

# Limited Assurance Report to the Board of Directors of Türk Telekomünikasyon A.Ş.

We have been engaged by Türk Telekomünikasyon A.Ş. (the "Company" or "Türk Telekom") to perform an independent limited assurance engagement in respect of the Selected Information stated in the Company's CDP Climate Change Report (the" 2022 CDP Climate Change Report") for the year ended 31 December 2021 and listed below.

## **Selected Information**

The scope of the Selected Information for the year ended 31 December 2021, which is subject to our independent limited assurance work, set out on the section C6: Emissions Data and "Annex 1: Türk Telekom 2022 CDP Climate Change Report-Reporting Principles" is summarised below:

- Direct (Scope 1) Greenhouse Gas Emissions from owned or controlled sources,
- Indirect (Scope 2) Greenhouse Gas Emissions from the generation of purchased energy,
- Indirect (Scope 3) Greenhouse Gas Emissions (not included in Scope 2).

Our independent limited assurance work was with respect to the year ended 31 December 2021 information only and we have not performed any procedures with respect to earlier periods or any other elements, other than Selected Information included in the 2022 CDP Climate Change Report and, therefore, do not express any conclusion thereon.

#### Criteria

The criteria used by the Company to prepare the Selected Information is set out in section Annex 1: Türk Telekom 2022 CDP Climate Change Report - Reporting Principles (the "Reporting Principles").

# The Company's Responsibility

The Company is responsible for the content of the 2022 CDP Climate Change Report and the preparation of the Selected Information in accordance with the Reporting Principles. This responsibility includes the design, implementation, and maintenance of internal control relevant to the preparation of Selected Information that is free from material misstatement, whether due to fraud or error.



#### **Inherent Limitations**

Non-financial performance information is subject to more inherent limitations than financial information, given the characteristics of the subject matter and the methods used for determining such information.

The absence of a significant body of established practice on which to draw to evaluate and measure non-financial information allows for different, but acceptable, measures and measurement techniques and can affect comparability between entities. The precision of different measurement techniques may also vary. Furthermore, the nature and methods used to determine such information, as well as the measurement criteria and the precision thereof, may change over time. It is important to read the Selected Information in the context of the Reporting Principles.

In particular, the conversion of different energy measures and energy used to carbon emissions is based upon, inter alia, information and factors generated internally and/or derived by independent third parties as explained in the Reporting Principles. Our assurance work has not included examination of the derivation of those factors and other third-party information.

## Our Independence and Quality Control

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality, and professional behaviour.

Our firm applies International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

# **Our Responsibility**

Our responsibility is to form a conclusion, based on limited assurance procedures, on whether anything has come to our attention that causes us to believe that the Selected Information has not been properly prepared in all material respects in accordance with the Reporting Guidance. We conducted our limited assurance engagement in accordance with International Standard on Assurance Engagements 3000 (Revised), "Assurance Engagements other than Audits or Reviews of Historical Financial Information", and, in respect of greenhouse gas emissions, International Standard on Assurance Engagements 3410, "Assurance Engagements on Greenhouse Gas Statements", issued by the International Auditing and Assurance Standards Board.

A limited assurance engagement is substantially less in scope than a reasonable assurance engagement under ISAE 3000 (Revised) and ISAE 3410. Consequently, the nature, timing, and extent of procedures for gathering sufficient appropriate evidence are deliberately limited relative to a reasonable assurance engagement.



The procedures we performed were based on our professional judgement and included inquiries, observation of processes performed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records.

Given the circumstances of the engagement, in performing the procedures listed above we:

- made inquiries of the persons responsible for the Selected Information;
- understood the process for collecting and reporting the Selected Information. This included analysing the key processes and controls for managing and reporting the Selected Information;
- evaluated the source data used to prepare the Selected Information and re-performed selected examples of calculation;
- performed limited substantive testing on a selective basis of the preparation and collation of the Selected Information prepared by the Company; and
- undertook analytical procedures over the reported data.

#### **Limited Assurance Conclusion**

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Company's Selected Information for the year ended 31 December 2021, is not properly prepared, in all material respects, in accordance with the Reporting Principles.

#### Restriction of Use

This report, including the conclusion, has been prepared for the Board of Directors of the Company as a body, to assist them in reporting Türk Telekomünikasyon A.Ş.'s performance and activities related to the Selected Information. We permit the disclosure of this report within the 2022 CDP Climate Change Report for the year ended 31 December 2021, to enable the Board of Directors to demonstrate they have discharged their governance responsibilities by commissioning an independent assurance report in connection with the Selected Information. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Board of Directors of Türk Telekomünikasyon A.Ş. as a body and Türk Telekomünikasyon A.Ş. for our work or this report save where terms are expressly agreed and with our prior consent in writing

PwC Bağımsız Denetim ve

Serbest Muhasebeci Mali Müşavirlik A.Ş.

Mehmet Cenk Uslu, SMMM

Partner

Istanbul, 28 July 2022

#### Annex-1: Türk Telekom 2022 CDP Climate Change Report - Reporting Guidance

Reporting principles provides information on the data collection and regarding the greenhouse gas (GHG) emissions (Scope 1, Scope 2, Scope 3) included in Türk Telekomünikasyon A.Ş. (the "Company" or "Türk Telekom") 2022 CDP Climate Change Report. Indicators within the scope of the audit include data from Türk Telekom's buildings, data centers, operations and maintenance centers, cell sites, and transmission systems, unless otherwise stated.

This reporting principles provides information on the data preparation, calculation principles and reporting methodologies of indicators within the scope of the independent limited assurance of the 2022 CDP Climate Change report. These indicators include the greenhouse gas (GHG) emissions (Scope 1, Scope 2, Scope 3) It is the responsibility of the Company's management to ensure that appropriate procedures are in place to prepare the indicators mentioned above in line with, in all material respects, the Guidance.

The data included in this guideline is for the FY21, fiscal year ended December 31, 2021, and as detailed in the "Key Definitions and Reporting Scope" section comprises only the relevant operations in Turkey is the responsibility of the Company by excluding information about base stations of Türk Telekom, group companies, affiliates and subcontractors.

## **General Reporting Principles**

In preparing this guidance document, consideration has been given to following principles:

- Information Preparation to highlight to users of the information the primary principles of relevance and reliability of information; and
- Information Reporting to highlight the primary principles of comparability / consistency with other data including prior year and understandability / transparency providing clarity to users.

# **Scope of Reporting**

For FY21, the greenhouse gas (GHG) emissions data of the Company is related to:

Indicator	Scope	
Scope 1, Scope 2 and Scope 3 Emissions (ton CO2-e)		
Scope 1 Emissions	This indicator means the emission of greenhouse gases due to the use of natural gas, LPG, coal, fuel-oil, diesel, gasoline consumption, refrigerants and fire extinguishers at the relevant locations of the Company during the reporting period.	
Scope 2 Emissions	This indicator means the emission of greenhouse gases due to the use of purchased electricity at the relevant locations of the Company during the reporting period.	
Scope 3 Emissions	This indicator means the emission of greenhouse gases due to employee commuting, flights, paper and tuner consumption at	

the relevant locations of the Company during the reporting
period.

#### **Data Preparation**

## **Environmental Indicators**

#### **Energy Consumption**

Energy consumption data are reported for electricity and primary fuel sources, which comprise natural gas, coal, fuel-oil, diesel and gasoline.

Electricity, natural gas, coal and fuel-oil consumption data are obtained from supplier meters and service provider invoices. Diesel and gasoline consumption for the use of generators and company owned vehicles are obtained from service provider invoices. Gasoline consumption for the use of company owned cars data are obtained from service provider invoices.

## Scope 1 and 2 Emissions

Scope 1, Scope 2 and Scope 3 emissions have been calculated in accordance with ISO 14064-1, with the principle of operational control within the framework of the "Greenhouse Gas Protocol: Corporate Accounting and Reporting Standard".

In the calculations, CO2 equivalent factors consisting of CO2, CH4, N2O, HFCs (refrigerant gas) CO2 equivalent emission factors were used. The emission factors used are detailed in the table below. Global Warming Potential (GWP) coefficients are from 5th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) and Greenhouse Gas Protocol (https://www.gov.uk/government/publications/greenhouse-gasreporting-conversion-factors-2021) and the UK DEFRA 2021 Emission Factors list. The resultant ton CO2 equivalent value is calculated by multiplying with the appropriate coefficients. Grid emission factor has been calculated by using the relevant annual data provided by Turkish Electricity Transmission Company (TEİAŞ).

Table 1: Türk Telekom 2021 CDP Climate Change Report – Reporting Guidance Emission Factors

Emission Factors – Scope 1	Emission Factor (kg CO <sub>2</sub> -e)
Diesel – company vehicles (kg/l)	2.665
Gasoline – company vehicles (kg/l)	2.309
Natural Gas (kg/sm³)	1.942
Fuel-oil (kg/l)	2.939
Diesel – generators and other (kg/l)	2.640
Refrigerant gases – R22 (kg/kg)	1,760.00
Refrigerant gases – R404A (kg/kg)	3,942.80
Refrigerant gases – R407C (kg/kg)	1,624.21
Refrigerant gases – R410A (kg/kg)	1,923.50
Refrigerant gases – R134A (kg/kg)	1,300.00
Fire Extinguishers – CO <sub>2</sub> (kg/kg)	1.00

Fire Extinguishers – HFC 227 fa fire supresants (kg/kg)	3,350.00
Fire Extinguishers – HFC 236 fa fire supresants (kg/kg)	8,060.00
Novec 1230 (kg/kg)	0.560

Emission Factors – Scope 2	Emission Factor (kg CO <sub>2</sub> -e)
Electricity (renewables) (GWh)	0.0000
Turkey Electrical energy (grid) (GWh)	455,314.39

Emission Factors – Scope 3	Emission Factor (kg CO <sub>2</sub> -e)
Employee Commuting (kg/vehicle.km)	0.487
Air Travel (Domestic) (kg/passenger.km)	0.246
Air Travel (Short Distance – Europe) (kg/ passenger.km)	0.184
Paper Consumption (kg/kg)	0.919
Tuner Consumption (kg/piece)	5.648

Total Scope 1 Emissions (tCO2-e)	130,576.20
Total Scope 2 Emissions (tCO2-e)	529,284.41
Total Scope 3 Emissions (tCO2-e)	3,991.32

## Restatement

The measuring and reporting of sustainability-related data inevitably involves a degree of estimation. Restatements are considered where there is a change in the data of greater than 5 percent at the Company level.