the existing guide until 28th October, 2020. In addition, since the number of equipment approved by the United States is low, this postponing is proper with the current manual (MEPC 279 (70)) and it is going to enable the number of US approved systems to be increased.

Turk Loydu issues certificate for BWM and "Document of Compliance" is also provided for the flags that are not party to the convention. The draft form created to make easier the preparation of the Ballast Water Management Plan can be accessed on the web page. D-2 implementation dates will be finalized by the MEPC meeting which will held in July 2017, however it will be appropriate to assess the preliminary preparation by assessing existing type-approved systems or to predate the class renewal survey particularly for the ships whose renewals are close after September 2017. Appropriate systems should be preferred by considering the investment and operation costs and the treatment method (Filter, UV, Ozone, Electrolysis etc.) which are important for shipowners as well as that the treatment systems which will be fitted on ships are approved by whom and according to which guide. Also, considering that the US has begun to implement ballast water requirements within the framework of national rules, independently from IMO, the vessels going to the US need to have a USCG approved treatment system or grant extension from the USCG to comply with the requirement of D-2.

TURK LOYDU IN NAVAL SHIPS PROJECTS

Turk Loydu Foundation Economic Enterprise
General Manager
Alper ERALP

The experience of naval shipbuilding goes back a long way in Turkey. In 1081, the first Turkish Naval ships were built. Halic Shipyard which was founded after the conquest of Istanbul by the Turks has been active since 1455 and maintains its characteristics being one of the oldest industrial facilities in the world. The naval ships which would change the Mediterranean Sea to "Turkish Lake" were built in these shipyards.

Despite this long history, our naval shipbuilding industry has suffered a serious decline in the last period of the Ottoman Empire because of that modern technology could not be followed and the technology such as developing steam engines and steel constructions was not caught.

If it is asked why the capability to build a national warship in Turkey is important; it will be useful to recall the fact of the recent history that is well known by the old generation but is forgotten today.

The Ottoman Empire recently recognized its weaknesses in the seas and ordered two war ships

British seized "Reşadiye" and "Sultan Osman" Dreadnoughts.

"Dreadnought" to the British shipyards, by means of the money collected mostly by volunteer campaigns from the community.

Although the construction of these two warships was completed and payments were made, two ships were not delivered to the Ottoman Empire on the excuse that war that had not begun yet.
It is certain that situation created a great trauma over the Ottoman intelligentsia, officer and people.

A similar situation occurred when military intervention to Cyprus came up in the protection of the rights of Turks. It was seen that we didn't have a fleet able for amphibious landing.

Although very serious developments have been made in the construction of the national warship during the Republic period, the most important progress is making actual the facilities of Undersecretariat of Defense Industry and the National Ship "Milgem" Project.

One of the most important pillars of this breakthrough is the development of naval shipbuilding capabilities of private sector industrialists. As Turk Loydu, we have been at every stage of this process which started with the classification of "TCG Yarbay Kudret Gungor" that is the first naval ship built in the private sector in Sedef Shipyard in 1996.

Today, if a wide range of ships such as warships, helicopter-carrying ships, patrol boats, landing ships, special purpose vessels (submarine rescue ships, rescue and towing ships), marine supply vessels, naval tankers, training boats can be built in the private shipyards under the supervision of Turk Loydu by using national design and a serious local contribution, this is the result of policies which have been successfully carried out for the last 20 years.

Regarding the renewal of the Turkish Naval Forces' fleet at private sector shipyards; it was a decent decision to choose Turk Loydu, the national classification

organization, as the institution to be trusted in the fields of audits and surveys. Since its establishment in 1962, Turk Loydu has been creating its rules with an increasing momentum, providing both experience and increasing its performance. Turk Loydu which has been established in 1962 with a very limited staff and budget is now in service of Turkish naval shipbuilding and Turkish Naval Forces, with its 150 expert technical staff, original rules, overseas offices that they have started to open, and reliable, independent and specialized expertise.

If a national ship is being built in Turkey, this should be done with Turk Loydu classification. Of course, there were two main reasons: the first is the national security issue. Keeping your own design data in our country is a priority that will not leave any debate. The second is that the acquired knowledge and experience remain in the country so that we recall the following statement: experience is the greatest but most expensive teacher. Mistakes made, repetitions, delays are actually tremendous savings if lessons taken properly.

Besides, why Turk Loydu should be chosen;
• Turk Loydu is a member of Naval Ship Classification Association (NSCA) and International Naval Safety Association (INSA),
• Experienced gained over more than 100 naval ships in 25 years,
• There are technical staffs specialized on naval shipbuilding,
• There are a wide range of services provided at every stage of construction,
• Service philosophy that goes beyond normal classification service, for example provides control according to technical specifications, additional survey services,
• Attractive conditions and competitive prices,

• Standing behind the service provided is a commitment to service that can be provided even after many years,
• There is a wide range of naval ships (multi-specialization),
• Experience of classification of naval ships also in foreign countries,
• There is close cooperation with universities and other organizations,
• Familiarity with military rules,
• Being open to alternative calculation methods,
• The possibility of immediate service next to you, survey within the same day, and plan control service when necessary,

And needless to say the independent, objective and expert status which is gained by the structure of foundation

Turk Loydu is proud to be part of the next generation of Turkish Naval Forces, all of which are designed and built locally.

Turk Loydu plans to provide survey services also for naval ships that will be built for exportation in Turkish Shipyards, which are specialized in naval ships, and these examples have already begun to put into practice.

SPECIAL PURPOSE SHIP BUILDING INDUSTRY AND TURK LOYDU

Marine Sector, Survey Location Chief
M.Cevat YARDIMCI

The history of shipbuilding and boat manufacturing industry in Turkey goes back a long way. Today, shipbuilding has become a sector that provides a significant amount of employment and contributes to our economy substantially by exporting.

The development of the Turkish boat manufacturing industry, which started with the small scale enterprises located in the region of Halic-Istanbul, continues as the rising sector of our country with more than 400 manufacturers and modern boat manufacturing regions spread to all our coasts today. The majority of boat manufacturers scattered all over the country are located particularly in Istanbul; and in the cities such as İzmir, Antalya, Bodrum, Marmaris, Fethiye, Bursa and Bartin.

It is possible to see very successful practices of boat manufacturing materials such as laminated wood, steel, aluminium and composites also in Turkey in the last 30 years in parallel with the developments in the world while making the traditional wooden boat manufacturing at the beginning.

Today, the Turkish boat manufacturing industry; can supply the boats manufactured for international market with competitive prices by means of the manpower it has, quality manufacturing, modern technology and the spirit of superior entrepreneurship. All the special purpose boats and yachts built are exported to the whole world, particularly in Europe, and they are all appreciated.

As a result of the development and breakthrough that started in the 1980s, our manufacturers, who realized the importance of producing in accordance with high production standards, started to reorganize themselves in order to fulfil their customers' requests by targeting export markets.

Our country has become a world-class brand in yacht manufacturing of 24 meters and over. Turkey is among the countries together with the USA, Italy, the United Kingdom, Germany, France, and Netherlands that build yachts with 24 metres and over most in the world together.

Especially Istanbul-Tuzla and Antalya Free Zone, and partly Bodrum; are considered as production base of mega yachts with different design, model or class. Today, super yachts up to 80-90 metres are built in our country.

The yacht and mega yacht building industry, which has grown in parallel with the increase in demand all over the world, entered a period of recession beginning from 2009 due to the effect of the global crisis in 2008.

After a short period of stagnation in 24-meter yacht building, a recovery has been observed beginning from 2012. Today we can say that there is a visible improvement in mega yacht orders and building, especially in the Antalya free zone.

Regarding the manufacturers of small boat and yacht under 24 meters, as in the whole world, these manufacturers in Turkey are far away from catching pre-crisis production numbers with the effect of the ongoing global crisis. Both big, organized enterprises and small enterprises have been trying to survive and overcome the global crisis with a limited number of local and international orders by operating well below their capacities.

However, this situation led some of the small boat and yacht manufacturers to build special boats such as small passenger boats, patrol boats for navy and civil use, fishing boats, tugboats, ambulance boats, pilot boats, service boats, crew boats which have been made of particularly composite, polyethene and aluminium materials.

Many boat manufacturers located foremost in Istanbul, Antalya and Izmir are successfully building various types of special purpose boats ordered from both domestic market and all the Gulf countries mainly Qatar and Bahrain in recent years. In fact, it is possible to say that the number of shipyards specialized in this issue and specialized in the manufacturing of special small boats has been increasing in recent years in Turkey.

With the awareness of being a sole national Classification Society established in Turkey, addition to ship classification services provided since 1962 which is the year of establishment, Turk Loydu successfully carries out the classification of both wooden boats and yachts built traditionally in the past and special purpose crafts and yachts which nowadays were built by all kinds of boat building materials with a team of 10 experts in Antalya and Marmaris as well as Istanbul head office.

Turk Loydu successfully continues the service of the classification of these special type crafts built for the whole world market, both in Turkey and also in the Middle East market by keeping its successful cooperation with these manufacturers as it always has been. In addition, the activities for development of special rules for such special crafts made by Turk Loydu has accelerated in recent years and continues today in line with the demand of the market

With the Omnibus Bill No. 6770, published in the Official Gazette, it entered into force and opened the way for changing to Turkish flag for Turkish-owned but foreign-flagged ships and yachts.

In order to support the sector as Turk Loydu, it is envisaged that significant discounts will be made in the transfers of Turkish flagged yachts to Turk Loydu class, in scope of a campaign which will be valid until August 30, 2017. In this context, a discount of % 75 over the service tariff will be applied for the yachts that has a valid class certificate issued by a foreign classification society and will transfer to Turk Loydu class and a discount of % 50 will be applied for the yachts that are already built but they do not have any class certificate despite the fact that they are in operation and will request the class certificate from Turk Loydu.

With a status of non-profit foundation, Turk Loydu's contributions to the quality systems and quality of production of the sector's distinguished shipyards that Turk Loydu collaborated have been reported to us by shipyards themselves.

TÜRK LOYDU
1962
İSTANBUL

INDUSTRY AND CERTIFICATION SECTOR

Ayfer ADIGÜZEL
Industry and Certification Sector Director

"We will continue to strengthen our goal of becoming a power in our country and in our region.

As a result of tightening the rules for product safety and performance subject to the increase in international trade and customer expectations, conformity assessment market continues to develop with acceleration. There have been significant developments recorded in our country in the field of conformity assessment which consisting mainly test, inspection and certification services in parallel with the global market.

In terms of economic data and growth figures, the year 2016 has been a year of static and even negative ratios observed on a global scale. In addition to the global effects, despite the events that adversely affect our economy, it has been a year of significant development in the field of conformity assessment, especially in construction sector investments where defense industry, energy sector and public infrastructure investments are dominant.

2016 was a year that we have been working hard to reach our growth targets in line with the needs and expectations of our clients by means of our experience more than 55 years in national and regional markets. We are focused on our business plans to deliver our existing products to wider markets and develop new products. Within this scope, we have increased our geographical spread in the sectors we serve, especially in energy, construction, manufacturing, chemistry, transportation and logistics sectors and on the other hand we offered new services to our clients by designing new products.

Being an "Accredited Verifier" to provide service for verification of greenhouse gas emissions measurements in industrial facilities was one of them. By completing our preparations for authorization, we have made an application to the Ministry of Environment and Urbanization to be authorized. In January 2017, we will start to provide verification services by receiving our authorization.

We have completed our works to provide service by preparing guidance documents which all the parties particularly public authorities and municipalities can take as reference regarding the detection, inventory and safely disposal of asbestos and similar dangerous materials which can be formed in the structures during the demolition period in order to protect the environment and public health in our country which has almost turned into a huge building site due to urban transformation. We are very excited about this project which is closely related to community health and we have shared our work with the public and interested parties via our website.

"MYK Professional Competence Certificate" has become mandatory as of the date of 26.05.2016 for the professions which are among the dangerous and very dangerous professions in compliance with the additional clause (1) which was added to the Law No. 5544 on 23.04.2015, and its national competencies are published by Vocational Qualification Authority (MYK) and belongs to the professions which are published in the communiques published by the Ministry of Labour and Social Security.

Since our establishment, we have been providing services for the personnel certification services for the maritime and industrial sector; we continued our services in 2016 by

obtaining authorization from MYK to certify as an authorized certification body in various professional groups especially welding operator, steel, aluminium, plastic, natural gas polyethylene pipe, automotive steel plate and body welder and scaffolding personnel to meet the requirement above. We will continue our services by including the certification of new occupational groups into our range within 2017.

Another new service we have received to our service range since 2017 is to provide project control services for steel construction elements and simple composites in compliance with the "Regulation of Design, Calculation and Application for Steel Structures" issued by the Ministry of Environment and Urbanisation on February 4th, 2016 and entered into force on September 1st, 2016. Our preparations relating the matter have been completed and we will start to serve as of the New Year.

We have started to provide services by signing important contracts in order to provide turn-key conformity assessment services for facility investments of conventional and renewable energy projects which have increased in recent years. In 2016, we have completed our 3rd Bosphorus Bridge project which is one of our projects for structural steel control that form a significant part of our activities. We have started to provide construction inspection service on the 3rd Airport project of Istanbul, which is one of the most important infrastructure investments of our country. Our objective is to ensure that reliable products and facilities come true in the chain until the end user with regards to investors, contractors, operators and insurance companies by ensuring the control of conformation of projects with a high budget and a long design life with the specifications.

Our goal is to ensure the control requirement of third party to take place as essential in the technical specifications in all public and private investment projects.

Periodic examinations of compressed cylinders that we have been performing voluntarily, been included in the scope of mandatory application as of January 22nd, 2016 in compliance with the "Communique on the Procedures and Principles for Periodical Inspections and Filling of Compressed Gas Cylinders" numbered SGM-2015/2 published by the Ministry of Science, Industry and Technology on January 22nd, 2015, and activities started to be carried out by the organizations authorized by the Type A Examination Organizations which have been accredited in compliance with the ISO 17020 standards by the Ministry.

By means of safe delivery of product; we have started to provide services at the beginning of 2016, by taking our authorization from the Ministry for the regulation that aims to provide maximum protection for human and environmental health. Until today, thousands of compressed cylinder examinations have been carried out by us, and the products that are not in compliance with public health are reported to the Ministry. Thus, the products in circulation can be secured and monitored.

In addition to our new service areas, in the scope of our ongoing services, conformity assessment has been carried out for more than 500 industrial products, mainly pressure vessels, boilers, heat exchangers, LPG and LNG tanks, and personnel certification has been carried out for 3038 people (316 of them are as part of MYK). In the new year, we aim to increase the number and diversity.

The number of chambers and stock exchanges that are accredited within the scope of the Union of Chambers and Commodity Exchanges of Turkey (TOBB), Chamber and Stock Exchange Accreditation Project for which we serve as audit and

training organization, increased to 234.

The Accreditation System, which provides opportunity for the members of the Chambers and Stock Exchanges to provide "Five Star Service"; plays a pioneering role in local, regional, national and international platforms for branding of Chambers and Stock Exchanges. By means of our competent auditors and trainers, we became the most important stakeholder of TOBB in this project. By means of the quality services we provide, we contributed Turk Loydu's brand value to get strong by introducing to a wide range of network.

In parallel with the accreditation project, as Turk Loydu, we have certified 42 Chambers and Stock Exchanges by performing audits (ISO 9001, ISO 14001, ISO 10002, ISO 27001) of management systems for the Chambers and Stock Exchanges.

We owe development and sustainability of our conformity assessment services in the industrial field have to assuming our customers as our cooperation partner, to the employment of qualified human resources, to our customer-oriented business culture, to make the necessary investments for continuous development, and above all to the confidence that our clients have.

By means of our team believing in our goals wholeheartedly and succeeded achievements by their efforts, we will continue our aim to be the power in our country and region in 2017 by strengthening the brand value of Turk Loydu more in line with our strategical objectives, varying our range of products, providing technical support to our customers as well as conformity assessment services that our industry needs by spreading in national and international markets.

I hereby present my gratitude to our clients and stakeholders who have strengthen us and contributed to our development with the confidence that they have shown to our services

PRODUCTION CONTROL OF CONSTRUCTIONS

THE PROJECT OF 3RD AIRPORT'S ROOFING AND FACADE CONSTRUCTION

The New Istanbul Airport Project, whose construction started in 2013, will be the world's largest airport when completed with its terminals which has an area of 76.5 km2 and passenger capacity of 200 million, and 6 airfields independent of each other. The project consists of 4 stages.

The international terminal, the scaffolding buildings and the ATC tower which were built in the first stage are being planned to open in the first half of 2018. Third party control services for production and assembling of all roofing and facade systems for the international terminal, the scaffolding buildings and the ATC tower which were built in the first stage have been carried out by Turk Loydu in accordance with the technical specifications.

Within the scope of the control service started as of July 2016, there are assembling works for the roofing production on scaffolding building 1, scaffolding building 1, and steel bolting assembly for the facade carrier on the terminal building. In 2017 roofing and facade production for Scaffolding 1, Scaffolding 3 and Scaffolding 5 buildings, steel bolting assembly for the facade carrier on the terminal building, factory production controls for carrier steel of back facade on the terminal building will be in progress.

STEEL CONSTRUCTION MANUFACTURING INSPECTIONS

ASF ANTAKYA MUSEUM OTEL

The project which is being constructed in the opposite of St. Pierre Church located in Hatay, as world's second Museum Hotel that will consist of 250 rooms located. In this project, steel production and assembling control of 14.000 tons are carried out by Turk Loydu in accordance with the technical specification of steel production and EXC3 class of EN 1090-2 standard.

Before the production, Inspection and Test Plan (ITP) have been customized and have been carried out in all phases of production and assembling providing that conformity assessment for standards has been starting from the material procurement process.

The project has continued also in 2016, steel manufacturing has been completed and installation control procedures are in progress. The project is planned to be completed in April 2017.

DR.LUTFI KIRDAR KARTAL TRAINING AND RESEARCH HOSPITAL

Dr. Lutfi Kirdar Kartal Training and Research Hospital which will be constructed with a total residence area of 55,000 m2 and closed area of 300,000 m2 in Kartal, Istanbul has a sophisticated electromechanical system that includes elevators and heating-ventilation and treatment system in addition to being a multi-storey building with a capacity of 920 beds and seismic isolation system.

In this project, steel production and assembling control of 2,000 tons are carried out by Turk Loydu in accordance with the technical specification of steel production and EXC3 class of EN 1090-2 standard.

TURKISH AIRLINES NEW SIMULATION CENTER

T.H.Y. A.O. Simulator Building Construction Project which is in progress in Florya, Istanbul has 18 Simulators inside a total closed area of 30.000 m2. This project which upon completion will contribute to THY A.O.'s pilot simulation training capacity to be in the first place in the world is an important investment both for sector and our country. In other words, the building has been used as a concrete-steel carcass structure as a conveyor system and it is equipped with latest technology in electro-mechanics as well as functional and impressive design in visual and architectural sense.

In this building, concrete-steel carcass construction has been used one within the other for carrier system and the building has been equipped with latest technology electromechanically as well as its functional and impressive design in visual and architectural sense.

KOMURHAN BRIDGE

The project, which consists of the "Cable-stayed New Komurhan Bridge" and the Tunnel Construction and provides the passage for Karakaya Dam Lake (Firat River) on the Malatya-Elazig State Highway, is a new road construction project with a total length of 5,155 m and 2x2 lane. By means of this project, a new bridge with a total length of 660m and a tunnel with a length of about 2.4km and a modern state road will be built next to the existing road, while the existing one which has 1x1 lane and low standards (small curve radius and many curves) and Komurhan Bridge were maintained in the region. New Komurhan Bridge will be "Cable Stayed Bridge" as called in the international literature.
Third party control service for the production and assembling of about 20.000 tons of steel to be used within the scope of the project is carried out by Turk Loydu in accordance with EN 1090-2 EXC.4 construction class.

MALL OF ANTALYA PROJECT

The Mall of Antalya is being constructed as an AVM project with a usage area of approximately 42.000 m2 within the boundaries of Kepez Municipality of Antalya and the investment cost is approximately 134,2 Million TL.

In the project, steel production and assembling control of 4,000 tons are carried out by Turk Loydu in accordance with the technical specification of steel production and EXC-3 class of EN 1090-2 standard.

Before the production, Inspection and Test Plan (ITP) have been customized and have been carried out in all phases of production and assembling providing that conformity assessment for standards has been starting from the material procurement process. The worksite assembly works are planned to be completed by April 2017.

ICONOVA PROJESİ

For the ongoing project in Gaziantep, steel production and assembling control of 4,000 tons are carried out by Turk Loydu in accordance with the technical specification of steel production and EXC-3 class of EN 1090-2 standard.

Before the production, Inspection and Test Plan (ITP) have been customized and have been carried out in all phases of production and assembling providing that conformity assessment for standards has been starting from the material procurement process. The worksite assembly works are planned to be completed by April 2017.

ADANA STADIUM PROJECT

The Adana Stadium built by TOKI has a capacity of 33,000 spectators

In the project, steel production and assembling control of 3,500 tons are carried out by Turk Loydu in accordance with the technical specification of steel production and EXC-3 class of EN 1090-2 standard.

Before the production, Inspection and Test Plan (ITP) have been customized and have been carried out in all phases of production and assembling providing that conformity assessment for standards has been starting from the material procurement process. The worksite assembly works are planned to be completed by June 2017.

Information

Location	: Adana, Turkey
Duration of Construction	: 18 Months
Ground	: Grass
Host	: Adanaspor, Adana Demirspor
Capacity	: 33,000
Total Construction Area	: 102 Decares
Dimensions	: 105m x 68m
Seat arrangement	: All seated
Type of ground	: Natural grass
Disabled tribune	: Available
Camera system	: Available
Cost	: 106 Million TL

YILDIZ ENTEGRE COLD ROLLING MILL PROJECT

There are Continuous Pickling Line, Vertical Hot-Dip Galvanizing Line, Bell Annealing Furnace and Tandem Line for the cold rolling mill and galvanizing facility built by Yildizlar Investment Holding in the area of 500.000 m2 in Alikahya OSB.

Acidified, cold rolled, galvanized and tempered rolls will be produced in the continuous pickling line with a capacity of 1,500,000 tons per year. The facility will come into operation gradually in 2017. In this context, first of all, bell-annealing furnaces and later on annealing and tandem lines will be put into use.

For the ongoing project in Izmit, steel production and assembling control of 15,000 tons are carried out by Turk Loydu in accordance with the technical specification of steel production and EXC-3 class of EN 1090-2 standard.

Before the production, Inspection and Test Plan (ITP) have been customized and have been carried out in all phases of production and assembling providing that conformity assessment for standards has been starting from the material procurement process. The worksite assembly works are planned to be completed by April 2017.

STEEL CONSTRUCTION MANUFACTURING INSPECTIONS

YAVUZ SULTAN SELIM BRIDGE

Yavuz Sultan Selim Bridge, which is a high engineering and technology product that allows the construction of 8 lane passageway and 2 lane railway, is among the bridges of the world with its aesthetic and technical features.

The manufacturing inspections of Yavuz Sultan Selim Bridge performed by Turk Loydu in 2014 in accordance with the technical specification and EXC4 class of EN 1090-2 standard. The assembly inspections of the remaining 17 bridge floors (391m) belonging to Yavuz Sultan Selim Bridge have been carried out in 2016 and the "Manufacturing Inspection Document "has been issued for steel manufacturing and assembly within the scope of inspection.

On the other hand; the cable pulling operation of 2 main cables and installation of cable band and hangers which is attached to this main cable have been completed.

At this stage, the derrick crane used to lift the bridge floors from sea level until today has been dismantled and it came to the end for the installation of the Strand Jack system, which was used to lift the bridge floors over the main cable.

3rd Bosphorus Bridge, which is a high engineering and technology product that allows the construction of 8 lane passageway and 2 lane railway, is among the bridges of the world with its aesthetic and technical features.

The manufacturing inspections of 3rd Bosphorus Bridge have been started to perform by Turk Loydu in 2014 in accordance with the technical specification and EXC4 class of EN 1090-2 standard. The assembly inspections of the remaining 17 bridge floors (391m) belonging to Yavuz Sultan Selim Bridge have been carried out in 2016 and the "Manufacturing Inspection Document "has been arranged for steel manufacturing and assembly within the scope of inspection.

On the other hand; the cable pulling operation of 2 main cables and installation of cable band and hangers which will be attached to this main cable have been completed. At this stage, the derrick crane used to lift the bridge floors from sea level until today has been dismantled and it came to the end for the installation of the Strand Jack system, which will be used to lift the bridge floors over the main cable

TORUN CENTER

Torun Centre is being built on the area of Ali Sami Yen Stadium in Mecidiyekoy, Istanbul. It consists of three towers; an office and two residences. The amount of steel used in the construction is 2,000 tons.

The Torun Tower is being built in Esentepe, Istanbul and consists of an office building. The weight of steel to be manufactured is 400 tons.

The manufacturing of the structural steel part of the project started in July 2013. The project is carried out by Turk Loydu inspectors in accordance with EXC3 class of EN 1090-2 standard.

The project was completed in September 2016.

THE NORTH APPROACH VIADUCT OF IZMIT GULF PASSAGE BRIDGE

The manufacturing inspections of the steel part of the viaduct through which the vehicles coming from Istanbul will pass prior to the entrance from Istanbul has been started in November 2013. EXC3 class of EN 1090-2 standard has been selected for manufacturing and assembly inspections. The amount of steel to be manufactured in the project is 5,000 tons. The manufacturing of the project was completed in September 2014 and the assembly was completed in July 2016.

ESKISEHIR STADIUM PROJECT

The stadium has a capacity of 33.000 spectators and the steel manufacturing and assembling control of 3,500 tons are carried out by Turk Loydu in accordance with the technical specification of steel production and EXC-3 class of EN 1090-2 standard.

Standard conformity inspections have been carried out in all phases of production and assembling providing that conformity assessment for standards has been starting from the material procurement process. The assembly works have been completed in October 2016.

Information

Capacity	: 34.930
Owner	: Eskisehir General Directorate of Youth and Sports
Main contractor	: TOKI
Contractor	: Arsel Yapi
Cost	: 140.000.000 TL
Parking lot	: 1148 cars
Parking garage	: 502 cars
Cost	: 106.928.000 TL
Dimensions	: 137.700 m^2

INDUSTRIAL FACILITY INSPECTION

MAZIDAGI FERTILIZER PRODUCTION COMPLEX PROJECT

Within the scope of Fertilizer Production Complex project which was built in Mazidagi, Mardin by ETI BAKIR Inc., there are phosphoric acid plant, sulfuric acid plant, ammonia plant, dap plant and leach plant.

When the project is completed, 750.000 tons of fertilizer will be produced annually in the facility. Together with the production of fertilizer, it will also be possible to obtain precious metal, to make sale of phosphoric acid, sulfuric acid and ammonia as well as to make mineral separation.

In the scope project; third party inspection services such as inspection and assessment of conformity for equipment manufacturing, steel and piping manufacturing are provided. The project, which has an investment value of 1 billion 90 million TL, started as of July 2015 and is planned to last for 3 years. When the plant is put into operation; it will be in a capacity to produce 437760 tons of concentrated phosphate per year, 75000 tons of ammonia per year, 650000 tons of sulfuric acid per year, 150000 tons phosphoric acid per year, 325000 tons phosphate fertilizer per year, 690000 tons of pyrite and iron ash.

POWER PLANT INSPECTION

KARABIGA THERMAL POWER PLANT PROJECT

The Thermal Power Plant project being built in Karabiga, Canakkale by CENAL Electricity Generation Inc. will have the ultra-supercritical pulverized coal technology when it is completed.

The thermal power plant project, which will produce based on imported coal with an installed capacity of 2,960 MWe and production capacity of 9,900 GWh per year is one of the rare projects built with ultra-supercritical pulverized coal technology.

In the scope project; third party inspection services such as inspection and assessment of conformity for equipment manufacturing, steel and piping manufacturing are provided. The project has started as of November 2015 and is planned to be completed by the end of 2017.

THE PROJECT OF SITUATION DETERMINATION FOR CAN 2 THERMAL POWER PLANT

The Thermal Power Plant project being built in Can, Canakkale by Can Komur & Insaat Inc. will be working with domestic coal and having subcritical pulverized coal boilers when it is completed.

The thermal power plant project which is based on domestic coal with an installed capacity of 340 MWm/330 MWe is aimed to put into operation in the second half of 2017.

In the scope project; Turk Loydu carries out third party inspection services such as inspection and assessment of conformity for pressurized vessels under pressure and reassembling of pipes.

PERIODICAL INSPECTIONS OF PORTABLE PRESSURE VESSELS

Turk Loydu was accredited as Type A inspection organization in accordance with ISO 17020 as of March 2016 by the Ministry of Science, Industry and Technology in order to perform periodical inspections for tubes without π or epsilon marking which were manufactured before 01.07.2005 and after 01.01.1981 within the scope of " Communique on the Procedures and Principles for Periodical Inspections and Filling of Compressed Gas Cylinders " under numbered SGM-2015/2 of 22 January 2015.

Within this scope, filling facilities were communicated and 150 filling facilities were reached in Turkey in a short duration like a month. In addition, the Provincial Directorates of the Ministry of Science, Industry and Technology which is legislative body (Istanbul, Kocaeli, Sakarya, Yalova, İzmir, Adana) were visited, information was provided about the works performed.

In the interviews and evaluations made, it was determined that the pressure vessels had requirements related to the periodical inspection processes within the context of Portable Pressure Vessels Regulation TPED (2010/35 / EC). Since our Notified Body processes as per TPED regulation have not been concluded yet in country level, we have cooperated with a partner company which is an authorized body from the EU. Within the scope of cooperation, our clients are also provided services under TPED (2010/35 / EC). Our expert team is qualified related to subject, and services are provided with the local resources of Turk Loydu. As of the end of 2016, periodical inspections for more than 3000 tubes without PI mark and more than 1000 tubes with PI mark were carried out. In addition, periodical control inspections of the tubes were performed within the company for two filling companies according to 2010/35/AT, and these companies were authorized as a result of inspections.

RISK ASSESSMENT

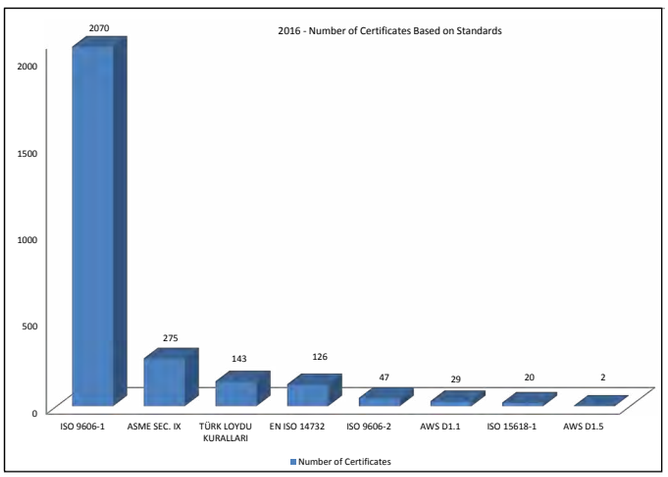
As part of the Security Report and the BKOP inspection / reporting services within the context of the Regulation on the Prevention of Major Industrial Accidents and Reducing its Effects (SEVESO Regulation), Turk Loydu has provided services for 18 facilities regarding the following issues in 2016 and still continues to provide.

- Examination of the classification of hazardous chemicals (in accordance with CLP);
- Chemical Exposure assessment (ILO COSH method);
- Classification of Explosive Atmosphere and Preparation of Explosion Protection Document as per Atex;
- P&ID drawings and controls;
- Process hazard analysis (HAZOP);
- Analysis for the identification and grouping of dangerous equipments within the process (Dow FEI index);
- Analysis of the reliability-centred maintenance (RCM) review;
- Analysis of the Risk based inspection methods;
- Review of root cause and results analysis of major accident scenarios with BOW TIE;
- Review of Lopa analysis;
- Analysis of Functional Safety (SIS, SIL, SIF and ESD design);
- Analysis of Security Management System;
- Review of Result analysis and individual and social risks (F-N Curve);
- Modelling (Brezee)
- Preparation of the Security Report

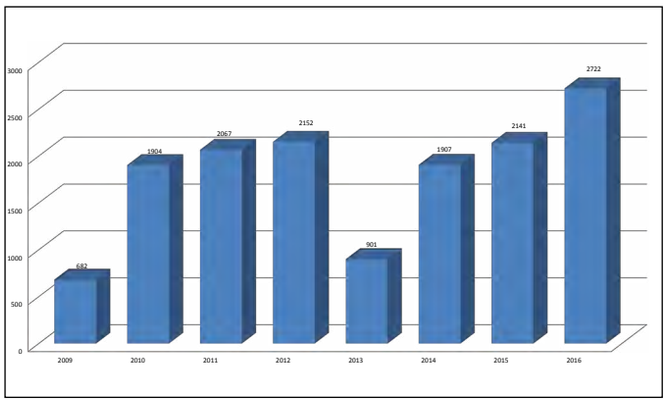
CERTIFICATION OF PERSONNEL

Turk Loydu finds solutions for the needs of clients by means of its dynamic structure and expert staff which update themselves in parallel with the changing design and production standards and constantly developing technology.

In this context, personnel certification services are provided in a wide range of sources, particularly manufacturing pressure vessels, steel construction, energy sector and so on.



Turk Loydu provided a total of 2,722 welder personnel certification services in 2016. The distribution of the last seven years is shown in the graphic below.



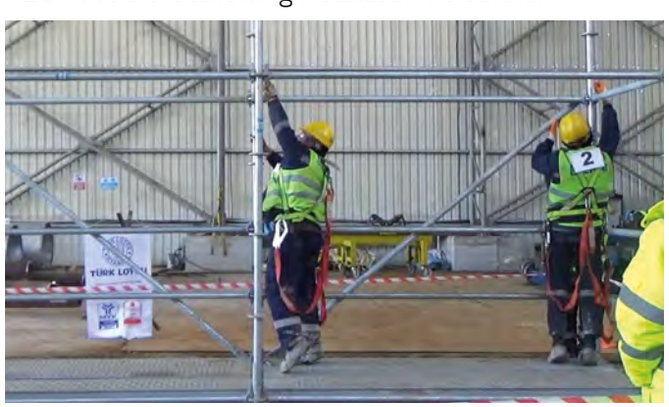
PROFESSIONAL COMPETENCE CERTIFICATE

"MYK Professional Competence Certificate" has become mandatory as of the date of 26.05.2016 for the professions which are among the dangerous and very dangerous professions in compliance with the additional clause (1) which was added to the Law No. 5544 on 23.04.2015, and its national competencies are published by the Vocational Qualification Authority (MYK) and belongs to the professions which are published in the communiques published by the Ministry of Labour and Social Security.

Turk Loydu has been authorized as "Certification Body" by the Vocational Qualification Authority (MYK) in 20.06.2016 to perform examinations and certification on the various national competencies for the profession groups which have the certification obligation.

Examination and certification activities for the relevant national competencies are carried out in our test centre and customer premises.

11UY0014-3 Aluminium Welder
11UY0010-3 Steel Welder
11UY0016-4 Welding Operator
11UY0033-3 Natural Gas Steel Pipe Welder
11UY0034-3 Natural Gas Polyethylene Pipe Welder
11UY0034-4 Natural Gas Polyethylene Pipe Welder
12UY0053-3 Automotive Sheet Metal and Body Welder
12UY0053-4 Automotive Sheet Metal and Body Welder
09UY0001-3 Plastic Welder
12UY0056-3 Scaffolding Installation Personnel



CONSTRUCTION PRODUCTS (305/2011/AB Construction Products Regulation)

As a Notified Body, Turk Loydu with the identification number of 1785 has started the activities of Factory Manufacturing Inspection System Certification in the field of structural metal products and auxiliary elements within the scope of 305/2011 / EU - Regulation on Building Materials in 2015.

Turk Loydu has become an important player on the market in the field of conformity assessment and certification of factories manufacturing steel and aluminium structures, steel profile manufacturers, welding electrodes, mechanical fasteners, milled steel sheet manufacturing factories.

Within the scope of the Regulation, CE conformity assessment activities are carried out for the products listed below.

Construction Materials Directive (305/2011/EC)	
Structural metal products and auxiliary elements Structural metallic cross sections/profiles: Hot rolled, cold formed or otherwise produced the sections/profiles of various shapes (T, L, H, U, Z, I, channels, angles, gutters, pipes), flat products (plates, sheets, stripes), made from various metal materials, protected or unprotected casting, forging and bar iron by undercoating (priming) against corrosion. (For use in metal structures or metal and concrete mixed structures)	PDDD system: System 2+ EN 10025-1 EN 10210-1 EN 10219-1 EN 15048-1 EN 15088
Structural metal products and auxiliary elements C onstruction products made of structural metal: Finished products such as shears, beams, columns, staircases, upholstery beams, bearing posts and sheet pile. Designed for specific applications, cut pieces, rails, traverses of appropriate sizes. They can be undercoated and protected against corrosion or can be unprotected, welded or weldless. (For use in foundations and building frames)	PDDD system: System 2+ EN 1090-1+A1
Structural metal products and auxiliary elements Welding materials. (For use in structural metal works)	PDDD system: System 2+ EN 13479
Structural metal products and auxiliary elements Structural junction elements: Metallic rivets, bolts (nuts and washers) and high-strength bolts (high-strength frictional clutch bolts), stud bolts, screws, railway fasteners. (For use in structural metal works)	PDDD system: System 2+ EN 14399-1

In 2016, certification services were carried out in 17 companies within the scope of the Regulation of Building Materials 305/2011 / EU.

ISO 3834 COMPETENCY IN WELDING MANUFACTURING

Industrial products are manufactured in a wide range from pressure vessel to industrial facility from cranes to machinery by using welded joint method.

Welding process; is defined as a special process in the production standard and has an extremely important effect on the cost of production and on the safety and quality of the final product.

Enterprises manufacturing in accordance with ISO 3834 series standards; assure the continuity by making the inspections for product control within the scope as per the conditions.

According to ISO 3834-2, ISO 3834-3 and ISO 3834-4 standards, the certification for competency of welding production of manufacturers is performed by Turk Loydu in order to determine the quality requirements for welding production and welding capability of manufacturer

17 companies were certified as per the IOS 3834 series standards in 2016.

AD 2000 MERKBLATT HP0, W0 SERVICE PLACE COMPETENCE CERTIFICATION

AD 2000 Merkblatt is a standard which was developed for pressure vessel design and manufacture. The standard was formed for the assessment of technical documents, operational and testing procedures, checking for the conformity of personnel and confirmation for the conformity of materials used.

W0 certification for product components and HP0 certification for the products are carried out within the scope of AD 2000 Merkblatt. Within this scope, services have been provided for GEDIK Casting and Valve Industry Trade Inc. and OZTURK Model Casting Trade Limited companies.

CERTIFICATION OF COMPETENCY IN MANUFACTURING

This certification is provided by Turk Loydu to determine the competency for the places in which products are manufactured regarding facility, personnel, machinery-equipment, quality control.

Service Place Competence Certificate confirms the production infrastructure and personnel qualifications of the audited plant.

Within this scope, services have been provided for ARME Industrial Mechanical Machinery Trade Limited Company, OZMAKSAN Heat Industry Trade Inc., SELNIKEL Heating and Air conditioning Products Trade Inc.

INDUSTRIAL CERTIFICATION OF PRESSURE EQUIPMENT

Certification of boilers, pressure vessels and industrial products within the scope of product certification, which is one of the core elements of our conformity assessment services, is an important activity that has been going on for many years.

Conformity assessment and certification of products are performed in accordance with the EU new approach directives in cases where CE marking is required. In product certification for product groups or markets where CE marking is not mandatory; Turk Loydu procedures are applied to assure the design, production, assembly and start-up of the products and the Product Certificate is issued.

Boilers (steam boilers, hot water boilers, hot oil boilers, etc.) are checked and certified according to EN 12953, EN 12952, EN 303, TS 497 standards unless otherwise stated.

Pressure vessels are; (LPG, LNG, air, nitrogen, oxygen tanks, etc.) are checked and certified according to AD 2000, EN 13445, ASME Sec. VIII Div. 1 and similar standards unless otherwise stated.

The main control steps during the product certification can be summarized as follows:

- Control and approval of design and strength calculations
- Conformity check of materials and certificates
- Conformity check of welders' certifications
- Compliance check of welding method (WPS, PQR) approvals
- Intermediate manufacturing controls (cutting, assembly, measure, dimension controls, etc.)
- NDT applications and assessment in welding seams
- Final inspection and hydrostatic pressure test
- Inspection and approval of the technical file of the product
- Issue of document

To provide uninterrupted service to our clients due to the suspension of the authorizations of the national Accredited Bodies, which have been appointed due to the incomplete negotiations between our country and the EU Commission during the adaptation of the Revised Pressure Vessels (2014/68 / EU) and Simple Pressure Vessels (2014/29 / EU), a cooperative agreement was signed with a company which is an EU approved body in 2016.

In addition, within the context of the cooperation, Pi mark conformity assessment services have started to be provided as per Portable Pressure Vessels Regulation (210/35 / EU) for which the national Accredited Body is not yet authorized in our country.

Certification services for a total of 550 boiler, pressurized equipment and similar industrial products have been provided in 2016.

FIRE PROTECTION SYSTEMS

The conformity assessment of fire protection systems is one of the most important activities in industrial and domestic structures. Turk Loydu carries out conformity assessments in this area as Type A Inspection Organization in accordance with the ISO 17020 standard. Design, hydraulic calculations, assembly controls, performance and function tests are carried out according to the "Regulations on Fire Protection of Buildings" and related standards. In case the system is found proper by Turk Loydu, System Approval Certificate is issued.

The main systems assessed in the field of fire protection are summarized below:

- Fire extinguishing systems with water, foam, automatic gas
- Pressurization systems of smoke evacuation and escape stair
- Detection, alarm, emergency lighting systems
- Storage tanks for fire protection water
- Assessment of fire scenarios

With the enactment of the legislation regarding the regulation of Dangerous Goods Conformity Certificate in 2016, conformity assessments of firefighting systems in coastal facilities such as ports and storage terminals have been carried out in accordance with the fire regulations and related standards.

A number of projects have been carried out by Turk Loydu in the field of conformity assessment of fire protection systems in 2016, the main ones being listed below.

Turkcell Data Processing Centre, APM Terminal, DP World Port, Evyap Port, Mehtap Kitchen Trade Inc., Mercedes Benz Turk Inc. factories, Fertilizer factory of Eti Bakir Inc. constructed in Mazidagi-Mardin, ISPAK Packaging, Assan Aluminium.

STORAGE TANKS

Turk Loydu carries out the periodical controls within API 650 and API 653 for the manufacture and assembly of new tanks and tanks in service regarding aboveground storage tanks by means of its expert staff under the accreditation of the ISO 17020 standard and the competence of "API 650 Authorized Inspection Agency" for atmospheric aboveground storage tanks .

Compliance of storage tanks to API 650 standard during design controls is performed by considering earthquake, wind and snow loads. Inspections are carried out by specialist plan control engineers in this area and a specialized Intergraph e-tank computer program is used. Special construction solutions are performed by using SAP-2000 and ANSYS finite element method.

The scope of controls which is performed within the Manufacturing Inspections of Storage Tanks is as follows:

- Materials, manufacturing, assembly checks according to approved project
- Conformity check of welders' certifications
- Compliance check of welding method (WPS, PQR) approvals
- Inspections during pre-manufacturing (bending, etc.)
- Inspections for tanks' verticality, diameter and ovality
- Visual inspections
- NDT applications and assessment of reports
- Final inspection and tests
- Issuance of certificate for storage tank

In 2016, the conformity assessment of 12 storage tanks at various sizes from 300 m3 to 2000 m3 has been carried out. Some of the main companies for which services are provided; POLISAN Holding Inc., PIR Engineering Limited Company, BP GAZ Inc., ISIMEK Machinery Boiler Industry Trade Limited Company, Hatay Dortyol Highways

TRAINING SEMINARS

Training seminars were organized for our clients on various topics in 2016. The main ones are listed below.

- For Port Operation Companies, Dangerous Goods Conformity Certificate and information on the rules and international agreements to be complied within the scope of Operation Permit Regulation for Coastal Facilities - May 6, 2016 Turk Loydu
- Pressure Equipment Regulation and Information Seminar within the scope of Regulation on Simple Pressure Vessels - September 28, 2016 - Konya Chamber of Industry
- Pressure Equipment Regulation and Information Seminar within the scope of Regulation on Simple Pressure Vessels- November 29, 2016- Adana Chamber of Industry

CERITIFICATION OF MANAGEMENT SYSTEMS

Turk Loydu continued its certification activities on the management system certification for a wide range of clients in various sectors such as trade and industrial chambers, trade exchanges, local administrations, education, shipbuilding, maritime, machinery, metal, chemical, transportation, engineering services in 2016.

Standards documented in 2016:

- ISO 9001 Quality Management System
- ISO 14001 Environmental Management System
- OHSAS 18001 Occupational Health and Safety Management System
- ISO 10002 Customer Satisfaction Management System
- ISO 27001 Information Security Management System
- ISO 50001 Energy Management System

VERIFICATION OF THE REPORTS OF GREENHOUSE GAS EMISSIONS

The "Regulation on the Establishment of Greenhouse Gas Emissions" prepared by the Ministry of Environment and Urbanization was published in the Official Gazette dated April 25, 2012 and numbered 28274 entered into force. In the following period, in order to meet some sectoral and institutional needs and requirements; it was amended / updated and published in the Official Gazette dated 7 May 2014 and numbered 29003.

Finally, the "Regulation on the Amendment of the Regulation on the Establishment of Greenhouse Gas Emissions" was published in the Official Gazette dated 29 June 2016 and numbered 29757. With this amendment in the Regulation, the verification processes of the 2015 and 2016 emission reports are combined. In this case, both emission reports must be verified and sent to the Ministry by 30 April 2017.

With the implementation of the Regulation, greenhouse gas emissions from sectors such as electricity and steam production, cement, iron and steel, ceramics, lime, paper, glass, large volumes of organic chemicals and ammonia production, which form a significant part of national greenhouse gas emissions, will be monitored at the plant level.

Thus, it will be possible to calculate more precisely the emissions of our country's greenhouse gases, at least half of the total emissions will be determined at the plant level and the data obtained will be reported by the plants and verified by the Ministry's Independent Verification Organizations.

Turk Loydu completed the related infrastructure studies and started to verification activities with qualified verification teams by obtaining authorization from the Ministry of Environment and Urbanization as a Verification Organization.

ISO 50001 CERTIFICATION FOR ENERGY MANAGEMENT SYSTEM

Turk Loydu which takes social responsibility and environmental awareness as its principle has started to provide certification activities related to the ISO 50001:2011 Energy Management System Standard in order to contribute to the establishment of a sustainable energy management by transferring this awareness to its clients and to facilitate compliance with the legislation for the organizations.

It is inevitable to have energy saving and create energy management system if it is taken into consideration that the total energy costs exceeds the total production costs by %50, the enforcement of the Energy Efficiency Law for the efficient use of energy, prevention of waste, reduction of the load of energy cost over the economy, increasing the energy source to protect the environment and increasing the efficiency in the use of energy.

Determining energy efficiency requirements, policies and targets, processes, energy manager and other resources, identifying measurement and monitoring plans, preparing procedures, carrying out applications by maintaining communication, conducting internal audits, reviewing and continuous improvement are the implementation steps of the system.

Within the scope of ISO 50001 Energy Management System standard, as a result of the inspections carried out at various companies, mainly the Yarimca Filling Facility of AYGAZ Inc. and Gebze Plant, the conformity of energy efficiency works as per ISO 50001 standards were assessed and appropriate ones were certified, follow-up is ensured by periodical inspections.

ISO 27001 CERTIFICATION FOR INFORMATION SECURITY MANAGEMENT SYSTEM

Turk Loydu has started certification activities within the ISO 27001 Information Security Management System in 2016, especially in the electricity generation, distribution, natural gas distribution companies which are within the scope of EPDK License Regulations and in the organizations which are within the scope of Authorized Liability.

The ISO 27001 information security management system addresses the entire sector; from small to large, from production to service, from the public to the private sector can be applied to every structure in the changing range. This standard is required especially in the sectors where protection of information has a great importance such as energy, finance, health, public, logistics, customs, exports, imports, telecommunication and information technology is a major priority.

ISO 27001 Certificate is required for EPDK (Energy Market Regulatory) License. On the changes made by EPDK in the Electricity Market Licensing Regulation, Natural Gas Market License Regulation and Petroleum Market License Regulation published in the Official Gazette dated 26/12/2014 and numbered 29217, it became mandatory to obtain ISO 27001 information security management certificate from the organizations accredited by TURKAK.

ISO 27001 Certificate facilitates Customs Procedures. ISO 9001 and ISO 27001 certificates are required for the organizations to be authorized to apply for Authorized Liability pursuant to the Regulation on Facilitation of Customs Procedures published on the official gazette on January 10, 2013 and revised and published on 21 May 2014.

The organizations that have certified with ISO 27001 Information Security Management System in 2016 are listed below.

- Agdas Adapazari Gas Distribution Inc.
- Akedas Electricity Distribution Inc.
- Astas Aluminium Industry and Trade Inc.
- BP Petrolleri A.Ş.
- Gazdas Gaziantep Natural Gas Distribution Inc.
- Huawei Telecommunication Foreign Trade Limited Co.
- Kargi Kizilirmak Energy Inc.
- Kirsehir Chamber of Commerce and Industry
- Ozka Rubber Industry and Trade Inc.
- Statkraft Energy Inc.
- Tepe Service and Management Inc.
- Thracian (Trakya) Region Natural Gas Distribution Inc.

TOBB CHAMBER AND EXCHANGE ACCREDITATION SYSTEM

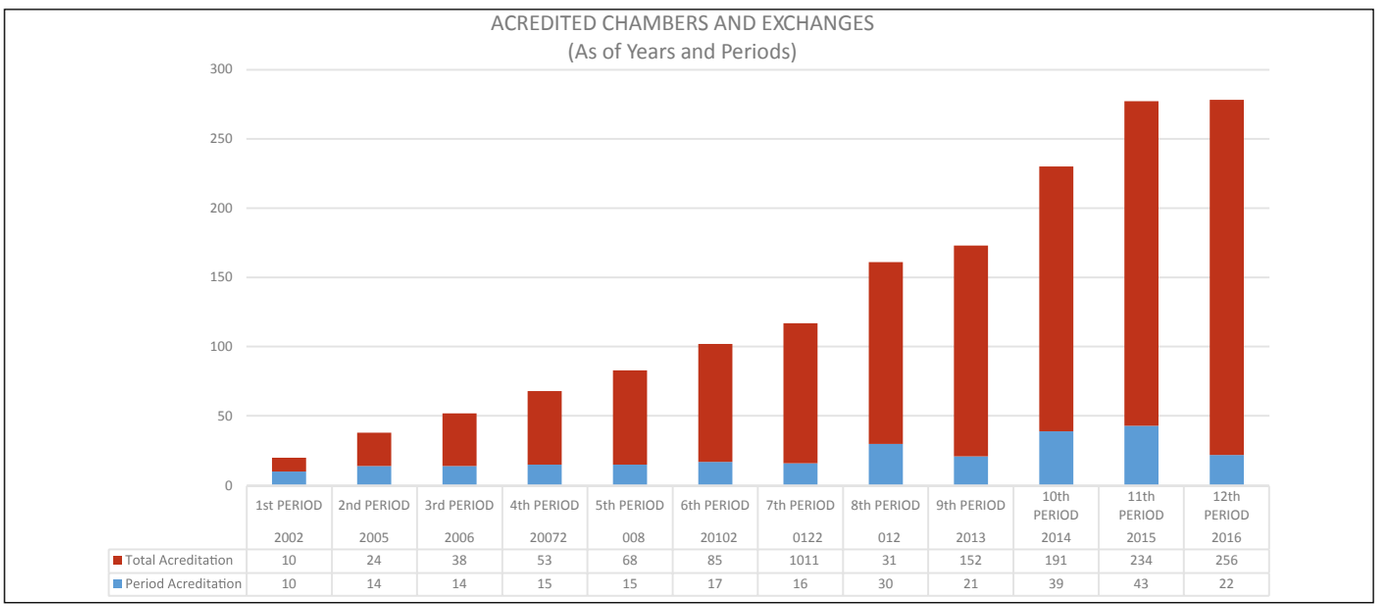
Chamber / Stock Exchange Accreditation System is a model formed by taking into account the views about Eurochambers-TOBB cooperation within the scope of Turkish Chamber Development Program and system of Eurochambers and England Chambers Union in which German Chamber system is also included within the ARCHIMEDES in order to improve service quality of chambers and stock exchanges affiliated to the Union of Chambers and Commodity Exchanges of Turkey (TOBB)

Turk Loydu has been providing services within supervision and education services in the TOBB Chambers and Exchange Accreditation Project since 2005.

AKREDİTE ODA
ACCREDITED CHAMBER

AKREDİTE BORSA
ACCREDITED
COMMODITY EXCHANGE

Within the year 2016, 12th period development visits and accreditation inspections for chambers and stock exchanges, as well as 4th, 6th, 8th period development visits and accreditation renewal inspections for chambers and stock exchanges, and 1st, 2nd, 5th, 10th period development visits for chambers and stock exchanges have been carried out. A total of 254 development visits, accreditation audits and follow-up audits were conducted.



	1st PERIOD	2nd PERIOD	3rd PERIOD	4th PERIOD	5th PERIOD	6th PERIOD	7th PERIOD	8th PERIOD	9th PERIOD	10th PERIOD	11th PERIOD	12th PERIOD
	2002	2005	2006	20072	008	20102	0122	012	2013	2014	2015	2016
Total Acreditation	10	24	38	53	68	85	1011	31	152	191	234	256
Period Acreditation	10	14	14	15	15	17	16	30	21	39	43	22

Turk Loydu has increased the number of auditors up to 20 who are working on the project in which number of accredited chambers / stock exchanges increase day after day.

With the amendment to the TOBB Chamber / Stock Exchange Accreditation standard in 2016, the scoring system was revised and the evaluation became more objective.

Apart from the conformity assessment carried out to accredit only Chamber and Stock Exchanges, this project aims to contribute to the development of capacity to serve their members and to contribute to the development of the city/town through these organizations.

CERTIFICATION OF CHAMBERS AND STOCK EXCHANGES AFFILIATED TO TOBB

Turk Loydu, who has undertaken training and audit services on the TOBB Chamber / Stock Exchange Accreditation Project, has been intensely active in chamber / stock exchange trainings and certification in 2016 with the aim of increasing the level of application of the management systems of chambers and stock exchanges.

The chambers and stock exchanges certified by Turk Loydu are shown below in alphabetical order:

NAME OF CHAMBER	NAME OF CHAMBER	NAME OF CHAMBER
ADIYAMAN TSO	AKHİSAR TB	AMASYA TSO
ANAMUR TSO	BAFRA TB	BALIKESİR TB
BANDIRMA TO	BERGAMA TO	BEYPAZARI TO
BİRECİK TSO	BURHANİYE TO	CEYHAN TB
ÇANKIRI TB	ÇORLU TB	EDREMİT TO
FETHİYE TSO	GİRESUN TB	GİRESUN TB LABORATUVARI
GİRESUN TSO	HAYRABOLU TB	HOPA TSO
IĞDIR TSO	İSTANBUL TB	İMEAK DTO
İMEAK DTO FETHİYE ŞUBESİ	İMEAK DTO İSKENDERUN ŞUBESİ	KARS TSO
KASTAMONU TB	KEŞAN TB	KIRKLARELİ TSO
KIRŞEHİR TB	KIRŞEHİR TSO	KIZILTEPE TB
KIZILTEPE TSO	KÖRFEZ TO	KUMLUCA TSO
KÜTAHYA TB	MARDİN TSO	MERSİN TB
POLATLI TO	SAFRANBOLU TSO	SOMA TSO
SÖKE TB	TARSUS TSO	TAVŞANLI TSO
TOKAT TB	TURHAL TSO	UZUNKÖPRÜ TB
UZUNKÖPRÜ TSO	ZİLE TB	

TSO: Chamber of Commerce and Industry, TO: Chamber of Commerce, TB: Commodity Exchange, DTO: Chamber of Shipping

PERIODICAL INSPECTIONS OF COMPRESSED GAS CYLINDERS

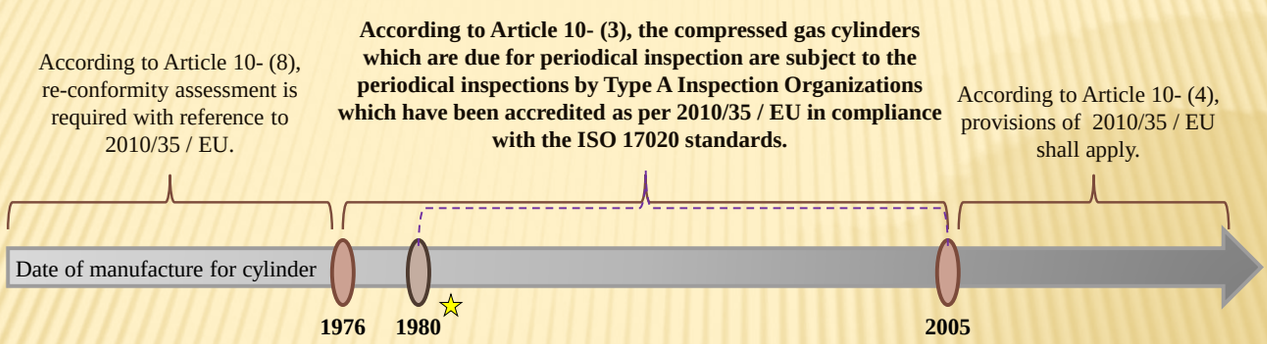
Energy and Transportation Division Manager
Hasan MÜFTÜOĞLU

Depending on the increase in consumer awareness; Public authorities aiming to maximize the safety of life, property and the environment are intending to increase security level by making arrangements on the regulations related to product safety.

In accordance with the "Communique on the Provision of Competency Document for Periodical Inspection, Test, Maintenance, and Repair of Compressed Gas Cylinders" published in the Official Gazette dated 19/4/2011 and numbered 27910 (Communique No: SGM-2011/4), within the scope of "Communique on the Procedures and Principles for Periodical Inspections and Filling of Compressed Gas Cylinders" numbered SGM-2015/2 published by the Ministry of Science, Industry and Technology on January 22nd, 2015, the authorization of filling stations for periodical inspections of tubes without π or epsilon mark, was transferred to Type A Inspection Organizations which have been accredited in compliance with the ISO 17020 standards by the Ministry.

However, according to the Communique numbered SGM-2015/02, periodical inspections of tubes with π or epsilon mark are carried out according to the 2010/35/EU Portable Pressure Vessels Regulation. For the compressed gas cylinders whose production date belongs to the years before 1980 including 1980, it will only be allowed to be used providing that there will be again process of conformity assessment and π marking according to the 2010/35/EU Portable Pressure Vessels Regulation.

INFORMING BROCHURE ABOUT PERIODIC INSPECTIONS OF COMPRESSED GAS CYLINDERS IN ACCORDANCE WITH THE SGM-2015/2 DIRECTIVE ISSUED BY THE MINISTRY OF SCIENCE, INDUSTRY AND TECHNOLOGY



☆ **DIRECTIVE NO: SGM-2015/2, ARTICLE 10 - (8)** Cylinders and manifold cylinder bundles with a **manufacture date of 1976 or earlier as of 1/7/2015**, and with a **manufacture date of 1980 and earlier as of 1/7/2016** shall not be filled. However, this provision does not apply to the cylinders and manifold cylinder bundles for which conformity assessment or re - conformity assessment have been carried out and marked with (Pi) π within the scope of Portable Pressurized Equipment Directive (2010/35/ EU).

As **TURK LOYDU,** we provide services within the scope of re-conformity assessments and periodical inspections that have been specified on the scale above and we have been authorized by **the MINISTRY OF SCIENCE, INDUSTRY AND TECHNOLOGY** to carry out periodical inspections.

Table 1 SGM-2015/02 Periodical Inspection of Cylinders Control Status

According to the Communique, the scope of the periodical inspection conducted by Type A Inspection Organization authorized on behalf of the Ministry basically consists of the following stages.

- Determination of cylinder condition, preparation for inspection and test
- Visual external inspection
- Visual internal inspection
- Additional experiments
- Inspection of insulation tube
- Pressure test and ultrasonic inspection
- Control of tube
- Rejecting and disabling of the tubes

The issue of regulation has great importance in terms of the taking the inventory of tubes which is in the scope of Communique, the traceability of the products on the market and ensuring its safety in our country.

Turk Loydu has been authorized by the Ministry of Science, Industry and Technology in order to perform periodical inspections for tubes without π or epsilon marking which were manufactured before 01.07.2005 and after 01.01.1981 within the scope of subjected Communique, and as of March 2016, Turk Loydu provides services for clients in all over the country by means of its active staff.

VERIFICATION OF GREENHOUSE GAS EMISSION REPORTS

System Certification Division Manager
H. Uğur AYKAÇ

Global warming is a phenomenon that threatens the holistic structure of ecosystems in which life continues in the world and causes the extinction of other meteorological disasters such as extreme temperatures, fire, lack of water, drought, which affect human life, causing thousands of plant and animal species to disappear.

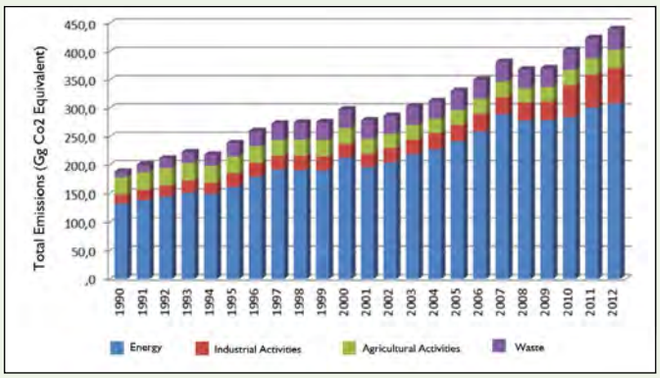
The average global air temperature increased from 0.3 ° to 0.6 ° C during the period from the mid-19th century to the present day on the Earth. According to the research, global warming is expected to last 0.1 ° C every 10 years over the next 40 years.

Human and climate interaction has been ongoing for centuries and now humanity is facing the problem of global climate change. The United Nations Framework Convention on Climate Change has been put into effect in order to reduce the changes in the climate that occurs as a result of chemical changes in the atmosphere due to various activities of humans.

Greenhouse gas emissions data for the years 1990 - 2012 presented to the United Nations Climate Change Secretariat on April 14, 2012, that calculated by using the 1996 Intergovernmental Panel Guidance on Climate Change.

According to the inventory results, total greenhouse gas emissions for 2012 were estimated as 439.9 million tons of CO2 equivalent. In addition, the emission amount per person in 2012 was calculated as 5.9 tons.

The distribution of Greenhouse Gas Emissions according to sectors is given below (except AKAKDO)



With the awareness that climate change is a multifaceted and confusing problem that can lead to very serious environmental and social economic consequences, even threats to the security of countries, and that the effects caused will have become one of the most important tests that threaten the lives of future generations, Turkey is aware of the importance of international co-operation in the fight against climate change and the reduction of greenhouse gas emissions that cause climate change. An important step for fighting against climate change in our country was taken by the Ministry of Environment and Urbanization, and the "Regulation on the Establishment of Greenhouse Gas Emissions" was published in the Official Gazette dated April 25, 2012 and numbered 28274 and entered into force. In the following period, in order to meet some sectoral and institutional needs and requirements; it was amended / updated and published in the Official Gazette dated 7 May 2014 and numbered 29003.

Finally, the "Regulation on the Amendment of the Regulation on the Establishment of Greenhouse Gas Emissions" was published in the Official Gazette dated 29 June 2016 and numbered 29757. With this amendment in the Regulation, the verification processes of the 2015 and 2016 emission reports are combined. In this case, both emission reports must be verified and sent to the Ministry by 30 April 2017.

With the implementation of the Regulation, greenhouse gas emissions from sectors such as electricity and steam production, cement, iron and steel, ceramics, lime, paper, glass, large volumes of organic chemicals and ammonia production, which form a significant part of national greenhouse gas emissions, will be monitored at the plant level.

Thus, it will be possible to calculate more precisely the emissions of our country's greenhouse gases, at least half of the total emissions will be determined at the plant level and the data obtained will be reported by the plants and verified by the Ministry's Independent Verification Organizations.
Turk Loydu has been authorized by the Ministry of Environment and Urbanism as a Verification Body.

It is possible for companies to decide whether their activities are within the scope of the Regulation or not according to the threshold values (conditions) mentioned below. Some activities unconditionally fall within the scope of the Regulation.

1	Burning of fuels in facilities (≥20 MW) Energy - Food - Automotive - Plastic - Textile
2	Oil refining
3	Coke production Roasting, sintering and palletization of metal ores (including Sulphur ores) Production of pig iron and steel (primary and secondary melting), including continuous casting (≥2.5 Ton / Hour)
4	Production or processing of iron-containing metals (including ferrous alloys) (≥20 MW) Secondary aluminium production (≥20 MW) The production or processing of non-ferrous metals, including the production of alloys (≥20 MW)
5	Primary aluminium production
6	Production of clinker(Rotary furnace≥500 Tons / day; other furnaces ≥50 Tons / day) Production of lime or Calcination of magnesite or dolomite (> 50 Tons / Day) Production of ceramic products (≥75 Tons / Day) Glass production including glass fiber (≥20 Ton / Day) Production of mineral fiber insulation material (≥20 ton / day) Drying and calcination of gypsum, and production of other gypsum products (≥20 MW)
7	Cellulose production from wood or other fibrous materials. Production of paper, cardboard or carton (≥20 Tons / day)
8	Carbon black production (≥20 MW) Ammonia production Production of large volume organic chemicals by cracking or reforming (≥100 Ton / Day) Production of hydrogen (H2) and synthesis gas by reforming or partial oxidation (≥25 Ton / Day) Production of soda ash (Na2CO3) and sodium bicarbonate (NaHCO3)
9	Nitric acid production Adipic acid production Glyoxal and Glyoxylic acid production

REQUIREMENT OF PROFESSIONAL COMPETENCE CERTIFICATE

Civil and Structural Engineering Division Manager
Murat DEVREZ

"Professional Competence Certificate" is a certificate for the professional who became successful at the theoretical and practical examinations carried out in the occupational groups covered and issued by a certification body authorized by MYK, and it proves that the person has learning achievements specified in the relevant national qualification.

The question "Why should I get a Professional Competence Certificate?" is being a matter for everybody. One of the biggest reasons; as a result of the researches carried out, the most important causes of work accidents are "employee sourced". Unfortunately, these accidents can result in disability and even death. Another important reason is that it will increase product / production quality and production speed. Work performed by certified personnel will increase the quality of the product, reduce negative feedbacks and by this means additional costs will be avoided. Production speed is also affected positively and it will also have a positive financial impact. "MYK Professional Competence Certificate" has become mandatory as of the date of 26.05.2016 for the professions which are among the dangerous and very dangerous professions in compliance with the additional clause (1) which was added to the Law No. 5544 on 23.04.2015, and its national competencies are published by Vocational Qualification Authority (MYK) and belongs to the professions which are published in the communiques published by the Ministry of Labour and Social Security. In this respect, the qualified and certified employee will be provided and the prevention / reduction of work accidents will be ensured and the distinction between qualified and non-qualified personnel will be easily made and product / production quality will be increased. Employees will be able to prove their competence and qualifications; related professions will be carried out by competent employees. The quality of the product will increase, the costs will be reduced indirectly, customer complaints and negative feedbacks will be reduced by executing the concerned profession by competent employee.

Another question that comes to mind is where the employee can get the certificate. In order for the employee to obtain the "MYK Professional Competence Certificate", there must be national competency of the profession of which he/she wishes to get certificate, and he/she must apply to the certification body authorized by the MYK to perform the examination and certification for this national qualification. Candidates can learn from the MYK website the authorized certification bodies at the national level where they wish to obtain the certificate. (www.myk.gov.tr)

Certification fees can also be confusing. However, in this regard, the government helps the person who wants to get a certificate and the person who will receive the Certificate of Proficiency does not pay. The examination and certification costs for the MYK Professional Competence Certificate are paid by the government.
The validity of the "Professional Competence Certificate" is 3 years. And, it should be monitored at every six months. At the end of 3 years, it is mandatory to make the certification process like the first documentation.

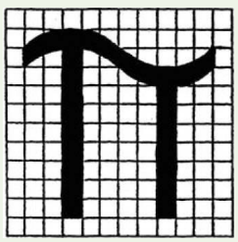
If the employee has not been certified by 1 January 2017; in the audits to be carried out upwards the new year, the Labour inspectors of the Ministry of Labour and Social Security will apply the administrative fine of 500 TL to the employers for each uncertified employees working for the 40 professions in which it is mandatory to hold MYK Professional Competence Certificate and the personnel without professional competence certificate will not be employed. Starting from 24 March 2017, administrative fines will also be imposed on employers for uncertified workers in 8 professions.

TURK LOYDU has been authorized by the Vocational Qualifications Authority (MYK) as "Certification Body" on 20.06.2016 to carry out examinations and certifications in various national qualifications belonging to professions in which there is obligation to hold certificates. Examination and certification services for the relevant national competencies are provided at the test centres and customer premises in the relevant national qualifications. For detailed information and applications, please visit www. tlmyk.org

π MARKING IN EQUIPMENT REGULATION

Industrial Certification Division Manager
Eser TEMİZ

Pressure equipments are defined by three main regulations within the EU legislation; Pressure Equipment Directive (PED), Simple Pressure Vessel Directive (SPVD) and Portable Pressure Equipment Directive (TPED). TPED from these regulations is an important EU legislation for which a notified body has not been assigned in our country from past to present.



In case of transportation of Class 2 hazardous substances in accordance with the Member States of the EU and ADR in Turkey, or in the case of dangerous substances UN 1051, UN 1052, UN 1745, UN 1746, UN 1790, UN 2495 excluding Class 2, the equipment have to be subjected to conformity assessment by the notified body under TPED and it is obligatory to release to the market with π marking.

The new version of TPED 2010/35/EU has been compulsory to perform both in EU member countries and in our country by making fully compatible with ADR. The conformity assessment of portable pressurized equipment and the inspection of the equipment in use are carried out entirely in accordance with ADR. The stages to be followed during design manufacturing, inspection, documentation are detailed by ADR. ADR Chapter 6.2.3 describes compressed cylinders and cylinder bundles and ADR Chapter 6.8 describes tanks and containers. For design, manufacture and inspection purposes these sections are also taken as basis.

It is compulsory to make conformity assessment of the components connected to the portable pressure equipment but not exposed to pressure and accessories on the equipment as a whole within the context of the TPED. In the cylinder bundles, not only the pressurized cylinders, but also the carrier frame, manifold, safety valves used and stop cocks must have conformity assessment as a whole. The same applies to fixed tanks and containers on vehicles. In addition

to the compressed cover of the tank, the tank-vehicle chassis connection, the carrier frame in the containers, the filling-discharge system, the safety valves, the stop cocks, the earthing system, the wave breakers and the dangerous goods warning and identification marks on the equipment are all covered as a whole within TPED. Accelerating the vehicle forward 2g, side to side, backwards and upwards 1g creates the loading conditions that must be considered in the design.

Convention for Safe Containers (CSC) approval is mandatory for the carrier frame of the container if the tank container is to be used for maritime transport, and the prototype container must be passed through the impact test according to UN Manual of Tests and Criteria, Part IV, Section 41.

Although the mutual negotiations between Turkey and the EU Commission are not yet concluded in TPED Regulation, the regulation is compulsory in the domestic legislation of our country. Thus, Turk Loydu can provide certification for portable pressurized equipments newly manufactured and equipments already in use within the cooperation agreement signed with an EU country organization in 2016. Multi-element Gas Containers (MEGC) with special design at 30 feet and 20 feet, type approval certification and initial inspection for LPG, LNG, LIN / LOX / LAR tanks above vehicle, and periodical inspections of portable pressure equipment are provided until today.

TRAINING SERVICES

TRAINING ACTIVITIES

As Turk Loydu, our trainings that we have carried out by taking into account the needs of the sectors we serve (Maritime, Ship and Yacht Construction, Energy, Manufacturing, Transportation, Logistics, Defense Industry etc.) have been continued with the addition of new training subjects in 2016.

In addition, new cooperation protocols have been put into effect to have a greater interaction with our industry stakeholders.

Turk Loydu is a leading organization in Turkey in the field of industrial education with its ability to offer innovative trainings and its ability to make sectoral cooperation.

Turk Loydu's trainings are planned as open trainings for general participation; the trainings organized within the demands of companies and organizations and the trainings organized according to the requests of the official organizations. The trainings we provide can be listed in 5 main groups.

1.Management Systems Trainings
2.Maritime Trainings
3.Transportation / Logistics Trainings (including the Trainings within DGSA and IMDG codes)
4.Trainings within the scope of Industrial Activities
5.Trainings within the scope of Corporate and Individual Development

All of our trainings are offered by expert and experienced trainers, and the contents of the training are improved with feedback received after the trainings. At the end of our trainings, Turk Loydu success certificate or participation certificate is given depending on the training that the participant has received. For some trainings (Dangerous Goods Safety Adviser- DGSA), the certificate for the completion of training is provided.

Turk Loydu can solve all the training needs of our stakeholder sectors by providing ideal conditions for training with the infrastructure of 5 training rooms one of which is equipped with computers and one Conference Hall. The figures related to open trainings for general participation and the trainings carried out within the demands of companies and organizations in 2016 are given below.

In 2016;
Total Number of Trainings provided: 101
Total Number of Participants: 1916 people

SUBJECTS OF TRAININGS NEWLY LAUNCHED IN 2016

It has been aimed to increase the diversity of trainings offered, by taking into account the new trainings which is our stakeholder sectors need as per new developments, and new trainings have been programmed and provided, especially in transport, logistics and maritime areas in 2016.

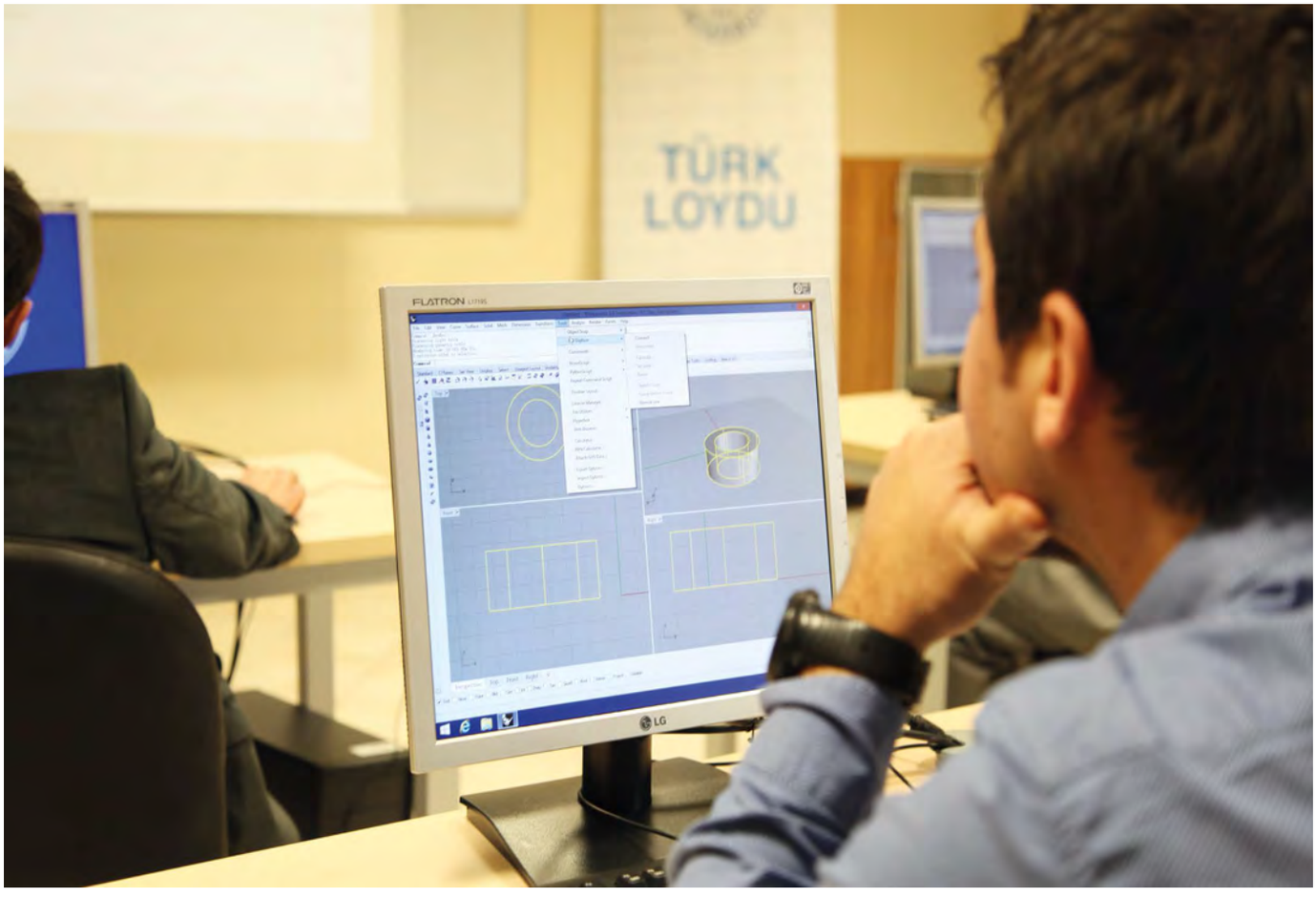
Our newly launched trainings in 2016;

Within the Scope of Management Systems,
The "DGSA Training Authorization Certificate" was obtained in accordance with the "Communiqué on Dangerous Goods Safety Consultancy" published in the Official Newspaper on 22 May 2014 issued by the Ministry of Transport, Maritime Affairs and Communications. By means of this certificate, new training modes respectively seaway, railway transportation modes (IMDG Code and RID) have been added to existing DGSA Trainings within the scope of ADR which takes an important place in logistics and transportation sector.

Depending on the training needs of our clients; new trainings are also designed by analysing the participant profile and the specific details of the project and / or the field together.

- ISO 9001:2015 Quality MS Revision Transition, Information and Internal Auditor Trainings
- Quality MS and ISO 14001: 2015 Revision Transition Trainings
- Integrated Management Systems (ISO9001:2015 + ISO14001:2015) Information and Internal Auditor Trainings
- ISO / IEC 27001 Information Security MS Information and Internal Auditor Training
- ISO / IEC 20000 Information Technologies - Service Management System Information Training

Within the Scope of Industrial Activities
- Welding Failure and Assessment Information Training
- Explosion Protection Document Preparation Training
- Explosion Protection General Awareness Training
- Practical General Fire Training
- Working aloft Training
- Emergency Team Training and Emergency Evacuation Drill
- Degasification and Gas Measurement Techniques Information Training



Within the Scope of Transportation / Logistics / Maritime Activities

- Cargo Safety in Land and Sea Transport; Safe Stacking and Lashing Calculations Training
- Training on Safe Execution of Fumigation Operations in CTU Code
- Implementation Code (CTU Code) Training for Packing of Cargo Transportation Units
- Training on Dangerous Goods Safety Adviser (DGSA) under IMDG Code and RID
- Fatigue-Beginning-Training on Ship and Marine Structures
- Draft Survey Calculation Information Training
- Tanker Management Self-Assessment (TMSA) Conditions: Detailed analysis

"Dangerous Goods Safety Adviser (DGSA) Training

Our Dangerous Goods Safety Adviser Trainings are carried out under the authorization certificate we received from the Ministry of Transport, Maritime Affairs and Communications in 2014. The trainings we have organized;

DGSA Trainings within the scope of ADR (49 hours)

Two different training periods can be applied.

- 7-day training period, including 7 hours per day, weekend days, and working hours
- Outside the working hours (17: 00-21: 00); a total of 9-days training period, 7 hours per day, and on weekends (4 days).

Dangerous Goods Safety Consultation Training under IMDG Code and RID

This training is organized for those who have received DGSA Training in the scope of ADR. The training is applied in both modes of transportation (seaway and railway) as an additional 10 hours of training. It takes 3 days in total. After the training, similar to the DGSA Certificate exams organized by the Ministry of Transport, Maritime Affairs and Communications (UDHB) as per ADR, it is necessary to enter the DGSA certificate exams organized separately for both modes of transportation. Prerequisites for attending DGSA Certification Exam in the context of IMDG code and RID is to get DGSA Training under the IMDG Code and RID and to have the DGSA Certificate in the scope of ADR.

Detailed regulation on the subject has been made with the "Communiqué on Dangerous Goods Safety Consultancy (Communiqué No: TMKTDGM-01)" published in the Official Newspaper numbered 29007 dated May 22, 2014 on 22 May 2014, issued by the Ministry of Transport, Maritime Affairs and Communications. Within the scope of this Communique, it has been stated that; the enterprises take part in the dangerous

goods transportation chain; by sending, packing, loading and unloading and transportation enterprises by stating the temporary exemptions and durations, are obliged to employ at least one "Dangerous Goods Safety Advisor" (DGSA) or to obtain services from the dangerous goods safety advisor. The obligation to employ DGSA or to obtain services has entered into force on 30 June 2015 in many enterprises within the scope of legislation.

In accordance with the Provisional Article 2 of the Communique mentioned above;

1. The obligation to employ DGSA or to receive DGSA services for the enterprises carrying out retail sales of fuel oil, LPG, CNG and LNG station operations and LPG, CNG tube sales enterprises will begin on 1/1/2018.
2. The requirement of having a dangerous goods safety adviser for businesses sending, packing, loading, filling and unloading dangerous goods in port facilities and airline cargo terminals; will start on 1/1/2018.
3. According to the Road Transport Regulation, the requirement of having DGSA for the vehicles with the certificate of authorization of K1, K2, C1, C2, L1, L2, R1, R2 operating within the scope of the Regulation on the Transport of Dangerous Goods by land shall be started on 1/1/2018.
4. The obligation to employ DGSA or to get services from DGSA in public institutions and organizations will start as of 1/1/2018.

For these reasons, it is necessary to make it count the year 2017 for the businesses, enterprises that perform transportation activities, public institutions and organizations that will be obliged to employ DGSA or to get DGSA services as of 1 January 2018. Members of the Chamber of Chemical Engineers of TMMOB, the Chamber of Environmental Engineers of TMMOB and the Chamber of Naval Architects and Marine Engineers of TMMOB and related chamber members in the protocols that have been previously made and still in force have discounts on the tuition fees. Similar protocols can be arranged in 2017 with other Chambers and Associations that may request similarly.

Our other trainings among the trainings within the Dangerous Goods Transportation are given below. These trainings can be provided for the institutions and organizations which are in need.

- Class 1 (ADR / IMDG Code / RID) Information on the Transportation of Explosive Substances
- Class 7 (ADR / IMDG Code / RID) Information on the Transportation of Radioactive Substances
- Loading Safety in Highways
- Information on the International Convention of Safe Containers (CSC)
- EN 12798:2007 Road, Rail and Domestic Maritime Transport - Information Training on the Quality Management System Requirements for Completion of ISO 9001 for the Dangerous Goods Transportation

EXISTING TRAININGS

Turk Loydu's trainings have been increasingly preferred by our stakeholder sectors for many years. In 2016, particularly the trainings of ISO 9001 Quality Management System and ISO 10002 Customer Satisfaction Management System which are organized within the scope of Chamber-Stock Exchange Accreditation within the Union of Chambers and Commodity Exchanges of Turkey and "Dangerous Goods Safety Consultancy" (HMSC) trainings which we provide in road, sea, railway modes (ADR, IMDG Code and RID) by the authorization of the Ministry of Transport, Maritime Affairs and Communications (UDHB), have attracted a great deal of attention from the participants.

General information about the trainings that we have been pursuing for many years is as follows:

Training Seminars in the context of IMDG Code:

Training seminars that we started to provide as a Notified Body as of September 17, 2011, was also maintained in 2016 within the scope the "Regulation on Training and Authorization under the International Code for Dangerous Goods Transportation by Sea (IMDG Code)", which was amended by the Republic of Turkey Ministry of Transport, Maritime Affairs and Communications and re-published in the Official Newspaper numbered 29601 dated on 22 January 2016.

The courses we have provided under IMDG Code as Turk Loydu are in three different groups. Renewal Training Seminars under the IMDG Code, which started as of 2013, are also in progress. Employees who is under the Regulation and have previously received the IMDG Code General Awareness and Mission Related Trainings must attend the Renewal Training Seminars within the IMDG Code every two years in accordance with the relevant legislation.

IMDG Code General Awareness and Mission Related Trainings must be taken together and takes 4 days in total.

Under the regulation adaptable with the IMDG Code 37-14 version, a training title which covered the topics that were previously within the Mission Related Training was described as per the Regulation. Safety Training is provided within the IMDG Code Mission Related Training.

1. IMDG Code General Awareness Training Seminar (1 day)
2. IMDG Code Mission Related Training Seminar (3 days)
3. IMDG Code Renewal Training Seminar (1.5 days)

Trainings for Management Systems;

- Information/basic and internal auditor trainings provided within the scope of "ISO 9001 Quality Management System", "ISO 14001 Environmental Management System", "OHSAS 18001 Occupational Health and Safety Management System", "ISO 10002 Customer Satisfaction Management System" and Integrated Management System trainings,
- "Process Management and Improvement" and "Refreshment and Experience Sharing for In-house Auditors" trainings,
- ISO 50001 Energy Management Systems Information and Internal Auditor Training,
- ISO 27001 Information Security Management System Information and Internal Auditor Training which have been formed by certain combinations of these standards.

Since the standards in ISO 9001 and ISO 14001 have been updated in 2015, revision transition trainings and Information and Internal Auditor trainings that can be provided within the standards of 2015 have been started to provide in 2016.

Trainings for Industrial Activities;

- Information Trainings on the Pressure Equipment Regulations (97/23/EC) and Simple Pressure Vessels Regulations (2009/105/EC)
- Information Training on the Application of Tests in Pressure Vessels
- General-Technical Information Training on the Lifting Equipments
- CE Marking and EN 1090 Standard Training on Steel Structures
- Trainings in the context of Occupational Health and Safety
- Information Training on the Occupational Health and Safety in Shipyards
- Information Training on the Occupational Health and Safety for Working in Confined Spaces
- Information Theoretical Training on the Safe Scaffolding and Working at Scaffolding safely

Trainings for welding technology and applications;

- Information refreshment trainings related to the theoretical application of the relevant standards which are organized according to the Company's demands

such as various joining / welding technologies (Plastic Welding, Electric Arc Welding, Inert-gas Welding, TIG Welding, Oxy-Acetylene Welding, Brazing and Soft Soldering etc.):

- EN ISO 14731 Information Training on Welding Coordination-Tasks and Responsibilities
- ISO 3834 series Standard Training on the Quality requirements for fusion welding of metallic materials
- Welding Failure and Assessment Information Training
- Preparation and Approval of Welding Plans (WPS) Training

Trainings for Maritime and Shipbuilding Maintenance and Repair Industry;

- "Auditor" trainings under the International Safety Management System (ISM Code):

ISM Code Auditor Training is one of the DPA appointment criteria and is a two day training that Turk Loydu has been widely implementing since 2009.

- "MARPOL International Convention for the Prevention of Pollution from Ships" Training:

Training tailored to ship operators has also been developed specifically for harbours and marine terminals.

- MLC, 2006 (ILO Maritime Labour Convention, 2006) Trainings:

As of the beginning of 2011, trainings in this context are among our trainings open for general participation. It is anticipated that this training will attract even more interest in the coming period.

- International Conventions / Codes / Standards Training in the context of Marine Terminals
- Market Surveillance and Inspection of the Products within the scope of the Leisure Boats Regulations
- Information and Implementation of Ship Energy Efficiency Management Plan

NEW CO-OPERATION PROTOCOLS RELATED TO OUR TRAINING ACTIVITIES

By adding new cooperation protocols in 2016 to our current ongoing cooperation protocols, it is aimed for sectoral solidarity and interaction to be further developed.

Training Service Agreement was signed with PDI Sales Force Management and Private Consulting Inc. (TMI Turkey) that is one of leading training institutions in the personal and corporate trainings and entered into force on 24.11.2016 in order to cooperate with TMI Turkey to be able to conduct the trainings in the portfolio of TMI Turkey which is aimed at open for general participation or created by firm requests.

In 2017, trainings sessions open for general participation will be planned within the scope of the following titles given below. These trainings can also be arranged depending on the company requests.

- Reliable Behaviour
- Time management
- Stress Management
- Emotional Intelligence
- Personal Quality, Personal Guarantee
- Problem Solving and Decision Making Skills
- Correct and Effective Speaking Skills (Oratory Skills)
- Change Management
- Efficient Written Communication at Work
- Developing Management and Leadership Skills
- Strategic thinking and planning Skills
- Developing Coaching Skills

In order to have co-operation in education, Education Cooperation Protocol negotiations have been started with YTU Yildiz Continuing Education Centre (SEM) at the end of 2016 and it is aimed to be completed at the beginning of 2017 within the scope of co-operation studies for providing various trainings in sectoral areas by making education co-operation protocols particularly with the Universities, Professional Chambers such as the Chamber of Naval Architects and Marine Engineers of TMMOB, and Organized Industrial Zones. Within the scope of the "Educational Cooperation Protocol", trainings open for general participation are planned to organize by means of the industrial experience, infrastructure adequacy, and high training standards which the Yildiz Technical University that is one of the leading institutions of higher education in Turkey and Turk Loydu that is one of the leading organizations in the areas of classification, industrial certification and inspection; industrial and maritime related trainings have.

Within the scope of agreement which will be signed between Turk Loydu and YTU Yildiz Continuing Education Centre (SEM), information about the trainings that will be provided by merging experience and infrastructures, will be monitored through the web sites of both institutions.

At the end of 2016, negotiations have been started with the Chamber of Naval Architects and Marine Engineers of TMMOB in order to develop co-operation, and it is aimed to sign a protocol upon the completion of negotiations in 2017.

FOUNDATION'S ACTIVITIES

TURK LOYDU FOUNDATION

On February 27th, 1962, at the Galata Passenger Hall, the meeting, which was organized in the leadership of the Chamber of Naval Architects and Marine Engineers of TMMOB, a group of representatives of the Shipbuilding and Repair Works, Turkish Reinsurance Companies Union, Maritime International Union, Istanbul Chamber of Industry, Maritime Bank, Eregli Iron and Steel Factories TAS, the Ministry of Commerce and ITU, became the first general assembly of Turk Loydu.

At the first General Assembly Meeting of Turk Loydu, Zeyyad Parlar, Chairman of the Entrepreneur Standing Committee, stated the basic principles of Turk Loydu in the opening speech. Turk Loydu will not be different from other well-known classification societies. Turk Loydu will be based on two measures. One is technical and science and the others are honesty and the objectiveness. The principles have been prepared accordingly for the establishment not to leave from these two measures. Turk Loydu will endeavour to be the most honest consultant to which insurers, shipowners and motor owners, shipbuilders and repairers and the government's relevant authorities can rely on. Turk Loydu will be the most reliable and confidant partner in technical matters for the corporations I mentioned. We will be technical and scientific friend to whom they can believe in the problems they encounter.

'Turk Loydu', the dream of a group consists of engineer, seafarer and insurer which rely on the human power of our country, based on scientific and technological knowledge, attached to ethical and moral values and have a great vision, approaches to its 60th year. Now, it has achieved being an efficient classification society not only in our country but also in the region by means of its professional staff which is more than 150 located in its modern facilities, almost 1 million GT fleet of classed ships in service, newbuilding ships including merchant and naval ships, industrial plants from pipeline to refineries and steel construction inspections from storage tanks to stadiums and cable suspension bridges.

Turk Loydu has implemented a structure having international accreditation, authorized by different flag states, having high performance in the statistics of port state controls, ranking at the top on the class list, with the highest quality standards in parallel with the growth and development process achieved within 55 years.

Because of its structure which is open to scientific and technological development since the first day it has been established, Turk Loydu has taken its place among the world classification societies by means of its new generation of original rules, fund of knowledge and high quality standards that have been achieved in cooperation with the universities.

The surplus income after tax-income that is acquired from the commercial activities carried out by the Turk Loydu Foundation Economic Enterprise is transferred to the Turk Loydu Foundation. The Turk Loydu Foundation carries out activities in order to achieve its almighty objectives such as providing bachelor's degree, post-graduate and Ph.D. student scholarships, training grants and establishing facilities appropriate with the aim of foundation by means of the income acquired and grants received from the outside. The students who are studying in the fields of Naval Architecture Engineering, Maritime Faculty, machinery, electricity, metallurgy and insurance and meet the conditions for granting can benefit from the scholarships supports provided by Turk Loydu through professional organizations.

2016 TURK LOYDU FOUNDATION'S SUPPORTS

Turk Loydu has continued to provide non-refundable scholarships and educational grants to undergraduate and graduate students studying at higher education institutions within the scope of their activities in 2016. The granting of non-refundable scholarships and educational grants are considered in the framework of fulfilling social responsibility. Non-refundable scholarships are offered as monthly scholarships from the beginning of each academic year (October) to the end of the academic year (June) for nine months. In beginning of 2015/2016 academic year, a total of 113 selected students studying at undergraduate and graduate programs have been provided with the scholarships for the first six months of 2016.

At the beginning of 2016/2017 Academic Year, the total quota of scholarships was increased by 22% and the number of quota for 2016/2017 Academic Year became 165. At the beginning of the academic year 2016/2017, within the scope of the Foundation Scholarship Regulation; applications for the available undergraduate scholarships were accepted from the higher education institutions to which the quota has been granted. Applications twice of the designated scholarships quota were accepted and the applications were evaluated within the framework of the Scholarship Regulation. The undergraduate scholarship applications were handled according to pre-assessment criteria and listed as per

quota, and required documents were requested to be able to confirm the information they declared from the scholarship candidates. Together with the students who granted scholarships in 2015/2016 Academic Year and eligible to continue to grant scholarships for the current year according to our Scholarship Regulations, in the first three months of 2016/2017 Academic Year (October, November, December), a total of 145 students were granted non-refundable scholarships of which a total of 128 undergraduate students, 4 graduate students and 13 doctoral students by our foundation. For This Academic Year scholarship will be given for 6 months duration, including June 2017. The requirements related to Turk Loydu's rule development and other fields of activity are taken into consideration in the applications for Master's and Doctoral Scholarships.

The Turk Loydu Foundation, which uses its income for almighty objectives, provides sponsorship support for projects prepared in a wide range of fields, as well as support for research and development activities within the scope of its activities, scholarships for undergraduate and graduate students and technical staff training assistances. By means of many projects to which Turk Loydu provided sponsorship support in line with these aims, it is achieved to support research and development activities required by the sectors Turk Loydu serves.

In this context, the Istanbul Technical University Marine Cycling Team, the Black Sea Technical University Marine Cycling Team and the Piri Reis University Marine Cycling Team, sponsored by the Turk Loydu Foundation, have participated in the 37th International Water bike Regatta Vienna races with Turk Loydu's support. More than 20 universities and more than 300 naval architecture students from 8 countries attended the competition which is held in Vienna, Austria. The teams returned to the country after the competition had a visit to the Board of Trustees of Turk Loydu Foundation. The teams provided information to the Head of Board of Trustees and Board Members about the competition's results and presented 'Thank you Certificate' because of its supports.

The Turk Loydu Foundation Head of Board of Trustees and managers who have always supported youngsters who represent the future of the sector during their entire

education and training life, and they have participated in their happy days by also joining in their graduation ceremonies, which is an important milestone in their careers. Within these activities, Turk Loydu has attended the graduation ceremonies held in Istanbul Technical University, Piri Reis University, Yildiz Technical University and Karadeniz Technical University in 2016.

The EMSHIP week, organized at Istanbul Technical University Naval Architecture and Marine Science Faculty under the sponsorship of Turk Loydu, is a European Union-funded program conducted by the Liege University of Belgium which provides a Master's Degree in Naval Architecture and Marine Technology under the Erasmus-Mundus Program.

In the program which students from various countries of the world have attended and carried out their graduation ceremonies in Turkey, Turk Loydu Foundation has been given a plaque. An introductory presentation was performed by Turk Loydu for participants in the same program and participation was ensured to the special night organized in the program.

Within the scope of an activity with the slogan "The Sailors Meet", it was aimed to create an environment where all civilian / military seafarers will be able to interact in the Naval Academy for the first time this year, open to the public at the international level. Within the scope of this event which bring all the stakeholders of the maritime industry together; Traditional Lamb Day, International Maritime Competitions, Visitor Seafarers Day, Defense & Maritime Seminar and Exhibition, Opening of Vessels under the Naval Forces and Coast Guard for Public visits, Special Shows of Aircraft-Helicopter and SAT-SAS Commandos, Seamanship and Maritime Competitions as well as various activities and shows have been held. Turk Loydu stand was set up in the exhibition area which was created within the scope of the activities and Turk Loydu was introduced. Turk Loydu stand was presented in the exhibition area and Turk Loydu was introduced to the participants. Within the Defense and Maritime Seminar, a presentation was held about the Turk Loydu's activities related to naval ships.

www.turkloydu.org

facebook.com/TurkLoyduVakfi

twitter.com/TurkLoydu

linkedin.com/company/Turk-Loydu

HEAD OFFICE
Tersaneler Cad. No:26
34944 Tuzla - İstanbul
Tel: +90 216 581 37 00 (pbx)
Fax: +90 216 581 38 00
+90 216 581 38 10
+90 216 581 38 20
e-mail: info@turkloydu.org

ANKARA
Eskişehir Yolu Mustafa Kemal
Mah. 2159 Sok. No:6/4
06680 Çankaya - Ankara
Tel: +90 312 219 56 34
+90 312 219 68 25
Fax: +90 312 219 69 72
e-mail: ankara@turkloydu.org

IZMIR
Alsancak Mah. Atatürk Cad.
Kavalalı Apt. No:378/42
Konak - İzmir
Tel: +90 232 464 29 88
Fax: +90 232 464 87 51
e-mail: izmir@turkloydu.org

ADANA
Çınarlı Mah. Atatürk Cad.
Aziz Naci İş Merkezi No:5
K.1 D.2 01000 Seyhan - Adana
Tel: +90 322 363 30 12
Fax: +90 322 363 30 19
e-mail: adana@turkloydu.org

TL TEKNOPARK
Tersaneler Cad. No:26
34944 Tuzla - İstanbul
Tel: +90 216 581 37 00 (pbx)
Fax: +90 216 581 38 00
+90 216 581 38 10
+90 216 581 38 20
e-mail: info@tlteknopark.com

NORTERN CYPRUS
Deniz Yıldızı Apartmanları
D/Blok Kat.1 Mağusa - KKTC
e-mail: kktc@turkloydu.org

AZERBAIJAN
Az1033, Bakü Şehri
Nerimanov Bölgesi, Arif Heyderov,
26 ev Bakü - Azerbaijan
Tel: +99 412 480 35 59
Fax: +99 450 252 05 85
e-mail: azerbaycan@turkloydu.org

ROMANIA
Ion Theodorescu Valahu,
Nr 10 Camera Nr.1, Judet
Constanta - Romania
Tel: +40 723 171 955
e-mail: romania@turkloydu.org

GREECE
Alpha Marine Consulting Ltd.
55, Kastoros Str. 1 Piraeus
185 45 - Greece
Tel: +30 211 888 1000
Fax: +30 211 888 1039
e-mail: mail@alphamm.com

ITALY
Bassani Adriatico Srl
Dorsoduro Santa Marta Fabbricaro
17 30123 - Venice, Italy
Tel: +39 041 272 78 60
Fax: +39 041 523 03 36
e-mail: shipping@bassani.it