Exposure Draft
IFRS® Sustainability Disclosure Standard

[Draft] IFRS S2 Climate-related Disclosures
Appendix B Industry-based disclosure requirements
Volume B59—Telecommunication Services

Comments to be received by 29 July 2022
This industry from Appendix B Industry-based disclosure requirements accompanies the Exposure Draft ED/2022/S2 Climate-related Disclosures (published March 2022; see separate booklet). It is published by the International Sustainability Standards Board (ISSB) for comment only. Comments need to be received by 29 July 2022 and should be submitted by email to commentletters@ifrs.org or online at https://www.ifrs.org/projects/open-for-comment/.

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Introduction

This volume is part of Appendix B of [draft] IFRS S2 Climate-related Disclosures and is an integral part of that [draft] Standard. It has the same authority as the other parts of that [draft] Standard.

This volume sets out the requirements for identifying, measuring and disclosing information related to an entity’s significant climate-related risks and opportunities that are associated with specific business models, economic activities and other common features that characterise participation in this industry.

The industry-based disclosure requirements are derived from SASB Standards (see paragraphs B10–B12 of [Draft] IFRS S2 Climate-related Disclosures). Amendments to the SASB Standards, described in paragraph B11, are marked up for ease of reference. New text is underlined and deleted text is struck through. The metric codes used in SASB Standards have also been included, where applicable, for ease of reference. For additional context regarding the industry-based disclosure requirements contained in this volume, including structure and terminology, application and illustrative examples, refer to Appendix B paragraphs B3–B17.
Telecommunication Services

Industry Description

The Telecommunication Services industry consists of wireless and wireline telecommunications companies, as well as companies that provide cable and satellite services. The wireless services segment provides direct communication through radio-based cellular networks and operates and maintains the associated switching and transmission facilities. The wireline segment provides local and long distance voice communication via the Public Switched Telephone Network. Wireline carriers also offer voice over internet protocol (VoIP) telephone, television, and broadband internet services over an expanding network of fiber optic cables. Cable providers distribute television programming from cable networks to subscribers. They typically also provide consumers with video services, high-speed internet service, and VoIP. These services are traditionally bundled into packages that provide subscribers with easier payment options than paying for each service separately. Satellite companies distribute TV programming through broadcasting satellites orbiting the Earth or through ground stations. Companies serve customers primarily in their domestic markets, although some companies operate in several countries.

Sustainability Disclosure Topics & Metrics

Table 1. Sustainability Disclosure Topics & Metrics

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>METRIC</th>
<th>CATEGORY</th>
<th>UNIT OF MEASURE</th>
<th>CODE</th>
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<tbody>
<tr>
<td>Environmental Footprint of Operations</td>
<td>(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable</td>
<td>Quantitative</td>
<td>Gigajoules (GJ), Percentage (%)</td>
<td>TC-TL-130a.1</td>
</tr>
<tr>
<td>Managing Systemic Risks from Technology Disruptions</td>
<td>Discussion of systems to provide unimpeded service during service interruptions</td>
<td>Discussion and Analysis</td>
<td>n/a</td>
<td>TC-TL-550a.2</td>
</tr>
</tbody>
</table>

Note: TC-TL-000.A – Wireless subscribers are defined as those customers that contract with the entity for mobile services, which include cellular phone service and/or wireless data service.

Note: TC-TL-000.B – Wireline subscribers are defined as those customers that contract with the entity for fixed line phone services.

Note: TC-TL-000.C – Broadband subscribers are defined as those customers that contract with the entity for fixed line cable and internet services, which include WiFi connections.

Table 2. Activity Metrics

<table>
<thead>
<tr>
<th>ACTIVITY METRIC</th>
<th>CATEGORY</th>
<th>UNIT OF MEASURE</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of wireless subscribers 107</td>
<td>Quantitative</td>
<td>Number</td>
<td>TC-TL-000.A</td>
</tr>
<tr>
<td>Number of wireline subscribers 108</td>
<td>Quantitative</td>
<td>Number</td>
<td>TC-TL-000.B</td>
</tr>
<tr>
<td>Number of broadband subscribers 109</td>
<td>Quantitative</td>
<td>Number</td>
<td>TC-TL-000.C</td>
</tr>
<tr>
<td>Network traffic</td>
<td>Quantitative</td>
<td>Petabytes</td>
<td>TC-TL-000.D</td>
</tr>
</tbody>
</table>

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Environmental Footprint of Operations

Topic Summary

Individual telecommunication services companies consume substantial amounts of energy. Depending on the source of energy and the efficiency of its generation, electricity consumption by telecom network infrastructure can contribute significantly to environmental externalities, such as climate change, creating sustainability risks for the industry. Although network equipment and data centers are becoming more energy-efficient, their overall energy consumption is increasing with the expansion in telecommunication infrastructure and data traffic. The way in which telecommunication services companies manage their overall energy efficiency or intensity, their reliance on different types of energy, and their ability to access alternative sources of energy will become increasingly material as the global regulatory focus on climate change increases, bringing with it incentives for energy efficiency and renewable energy as well as pricing of greenhouse gas (GHG) emissions. Since expenditures on energy can be significant in the industry, companies that are able to improve the energy-efficiency of their operation are likely to see cost savings and higher profit margins.

Metrics

TC-TL-130a.1. (1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable

1 The entity shall disclose (1) the total amount of energy it consumed as an aggregate figure, in gigajoules (GJ).

1.1 The scope of energy consumption includes energy from all sources, including energy purchased from sources external to the entity and energy produced by the entity itself (self-generated). For example, direct fuel usage, purchased electricity, and heating, cooling, and steam energy are all included within the scope of energy consumption.

1.2 The scope of energy consumption includes only energy directly consumed by the entity during the reporting period.

1.3 In calculating energy consumption from fuels and biofuels, the entity shall use higher heating values (HHV), also known as gross calorific values (GCV), which are directly measured or taken from the Intergovernmental Panel on Climate Change (IPCC), the U.S. Department of Energy (DOE), or the U.S. Energy Information Administration (EIA).

2 The entity shall disclose (2) the percentage of energy it consumed that was supplied from grid electricity.

2.1 The percentage shall be calculated as purchased grid electricity consumption divided by total energy consumption.

3 The entity shall disclose (3) the percentage of energy it consumed that is renewable energy.
3.1 Renewable energy is defined as energy from sources that are replenished at a rate greater than or equal to their rate of depletion, such as geothermal, wind, solar, hydro, and biomass.

3.2 The percentage shall be calculated as renewable energy consumption divided by total energy consumption.

3.3 The scope of renewable energy includes renewable fuel the entity consumed, renewable energy the entity directly produced, and renewable energy the entity purchased, if purchased through a renewable power purchase agreement (PPA) that explicitly includes renewable energy certificates (RECs) or Guarantees of Origin (GOs), a Green-e Energy Certified utility or supplier program, or other green power products that explicitly include RECs or GOs, or for which Green-e Energy Certified RECs are paired with grid electricity.

3.3.1 For any renewable electricity generated on-site, any RECs and GOs must be retained (i.e., not sold) and retired or cancelled on behalf of the entity in order for the entity to claim them as renewable energy.

3.3.2 For renewable PPAs and green power products, the agreement must explicitly include and convey that RECs and GOs be retained or replaced and retired or cancelled on behalf of the entity in order for the entity to claim them as renewable energy.

3.3.3 The renewable portion of the electricity grid mix that is outside of the control or influence of the entity is excluded from the scope of renewable energy.

3.4 For the purposes of this disclosure, the scope of renewable energy from hydro and biomass sources is limited to the following:

3.4.1 Energy from hydro sources is limited to those that are certified by the Low Impact Hydropower Institute or that are eligible for a state Renewable Portfolio Standard.

3.4.2 Energy from biomass sources is limited to materials certified to a third-party standard (e.g., Forest Stewardship Council, Sustainable Forest Initiative, Programme for the Endorsement of Forest Certification, or American Tree Farm System), materials considered eligible sources of supply according to the Green-e Framework for Renewable Energy Certification, Version 1.0 (2017) or Green-e regional standards, and/or materials that are eligible for an applicable state renewable portfolio standard.

4 The entity shall apply conversion factors consistently for all data reported under this disclosure, such as the use of HHVs for fuel usage (including biofuels) and conversion of kilowatt hours (kWh) to GJ (for energy data including electricity from solar or wind energy).

5 The entity may disclose the trailing twelve-month (TTM) weighted average power usage effectiveness (PUE) for its data centers.
5.1 PUE is defined as the ratio of the total amount of power used by a computer data center facility to the amount of power delivered to computing equipment.

5.2 If disclosing PUE, the entity shall follow the guidance and calculation methodology described in PUE™: A Comprehensive Examination of the Metric (2014), published by ASHRAE and The Green Grid Association.
Managing Systemic Risks from Technology Disruptions

Topic Summary

Given the systemic importance of telecommunications networks, systemic or economy-wide disruption may be created if the network infrastructure of telecommunication services companies is unreliable and prone to business continuity risks. As the frequency of extreme weather events associated with climate change increases, telecommunication services companies will face growing physical threats to network infrastructure, with potentially significant social or systemic impacts. In the absence of resilient and reliable infrastructure, companies may face lost revenue associated with service outages and unplanned capital expenditures to repair damaged or compromised equipment. Companies that successfully implement measures to address business continuity risks, including an identification of critical business operations, or to enhance resilience of the system are likely to substantially reduce their risk exposure and, hence, lower their cost of capital. While implementation of such measures may have upfront costs, companies are likely to see long-term benefits in terms of lower remediation expenses in cases of high-impact disruptions.

Metrics

TC-TL-550a.2. Discussion of systems to provide unimpeded service during service interruptions

1 The entity shall discuss business continuity risks associated with technology disruptions affecting operations.

1.1 Examples of disruptions include, but are not limited to, those caused by technical failures, programming errors, cyber attacks, weather events, or natural disasters at hosting facilities.

2 The entity shall discuss measures to address business continuity risks, including an identification of critical business operations and redundancies or other measures implemented to enhance resilience of the system or to reduce impact, including insurance against loss.

3 The entity may discuss estimated amount of potential loss, probability of that loss, and the associated timeframe. These estimates may be based on insurance figures or other third-party or internal assessments of potential loss.