



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

We have been engaged by the Board of Directors of 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 2020 CDP Climate Change report”) for the year ended 31 December 2020 and listed below.

### **Selected Information**

The scope of the Selected Information for the year ended 31 December 2020, which is subject to our independent limited assurance work, set out on the section C6: Emissions Data and “Appendix 1: Türk Telekom 2020 CDP Climate Change 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) that occur in the value chain of the reporting company, including both upstream and downstream emissions.

Our independent limited assurance work was with respect to the year ended 31 December 2020 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 2020 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 Appendix 1: Türk Telekom 2020 CDP Climate Change Report - Reporting Principles (“Reporting Principles”).

### **The Company’s Responsibility**

The Company is responsible for the content of the 2020 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 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 judgment 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 2020, is not properly prepared, in all material respects, in accordance with the Reporting Principles.

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 2020 CDP Climate Change Report for the year ended 31 December 2020, 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 the 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, 27 July 2021

## **Annex 1: Türk Telekom 2020 CDP Climate Change Report – Reporting Principles**

Reporting principles provides information on the data collection and regarding the greenhouse gas (GHG) emissions (Scope 1, Scope 2 and Scope 3) included in Türk Telekom 2020 CDP Climate Change Report (“the 2020 CDP Climate Change report”).

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 2020 CDP Climate Change report. These indicators include the greenhouse gas (GHG) emissions (Scope 1, Scope 2 and 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 document is for the FY 20 (1 January – 31 December 2020), fiscal year ended December 31, 2020, comprises only the relevant operations of Türk Telekomünikasyon A.Ş. (“the Company”) in Turkey, that are the responsibility of the Company and excludes information about group companies.

### **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 FY20, the greenhouse gas (GHG) emissions data of the Company is related to:

Direct (Scope - 1) Greenhouse Gas Emissions from owned or controlled sources;

- Stationary combustion (fuels and heating sources),
- Mobile combustion (fuels),
- Fugitive emissions (refrigerant gas),

Indirect (Scope - 2) Greenhouse Gas Emissions from the generation of purchased energy;

- Consumption of purchased electricity,

Indirect (Scope - 3) Greenhouse Gas Emissions (not included in Scope 2) that occur in the value chain of the reporting company;

- Upstream activities (business travel, employee commuting, paper and toner consumption)

Energy consumption outside of the Company-owned or -operated locations originating from supplier or customer and their associated greenhouse gas emissions (Scope 1 and Scope 2) are omitted from the scope of reporting.

## Data Preparation

### *Greenhouse Gas (GHG) Emissions*

GHG emissions were calculated in accordance with IPCC, GHG Protocol and DEFRA, “GHG activity data multiplied by emission or removal factors” based calculation methodology has been applied for calculating GHG. Boundaries of the organization were addressed with a control approach, and the sources causing greenhouse gas emissions related production facilities under the control of the Company are as follows:

#### **Direct (Scope 1) Greenhouse Gas Emissions from owned or controlled sources:**

- Stationary combustion data is included fuels used in buildings such as natural gas and fuel oil.
- Mobile combustion data is included diesel and gasoline for company owned and leased cars.
- Fugitive gases data is included HFC gases (fire supresants and refrigerant gases) .

#### **Indirect (Scope - 2) Greenhouse Gas Emissions from the generation of purchased energy:**

- Consumption of purchased electricity data is included electricity consumption (GWh)

#### **Indirect (Scope - 3) Greenhouse Gas Emissions (not included in Scope 2) that occur in the value chain of the reporting company:**

- Upstream activities (business travel, employee commuting, paper and tuner consumption)

CO<sub>2</sub> equivalent factors for emissions CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and HFCs (refrigerant gas) were used in calculations. Emission factors and Global Warming Potential (GWP) coefficients were taken from Intergovernmental Panel on Climate Change (IPCC) 5th Assessment Report and the UK DEFRA 2020 Emission Factors list. Grid emission factor has been calculated by using the relevant annual data provided by Turkish Electricity Transmission Company (TEİAŞ). Emission factors used for calculation are as follows:

<b>Emission Factors – Scope 1</b>	<b>Emission Factor (kg CO<sub>2</sub>-e)</b>
Diesel – company vehicles (kg/l)	2.665
Gasoline – company vehicles (kg/l)	2.309
Natural Gas (kg/sm <sup>3</sup> )	1.942
Fuel-oil (kg/l)	3.127
Coal (kg/kg)	3.181
Diesel – generators and other (kg/l)	2.640
Gasoline – generators (kg/l)	2.230
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
Fire Extinguishers – CO <sub>2</sub> (kg/kg)	1.00
Fire Extinguishers – HFC 236 fa fire supresants (kg/kg)	8,060.00

  

<b>Emission Factors – Scope 2</b>	<b>Emission Factor (kg CO<sub>2</sub>-e)</b>
Electricity (renewables) (GWh)	0.0000
Turkey Electrical energy (grid) (GWh)	476,960.11

<b>Emission Factors – Scope 3</b>	<b>Emission Factor (kg CO<sub>2</sub>-e)</b>
Employee Commuting (kg/vehicle.km)	0.498
Air Travel (Domestic) (kg/passenger.km)	0.129
Air Travel (Short Distance – Europe) (kg/ passenger.km)	0.082
Air Travel (Long Distance – Overseas) (kg/ passenger.km)	0.101
Paper Consumption (kg/kg)	8.979
Tuner Consumption (kg/piece)	4.382
<b>Total Scope 1 Emissions (tCO<sub>2</sub>-e)</b>	129,419
<b>Total Scope 2 Emissions (tCO<sub>2</sub>-e)</b>	601,635
<b>Total Scope 3 Emissions (tCO<sub>2</sub>-e)</b>	6,032

### **Restatements**

The measuring and reporting of carbon emissions 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.