# NETAŞ TELEKOMÜNİKASYON A.Ş. BOARD OF DIRECTORS INTERIM REPORT

## FOR THE PERIOD ENDED 31 MARCH 2020

Trade Registration Number: 94955/403045 Headquarters Yenişehir Mah. Osmanlı Bulvarı No:11 34912 Kurtköy-Pendik/İstanbul Phone: +90 (216) 522 20 00 Fax: +90 (216) 522 22 22

#### Ankara

ODTU Teknokent, 06531, Ankara Phone: +90 (312) 210 18 08 Fax: +90 (312) 210 18 05

www.netas.com.tr

#### **ORGANIZATION AND OPERATIONS OF THE GROUP**

Netaş Telekomünikasyon A.Ş. (the "Company") and its' subsidiaries (together the "Group") are engaged in the manufacture and trade of telecommunication equipment, project installation services, technical support, repair and maintenance services, IT services, strategic outsourcing services, implementation activities, and associated services. The shares of the Company are quoted on the Borsa İstanbul ("BIST") since 1993. The headquarter of the Group was registered at Yenişehir Mah. Osmanlı Bulvarı No:11 34912 Kurtköy-Pendik/İstanbul at Istanbul Trade Registry Office as of 23 July 2013.

The Group works with major clients such as Aselsan Elektronik Sanayi ve Ticaret A.Ş, Türk Telekomünikasyon A.Ş, Vodafone İletişim Hizmetleri A.Ş., Avea İletişim Hizmetleri A.Ş., Turkcell İletişim Hizmetleri A.Ş, service providers, corporate and governmental institutions in Turkey, to provide communications solutions and the infrastructure needed for modern communication systems. The Company is also engaged in research and development and provided design and development services to the foreign customers as well as to local customers.

Netaş Bilişim Teknolojileri A.Ş. which is the %100 subsidiary of the Group offers industrial solutions, system integration, outsourcing, support services, network solutions and consultancy services to its domestic customers. Netaş Bilişim founded in 1989, also provides value added solutions to international customers in Commonwealth of Independent States (CIS), mainly in Asia Pasific (Nepal), Kazakhstan, Azerbaijan, Algeria and Uzbekstan with strategic business partnerships.

Specialized in all IT services, BDH Bilişim Destek Hizmetleri San. Tic.A.Ş. ("BDH") was founded in April 2006 in order to provide consultancy, strategic outsourcing, data center and support services.

According to Board of Directors resolution as at 11 April 2012, foundation of a "Limited Liability Partnership" (Netas Telecom Limited Liability Partnership) was completed in Kazakhstan Almaty. The amount of capital which solely belongs to Netaş is 161.800 Tenge (approximately 1.100 American USD). Registration was made on 25 June 2012 and it became valid starting from 4 July 2012.

As of 28 November 2013, an agreement is signed between Kron Telekomünikasyon Hizmetleri A.Ş. ("KRONT") and the Company for the acquisition of 10 % of A group is TL 1.700.000.

The Company has established an organization in Malta (Netas Telecommunications Malta Ltd.) and holds all of its share capital (100%) amounting to 1.200 EUR. Registration processes were completed in date of 4 November 2014.

As of 12 June 2018, the Group's liaison office was established in Azerbaijan.

The Company which is amounted TRY 50.000 registration of NETRD Bilgi Teknolojileri ve Telekomünikasyon A.Ş. has been established organization in date of 29 August 2018 in Istanbul. The subject of the Company, including all kinds of information and telecommunication systems, hardware and software design and coding, research and development activities, product development, consultancy, including all kinds of information activities and services, technical support, technological solution, integration, VOIP to develop, install, service, operate and operate advanced communication technologies in Turkey or abroad, to provide business services and to carry out all these activities on behalf of its own customers or to the customers it serves.

The Company which is amounted DZD 23.800.000 registration of Netas Telecommunications Algerie Sarl LLC has been established organization in date of 31 March 2019 in Algeria between the Company and Mohamed Karim Faraoun. The management control of the company, which is owned %49, belongs to Netas Telecommunications A.Ş. in accordance with the agreement and Netas Telecommunications Algerie Sarl LLC is consolidated for this reason.

As of March 31, 2020, The Group's largest and the controlling shareholder is ZTE Cooperatief U.A.

The average number of personnel employed in the Group as of 31 March 2020 is 2.446 white-collar (31 December 2019: 2.478), and the Group has no blue-collar employees for both periods, 31 March 2020 and 31 December 2019.

The related to joint ventures and association of the Company is as follows:

#### Netaş Bilişim Teknolojileri A.Ş

Global competition is constantly increasing and companies now begin to operate on a service-and customer oriented basis rather than simply focusing on the products. This mandates companies including Netaş Bilişim to closely follow and use IT technologies more effectively. From industrial solutions to business solutions and from systems integration and outsourcing to care and maintenance services, network solutions and consultancy, "Netaş Bilişim" has been providing a wide range of services in international markets since 1989. The Company has 100% shares of Netaş Bilişim Teknolojileri A.Ş.

#### • <u>NETRD</u>

The business area of NETRD, includes all kinds of information and telecommunication systems, hardware and software design and coding, research and development activities, product development, consultancy, including all kinds of information activities and services, technical support, technological solution, integration, VOIP to develop, install, service, operate and operate advanced communication technologies in Turkey or abroad, to provide business services and to carry out all these activities on behalf of its own customers or to the customers it serves.

#### **BDH**

BDH offers brand-independent consultancy, strategic outsourcing, hardware and support services in the IT sector to a wide range of customers from small-medium sized enterprises to large ones and public institutions. With a service team of experienced and certified professionals specializing in different areas of IT, BDH provides with 18 branches and 45 partners to its customers throughout Turkey.

Centers located in Istanbul, Ankara, Izmir, Bursa and Samsun offer hardware support for all kinds of IT products including servers, storage units, handheld devices, printers and more. The Company indirectly has 100% shares of BDH.

#### <u>Netaş Telecom LLP</u>

Founded in Almaty, Kazakhstan, in 2012, Netaş Telecom LLP operates in line with Netaş's vision of becoming "Regional System Integrator". Netaş Telecom LLP is fully owned (100%) by the Company.

#### • Netaş Telecommunication Malta

"Netaş Telecommunications Malta Ltd" was established with an initial capital of 1.200 Euros on 4 November 2014 for the purpose of improving operational efficiency. Netaş Telecommunication Malta is fully owned by the Company.

#### <u>Netaş Telecommunication Algeria</u>

"Netaş Telecommunications Algerie Sarl LLC" was established in Algeria, field of activity of the company is manufacturing of small installation and electric lighting equipments; registration of the company completed on 31 March 2019. In accordance with the agreement, Netaş Telecommunication A.S owns 49% of "Netaş Telecommunication Algeria" and has the management control.

#### • Kron

Kron Telekomünikasyon Hizmetleri A.Ş. produces software solutions for national and regional telecoms operators and service providers. The Company acquired the company's Group A shares in 2013 in line with its strategic growth goal and for the purpose of offering innovative solutions to its customers. Having strengthened its systems integration capabilities by acquiring Kron, the Company now provides a wider range of end to-end solutions to its customers in Turkey and the region. The Company has 10% shares of Kron.

#### **SHAREHOLDER'S STRUCTURE**

Shareholder's structure of the Company as of 31 March 2020 and 31 December 2019 is as follows:

	31 Marcl	31 March 2020		
	Share Amount (TL)	Share Amount (%)	Share Amount (TL)	Share Amount (%)
ZTE Cooperatief U.A.	31.168.351	48.05%	31.168.351	48.05%
Turkish Armed Forces Foundation(TFF)	9.729.720	15.00%	9.729.720	15.00%
Free Float	23.966.729	36.95%	23.966.729	36.95%
Paid in Capital	64.864.800		64.864.800	
Ticker	NETAS		NETAS	

*Note:* As at 28 July 2017, the conditions precedent to completion of the Transaction stipulated under the Share Purchase Agreement have been satisfied in full and the shares of OEP were transferred to ZTE Cooperatief. Following the transaction, a Mandatory Takeover Bid Obligation has arisen for the shares owned by ZTE Cooperatief. Takeover bid has been completed on October 17, 2017. As of October 17, 2017, ZTE Cooperatief holds 48.05% of Netaş.

## **BOARD OF DIRECTORS**

The Members of Board of Directors as of 31 March 2020 are as follows:

Chairperson
Vice-Chairperson
Member
Member
Member
Independent Member
Independent Member

#### **THE GROUP'S MANAGEMENT:**

Chief Executive Officer
Deputy Chairman of the Executive Committee and CFO
Chief People Officer
Chief Compliance Officer
Chief Communications Officer
Public & Defense Sector Business Unit General Manager
International Markets Business Unit General Manager
Enterprise Business Unit General Manager
Chief Technical Officer (CTO)
CEO Advisor
Chief Digital Officer
Localization Strategies Senior Director
NetRD General Manager
Carrier Telco Business Acting General Manager
R&D General Manager
Strategy Director

## VISION, CORE VALUES, QUALITY POLICY

#### Vision

Becoming Turkey's and Region's #1 systems integrator working as per global standards.

#### **Core Values**

- Our customers are our driving force.
- Our employees are our most valuable asset.
- We target quality in all areas.
- Innovation is our assurance for the future.
- Responsibility prevents uncertainty in workflow.
- Integrity is the basis of all our projects.

### **Quality Policy**

Continuous improvement to ensure the sustainability of our quality management system established in accordance with international standards aiming for "Excellence" and based on data for the purpose of creating added value for our customers in line with our vision. All Netaş/Netaş Bilişim Teknolojileri employees are responsible for ensuring "Excellence" through continuous improvement.

#### Research & Development (R&D) Studies

Netas R&D Center, with the knowledge and skills of 964 researchers provides solutions that has power to compete and lead globally. Netas R&D center contributes to economic growth of the Turkey and to companies for them to become global brands by its patent applications for ongoing projects and products in the field of mobile communication, cyber security, defense, multimedia, cloud computing, data center, managed services and IoT technology. Netas leads digital transformation of the companies and public institutions with its developed R&D projects.

Netaş actively participates in the studies (mainly related to 5G) of 3GPP and ETSI in the European Union, to follow the latest developments and to contribute. Moreover, Netas is a member of 5GIA infrastructure association and the company had been chosen for executive council of NetWorld200 platform which is one of the most effective European Union platform that direct studies like 5G and others. Netas, is in the vice president role in the Celtic Plus organization for 3 years, which manages technological cooperation in the field of ICT and Telecom, has been actively participating to organizations of all these working groups.

According to the Turkishtime magazine's study of "R&D 250, Turkish companies making the most R&D spending" Netaş become prominent in information technology sector in 2018 with making the largest R&D investment and providing employment. 18% of Netaş's R&D Engineers completed their graduate studies and doctorate, whilst 7% continues to their graduate and postgraduate education.

#### Netas Operates its R&D studies in 6 Main Domains:

- 1) NetRD International R&D (NetRD operates under Netaş Bilişim Teknolojileri A.Ş)
- 2) Information Technologies R&D
- 3) Defense R&D
- 4) Research & Development Services
  - Netaş Test Center
  - Netaş Managed Services
    - Cyber Security Operations Center (SOC)
    - Network Operations Center (NOC)

# 1) NetRD - International R&D – Provided R&D solutions and technology transfers more than 80 countries

More than 365 engineers work in the R&D company, NetRD. This unit consists of three main teams; software development, software testing, and customer support. Thanks to R&D expertise and service quality, in addition to skills of Turkish engineers and Turkey's central and strategic position, NetRD is establishing long-term partnerships with its customers in international markets.

NetRD software solutions are being used by more than 200 operators worldwide and its largest international R&D customer is USA-based Ribbon Communications. The products of Ribbon Communications, the world leader in VoIP (Voice over Internet Protocol), are being used by more than 800 service providers and companies in more than 80 countries. Leading the world of unified communications, these products and solutions provide a connectivity anywhere on any platform. These next-generations products are being developed by NetRD engineers. Providing both product development and customer support services, NetRD is Ribbon Communications' largest R&D and innovation lab. With a proven-track record of over 40 years, NetRD continues to cooperate with Ribbon Communications and therefore, NetRD is one of the most important technology transfer hubs on a global scale.

NetRD – (International R&D) unit consists of three main teams:

- Cloud communication team "Kandy",
- the unified communication team "A2" and
- "c20" team working on the modernization and adaptation of existing telecommunication systems to modern day.

## Kandy R&D

- UCaaS: As the R&D owner, NetRD increased its capability and pace on feature development and stability improvements on the UCaaS (Unified Communications As A Service) platform. Three new releases have been published in Q1-2020, varying from highly complex features to analytics platform integrations, third party client vendor client integrations and scalibility improvements.
- **SMB Solution:** Loop Live SMB (Small Medium Business) solution which is a unique Cloud UC (Unified Communications) offer in Australia market reached out to ~ 850 SMBs/2200 users. During this 'work from home' period, the solution has caught more attention from the market as it provides a full suite of unified communication services like video conferencing, screen share/collaboration, rich messaging, group chat, multi-device support.
- Smart Office (SO): Expansion of capabilities and customer deployments continue in NA and Gulf region in both private and public sectors. With increased capabilities in user authorization and an enhanced UX developed in Q1, Smart Office is on its way to become a top tier client and this is driving up both subscriber counts of existing customers and new business opportunities.
- **CIM:** A new CIM Release is about to be delivered to the customer including improvements for voicemail, fax and virtual receptionist features. A new language support is also introduced in this release. Testing activities are in progress before the delivery of the new release. In addition, the work started last quarter aiming to facilitate the configuration processes and infrastructure by performing automations continues.
- **SO Collab:** Single Sign On functionality has been introduced for one of the important customers, Etisalat. In addition to SSO, account dunning feature has been implemented and deployed to the same customer.

- SPiDR/WebRTC Gateway (Kandy Link): Customer upgrades with SPiDR / WebRTC Gateway new releases that includes security, quality, virtualization improvements and contact center enhancements are being continued. SPiDR / WebRTC Gateway R&D team continued to improve the product by developing requested enhancements from the customers in Q1-2020. The new version of SPiDR / WebRTC Gateway will be released in May 2020 with security, quality and upgrade enhancements.
- **RTC:** RTC Soft Phone client development with VDI solution started for a customer in the northern part of the United States. RTC Soft Phone Client is being regularly updated with latest SDK/VDI/HID libraries and sanitized regularly.
- **Mobile SDK:** AT&T APIM/Bradio launched their tele-health Concierge app on top of CPaaS Mobile SDK, to empower their apps with real time communication capability which brings great flexibility for remote health services.
- **CPaaS:** MS Teams Integration requirements, Restful API interfaces, MS Azure integration are implemented in Q1-2020. Unit tests and Integration tests automations are fully completed. On platform side, team continued to work on the robustness and enhancement of the CPaaS Platform system. As team gained experience on several areas; actively worked on production upgrades as well as adding new enhancements such as Lvol expansion, CI/CD pipeline and auto backup and restore.

## A2 R&D

- Coding phase of AS 14.0 version is complete and regression is ongoing as planned. 2 European customers started testing 14.0 in their labartuaries.
- Planning and coding of 14.1 version is ongoing with two parallel streamlines because of different customer focus. Database and platform will be re-structured with one of these new streams.

## C20 R&D

- Next C20 release R21 that planned to be delivered to Q3 this year and contains large product that will evolve C20 product to hardware independant, fully vituilized, cloud comply SW only product are passed design and development phase and delivered to system verification.
- Additionally 2 urgent advanced features are developed and delivered to key customers from United Kingdom (UK) and Canada successfully by using fast feature development process.

#### **Customer support**

- Helped to achieve of the Ribbon Communication's first quarters' fiscal targets by fixing the acceptance blocking problems of telecom operators from all over the world.
- More than 2500 customer problems have been fixed. More than 200 software fixes have been developed and more than 150 critical customer revenue effecting problems have been addressed on time.
- Quick and quality solutions have been developed for the acceptance phase of the highly critical projects

## 2) Information Technologies (ICT) R&D - Largest software exporter of Turkey.

## New Technologies R&D – Our portfolio enriches with high-tech and value-added products

Netas focuses on enriching its portfolio with high-tech and value-added products, competitive on a global scale. As our civilization is passing through a transformation with the introduction of next-generation technologies, Netas focuses on developing innovative solutions in the areas including but not limited to 4/5G, IoT and GSM, in order to offer higher connectivity and mobility.

#### 4G/5G solutions

In 2015, Netas was the first company to have established a 4G laboratory after the operators, within the scope of its studies to develop 4G LTE Advanced technology. Studies to develop in 4/5G technologies continues.

The development of MEC (Multi-Access Edge Computing) product that can provide one of the critical components of 4G LTE and 5G network security "Authentication, Authorization and Accounting" (AAA) server, Network slicing for QoE and QoS improvement in 5G network, location and delay sensitive services, network monitoring were completed in Netas R&D Center. The development of On Board Unit (OBU) and roadside unit (RSU) products for C-V2X (Cellular-Vehicle-to-Everything) applications also continue in Netas R&D Center.

## **ULAK Project**

Works on the development of ULAK, Turkey's first domestically developed 4.5G macro base station, continued. The project aims to reduce Turkey's dependency of on imports, through the development of local communications software and hardware components. The base stations designed for ULAK, serves over 1050 site in "Evrensel" and commercial mobile operators network. While the delivery of the new base stations continues, field support is provided to the base stations in-service.

#### **Netas IoT solution**

The Internet of Things (IoT-Internet of Things), a network of physical objects that are connected to each other or larger systems, has been developing rapidly in recent years. The IoT market is expected to accelerate and grow, especially with the work done on 5G technologies and Industry 4.0 issues. Parameters such as data width, high speed and low latency to be provided by 5G technology are the key technology for M2M and IoT solutions, and different IoT solutions with heterogeneous structure are intended to provide interoperability with each other and provide end-to-end service. Netas provides solutions in line with this target and reflects its technological competence to the field in accordance with industrial designs.

## Netaş IoT platform: ION by Netas

Developed 100 percent local by Netas, ION by Netas provides all device and data management services for large IoT networks. The platform was designed to ensure the end-to-end data security of IoT applications and to be automatically self-scalable depending on the changes of intensity in data traffic.

ION by Netas has been built in horizontal architecture to encourage rapid growth and innovation in the industry by enabling different IoT devices and application providers to operate under a common roof.

ION by Netas, which can be installed on the cloud or in local systems, can easily adapt and customize any stitch with its customizable structure. Furthermore, IoT provides an easy-to-use interface to network and service managers.

## The number of brands and patents are increasing rapidly

As Netas prioritizes the protection of intellectual property of the original products and ideas, and sharing the results of its R&D studies on scientific platforms, the Company filed 30 patent applications in 2019. As such, the total patent applications of Netaş since 2012 reached 487, while the number of its registered patents totaled 106. In 2019, Netaş filed 10 brand applications, six of which were international. The number of its brand applications increased to 125, while the number of its registered trademark to 50, both since 1984.

According to 2019 Turkey's Patent Map report, based on number of applications Netaş is ranked among the top 10 in all institutions with its 358 patent applications. Netaş ranked in the 4th place in the Computer Technologies Category with 101 applications and in the 5th place in the Communication Technologies category with 173 applications. Netaş's new patent applications also continue in 2020.

As Netaş R&D, one of the ways for gaining ground in the national and international arena is the publishment of scientific journals completed by our researchers. Netaş researchers published 108 scientific publications over the past four years, 23 of which are national, while the number of scientific publications since 2014 reached 165.

## Cyber Security R&D - Cybersecurity solution set is expanding

The NOVA Technology Development Group in Netas, which developed Turkey's first next-generation telecom and mobile media security products, is working to design cyber security products for the everincreasing customer needs in reply to rapidly changing technology. This group is conducting web firewall and web services analysis tool projects with the know-how of Netas on the web and continues to work on systems, developed to detect and prevent frauds using Big Data analytics, business intelligence, and machine learning technologies.

## • NOVA V-GATE

Application level firewalls are needed to protect VoIP systems. NOVA V-Gate, designed to meet this need, identifies and prevents the telecom frauds such as toll fraud, premium rate services fraud as well as anomalies.

In 2018, NOVE V-Gate is certified for being developed entirely locally, by Istanbul Chamber of Industry (ISO).

#### • NOVA V-SPY

NOVA V-SPY (VoIP Vulnerability Analysis) is a tool that examines all security infrastructures of VoIP/UC systems from end-user phones to call servers, revealing security vulnerabilities in products and that reports system configuration errors. This easy-to-use, modular and high performance vulnerability analysis tool is designed to support penetration tests and system administrators assessing the security of VoIP applications and can be easily operated by both the security personnel and non-technical personnel. NOVA V-SPY tool is compliant with standards and performs comprehensive screening, false numbering,

fuzzing, DoS/DDoS, brute-force attacks and man-in-the-middle attacks. This tool also tests previously unknown application-level vulnerabilities through black box test modules that are not available in other products.

## • NOVA S/COM

Nova S/COM provides security for both inter-client communication and client-server communication, even in non-secure open networks regardless of device and operating system. Nova S/COM client application benefits from state-of-the-art technologies and offers secure voice and video communication and instant messaging platform that prevents man-in-the-middle, intervention, eavesdropping attack. The S/COM Signaling Server, developed internally is able to perform all signaling operations including initiating calls and sending messages. The Nova S/COM Signaling Server, developed by Netas, carries out all signaling operations such as initiating calls and sending messages. Providing secure communication services for standard smartphones and providing services for all companies that need end-to-end secure communication, this product provides a secure environment for many industries from logistics to education with its secure vehicle tracking system and secure whiteboard application features.

#### • NOVA Pentest

NOVA Pentest Services test applications, infrastructures and the devices and reports protection recommendations against network, VoIP, WEB and unified communication linked attacks. With Netas NOVA Pentest Services, communication system topology detailed analysis and security checks are performed to determine the required security procedures. Basic infiltration and safety tests are conducted and a comprehensive report is provided. Verification tests are carried out after the detection of the findings at the end of the testing. Products developed within Netas Nova Security product family are used for testing.

## • NOVA FMS

NOVA FMS is a big data security analytics platform that supports deep, holistic, correlative assessment using statistical and machine learning approaches. Key points include complex anomalies, cyber-attacks, cyber-threats, cyber-fraud, user behavioral analysis, analytical rule engine and advanced network monitoring (Web, VoIP, and Netflow data). NOVA FMS platform combines two complementary approaches to analyze high volume of telecom data that either is streamed in near-real time or that has accumulated over time. It offers rule-based detection of known patterns, anomalies and attacks. On the other hand, it runs advanced machine learning to learn normal user and entity behavior and detect changes and anomalies in each user's account and call usage. It assigns scores to users based on their risks, and alerts fraud specialists of potential threats and anomalies. NOVA FMS, additionally, provides operational monitoring and data analysis framework with rich visualizations.

## Largest software exporter of Turkey

Netaş proudly continues to develop local software and to be the largest software exporter of Turkey. The company design software solutions tailored for major projects and integrate them into different systems.

10

Some homegrown R&D examples of Netas in 2018 are as follows:

## • TFF-Smart Stadium Project

Netas implemented e-ticketing infrastructure for more than 50 stadiums within the scope of the Smart Stadium Project carried out with Turkish Football Federation (TFF) since 2014.

## • AFAD - Disaster Management and Decision Support System (AYDES)

Disaster Management and Decision Support System (AYDES), which was started in 2013, was commissioned in 2018. Developed to manage all stages of a disaster in a digital environment and to use resources efficiently, AYDES is among the few disaster management systems in the world. 2nd phase of the project, which started at the end of 2019, has been continuing successfully.

## • TRNC - e-government transformation projects

Within the scope of e-government transformation projects of TRNC; 'e-Registration System Project", was launched. Maintenance and support phase of the project is ongoing. Other two important projects of the TRNC e-government digital transformation, e-Corporate (Central Registration System for e-Companies) Project and e-Customs - CIS (Customs Information System) Project are also successfully carried out by Netas.

# • NEOS

**The NEOS product family developed by Netas includes,** NEOS OSOS (Automatic Meter Reading System), NEOS hydro for the management of the water supply network and NEOS photon for the management of the city lighting have been started to be positioned in new projects.

## • T.C. Ministry of Health - 112 Emergency Call Management System Project

Within the scope of the Turkish Ministry of Health's 112 Emergency Line Management Systems project; supply of software, hardware, infrastructure, setup, test, and start-up activities were completed.

# 3) Defense R&D – High-tech communication solutions tailored for Turkish Armed Forces and Public Institutions

Developing domestic defense communications products, Netas has successfully contributed to the domestication of the Turkish defense industry. Applying all its expertise into defense, Netas became the company that designs the most competent defense communications equipment provider not only in Turkey, but in the region as well. Having achieved a competitive advantage in communication devices for land, air and naval forces, the Company has demonstrated its difference with its fast and high-quality service.

Netas develops IP/ATM/ISDN switching and routing products, user terminals transmission devices, and power units, with local design and production capabilities to provide the audio, data and video communication for the Turkish Armed Forces. Developed by Netas engineers, these products come forward with their operability in the harshest environmental conditions of a tactical field, thanks to a durable design at temperatures between  $-40^{\circ}$ C and  $+ 55^{\circ}$ C.

Some of the prominent projects of Netas are as follows:

## • Projects for the Turkish Naval Forces Command

Implementation works of the local Communication Control System (CCS), which includes hardware, software design, and manufacturing activities developed for all new and modernized platforms of Turkish Naval Forces, were carried out. (TCG Anadolu Ship – LHD Project, Test and Training Ship – TVEG Project, MILGEM 3-4 ships, Logistics Support ship- LDG project, New Type Submarine ship – YTDA project, Barbaros frigates project and Preveze Class Submarine Half-Life Modernization Project)

#### • Identification Friend or Foe System (IFF)

Netas continued to produce its own local Mod 5/S Identification Friend or Foe system, for Turkish Armed Forces.

#### • Tactical Field Communication Systems

Studies for Tactical Field Communication Systems were continued. The systems are designed to meet all communication requirements in the tactical field, offering a compact, portable, expandable, secure and easy to use solution to its users.

#### • Transfer of technology to Algeria

Netaş's production facility in Algeria with the Ministry of National Defense was commissioned. IP and standard phones were started to be produced in the completed facility.

### 4) Research & Development Services – *Privileged and distinctive R&D services*

#### Netaș Test Center

Netas has been providing testing services since 2011 with its international R&D competency and experience. The company established its Test Center back in 2015, and currently conducts testing services for many industries with its team of more than 400 experts.

Netas Test Center, which supports customers in many industries from finance to telecom, or from retail to energy, insurance, and e-commerce, the services include software development support, quality checks and performance tests on the highest possible number of devices for mobile and internet applications developed on different platforms. Providing a large part of these services at its customer locations, Netas is flexible to offer services periodically as well as continuously.

One of the most important factors that differentiate Netas Test Center in the industry is that it develops its own test solutions and takes responsibility in every stage of the service it provides by working as a part of companies, passing beyond the conventional service, in which only personnel is provided.

Netas undertook the 'Banking Practise Test Services from Turkey's oldest and largest public bank Ziraat Bank and its technology service provider Ziraat Technology, in order to provide services including the management of end-to-end test processes, creation of test automation strategies, management of project and resources, development and training of test team, monitoring of work outputs and quality, reporting, determining and using the necessary automation tools.

Having strengthened its presence in finance industry by starting to provide Banking Practice Test Services to İş Bank and also by starting provide outsource resources to Garanti Technology, Netas extended its

successful cooperation with Akbank for three more years. Netas Test Center has developed a product for Aktif Bank for performance testing and created the Device Farm solution for Credit Registration Bureau (KKB). Netas increased its effectiveness in the insurance industry by providing services to the leading companies in the industry such as Ak Sigorta, Mapfre, and Ergo. Netas Test Center also supports Defacto, Turkcell and Central Bank of Turkey by developing different projects for these institutions.

Netas now have "Domestic Goods Certificate" for its three products – VISIUM LOAD (Performance Tests), VISIUM SERV (Service Virtualization), VISIUM 5G (Telco Protocols Automation) - which are designed within ICT ARGE and being used as a part of tests services for the customers.

#### **Netas Test Center Product and Services**

**Test Automation Service:** Netaş Test Center has developed Visium GO to provide test automation platform for web, mobile and desktop applications of its customers. Visium GO can be also integrated with Visium FARM (Device Farm) solution which enables test automation of applications with various kind of mobile phones.

**Device Farm:** In 2018, Netas has extended the scope of testing services offered for software developers in all industries and commissioned its device farm, which allows mobile apps to be tested on different devices. Performance tests of all types of mobile and internet applications developed on different platforms can be run on maximum number of devices at Netaş Test Center, which also identifies the system and security gaps of the applications.

**Service Virtualization Platform:** Netas Test Center has developed the Netas Service Virtualization Platform to increase the efficiency of the companies by eliminating the dependence on external services. The product that allows simultaneous development, testing, and verification, improves application quality, reduces costs and risks by eliminating the dependence on live components without the need for "Mock Code".

**Testing Outsourcing Service:** Providing test services at world-class standards, NETAS TestCenter reduces project costs and allows for the efficient use of resources and technologies.

**Software Services:** Software Testing service offers software tests for various platforms, including web, desktop, server, embedded software ad business applications software.

M2M and Mobile Terminal Tests: Netas tests phones, tablets, M2M devices, PCs, modems and routers.

**Penetration Tests:** Netaș Penetration Testing (Pentest) Service analyses the status of the IT infrastructure and the steps to be taken in order to create a secure IT infrastructure.

**Mobile Application Tests:** Netaş Mobile Application Testing Service ensures increased end-user satisfaction through comprehensive tests on different mobile devices, using the maximum number of mobile devices available.

**Performance Tests:** Operating performances of software, help determining response behaviors and time under excessive traffic conditions.

**Environmental Tests Services:** These tests are designed to determine the resistance of systems created for military and civil purposes against natural environment conditions.

#### Netas Managed Services

Netas Managed Services Unit, taking the responsibility for managing companies' IT assets, provides proactive based management and control, to reduce the operational costs and improve the operational quality of enterprises.

Netas Managed Services Unit is the name behind many successful projects. As an example, in the scope of Smart Stadium Project of the Turkish Football Federation (TFF), Netas laid more the IT infrastructure of data centers in more than 40 locations, including the installation of all components such as cameras and turnstile card reader, and managed the operation in relationship with more than 20 product suppliers. This Unit has implemented and managed the IT systems of Turkey's largest and most critical infrastructure investments, such as Yozgat and Adana City Hospitals. The unit began to provide services in Elazığ City Hospital in 2018.

In 2020, the Netas Managed Services Unit will focus on maintaining the vision of ensuring the companies focus only on their core business, as Netas manages all their systems in an end-to-end manner, from installation to monitoring, and resolving critical end-user issues. The team, which is agile in developing solutions even for the most exceptional cases, aims to maintain a high-performance uninterrupted service.

#### Cybersecurity with the eye of Netas

One of the fastest changing areas in this process is cybersecurity. In terms of cyberattacks and defense strategies, every technological development pushes cyberattacks and defense strategies to the next level. In parallel with the digital transformation tide, developments in areas such as artificial intelligence, the Internet of Things (IoT), and automation technologies are changing businesses' risk tolerance levels. The nature of risks is changing, and attacks are becoming more sophisticated, which leads to greater organizational exposure to cybersecurity risks.

In order to meet these market needs and increase the efficiency of organizations security investments with their own human resources, as a Netaş we approach holistic cyber security take in account "Technology, Human-Process" triangle.

Within these scope, Netaş Cyber Security Ecosystem is categorized into 3 main domains which are Cyber Security Operation Center (CSOC) Managed Security Services and Consultancy Services. These services are operated according to global standardizations and integrated with global technology partners and leading technologies.

## Cyber Security Operation Center (CSOC)

In the SOC infrastructure, which we have successfully maintained for years, Netaş SOC services are not only monitor classic SIEMs but also integrate new technologies into its systems such as; Machine learning; aided by analytical, artificial intelligence, cyber intelligence. In these way, we aim to holistic security operation center that can access all security nerve endpoints, both endpoint and end user. Netaş Cyber Security Center goes beyond traditional SOCs by including cyber threat intelligence which collects

data from different sources, Endpoint Detection and Response (EDR), User Behavior Analytics (UBA) and national products such as NOVA.

In addition to SIEM management, Checkup, Traning and Consultancy services, we offer advanced solutions to our customer such as; Red and Blue Team, Vulnerability Management, Manage Detection and Response (MDR), Incident Response (IR) and Phishing Awareness.

#### Managed Security Services

Netaş Managed Security Services provide industry-specific solutions, we provide flexible and scalable managed security services to corporations while focusing on new generation technologies (such as cloud, endpoint and end-user security). We offer experienced management or partial professional support services according to the needs, as well as avoiding the cost of establishing security teams within the organization and providing experienced security expert teams to work for them.

Netaş Managed Security Services are provide industry-specific and flexible solutions while focusing on new generation technologies (such as cloud, endpoint and end-user security). We offer experienced management or partial professional support services according to customer needs, as well as avoiding the cost of establishing security teams within the organization.

Netaş Managed Security Services are as follows; Infrastructure Security, Data Security, End User and Endpoint Security, Threat and Security Management, Access and Identity Security and Application and Code Management.

#### **Consultancy and Test Services**

Netaş Cyber Security Consultancy team work in accordance with the Turkey's regulatin authority such as EPDK, BTK and KVKK. In this sense, projects are developt to meet the regulations and supervision of the applied security conditions.

Testing, monitoring and information are essential in security. In test services, it is aim that detecting vulnerabilities and provide evidence of access to systems.

With our experienced team, GAP Analysis and Security Tightening Program, KVKK and GDPR Consultancy, Risk and Compliance Management (ISO 27001, PCI / DSS etc.) and Advanced Testing Services (Function, Load, Source Code, DDoS, VoIP, intrusion testing) services can be customized or bundle according to organizations' needs.

## Netas Network Operation Center (NOC)

For all companies, managing daily IT operations as well as relationships with multiple services and product suppliers are very difficult and tiring processes. Companies receive all the information and communication technology environment from a reliable service provider, which gives them great productivity. Netas provides privileged and high-quality services to companies according to their specific needs.

Netas Network Operation Center (NOC), provides 24/7 network monitoring and management services to companies to provide the highest quality service by keeping the necessary infrastructure installation and employment costs of staff in the most economical level. In this center, the system and network infrastructures that enable all business data of customers are constantly and centrally monitored. The necessary actions are taken as soon as possible, and a proactive approach is taken to manage network and system infrastructure in terms of business continuity.

#### **GOVERNMENT GRANTS**

For the period ended 31 March 2020 the Group has received approved and accrued incentive from TÜBİTAK, TL 7.657.361 (For the year ended 31 December 2019 the Group has received approved and accrued incentive from TÜBİTAK, TL 7.764.115).

The Group is qualified for the incentives and exemptions provided by Support of Research and Development Act, numbered 5746 effective from 24 November 2008.

As of 31 March 2020, the Group has a corporate tax benefit of TL 537.008.082 due to research and development disbursement and out of this amount 5.715.157 TL has been utilized by 31 March 2020 (As of 31 December 2019, the Group has a corporate tax benefit of TL 517.489.187 due to research and development disbursement and 12.619.575 TL has been utilized by 31 December 2019). The Group has booked deferred tax assets for unused R&D tax benefit (Note 18). The lifetime of vested but not yet used R&D incentives is unlimited.

For the period ended 31 March 2020, the amount of income tax incentive within the scope of Act numbered 5746 is TL 4.002.754 (For the period ended 31 December 2019: TL 13.202.943) and the total amount of social premium incentive within the scope of Act numbered 5746 and Social Security and General Health Insurance Act numbered 5510 is TL 4.121.054 (For the period ended 31 December 2019: TL 13.384.392).

#### **DONATIONS MADE DURING THE PERIOD**

The Group does not have any donations for the interim period ended 31 March 2020.

#### **REMUNERATION PROVIDED FOR BOARD OF DIRECTORS**

Total remuneration provided for the board of directors for the period ended 31 March 2020 is 0.15 million TL. (It was 0.1 million TL for the period ended 31 March 2019 for the board of directors of the Group).

#### **RENUMERATION PROVIDED FOR TOP MANAGEMENT**

For the period ended 31 March 2020, total remuneration for the directors, management, and board members of the Group is 4.6 million TL (for the period ended 31 March 2019 total remuneration for the directors, management, and board members are 6.4 million TL).

As of 31 March 2020 and 31 December 2019 there is no credit granted to the Group's management.

#### FINANCIAL PERFORMANCE

#### 2020 Q1 Summary;

- Consolidated orders booked was 262.5 million TL,
- Sales Revenue increased by 39% and reached to 304 million TL,
- Order on Hand was 919 million TL.
- Increase in gross profit and strictly controlled operational expenses which are 10% lower year over year, are resulted in better Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA) figure.

EBITDA margin turned to positive and realized as 2.4% in Q1 2020 versus negative 5% same period last year. Similarly, in nominal terms, consolidated Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA) was 7.2 million TL in the first three months of 2020, compared to negative 11.2 million TL same period last year.

TL Million	Q1 2020	Q1 2019	y/y %
Revenue	304	219	39%
Cost of Sales	(274)	(202)	36%
Gross Profit	30	17	75%
Gross margin %	10%	8%	205
Operating Expenses	(41)	(46)	(10%)
General Administrative Expenses	(17)	(19)	(10%)
Sales, Marketing & Distribution Expenses	(24)	(24)	(1%)
Research & Development Expenses	(1)	(3)	(70%)
Incentives	1	4	-
EBIT	(10)	(25)	(60%)
EBIT margin %	-3%	-11%	814
Depreciation	17	14	24%
EBITDA	7	(11)	-
EBITDA margin %	2,4%	-5%	746

#### **Financial Highlights**

EBIT = Gross Profit - Sales, Marketing and Distribution Expenses - General Administrative Expenses - Research and Development Expenses + R&D Incentives

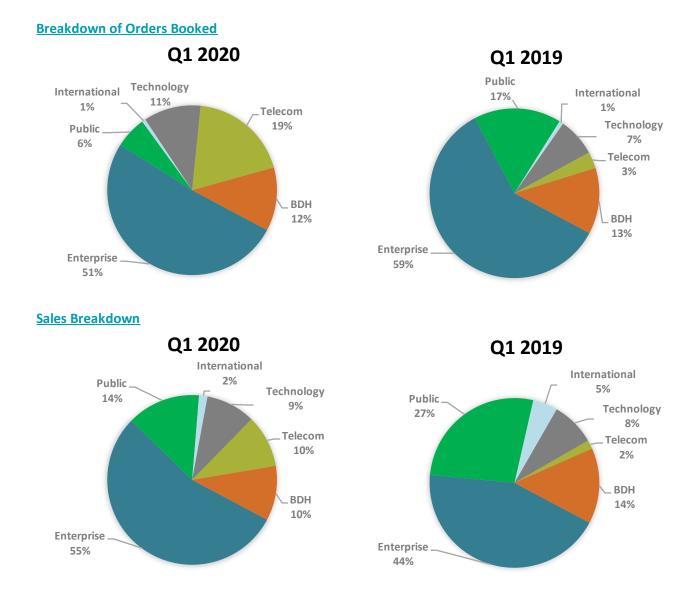
*R&D Incentives: Disclosed under Other Income from Operating Activities in the financial statements prepared in accordance with the Capital Markets Board requirements.* 

*EBITDA*= *EBIT* + *Depreciation and Amortization* 

#### **Orders & Sales Revenue**

**Orders:** Orders booked in the first three months of 2020 increased 5% year over year and recorded as 262.5 million TL (43.1 million USD). Orders on hand were 919 million TL (150.8 million USD) in the first three months of 2020.

<u>Sales Revenue</u>: In 3M 2020 Consolidated Group revenues was recorded at 304 million TL with a sharp 39% increase year over year.



**GENEL- PUBLIC** 

## **CONSOLIDATED FINANCIAL PERFORMANCE**

Group's consolidated order booking performance was reported at 262.5 million TL in 3M 2020 with 5% increase year over year. Telecom and Technology segments contributed to the increase in order booking performance in the first three months of 2020.

Consolidated sales revenue of the Group increased 39% year over year in the first three months of 2020 to 304 million TL. Enterprise, telecom and technology segments contributed to the increase in sales revenue.



Group's consolidated gross profit increased 75% year over year, and realized as 30.2 million TL as of 31 March 2020.

Consolidated operating expenses (OPEX) decreased 10% year over year in Q1 2020. Marketing, sales and distribution expenses were in line with last year whilst there was total 18% year over year decrease in general administrative and R&D expenses. Operational expenses were realized as 41.4 million TL in Q1 2020 versus 45.8 million TL in Q1 2019.

Increase in gross profit and strictly controlled operational expenses which are 10% lower year over year, are resulted in better Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA) margin. (2.4% in Q1 2020 versus negative 5% in Q1 2019). Consolidated Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA) was 7.2 million TL in Q1 2020 (vs. negative 11.2 million TL Q1 2019)

Group recorded 4.9 million TL net financial income in Q1 2020 whilst it has recorded 3.5 million TL net financial expense in the same period last year. The main reason for that was the Group's interest expense was lower in Q1 2020 compared to the same period last year and the Group's effective TL loan rate is significantly lower for the same period year over year.

21.1 million TL deferred tax income also supported the bottom line, the Group realized 3 million TL net loss in Q1 2020.

### SEGMENT BASED FINANCIAL PERFORMANCE

2020 / 3M (Million TL)	Enterprise	Public	International	Technology	Telecom	BDH	Unallocated	Total
Orders Booked	134,4	15,8	1,8	28,6	50,1	31,7	-	262,5
Sales Revenue	165,9	42,7	4,9	28,6	30,5	31,7	-	304,3
Cost of Sales	(158,3)	(36,5)	(5,2)	(25,2)	(29,4)	(19,5)	-	(274,1)
Gross Profit	7,6	6,2	(0,3)	3,4	1,1	12,2	-	30,2
Sales, marketing and distribution expenses	(6,0)	(4,4)	(3,3)	-	(5,0)	(4,7)	-	(23,5)
General administrative expenses	-	-	-	-	-	-	(17,0)	(17,0)
Research and development expenses	-	-	-	(0,9)	-	-	-	(0,9)
Operating profit/ (loss) of segment	1,53	1,8	(3,6)	2,5	(3,9)	7,5	(17,0)	(11,2)
Operating profit margin	1%	4%	-73%	9%	-13%	24%		-4%
2019 / 3M (Million TL)	Enterprise	Public	International	Technology	Telecom	BDH	Unallocated	Total
Orders Booked	149,3	41,8	2,0	18,4	7,9	31,6	-	250,9
Sales Revenue	95,9	59,4	10,4	18,4	3,7	31,6	-	219,4
Cost of Sales	(85,3)	(54,9)	(8,7)	(18,8)	(3,5)	(30,9)	-	(202,1)
Gross Profit	10,6	4,5	1,6	(0,4)	0,2	0,8	-	17,3
Gross Profit Sales, marketing and distribution expenses	<b>10,6</b> (9,4)	<b>4,5</b> (2,6)	,	(0,4)	<b>0,2</b> (3,1)	<b>0,8</b> (5,8)	-	<b>17,3</b> (23,9)
	,	· · · · · · · · · · · · · · · · · · ·	,					
Sales, marketing and distribution expenses	(9,4)	(2,6)	,		(3,1)		-	(23,9)
Sales, marketing and distribution expenses General administrative expenses	(9,4)	(2,6)	(3,1)	-	(3,1)	(5,8)	(18,9)	(23,9) (18,9)

#### **Enterprise Segment**

Group's order bookings from Enterprise segment decreased 10% year over year to 134.4 million TL in the first three months of 2020.

Sales revenue of the Group from enterprise segment increased significantly by 73% year over year to 165.9 Million TL in 3M 2020. However gross profit of the segment decreased 29% year over year to 7.6 million TL as a result of increase in cost of sales.

Enterprise segment generated 54.5% of total Group's consolidated revenue in 3M 2020.

#### **Public Segment**

Orders booked from Public segment declined 62% year over year and recorded as 15.8 million TL in 3M 2020.

Sales revenues from Public segment declined 28% year over year and realized as 42.7 million TL in the first three months of 2020. Compared to the same period of last year gross profit of the segment increased 39% and realized as 6.2 million TL. As a result of higher operational expenses, operational profit of the segment was 1.8 million TL, in line with the same period last year.

#### **International Segment**

Orders booked from international segment decreased 8% year over year in the first three months of 2020 to 1.8 million TL. Sales revenue of the segment decreased 52% year over year. Applied global travel bans in Q1 2020 extended the process of projects at the international segment.

#### **Technology Segment**

Long-term business relations with Ribbon continues in Technology segment. Orders booked increased 56% year over year and realized as 28.6 million TL in the first three months of 2020. Sales revenue of the technology segment also increased 56% year over year in Q1 2020 and reached 28.6 million TL. Increase in cost of sales was limited with 34% year over year and positively reflected to the gross profit of the segment. As a result of lower R&D expenses compared to last year, operational profit of the segment was realized as 2.5 million TL.

#### **Telecom Segment**

Volume of the telecom segment is growing with the contribution of projects received with ZTE products. Orders booked of telecom segment increased 535% year over year in the first three months of 2020 and reached 50.1 million TL. Sales revenue of the segment was up 728% year over year and realized as 30.5 million TL for the same period. Gross profit of the segment was realized as 1.1 million TL in Q1 2020, however marketing, sales and distribution expenses deteriorated operational profit of the segment.

#### **BDH**

In Q1 2020, both orders-booked and sales revenue of BDH was in line with the same period last year and sales revenue was realized as 31.7 million TL. As a result of 37% decrease in cost of sales, segment realized 12.2 million TL gross profit, significantly higher compared to the same period of last year. Year over year 18% lower operational expenses also supported BDH, operational profit of the segment was 7.5 million TL in Q1 2020.

## **DEBT STRUCTURE & NET WORKING CAPITAL**

Group's cash and cash equivalents was 206.8 million TL in 3M 2020.

Net debt of the group declined significantly 29% to 289.9 million TL in the first quarter of 2020, compared to 2019 year end. In 2019 year end results, net debt was standing at 408 million TL.

Gross financial debt of the Group was 496.7 million TL in 3M 2020 and 87% of the debt was in TL terms. Maturity of the 58% of the total financial debt was less than one year as of March 31, 2020.

(million TL)	Consolidated Total Financial Debt	Cash and Cash Equivalents	Net Debt	
Q1 2020	496,7	206,8	289,9	
2019	603,3	195,3	408,0	
Q1 2020		т		USD
Short Term Financial Debt (Bank Loans)		287,2		44,1
Long Term Financial Debt (Bank Loans)		205,0		31,5
Interest Expense Accruals for Borrowings		4,5		0,7
Total Debt		496,7		76,2

Group's net working capital\* (incl. non-current trade receivables and trade payables) requirement for the financing of continuing projects was 437 million TL as of 3M 2020 (2019 YE: 578 million TL).

\*Net Working Capital = (Total Current Assets - Cash & Cash Eq. + Non-current Trade Receivables)- (Total Short Term Liabilities – Financial Liabilities + Long Term Trade Payables)

## RISK MANAGEMENT

## Groups' Primary measures and their effects due to Coronovirus (COVID-19)

As a result of the coronavirus outbreak, governments are taking global measures on public health and trying to minimize economic damage. In order to stimulate global economic activity, which is shrinking in both ways supply and demand; measures concerning money markets and the real sector have been taken. Necessary steps have been taken towards monetary expansion, financial support programs and easing on regulations. Considering the effects of the coronavirus outbreak on the Telecom and Media sector, demand for telecom and media services is expected to increase due to remote working / education and social distance measures. However, there are different risks that may occur if the outbreak continues, the main ones are summarized below:

- Postponement of tender dates and IT investment plans due to uncertainties
- Negative reflection of the increase in exchange rates on customer budget and investment decisions
- Disruption in business development and marketing activities
- Extension of contract signing processes for won tenders
- Possible deterioration in cash flow (As a result of prolonged customer payment terms, postponement in invoice and collections)
- Slowness / delay in production processes and customs / logistics
- Termination / postponement / waiver requests from customers due to force majeure reason
- Disease / loss that may occur in critical human resources
- Problems in bidding in different countries and completing the ongoing projects in different countries

The company has acutely addressed the health of the employees, business partners and their families, and the continuity of their business processes, with regard to COVID-19, which has been declared as a pandemic by the World Health Organization.

As being one of Turkey's leading systems integrators with 53-year history, serving the ICT sector with different high tech services such as 4/5G, cloud and big data, cyber security; the company's business model is completely suitable for remote operation/working. Our company, which has produced various technology solutions so far with its business partners for the remote working model, can easily apply these technologies for its own employees in the period we are in. Netaş has all the infrastructure equipment to continue providing uninterrupted service to its customers.

After our company has completed all necessary technical infrastructure works regarding the continuity of operations; As of March 19, 2020, the remote working system, which it started gradually on the week of March 16, 2020, has been implemented throughout the company. Except for our duty staff on the field and on duty, the entire Netaş team has been working remotely since the mentioned dates. The company

will continue to follow developments closely with the coronavirus (COVID-19) epidemic, and will determine business plans and dates of return to office in line with these developments.

The main measures taken by our Company in this period are as follows:

• In line with the Business Continuity Management System, all kinds of necessary technical infrastructure works and tests have been completed and our operation has been maintained.

• Emergency Committee and action teams have been formed. Emergency managers and their backups have been determined for all units and locations.

• Our company has kept travels which were made from abroad offices to Turkey subject to the approval process before moving to remote working model. All our employees from overseas offices have been able to enter our offices after staying in their homes or hotels for 14 days from the date they entered the country. In the event that the employee or one of his household has traveled abroad, the related employee is obliged to notify this to his manager and Human Resources. In this case, his household or the employee were required to work from home for 14 days, from the date of his arrival in Turkey.

• Disinfection procedures of our Head Office and other locations are carried out at certain intervals using products approved by the World Health Organization.

• As stated by the Ministry of Health, the actions to be taken for personal hygiene, which is one of the most important measures to protect against the COVID-19 outbreak, were regularly shared with our employees through our internal communication channels; "Health Kit" was distributed to all our employees.

• All of our colleagues at the customer locations continued their work in accordance with the procedures and rules of the relevant customer.

## a) Credit risk

Collection risk of the Group may be arising from delays in the collection of commercial receivables or lower interest rates applicable to assets in banks as compared to the market revenues. Commercial receivables are evaluated by the Group based on previous experience and current economic situation, a suitable amount is reserved for doubtful receivables and clearly indicated on the balance sheet.

Doubtful receivables of the Group are 11.3% of total receivables. Group management does not see any additional risk regarding the receivables other that the reserved amount. A credit limit is assigned to each customer and transactions are kept within such limits. The Group has a significant amount of assets in banks. In this sense, the Group assigns a credit limit to each bank and transactions are kept within such limits. Financial Audit and Treasury Department of the Group controls whether or not transactions are kept within such limits.

## b) Liquidity risk

The Group holds adequate sources to be able to fulfill its current and future liabilities. As of 31 March 2020 and 31 December 2019 liquidity risk are presented in the audit report (Note 21).

## c) Foreign currency risk

Functional currency of the Group is USD and therefore, currency risk is associated for the most part with the shifts of USD value against TL and other currencies. With the purpose of limiting the effects of appreciation or depreciation of USD against other currencies, the Group makes use of its assets in compliance with its liabilities to the extent possible and undertakes contracted expenditures in the contract currency.

#### d) Interest rate risk

Interest rate-sensitive financial assets are placed in short term instruments in order to avoid any possible interest rate fluctuations. Interest rate-sensitive liabilities constitute 33% of the total liabilities.