



Ministry of National Education

Directorate General for Innovation and Educational Technologies (DGIET)

**SAFE SCHOOLING AND DISTANCE
EDUCATION PROJECT
(P173997)**

**Retroactive Financing
Environmental and Social Due Diligence**

Final v01

Date: 11 June 2021



Content

Content	i
List of Figure	ii
Abbreviations	iii
1 Introduction	1
1.1 Background Information.....	1
1.2 Safe Schooling and Distance Education Project and its Development Objective	2
2 Rationale of this Report	3
3 Description of the Contract Activities	4
3.1 Zoom	4
3.2 Artek Contract.....	4
4 Environmental and Social Appraisal	5
4.1 ESS 1: Assessment and Management of Environmental and Social Risks and Impacts.....	5
4.1.1 Zoom.....	5
4.1.2 Artek.....	5
4.2 ESS2: Labor and Working Conditions	6
4.2.1 Zoom.....	6
4.2.2 Artek.....	6
4.3 ESS3: Resource Efficiency and Pollution Prevention and Management	9
4.3.1 Zoom.....	9
4.3.2 Artek.....	9
4.4 ESS4: Community Health and Safety	14
4.4.1 Zoom.....	14
4.4.2 Artek.....	14
4.5 ESS5: Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement.....	14
4.6 ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources...	15
4.7 ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	15
4.8 ESS8: Cultural Heritage.....	15
4.9 ESS9: Financial Intermediaries	15
4.10 ESS10: Stakeholder Engagement and Information Disclosure	15
5 Conclusion.....	16
Annexes	17
Annex 1: References	18



List of Figure

Figure 1 Photo of One of the Procured Servers	4
---	---



Abbreviations

COVID-19	Coronavirus Disease 2019
DC	Direct Current
DGIET	Directorate General for Innovation and Educational Technologies
E&S	Environmental and Social
EBA	Digital Education Platform
ESDD	Environmental and Social Due Diligence
ESS	Environmental and Social Standard
LAYS	Learning Adjusted Years of Schooling
LoA	Letter of Agreement
MEBİM	Ministry of National Education Communication Center
MoNE	Ministry of National Education
NDES	New Digital Education System
OHS	Occupational Health and Safety
SSDE	Safe Schooling and Distance Education
WB	World Bank
WHO	World Health Organization



1 Introduction

1.1 Background Information

An outbreak of Coronavirus Disease 2019 (“COVID-19”) caused by the 2019 novel coronavirus (“SARS-CoV-2”) has been spreading rapidly across the world since December 2019, when the first cases were diagnosed in Wuhan, Hubei Province, China. COVID-19 has been detected (as reported) in 223 countries to date.¹ On March 11, 2020, the World Health Organization (“WHO”) declared the rapidly spreading Coronavirus outbreak a pandemic, acknowledging what has seemed clear for some time-the virus will likely spread to all corners of the globe. As of April 15, 2021 the total number of COVID-19 cases detected was 137,866,311, out of which there have been 2,965,707 deaths.² The first case in Turkey was reported on March 11, 2020. As of April 15, 2021, the number of cases reported has reached 4,086,957, out of which there have been 35,031 deaths.³

In the education sector, as a result of the COVID-19 pandemic, all schools and universities were closed. On March 23, the Ministry of National Education (“MoNE”) initiated distance-based schooling. MoNE is delivering distance education services during school closures due to COVID-19 through its online Digital Education Platform, EBA (“Eğitim Bilişim Ağı”). Teachers, students, and parents have access to the EBA learning environment and interface which can be customized for student-specific learning, including calendar, supportive publications and library resources. The EBA digital education system requires improvements to meet the needs of 18 million K-12 students and 1 million teachers now requiring additional distance learning services as a result of school closures. Through MEBİM hotline (call center of MoNE), teachers and parents have reported issues associated with: i) access to the platform and issues with passwords; ii) delivery of incorrect grade content; iii) uploading students’ homework; and iv) tracking progress of students and participants on the system.

Given the significant uncertainty of when schools can re-open, urgent investments are necessary to ensure MoNE online digital education system can support quality distance-based schooling for students and teachers. EBA is a platform that can be strengthened and scaled up not only to respond to the present crises but as an investment for a more resilient delivery of education during different types of emergencies in Turkey. It can also promote a shift towards new behaviors and technologies in the education sector that may have lasting influence on reducing carbon emissions. However, the digital education system was not fully completed as expected in terms of access and uptake by teachers, students and parents – which is crucially required now.

Considering online-base schooling is no longer an alternative but a necessity, MoNE seeks to improve and scale up the existing education technology tolls but some obstacles became imminent with the COVID-19 crisis such as limited access, insufficient distance education guidance and instructional methods for teachers, quality assurance mechanisms, and a school-wide approach clarifying the on-line learning support roles across school principals, teachers, parents and students. The MoNE’s two-prong strategy is; (i) to expand access to distance education, both on-line and TV, with required materials, teacher training, and parental guidance (both curricular and to mitigate COVID-19 risks), and (ii) to complete earlier investments in the education technology but modernizing EBA through a New Digital Education System (“NDES”), that is resilient to climate related natural disasters, and create the organizational and virtual structures for innovative digital education materials for teachers and students.

Turkey also aims to minimize the educational costs of school closures stemming from the COVID-19 outbreak. The “Learning Adjusted Years of Schooling (“LAYS”)” indicator, within the World Bank’s Human

¹ <https://www.who.int/emergencies/diseases/novel-coronavirus-2019> accessed on April 15, 2021

² <https://www.who.int/emergencies/diseases/novel-coronavirus-2019> accessed on April 15, 2021

³ Ministry of Health, Republic of Turkey, <https://covid19.saglik.gov.tr/> accessed on April 15, 2021



Capital Index, shows that although the Turkish school system has been able to provide access to more than 12 years of education to its children and youth, this has only translated to 8.9 years of learning. Although Turkey had begun to improve this access-learning gap according to recent international assessments (e.g., PISA 2018), the COVID-19 crisis threatens to reduce these gains. Without foreseen investments of MoNE to face school closures and re-opening, the access-learning gaps will worsen.

Turkey's education technology investments to-date aimed to improve the quality of education for the 21st century, now they are also required to respond to emergencies such as similar Syrian crisis, earthquake, floods, etc. A national and strong system for distance-based education is crucial for MoNE's readiness to respond during emergencies, both to deliver protection and life-saving information, as well as to continue teaching and learning to minimize learning loss during crises.

1.2 Safe Schooling and Distance Education Project and its Development Objective

The Safe Schooling and Distance Education ("SSDE") Project supports the immediate education response to the COVID-19 outbreak, while laying the groundwork for critical investments to preserve education human capital equitably over the mid-term and to face future shocks. It supports the Government of Turkey's efforts to mitigate rising pressures on education service delivery through distance learning for school-age children.

The SSDE Project aims to support Turkey's education sector to provide safe schooling through distance education during the COVID-19 pandemic and for resilient recovery. The project aims to respond to the COVID-19 needs for safe and interactive distance education and to continue to build a more resilient system for education technology. The project will significantly contribute to the country's investments in Education Technology and builds the resilience of the education system in the face of crises.

An additional aspect of equitable strategies, although device support is not considered as a component of the project; MoNE will encourage its central and local network to include the vulnerable groups, low-income families and students, people under temporary protection. And further, although there was not a systematic approach to provide equipment for students from low-income families during the first days of the pandemic, throughout the process of distance education, local administrations have partially provided the equipment that students require to be able to access to distanced education and continue their learning process. On the other hand, MoNE is planning to provide tablet computers for students from low-income families and as of April 2021, 586,245 tablet computers were distributed.

The Project Development Objective is to enhance the capacity of the education system to provide e-learning equitably to school-age children during and following the COVID-19 pandemic and future shocks.



2 Rationale of this Report

Within the scope of Safe Schooling and Distance Education (“SSDE”) Project, a contract between Artek Group Informatics Limited Company (“Artek”) and Ministry of National Education, DGIET was signed on July 17, 2020, before the date of the Loan Agreement, July 23, 2020. Another contract between Zoom Video Communications, Inc. (“Zoom”) and DGIET was signed on March 17, 2020, again before the date of the Loan Agreement.

These contracts are approved as advance contracting and are considered eligible for retroactive financing under the SSDE Project, within the scope of this Environmental and Social Due Diligence (“ESDD”) Report prepared.

The Letter of Acceptance of the World Bank’s Anticorruption Guidelines and Sanctions Framework was signed by Zoom on December 17, 2020. The contract of Artek includes the requirement to work complying with occupational health and safety regulations, laws and guidelines. The contract also covers the requirements of protecting the work force such as child labor and minimum age and forced labor.

This ESDD Report is developed in accordance with the World Bank Environmental and Social Framework, 2018 and regarding the clause 22 of Aide Memoire prepared upon the Implementation Support Mission, November 3-10, 2020.

3 Description of the Contract Activities

3.1 Zoom

Zoom is a cloud-based video communications service that allows you to set up virtual video and audio conferencing, webinars, live chats, screen-sharing, and other collaborative capabilities. It is a software platform used for teleconferencing, telecommuting, distance education, and social relations. Beginning in early 2020, Zoom's software usage saw a significant global increase following the introduction of quarantine measures adopted in response to the COVID-19 pandemic. The headquarter is at San Jose, California, USA.

With Zoom contract dated March 17, 2020, a total of 50,000 licenses was procured for provision of virtual classrooms to students and teachers. Regarding the Annex 3 Clause 4 of Aide Memoire prepared upon the Implementation Support Mission, November 3-10, 2020, a requirement for retroactive financing eligibility is for Zoom to accept the WB's anti-corruption commitments and sign the standard Letter of Agreement ("LoA").

The LoA of the WB's Anticorruption Guidelines and Sanctions Framework was signed by representative of Zoom on December 7, 2020. Thus, it is now considered eligible for retroactive financing.

3.2 Artek Contract

The contract, which was signed on July 17, 2020, includes procurement of eight servers of the same type and installation of these servers at Türk Telekom Ümitköy Data Center. Each of the servers weights 34,12 kg having a dimension of h: 8,75 x w: 44,55 x d: 75,47 cm. An exemplary photo of one of the servers is presented below.



Figure 1 Photo of One of the Procured Servers

The contractor firm's (Artek) responsibility is to bring the servers to the pre-defined place by MoNE DGIET's representatives and then install the servers at the Data Center's system room. All processes which are conducted in Türk Telekom premises, are controlled by the Türk Telekom representatives.



4 Environmental and Social Appraisal

The following subsections provide an assessment on the relevance of contract activities with the World Bank's Environmental and Social Standards (ESSs).

4.1 ESS 1: Assessment and Management of Environmental and Social Risks and Impacts

4.1.1 Zoom

There are no E&S risks anticipated that are directly and solely related to the SSDE Project considering that Zoom is a cloud-based service and not only providing services for MoNE, DGIET.

As a note to this Report aiming to give insight about Zoom's value increasing programs, Zoom introduces an initiative namely Zoom Care with an emphasize on education, social equity, and climate change in 2020.

Believing access to a high-quality education is a fundamental right, and the foundation to a bright and thriving future for all our children, Zoom works to ensure students are connected, safe, and learning during COVID-19 pandemic. Its back-to-school remote learning grants support organizations all over the world that are helping students disproportionately affected by school closures.

In the concept for equity for all, Zoom donated a number of organizations supporting racial justice and equity. knowing that the pandemic has widened already existing disparities in wealth, access to healthcare, and education, Zoom also donated to support COVID-19 response.

4.1.2 Artek

The contract activities are described under Section 3.2 of this Report. Considering activities under the contract, the environmental and social risk and impacts are evaluated as the ones associated with waste management, occupational health and safety and labor aspects. Under the following sections, an evaluation of firms' status against these risks are presented in detail considering each ESS.

As the procured servers were installed to Türk Telekom's Ümitköy Data Center, Türk Telekom's environmental and social management system is also considered within the scope of this due diligence. As a note for this ESDD, since Türk Telekom has a private utility with high security procedures and rules, during the assessment, it was not allowed to take photos and documents that could be presented as an evidence to the assessment was not shared with the assessors. Nevertheless, Türk Telekom team is considered as ready with relevant and adequate knowledge during the assessment and provide clear answers and clarification to assessors' questions particularly on waste/recycle management, occupational health and safety procedures and labor aspects. Several evidence/reference documents were reviewed by the DGIET PIU assessors in the course of the assessment on site and they were found appropriate in the way that they were recorded, monitored and managed.

Türk Telekom's three regional directorates operate under the ISO 14001 Environmental Management System and the ISO 45001 Occupational Health and Safety Management System.

The ISO 45001 Occupational Health and Safety Management System ensures continuous improvement of occupational health and safety performance, creating a better working environment for employees and minimizing occupational accidents. In Türk Telekom, there were no fatal accidents in 2019 and 2020.

Türk Telekom carries out systematic efforts to improve environmental management and reduce environmental damage within the scope of the ISO 14001 Environmental Management System. Türk Telekom did not suffer any environmental accidents and was not issued with any environmental fines in 2019 and 2020.



Integrated Management System Policy that is publicly available in Türk Telekom's web site is presented below.

Türk Telekom's Integrated Management System Policy

Beyond being a telecommunications operator, being one of the main actors in the transition to the information community, taking into account the principles of quality, environment, health and safety, complaint management systems and requirements in all processes, constantly evolving, increase productivity, focusing on customers and the market, taking social responsibility always in the foreground, being an organization that values employees.

- Provides the continuous improvement and development of its integrated management system with an active and constructive participation of its employees,
- Obligated to comply with national and international Quality, Environment, Health and Safety, Business Continuity Management Systems and committed to comply with related legal and regulative requirements,
- Fulfills the requirements of the Health and Safety in its operations, develop and implement systems for the prevention of all kinds of accident, injuries, occupational diseases, and health problems,
- Provides customer satisfaction by solving its customers' complaints, requests, and suggestions in the fastest way possible based on laws, regulations and company rules, in a fair and neutral approach and privacy,
- Committed to reduce or eliminate significant environmental effects causing from its activities,
- In business continuity services Türk Telekom aims to ensure our safety as a priority in an emergency, and by continuously improving its business continuity capacity and aim to ensure the continuity of its service.

4.2 ESS2: Labor and Working Conditions

4.2.1 Zoom

The requirements for working conditions and management of working relationships, protecting the workforce, and having a functional grievance mechanism are guaranteed with the "Code of Business Conduct and Ethics" of Zoom. Additionally, "K-12/Primary and Secondary Schools Privacy Statement" (or "K-12 Privacy Statement") of explains how Zoom handles personal information of Student Users of K-12 Accounts who are under the age of 18 years.

4.2.1.1 Grievance Mechanism

Zoom provides many reporting channels, including managers, the People Experience team, the Legal Department, and the Compliance and Ethics team. The Compliance and Ethics team maintains the following confidential reporting channels for Zoom employees:

- Chief Compliance and Ethics Officer can be contacted directly and confidentially through e-mail (complianceofficer@zoom.us) or by postal mail (55 Almaden Blvd., 6th Floor San Jose, CA 95113).
- SpeakUp Line (1-800-918-6595 (US)) can be used through calling the line directly, filing a SpeakUp Line web report (speakup.zoom.us) or texting an SMS (1-408-741-9673 (US)).

4.2.2 Artek

The contract of Artek covers the requirements of protecting the work force such as child labor and minimum age and forced labor.

It is clearly defined in the contract that a child under the minimum age of 14 will not be employed or engaged in connection with the work performed by Artek or its subcontractors. Additionally, a child over the minimum age and under the age of 18 will not be employed or engaged in connection with the work



performed by Artek or its subcontractors in a manner that is likely to be hazardous or interfere with the child's education or be harmful to the child's health or physical, mental, spiritual, moral or social development.

Furthermore, Artek and its subcontractors if any are committed that forced labor, which consists of any work or service not voluntarily performed that is exacted from an individual under threat of force or penalty, will not be used in connection with the performed work. This prohibition covers any kind of involuntary or compulsory labor, such as indentured labor, bonded labor, or similar labor-contracting arrangements. Also, no trafficked persons will be employed in connection with the work performed by Artek or its subcontractors.

As the procured servers were installed at Türk Telekom's Ümitköy Data Center, Türk Telekom's Grievance Mechanism and Occupational Health and Safety practices are also considered within the scope of this due diligence.

4.2.2.1 Grievance Mechanism

Business Ethics Code of Türk Telekom outlines the channels by which its employees can express their opinions and/or concerns as well as report an action, behavior and/or implementation that breach the Business Ethics Code. Grievances can be sent to:

- etik@turktelekom.com.tr internally or externally,
- The postal address of Business Ethics Unit at Türk Telekom Genel Müdürlüğü Ankara Kampüsü D Blok 2. Kat 06103 Aydınlikevler / Ankara.

Any grievances filed to other units and managers of the Company will be forwarded to the Business Ethics Unit at the above address.

4.2.2.2 Occupational Health and Safety

It is declared that creating a healthier and safer working environment for its employees; minimizing the effects of damage to the environment through its activities; and implementing environmentally friendly technologies are Türk Telekom's prioritized objectives.

In line with these objectives, employees are expected to

- Comply with legal regulations, practices, and accepted standards in the workplaces,
- Conform with measures taken as a result of risk and impact assessments, with a preventive approach; comply with systems to minimize the occurrence of incidents, accidents or emergency losses,
- Participate in training programs organized to promote safety culture, risk perception, and environmental consciousness,
- Demonstrate an objective and transparent attitude in audits related to occupational health, safety and the environment,
- notify and report any behavior, situation or accident that could endanger occupational health and safety, and
- cooperate with the responsible occupational health and safety specialist in charge.

Türk Telekom is required to take the necessary measures in workplaces as stipulated by the Occupational Health and Safety Law and the Environmental Law, and the legislation published in line with these laws. Türk Telekom carries out a wide range of studies in occupational health and safety in order to prevent occupational accidents and to ensure its employees can continue their work in a safe and healthy work environment.



There are comprehensive risk assessments in place. The aim of analysis is to identify the risks that may cause occupational accidents and occupational illnesses before they occur, and to take appropriate measures.

Türk Telekom, which has adopted proactive and productive Occupational Health Safety and Environmental Management standards, works to improve these management systems to prevent occupational accidents, foster environmental awareness, and promote occupational health and safety, and an environmental culture among employees.

In order to protect employees from work-specific hazards, personal protective equipment is provided where collective protection is not possible.

It is reported that with the awareness that occupational health safety and environmental management is a part of all processes, Occupational Health and Safety Management unit was established within the Directorate of Facility Management, which reports to Support Services and Procurement Management Assistant General Manager.

Additionally, Occupational Health and Safety Boards have been established in Türk Telekom's workplaces in order to ensure the health and safety of employees, to identify potential risks and take necessary measures. These Boards ensure that the occupational health and safety activities are planned and evaluated, the risks that may cause occupational accidents and occupational diseases are identified and necessary measures are taken.

Employee representatives also participate in these boards as members, and all kinds of feedbacks that employees provide on occupational health and safety measures are evaluated.

Audit planning and results, training, information sessions, sub-contractor activities, occupational health and safety activities, risk assessments, work accidents, incident reports and accident statistics are included in the agenda of the Occupational Health and Safety Boards which meet periodically in line with obligatory requirements.

There are periodical meetings where the following tasks are fulfilled:

- Guiding employees regarding occupational health and safety issues,
- Evaluating hazards and precautions related to occupational health and safety at the workplace, determining the measures and notifying employers or their representatives,
- Carrying out the necessary investigation, identifying the measures, and notifying the employer or the employer's representative with a report in the event of any occupational accident occurring at a workplace, or an occurrence at the workplace that does not qualify as an occupational accident but may cause damage to the workplace or to work equipment, or in case of occupational illness or occupational health and safety hazards,
- Planning trainings on occupational health and safety at work; preparing programs related to occupational health and safety and related rules; presenting them to the employer or the employer's representative for approval; monitoring the implementation of these programs and providing feedback in case any deficiency is noted,
- Planning the security measures necessary during maintenance and repair work to be performed at the workplace and controlling the implementation of these measures,
- Monitoring the adequacy of the measures taken against fire, natural disaster, sabotage or similar hazards at work and monitoring the works of related teams.

An emergency plan is in place in each workplace in accordance with the obligatory requirement and drills have been conducted periodically to ensure preparedness in the event of an emergency. The emergency team members, firefighting team and first aiders who are going to have an active role in the case of an emergency, have been assigned and trained. The fire extinguishers with control cards which are timely filled



were placed in the building, and a fire alarm system was installed. There is also fixed extinguishing system for the office and common areas and gaseous fire-extinguishing system for system rooms.

Since December 2011, Türk Telekom provides all employees with online training on climate change, the risks associated with climate change and the simple changes that can be made to mitigate these risks. The company also carries out in-class training and distance learning courses on energy efficiency, hygiene and occupational health and safety.

In 2019, 17,778 and in 2020, 17,389 Türk Telekom employees received training on occupational health and safety and environment.

It is considered that Türk Telekom takes a proactive approach to creating a healthy and safe working environment in its workplaces in order to protect its employees from the dangers and risks arising from activities, products and services. Türk Telekom carries out work to identify risks, prevent and reduce occupational accidents, occupational diseases and eliminate environmental risks that may occur as a result of existing risks. In this context, OHS risk assessments and environmental impact assessment tables are prepared and reported.

4.3 ESS3: Resource Efficiency and Pollution Prevention and Management

4.3.1 Zoom

Zoom Cares is part of its sustainability program, which was designed to minimize its impact on the environment and maximize its value of caring, looking at everything from how they manage their facilities to how they lessen the effects of climate change in their community. So far this year, 2020, Zoom claimed to help reduce 45 million metric tons of carbon emissions by enabling millions of users to work from home during the pandemic. Remote work and education will continue to play an important role in addressing the climate crisis, Zoom declared.

Recent studies put emphasize on information and technology solutions, such as video conferencing, contributes reducing global carbon emissions. It is clear that many devices involved in the capture, processing and transmission of information in a videoconference consume electricity, and the generation of electricity has a considerable carbon footprint. Environmental impact might also arise from the lifecycle of these devices, including their production, deployment and disposal stages. Depending on the magnitude of these effects, the actual carbon savings of videoconferencing over in-person meetings might be reduced or even negated. Considering use of video conferencing in education with involvement of several students which eliminates physical travelling more than in-person meetings, in this case the carbon saving is significant. This is considered as one of the positive environmental impact of the SSDE Project.

4.3.2 Artek

As the procured servers were installed to Türk Telekom's Ümitköy Data Center, Türk Telekom's resource efficiency and pollution prevention and management approach is considered within the scope of this due diligence.

Türk Telekom has a goal of leaving a habitable world to future generations and in line with that goal, it carries out transformation activities to ensure that its office and business processes are more compliant with the principles of sustainability. Türk Telekom seeks to involve all its employees and their families, suppliers and customers in this transformation process as a requirement of its sustainability strategy.

Türk Telekom attaches particular importance on investments and works in waste management, energy efficiency and renewable energy with the aim of efficient use of energy resources, widening the use of renewable energy resources and minimizing negative impacts on the environment. In addition, Türk Telekom reportedly attempts to reduce greenhouse gas emissions by offering products and services that



support the low carbon economy and extends support to various sectors with products and service solutions with low carbon emissions. Türk Telekom takes various steps to control its own activities and to raise environmental awareness.

4.3.2.1 Environmental Impact and Risk Assessment Studies

Türk Telekom prepares and documents risk and environmental impact assessment tables to determine potential hazards and related risks arising from its activities, products, and services; and to evaluate environmental impacts and dimensions, so as to systematically define the methods and principles for controlling potential risks and minimizing occupational accidents, occupational illnesses and environmental risks.

The aim of the work is to identify the risks that may cause occupational accidents, occupational illnesses, and environmental impacts before they occur, and to take appropriate measures.

4.3.2.2 Reporting Carbon Disclosure Project

In its efforts to reduce greenhouse gas emissions, Türk Telekom supports various sectors with its low carbon emission product and service solutions. Türk Telekom considers greenhouse gas management and efforts to combat climate change as important issues and includes them in its overall strategy.

Türk Telekom works to ensure the efficient use of energy resources and to reduce its carbon emission systematically. Türk Telekom, which completed its first reporting to the Carbon Disclosure Project (CDP) in 2011, was the first Turkish telecommunications company to participate in this global initiative. In order to report its endeavours supporting low carbon economy, Türk Telekom have been reporting to the CDP annually. Türk Telekom representatives reported that despite the increase in the number of its customers and bandwidth, Türk Telekom has been one of the very few operators in the world which succeeded to reduce energy consumption in the recent years.

In the 2018 CDP reporting, Türk Telekom disclosed projects aimed at increasing energy savings and renewable energy use, reducing fuel consumption and carbon monoxide emissions, annual energy saving targets, Smart City projects, Cloud Eye technology and projects which positively support the efforts to tackle climate change. With the report prepared in this scope, Türk Telekom increased its score by two notches from D+ level to C+ (Awareness). Within the scope of CDP reporting carried out by Türk Telekom in 2019, calculations of emission resulting from its activities have been verified by the authorized independent organization. The score in the CDP report, prepared in accordance with the 2018 data, improved to reach B+ (Management), thus it is reported that Türk Telekom achieved the highest score among telecom operators in Turkey. In 2020, the score of the CDP report is declared as B- (Management).

The departments throughout the Türk Telekom organization are all given annual emission reduction targets and their realizations are regularly monitored. Türk Telekom aims to set strategic emission reduction targets that will cover 5-year and 10-year periods and further reduce the carbon emissions that can be managed across its operations.

4.3.2.3 Afforestation Campaigns

In order to demonstrate Türk Telekom's sensitivity to the environment, an afforestation campaign was organized at the Ankara Central Campus with the slogan of "Senin de Dikili Bir Ağacın Olsun (Leave behind a tree)". A total of 220 trees were planted by determining which tree species would be most suitable for the city's climate. Within the scope of the "Breath for the Future" campaign implemented by the Ministry of Agriculture and Forestry, Türk Telekom donated 38,450 saplings on behalf of all its employees.



4.3.2.4 Initiatives in Sales Channels

4.3.2.4.1 E-invoice application

Türk Telekom aims to increase the rate of customers using e-invoices to support the sustainability. Türk Telekom, which has an e-invoice ratio of 75% in 2020, organizes new campaigns to increase this rate. In this context, the prerequisite for becoming an SMS e-invoice subscriber has been added as a condition for participation in the existing “Sil Süpür” campaign in the mobile segment, which offers customers a range of advantages. In its Annual Report, 2020, the use of e-invoices in 2020 contributes to the environment as estimated approximately:

- 54,000 trees,
- 13 million Kwh energy, and
- 101,000 m³ water conservation.

4.3.2.4.2 Digital document application

With a new application launched in 2019, Türk Telekom has started to receive legal documents from its customers through digital media with tablets and biometric pens, which it distributes to dealers. This new improvement has enabled savings in paper and cargo and courier costs related to the transportation of documents.

4.3.2.5 Efficiency

4.3.2.5.1 Energy efficiency

Considering the social and environmental impact of its high level of energy consumption, Türk Telekom undertakes investments in energy efficiency and renewable energy in order to use natural resources efficiently, to extend the use of renewables, and to minimize adverse impacts on nature.

By using solar and wind energy, Türk Telekom is able to make carbon savings. In order to boost energy efficiency and reliability, it replaces less efficient direct current energy equipment with high efficiency models in the recent 5 years. Similarly, with Central Transformation/Fiberkentt Project, central stations with low energy efficiency are replaced with next-generation stations and outdoor equipment with high-energy efficiency.

Türk Telekom reduces carbon emissions by replacing air conditioners in system rooms with next generation Free-Cooling air conditioning units with low energy consumption. The Smart Metering Project enables Türk Telekom to monitor energy consumption in detail, and when necessary, in real time. In addition, services formerly running in older generation systems unavailable for technical support and maintenance were transferred onto next-generation transmission systems. The results of this modification were improvements at the maintenance facility, energy savings, hall upgrades and increased service quality.

The activities carried out and achievements obtained in this context are summarized below:

- Türk Telekom systematically reduces carbon emissions through its efforts to use renewable energy and through efficiency projects. The solar energy system is used in approximately 1,701 Türk Telekom locations. This system has a total installed capacity of around 2.35 MW in 2020.
- Türk Telekom’s low-efficiency cooling and voice communication systems are being replaced with high efficiency equipment. Air conditioning units used in the system rooms are replaced with next generation, low energy consumption free-cooling air conditioners, thus helping to lower carbon emissions. With the Smart Metering project, energy consumption can be monitored real-time and in detail when necessary.
- Services in older generation systems that have completed their technological useful life are transferred to next generation transmission systems, thus providing ease of maintenance and operation, energy savings and enhanced service quality.



- In Türk Telekom offices, space is being saved through building/system hall optimization projects, bringing about a significant reduction in energy consumption in cooling.
- In addition to recycling and savings, reduction in carbon emissions is achieved with the use of energy saving light bulbs, thermal insulation and sheathing, building automations, an environment friendly fleet of vehicles, paper recycling, the electronic document and documentation system, central printing systems, e-learning, telepresence and video conferencing.

It was informed that Türk Telekom sets annual targets for reducing electricity consumption and fuel consumption. Senior management and related employees were given targets for reducing annual electricity consumption. Türk Telekom representatives reported that despite the increase in the number of its customers and bandwidth, Türk Telekom succeeded in reducing its electricity consumption in the fixed segment by 3% in 2017-2019 period. Between 2013 and 2020, Türk Telekom's total electricity consumption is reduced by 8%.

4.3.2.5.2 Measures for productivity and human health at base stations

The measures taken and the solutions developed by Türk Telekom in order to achieve higher productivity at base stations and to protect human health are summarized below:

- Equipment with a high level of energy consumption in use at Türk Telekom is replaced with lower energy consuming models in line with the objective of increasing energy savings. This project, which is currently being carried out in the İzmir and Bursa regions, is significantly completed in 2020.
- Direct current ("DC") inverter energy sources, with high energy losses, have been replaced with models that operate at high efficiency. The old type of DC Inverter backup units, which later became redundant, have been recycled at the recycling facilities.
- In order to reduce greenhouse gas emissions at the base stations, environmentally friendly air conditioning gas have been used. Air conditioning units in the field were dismantled in 2019 and old-type free-cooling devices were installed in the fields for trial purposes following the software updates. Their energy consumption has been monitored; the project was expanded to 2020 and 2021 due to positive results.
- Energy losses are minimized by regular maintenance and repair of the base stations.
- Electromagnetic field measurements are carried out before and after installation of base stations, ensuring that they work safely, both for the public and for the environment.
- During the planning, design, installation and operation stages, attention is placed on minimizing the human and environmental intervention factors at base stations and all necessary precautions are taken.
- In the interests of human health and environmental safety, to prevent base stations from being affected by natural disasters and endangering the environment and public health, necessary emergency and safety equipment are in use, and necessary updates are periodically performed. In 2019, 750 base station towers underwent detailed inspection and updates were made in line with requirements.
- Base stations are monitored 24 hours a day with the highest level of operational capability achieved by ensuring the fastest response to the site in emergency situations and natural disasters.

4.3.2.6 Water Management

Within the framework of its sustainability approach, Türk Telekom carries out studies to reduce water consumption and closely monitors consumption quantity.

Türk Telekom's initiated a project namely "Bina Merkezileştirme Projesi (Building Centralization Project)" to reduce water consumption. In this scope, it is indicated that water consumption has been reduced since 2013 by optimizing the use of buildings every year and reducing the number buildings with people working inside. Additionally, in 2012, water started to be used more economically by installing an aerator on the tap mixers in all of its buildings across Turkey.



The photocell tap mixers are installed to contribute to the reduction of wasted water. In addition, there is a Gray Water System located in the “Aydınlıkevler Tower Building” in the Ankara Headquarter, which has been in operation for last three years. With this system, water consumption and associated costs are reduced by using the water used in the sinks again in the toilet tanks after the necessary treatment processes. Moreover, in the said Building, water is used in landscape irrigation by collecting rainwater in the building.

As a result of actions taken, a declining trend is realized in water consumption of Türk Telekom. By 2019, water consumption decreased by 31% over the last four years and decreased to 389,000 m³. In 2020, as a result of home office working structure that has been implemented, water consumption decreased by 35% to 257,000 m³.

4.3.2.7 Waste Management

Waste management strategies aimed at preventing the rapid consumption of natural resources and transforming waste from being a threat to the environment and human health into an input for the economy form the basis of the sustainable development approach, which is turning into a priority policy target on a global scale.

Türk Telekom carries out waste management in line with its environmental policy. There are temporary collection sites in workplaces established in line with national regulations. The generated wastes have been collected by types and stored accordingly. All wastes are sent to licensed facilities by licensed trucks of which process has been managed by environmental officer assigned.

4.3.2.7.1 Zero Waste Project

Within the framework of the principles for sustainable development, the Zero Waste Project was launched in Turkey with the aim of protecting the country’s resources, reducing waste and leaving a clean and developed Turkey and a habitable world to future generations.

Türk Telekom also takes part in the Zero Waste Project. As a result of the Zero Waste Project and Türk Telekom’s waste management procedures, paper, plastic, glass, and metal waste as well as waste oil have been recycled by licensed companies.

4.3.2.7.2 Waste Recycling

Türk Telekom takes actions for recycling of wastes in a manner that does not harm the environment and is in accordance with the standards and methods determined in the related regulations, and disposal of waste if recycling is not possible. Annual Report, 2020 indicates highlights from the results of waste management projects carried out in Türk Telekom in 2019:

- 3,165 grown pine trees were saved from being cut by recycling 186 tonnes of wastepaper.
- A total of 285.6 tonnes of greenhouse gas emission were reduced through the recycling of 3,000 tonnes of waste metal.
- A total of 789.5 kW of energy was saved as a result of recycling of 19 tonnes of glass.
- A total of 22,371 barrels oil savings were achieved with 1,373 tons of waste plastic recycling.

4.3.2.7.3 Electronic Waste Collection Campaign

According to the Regulation on Waste Electrical and Electronic Goods Control, targets are set for manufacturers to recycle the electrical and electronic devices they put on the market in the amount specified by year. In line with its targets set in accordance with this legislation, Türk Telekom continued its campaign, which it started in 2017, to collect its modems in the market in 2018 and 2019.



It is informed that with campaigns and organizations such as the Waste Collection Competition carried out within Türk Telekom, employees were able to contribute to the process and the revenues generated from the collected wastes are used to fund corporate social responsibility projects.

In order to increase awareness of the damage caused by electronic waste to the environment, to reduce such damage by recycling these wastes in the correct way and converting the resources obtained into value for Turkey, “E-atıklarınızı Getirin, Yarınlarımıza Daha Yeşil Bir Dünya Bırakın! (Bring Your E-Waste, Leave a Greener World for Tomorrow)” campaign was initiated. This campaign was organized in the form of a competition for Türk Telekom employees and their families. In the third phase of the project carried out in 2019, more than 10,000 items of e-waste were collected all over Turkey. A total of 18 tonnes electronic waste has been collected and sent to recycling with the help of project.

In 2017, with the revenue collected as a result of the Electronic Waste Collection Campaign, Türk Telekom provided a contribution to the education of 55 children. The electronic waste revenues generated as a result of the 2018 campaign was donated to the Kızılay (Turkish Red Crescent). The collected electronic waste is provided to use of highly intelligent children in their workshops.

4.4 ESS4: Community Health and Safety

4.4.1 Zoom

Zoom services give unimpeded access for people of all ages and abilities in different situations and under various circumstances. Zoom provides its users the infrastructure for interpretation services or by providing video options for its users sign language during the meetings can also be used.

Zoom sources reveal that the concepts of “telehealth” and “virtual care” have been critically important during the COVID-19 pandemic. The benefits of telehealth or virtual services provided through Zoom can be outlined as strengthening public health systems and improving health equity by reaching populations that have long been underserved or struggled with access to care. In addition, people living in rural areas, patients lacking reliable transportation or the ability to take time off work, and those with medical conditions that made it difficult to leave the house have access to telehealth or virtual care services provided through Zoom when and how it is most convenient for them.

4.4.2 Artek

The standard is relevant though the risk is evaluated as negligible owing to the unlikely impact of temporary and minor nuisance caused by the traffic impact relating to the transportation of servers procured. The subject servers were loaded into a standard vehicle fit for the purpose and transferred from İstanbul to Ankara in Turkey which has a distance of 450 km. This activity is a routine activity for the firm and considered as not having any community health and safety risk due to use of a specific highway.

For Türk Telekom, in the interests of human health and environmental safety, to prevent base stations from being affected by natural disasters and endangering the environment and public health, necessary emergency and safety equipment are in use, and necessary updates are periodically performed. In 2019, 750 base station towers underwent detailed inspection and updates were made in line with requirements.

4.5 ESS5: Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement

The standard is not relevant as there will be no restrictions on the use or access to land or any acquisition of land depending on contract activities.



4.6 ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources

The standard is not relevant because the nature of both contract activities will not cause any adverse impacts to biodiversity and natural resources.

4.7 ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

The standard is not relevant, as there are no groups in Turkey meeting the definition of this standard.

4.8 ESS8: Cultural Heritage

The standard is not relevant because both contract activities will not have any impact on cultural heritage.

4.9 ESS9: Financial Intermediaries

The standard is not relevant because no Financial Intermediaries are involved in the contract activities.

4.10 ESS10: Stakeholder Engagement and Information Disclosure

The standard is not relevant because the nature of both contract activities will not require any stakeholder engagement and information disclosure.



5 Conclusion

In line with the given evaluations and details on firms environmental and social management procedures and considering that the contracts' activities are limited to the supply of video communication service licenses and the supply and installation of eight servers each with 34.12 kg weight, it is concluded that the environmental and social risk and impacts associated with the contracts' activities is negligible.

Both firms are acknowledged with their high efforts on sustainability; therefore, it is considered that in the event of any environmental or social issues, firms are able to manage it in a manner consistent with best practices.



Annexes



Annex 1: References

- World Bank's Environmental and Social Framework
- World Bank Group's General Environmental, Health and Safety Guidelines
- National Legal Framework
- Code of Business Conduct and Ethics of Zoom (available at https://cdn.brandfolder.io/AMC8F81D/at/c5xcnvb48bw46jmxt8c8ht/Code-of-Conduct_External.pdf)
- K-12/Primary and Secondary Schools Privacy Statement (available at <https://zoom.us/docs/en-us/schools-privacy-statement.html>)
- <https://blog.zoom.us/zoom-cares-our-commitment-to-a-connected-sustainable-world/>
- <https://blog.zoom.us/how-video-meetings-are-helping-reduce-environmental-impact-infographic/>
- <https://blog.zoom.us/how-video-conferencing-makes-the-world-greener/>
- <https://blog.zoom.us/using-zoom-for-telehealth-virtual-care/>
- <https://blog.zoom.us/transforming-medical-landscape-telehealth-before-during-after-covid-19/>
- <https://www.nec.com/en/global/eco/product/eco/pdf/Zoom.pdf>
- <http://www2.eet.unsw.edu.au/~vijay/pubs/jrnl/14comcomVC.pdf>
- <https://davidmytton.blog/zoom-video-conferencing-energy-and-emissions/>
- Türk Telekom, Annual Report 2020
- Türk Telekom, Annual Report, 2019
- Türk Telekom, Business Ethics Code