CABLE & SATELLITE
Sustainability Accounting Standard

About SASB
The Sustainability Accounting Standards Board (SASB) provides sustainability accounting standards for use by publicly listed corporations in the U.S. in disclosing material sustainability information for the benefit of investors and the public. SASB standards are designed for disclosure in mandatory filings to the Securities and Exchange Commission (SEC), such as the Form 10-K and 20-F. SASB is an independent 501(c)3 non-profit organization. Through 2016, SASB is developing standards for more than 80 industries in 10 sectors.

SUSTAINABILITY ACCOUNTING STANDARDS BOARD
75 Broadway, Suite 202
San Francisco, CA 94111
415.830.9220
info@sasb.org

www.sasb.org

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INTRODUCTION

Purpose & Structure

This document contains the SASB Sustainability Accounting Standard (SASB Standard) for Cable & Satellite.

SASB Standards are comprised of (1) disclosure guidance and (2) accounting standards on sustainability topics for use by U.S. and foreign public companies in their annual filings (Form 10-K or 20-F) with the U.S. Securities and Exchange Commission (SEC). To the extent relevant, SASB Standards may also be applicable to other periodic mandatory filings with the SEC, such as the Form 10-Q, Form S-1, and Form 8-K.

SASB’s disclosure guidance identifies sustainability topics at an industry level, which may be material—depending on a company’s specific operating context—to a company within that industry.

Each company is ultimately responsible for determining which information is material and is therefore required to be included in its Form 10-K or 20-F and other periodic SEC filings.

SASB’s accounting standards provide companies with standardized accounting metrics to account for performance on industry-level sustainability topics. When making disclosure on sustainability topics, companies adopting SASB’s accounting standards will help to ensure that disclosure is standardized and therefore useful, relevant, comparable, and auditable.

Industry Description

The Cable & Satellite industry is comprised of companies that provide various cable and satellite services, including television video, Internet, and phone services on a subscription basis throughout the United States. Cable providers distribute television programming from cable networks to subscribers. They typically provide consumers with video services, high-speed Internet service, and telephone services over the Internet (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. Both satellite and cable companies compete in the same market for delivering television content to households, which is the industry’s main market segment. This industry excludes telecommunications companies such as AT&T and Verizon, which SASB classifies in the Telecommunications industry (TC0301) within the Technology & Communications sector.
Guidance for Disclosure of Material Sustainability Topics in SEC Filings

1. Industry-Level Sustainability Disclosure Topics

For the Cable & Satellite industry, SASB has identified the following sustainability disclosure topics:

- Infrastructure Energy Use & Fleet Fuel Consumption
- Data Privacy
- Data Security
- Managing Systemic Risks from Technology Disruptions
- Competitive Behavior and Open Internet

2. Company-Level Determination and Disclosure of Material Sustainability Topics

Sustainability disclosures are governed by the same laws and regulations that govern disclosures by securities issuers generally. According to the U.S. Supreme Court, a fact is material if, in the event such fact is omitted from a particular disclosure, there is “a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the ‘total mix’ of the information made available.”1,2

SASB has attempted to identify those sustainability topics that it believes may be material for all companies within each SICS industry. SASB recognizes, however, that each company is ultimately responsible for determining what is material to it.

Regulation S-K, which sets forth certain disclosure requirements associated with Form 10-K and other SEC filings, requires companies, among other things, to describe in the Management’s Discussion and Analysis of Financial Condition and Results of Operations (MD&A) section of Form 10-K “any known trends or uncertainties that have had or that the registrant reasonably expects will have a material favorable or unfavorable impact on net sales or revenues or income from continuing operations. If the registrant knows of events that will cause a material change in the relationship between costs and revenues (such as known future increases in costs of labor or materials or price increases or inventory adjustments), the change in the relationship shall be disclosed.”2

Furthermore, Instructions to Item 303 state that the MD&A “shall focus specifically on material events and uncertainties known to management that would cause reported financial information not to be necessarily indicative of future operating results or of future financial condition.”2

In determining whether a trend or uncertainty should be disclosed, the SEC has stated that management should use a two-part assessment based on probability and magnitude:

- First, a company is not required to make disclosure about a known trend or uncertainty if its management determines that such trend or uncertainty is not reasonably likely to occur.
- Second, if a company’s management cannot make a reasonable determination of the likelihood of an event or uncertainty, then disclosure is required unless management determines that a material effect on the registrant’s financial condition or results of operation is not reasonably likely to occur.

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3. Sustainability Accounting Standard Disclosures in Form 10-K

a. Management’s Discussion and Analysis

Companies should consider making disclosure on sustainability topics as a complete set in the MD&A, in a sub-section titled “Sustainability Accounting Standards Disclosures.”

b. Other Relevant Sections of Form 10-K

In addition to the MD&A section, companies should consider disclosing sustainability information in other sections of Form 10-K, as relevant, including:

- **Description of business**—Item 101 of Regulation S-K requires a company to provide a description of its business and its subsidiaries. Item 101(c)(1)(xii) expressly requires disclosure regarding certain costs of complying with environmental laws:

  Appropriate disclosure also shall be made as to the material effects that compliance with Federal, State and local provisions which have been enacted or adopted regulating the discharge of materials into the environment, or otherwise relating to the protection of the environment, may have upon the capital expenditures, earnings and competitive position of the registrant and its subsidiaries.

- **Legal proceedings**—Item 103 of Regulation S-K requires companies to describe briefly any material pending or contemplated legal proceedings. Instructions to Item 103 provide specific disclosure requirements for administrative or judicial proceedings arising from laws and regulations that target discharge of materials into the environment or that are primarily for the purpose of protecting the environment.

- **Risk factors**—Item 503(c) of Regulation S-K requires filing companies to provide a discussion of the most significant factors that make an investment in the registrant speculative or risky, clearly stating the risk and specifying how a particular risk affects the particular filing company.

c. Rule 12b-20

Securities Act Rule 408 and Exchange Act Rule 12b-20 require a registrant to disclose, in addition to the information expressly required by law or regulation, “such further material information, if any, as may be necessary to make the required statements, in light of the circumstances under which they are made, not misleading.”


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3 SEC [Release Nos. 33-8056, 34-45321, FR-61] Commission Statement about Management’s Discussion and Analysis of Financial Condition and Results of Operations: “We also want to remind registrants that disclosure must be both useful and understandable. That is, management should provide the most relevant information and provide it using language and formats that investors can be expected to understand. Registrants should be aware also that investors will often find information relating to a particular matter more meaningful if it is disclosed in a single location, rather than presented in a fragmented manner throughout the filing.”
Guidance on Accounting of Material Sustainability Topics

For sustainability disclosure topics in the Cable & Satellite industry, SASB identifies accounting metrics.

SASB recommends that each company consider using these sustainability accounting metrics when disclosing its performance with respect to each of the sustainability topics it has identified as material.

As appropriate—and consistent with Rule 12b-204—for each sustainability topic, companies should consider including a narrative description of any material factors necessary to ensure completeness, accuracy, and comparability of the data reported. Where not addressed by the specific accounting metrics, but relevant, the registrant should discuss the following, related to the topic:

- The registrant’s strategic approach to managing performance on material sustainability issues;
- The registrant’s competitive positioning;
- The degree of control the registrant has;
- Any measures the registrant has undertaken or plans to undertake to improve performance; and
- Data for the registrant’s last three completed fiscal years (when available).

SASB recommends that registrants use SASB Standards specific to their primary industry as identified in the Sustainable Industry Classification System (SICSTM). If a registrant generates significant revenue from multiple industries, SASB recommends that it consider the materiality of the sustainability issues that SASB has identified for those industries and disclose the associated SASB accounting metrics.

Users of the SASB Standards

The SASB Standards are intended for companies that engage in public offerings of securities registered under the Securities Act of 1933 (the Securities Act) and those that issue securities registered under the Securities Exchange Act of 1934 (the Exchange Act), for use in SEC filings, including, without limitation, annual reports on Form 10-K (Form 20-F for foreign issuers), quarterly reports on Form 10-Q, current reports on Form 8-K, and registration statements on Forms S-1 and S-3. Nevertheless, disclosure with respect to the SASB Standards is not required or endorsed by the SEC or other entities governing financial reporting, such as FASB, GASB, or IASB.

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4 SEC Rule 12b-20: “In addition to the information expressly required to be included in a statement or report, there shall be added such further material information, if any, as may be necessary to make the required statements, in the light of the circumstances under which they are made, not misleading.”

5 Registration under the Securities Exchange Act of 1934 is required (1) for securities to be listed on a national securities exchange such as the New York Stock Exchange, the NYSE Amex, and the NASDAQ Stock Market or (2) if (A) the securities are equity securities and are held by more than 2,000 persons (or 500 persons who are not accredited investors) and (B) the company has more than $10 million in assets.
Scope of Disclosure

Unless otherwise specified, SASB recommends:

- That a registrant disclose on sustainability issues and metrics for itself and for entities in which the registrant has a controlling interest and therefore are consolidated for financial reporting purposes (controlling interest is generally defined as ownership of 50% or more of voting shares);6

- That for consolidated entities, disclosures be made, and accounting metrics calculated, for the whole entity, regardless of the size of the minority interest; and

- That information from unconsolidated entities not be included in the computation of SASB accounting metrics. A registrant should disclose, however, information about unconsolidated entities to the extent that the registrant considers the information necessary for investors to understand its performance with respect to sustainability issues (typically, this disclosure would be limited to risks and opportunities associated with these entities).

Reporting Format

Activity Metrics and Normalization

SASB recognizes that normalizing accounting metrics is important for the analysis of SASB disclosures.

SASB recommends that a registrant disclose any basic business data that may assist in the accurate evaluation and comparability of disclosure, to the extent that they are not already disclosed in the Form 10-K (e.g., revenue, EBITDA, etc.).

Such data—termed “activity metrics”—may include high-level business data such as total number of employees, quantity of products produced or services provided, number of facilities, or number of customers. It may also include industry-specific data such as plant capacity utilization (e.g., for specialty chemical companies), number of transactions (e.g., for Internet media and services companies), hospital bed days (e.g., for health care delivery companies), or proven and probable reserves (e.g., for oil and gas exploration and production companies).

Activity metrics disclosed should:

- Convey contextual information that would not otherwise be apparent from SASB accounting metrics.

- Be deemed generally useful for users of SASB accounting metrics (e.g., investors) in performing their own calculations and creating their own ratios.

- Be explained and consistently disclosed from period to period to the extent they continue to be relevant. However, a decision to make a voluntary disclosure in one period does not obligate a continuation of that disclosure if it is no longer relevant or if a better metric becomes available.

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6 See US GAAP consolidation rules (Section 810).
Where relevant, SASB recommends specific activity metrics that—at a minimum—should accompany SASB accounting metric disclosures.

<table>
<thead>
<tr>
<th>ACTIVITY METRIC</th>
<th>CATEGORY</th>
<th>UNIT OF MEASURE</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of customers and number of customers as (1) video subscribers, (2) high-speed data subscribers, and (3) voice subscribers</td>
<td>Quantitative</td>
<td>Number</td>
<td>SV0303-A</td>
</tr>
<tr>
<td>Number of service calls</td>
<td>Quantitative</td>
<td>Number</td>
<td>SV0303-B</td>
</tr>
<tr>
<td>Data center processing capacity, percentage outsourced</td>
<td>Quantitative</td>
<td>See note</td>
<td>SV0303-C</td>
</tr>
<tr>
<td>Network traffic</td>
<td>Quantitative</td>
<td>Petabytes</td>
<td>SV0303-D</td>
</tr>
<tr>
<td>Network bandwidth capacity, percentage leased</td>
<td>Quantitative</td>
<td>Megabits per second (Mbps), Percentage (%)</td>
<td>SV0303-E</td>
</tr>
</tbody>
</table>

Units of Measure

Unless specified, disclosures should be reported in International System of Units (SI units).

Uncertainty

SASB recognizes that there may be inherent uncertainty when disclosing certain sustainability data and information. This may be related to variables such as the imperfectness of third-party reporting systems or the unpredictable nature of climate events. Where uncertainty around a particular disclosure exists, SASB recommends that the registrant should consider discussing its nature and likelihood.

Estimates

SASB recognizes that scientifically-based estimates, such as the reliance on certain conversion factors or the exclusion of de minimis values, may be necessary for certain quantitative disclosures. Where appropriate, SASB does not discourage the use of such estimates. When using an estimate for a particular disclosure, SASB expects that the registrant discuss its nature and substantiate its basis.

Timing

Unless otherwise specified, disclosure shall be for the registrant’s fiscal year.

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7 Note to SV0303-C - Data processing capacity shall be reported in units of measure typically tracked by the registrant or used as the basis for contracting software and IT services, such as Million Service Units (MSUs), Million Instructions Per Second (MIPS), Mega Floating-Point Operations Per Second (MFLOPS), compute cycles, or other units. Alternatively, the registrant may disclose owned and outsourced data processing needs in other units of measure, such as rack space or data center square footage. The percentage outsourced shall include co-location facilities and cloud services (e.g., Platform as a Service and Infrastructure as a Service).

8 Note to SV0303-E - The registrant shall disclose the network bandwidth capacity as the maximum throughput of the network system, including owned and leased capacity. The percentage leased is defined as network capacity for which infrastructure is not owned by the registrant.
Limitations

There is no guarantee that SASB Standards address all sustainability impacts or opportunities associated with a sector, industry, or company, and therefore, a company must determine for itself the topics—sustainability-related or otherwise—that warrant discussion in its SEC filings.

Disclosure under SASB Standards is voluntary. It is not intended to replace any legal or regulatory requirements that may be applicable to user operations. Where such laws or regulations address legal or regulatory topics, disclosure under SASB Standards is not meant to supersede those requirements. Disclosure according to SASB Standards shall not be construed as demonstration of compliance with any law, regulation, or other requirement.

SASB Standards are intended to be aligned with the principles of materiality enforced by the SEC. However, SASB is not affiliated with or endorsed by the SEC or other entities governing financial reporting, such as FASB, GASB, or IASB.

Forward-looking Statements

Disclosures on sustainability topics can involve discussion of future trends and uncertainties related to the registrant’s operations and financial condition, including those influenced by external variables (e.g., environmental, social, regulatory, and political). Companies making such disclosures should familiarize themselves with the safe harbor provisions of Section 27A of the Securities Act and Section 21E of the Exchange Act, which preclude civil liability for material misstatements or omissions in such statements if the registrant takes certain steps, including, among other things, identifying the disclosure as “forward-looking” and accompanying such disclosure with “meaningful cautionary statements identifying important factors that could cause actual results to differ materially from those in the forward-looking statements.”

Assurance

In disclosing to SASB Standards, it is expected that registrants disclose with the same level of rigor, accuracy, and responsibility as they apply to all other information contained in their SEC filings.

SASB encourages registrants to use independent assurance (attestation); for example, an Examination Engagement to AT Section 101.

The following sections contain the disclosure guidance associated with each accounting metric such as guidance on definitions, scope, accounting, compilation, and presentation.

The term “shall” is used throughout this document to indicate those elements that reflect requirements of the Standard. The terms “should” and “may” are used to indicate guidance, which, although not required, provides a recommended means of disclosure.
Table 1. Sustainability Disclosure Topics & Accounting Metrics

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>ACCOUNTING METRIC</th>
<th>CATEGORY</th>
<th>UNIT OF MEASURE</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Infrastructure Energy Use &amp; Fleet Fuel Consumption</strong></td>
<td>Operational energy consumed, percentage grid electricity, percentage renewable</td>
<td>Quantitative</td>
<td>Gigajoules, Percentage (%)</td>
<td>SV0303-01</td>
</tr>
<tr>
<td></td>
<td>Fleet fuel consumed, percentage renewable</td>
<td>Quantitative</td>
<td>Gigajoules, Percentage (%)</td>
<td>SV0303-02</td>
</tr>
<tr>
<td><strong>Data Privacy</strong></td>
<td>Discussion of policies and practices relating to collection, usage, and retention of customer information and personally identifiable information</td>
<td>Discussion and Analysis</td>
<td>n/a</td>
<td>SV0303-03</td>
</tr>
<tr>
<td></td>
<td>Percentage of users whose customer information is collected for secondary purposes, percentage who have opted in</td>
<td>Quantitative</td>
<td>Percentage (%)</td>
<td>SV0303-04</td>
</tr>
<tr>
<td></td>
<td>Amount of legal and regulatory fines and settlements associated with customer privacy</td>
<td>Quantitative</td>
<td>U.S. Dollars ($)</td>
<td>SV0303-05</td>
</tr>
<tr>
<td></td>
<td>Number of government or law enforcement requests for customer information, percentage resulting in disclosure</td>
<td>Quantitative</td>
<td>Number, Percentage (%)</td>
<td>SV0303-06</td>
</tr>
<tr>
<td><strong>Data Security</strong></td>
<td>Number of data security breaches, percentage involving customers' personally identifiable information</td>
<td>Quantitative</td>
<td>Number, Percentage (%)</td>
<td>SV0303-07</td>
</tr>
<tr>
<td></td>
<td>Discussion of management approach to identifying and addressing data security risks</td>
<td>Discussion and Analysis</td>
<td>n/a</td>
<td>SV0303-08</td>
</tr>
<tr>
<td><strong>Managing Systemic Risks from Technology Disruptions</strong></td>
<td>(1) Average Interruption Frequency and (2) Average Interruption Duration</td>
<td>Quantitative</td>
<td>Disruptions per customer, Hours per customer</td>
<td>SV0303-09</td>
</tr>
<tr>
<td></td>
<td>Description of systems to provide unimpeded service</td>
<td>Discussion and Analysis</td>
<td>n/a</td>
<td>SV0303-10</td>
</tr>
<tr>
<td><strong>Competitive Behavior &amp; Open Internet</strong></td>
<td>Amount of legal and regulatory fines and settlements associated with anti-competitive practices</td>
<td>Quantitative</td>
<td>U.S. Dollars ($)</td>
<td>SV0303-11</td>
</tr>
</tbody>
</table>

9 Note to SV0303-05 - Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.
10 Note to SV0303-07 - Disclosure shall include a description of corrective actions implemented in response to data security incidents or threats.
11 Note to SV0303-09 - Disclosure shall include a description of each significant performance issue or service disruption and any corrective actions taken to prevent future disruptions.
12 Note to SV0303-11 - Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.
Table 1. Sustainability Disclosure Topics & Accounting Metrics (cont.)

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>ACCOUNTING METRIC</th>
<th>CATEGORY</th>
<th>UNIT OF MEASURE</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue from paid peering agreements with (1) content providers and</td>
<td></td>
<td>Quantitative</td>
<td>U.S. Dollars ($)</td>
<td>SV0303-12</td>
</tr>
<tr>
<td>(2) other networks and service providers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average actual sustained download speed of (1) owned and</td>
<td></td>
<td>Quantitative</td>
<td>Mbps</td>
<td>SV0303-13</td>
</tr>
<tr>
<td>commercially-associated content and (2) non-associated content</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discussion of risks and opportunities associated with Open Internet</td>
<td></td>
<td>Discussion and</td>
<td>n/a</td>
<td>SV0303-14</td>
</tr>
<tr>
<td>Principles and other potential regulation</td>
<td></td>
<td>Analysis</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Infrastructure Energy Use & Fleet Fuel Consumption

Description
Cable & Satellite companies use electricity to power their broadcast facilities and data centers. Since many of their facilities need to be powered continuously, cost savings from energy efficiency and the mitigation of risks of power disruptions are important. Companies in this industry also own large commercial fleets. As a result, the use of efficient routing, higher fuel economy, and cleaner vehicles could reduce companies’ Scope 1 greenhouse gas (GHG) emissions and fuel costs.

Accounting Metrics
SV0303-01. Operational energy consumed, percentage grid electricity, percentage renewable

.02 The registrant shall disclose energy consumption from all sources, except fleet vehicles, as an aggregate figure in gigajoules or their multiples.

- The scope includes energy purchased from sources external to the organization or produced by the organization itself (self-generated).
- The scope includes only energy consumed by entities owned or controlled by the organization.
- The scope includes energy from all sources including direct fuel usage (except for fleet vehicles), purchased electricity, and heating, cooling, and steam energy.
- The scope of disclosure excludes fuel consumption by fleet vehicles.

.03 In calculating energy consumption from fuels and biofuels, the registrant 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).

.04 The registrant shall disclose purchased grid electricity consumption as a percentage of its energy consumption.

.05 The registrant shall disclose renewable energy consumption as a percentage of its energy consumption.

- The scope of renewable energy includes renewable fuel the registrant consumes and renewable energy the registrant directly produces, purchases through a renewable power purchase agreement (PPA) that explicitly includes renewable energy certificates (RECs), or for which Green-e Energy Certified RECs are paired with grid electricity.
  - For any renewable electricity generated on-site, any RECs must be retained (i.e., not sold) and retired on behalf of the registrant in order for the registrant to claim them as renewable energy.
  - For renewable PPAs, the agreement must explicitly include and convey that RECs be retained and retired on behalf of the registrant in order for the registrant to claim them as renewable energy.
• The renewable portion of the electricity grid mix that is outside of the control or influence of the registrant is excluded from disclosure.13

06 Renewable energy is defined as energy from sources that are capable of being replenished in a short time through ecological cycles, such as geothermal, wind, solar, hydro, and biomass.

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

  ▪ Energy from hydro sources that are certified by the Low Impact Hydropower Institute.

  ▪ Energy from biomass sources is limited to sources that are considered “eligible renewables” according to the Green-e Energy National Standard Version 2.4 or that are eligible for a state Renewable Portfolio Standard.

07 The registrant 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 kWh to gigajoules (including for electricity from solar or wind energy).

SV0303-02. Fleet fuel consumed, percentage renewable

08 The registrant shall disclose total fuel consumption by fleet vehicles as an aggregate figure in gigajoules or their multiples.

• The scope includes fuel consumed by vehicles owned or operated by the registrant.

09 Fuel consumption shall be based on actual fuel consumed (i.e., not based on design parameters).

10 Acceptable methods for calculating fuel consumption include adding fuel purchases made during the year to any inventory at the start of the year and subtracting any fuel inventory at the end of the year, or tracking fuel consumption by vehicle or through expense reports.

11 The registrant shall disclose renewable fuel consumption as a percentage of its total fuel consumption.

• Renewable fuel is defined, consistent with the U.S. EPA’s Renewable Fuel Standard (40 CFR Section 80.1401), as a fuel which meets the following requirements:

  ▪ Fuel that is produced from renewable biomass.

  ▪ Fuel that is used to replace or reduce the quantity of fossil fuel present in a transportation fuel, heating oil, or jet fuel.

  ▪ Fuel that has lifecycle GHG emissions that are at least 20 percent less than baseline lifecycle GHG emissions, unless the fuel is exempt from this requirement pursuant to § 80.1403.

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13 SASB recognizes that RECs reflect the environmental attributes of renewable energy that have been introduced to the grid, and that a premium has been paid by the purchaser of the REC to enable generation of renewable energy beyond any renewable energy already in the grid mix, absent the market for RECs.
.12 In calculating energy consumption from fuels and biofuels, the registrant shall use HHV, also known as GCV, which are directly measured or taken from the IPCC, the U.S. DOE, or the U.S. EIA.

.13 The registrant shall apply conversion factors consistently for all data reported under this disclosure, such as the use of HHVs for fuel usage (including biofuels).
Data Privacy

Description

Through the services that they provide, Cable & Satellite companies have access to growing volumes of customer data. Companies are increasingly looking to monetize such data, which may include web browsing histories and behavioral and demographic information. One popular use for the data is to provide targeted advertising to customers. Growing public concern about privacy has led to increased regulatory scrutiny over the use, collection, and sale of consumer data. These trends are increasing the importance to Cable & Satellite companies of adopting and communicating in a transparent manner policies about providing customer data to third parties, including the amount and type of data provided and the nature of its use (for example, use for commercial purposes).

Accounting Metrics

SV0303-03. Discussion of policies and practices relating to collection, usage, and retention of customer information and personally identifiable information

1.4 The registrant shall describe the nature, scope, and implementation of its policies and practices related to customer privacy, with a specific focus on how it addresses the collection, usage, and retention of customer information, demographic data, customer behavioral data, location data from cellphone usage, and personally identifiable information, where:

- Customer information includes information that pertains to a user’s attributes or actions, including, but not limited to, records of communications, content of communications, demographic data, behavioral data, location data, or personally identifiable information.

- Demographic data is defined as the quantifiable statistics that identify and distinguish a given population. Examples of demographic data include gender, age, ethnicity, knowledge of languages, disabilities, mobility, home ownership, and employment status.

- Behavioral data is defined as the product of tracking, measuring, and recording individual behaviors such as consumers’ online browsing patterns, buying habits, brand preferences, and product usage patterns, among others.

- Location data is defined as data describing the physical location or movement patterns of an individual, such as Global Positioning System coordinates or other related data that would enable identifying and tracking of an individual’s physical location.

- Personally Identifiable Information (PII) is defined as any information about an individual that is maintained by an entity, including (1) any information that can be used to distinguish or trace an individual’s identity, such as name, Social Security number, date and place of birth, mother’s maiden name, or biometric records; and (2) any other information that is linked or linkable to an individual, such as medical, educational, financial, and employment information.14

The registrant shall describe the information “lifecycle” (i.e., collection, use, retention, processing, disclosure, and destruction of information) and how information-handling practices at each stage may affect individuals’ privacy.

- With respect to data collection, it may be relevant for the registrant to discuss which data or types of data are collected without the consent of an individual, which require opt-in consent, and which require opt-out action from the individual.

- With respect to usage of data, it may be relevant for the registrant to discuss which data or types of data are used by the registrant internally, and under which circumstances the registrant shares, sells, rents, or otherwise distributes data or information to third parties.

- With respect to retention, it may be relevant for the registrant to discuss which data or types of data it retains, the length of time of retention, and practices used to ensure that data is stored securely.

The registrant shall discuss the degree to which its policies and practices address similar issues as those outlined in the OMB Guidance for Implementing the Privacy Provisions of the E-Government Act of 2002 (M-03-22), including use of Privacy Impact Assessments (PIAs), where:

- A PIA is an analysis of how information is handled that ensures handling conforms to applicable legal, regulatory, and policy requirements regarding privacy; determines the risks and effects of collecting, maintaining, and disseminating information in identifiable form in an electronic information system; and examines and evaluates protections and alternative processes for handling information in order to mitigate potential privacy risks.

- As outlined by OMB M-03-22, PIAs must analyze and describe: (a) what information is to be collected, (b) why the information is being collected, (c) the intended use of the information, (d) with whom the information will be shared, (e) what opportunities individuals have to decline to provide information (i.e., where providing information is voluntary) or to consent to particular uses of the information (other than required or authorized uses), including how individuals can grant consent, and (f) how the information will be secured, among other government-specific requirements.

The registrant shall discuss how its policies and practices related to the privacy of customer information address children’s privacy, which at a minimum includes the provisions of the Children’s Online Privacy Protection Act (COPPA).

SV0303-04. Percentage of users whose customer information is collected for secondary purposes, percentage who have opted in

The registrant shall indicate the percentage of customers whose customer information is collected for its own secondary use or for transfer to a third party, where:

- Customer information includes information that pertains to a user’s attributes or actions, including, but not limited to, records of communications, content of communications, demographic data, behavioral data, location data, or PII.
Demographic data is defined as the quantifiable statistics that identify and distinguish a given population. Examples of demographic data include gender, age, ethnicity, knowledge of languages, disabilities, mobility, home ownership, and employment status.

Behavioral data is defined as the product of tracking, measuring, and recording individual behaviors such as consumers’ online browsing patterns, buying habits, brand preferences, and product usage patterns, among others.

Location data is defined as data describing the physical location or movement patterns of an individual, such as Global Positioning System coordinates or other related data that would enable identifying and tracking of an individual’s physical location.

“Secondary purpose” is defined as the intentional use of data by the registrant (i.e., not a breach of security) that is outside the primary purpose for which the data was collected. Examples of secondary uses include, but are not limited to, selling targeted ads, selling aggregated behavioral or location data, improving the registrant’s own product and service offerings, and transferring data or information to a third party through sale, rental, or sharing.

Of the users whose customer information is collected for secondary use or transfer to third parties, the registrant shall indicate the percentage that provided opt-in consent, where:

- Opt-in is defined as express affirmative consent required to use or share content.

The registrant may choose to discuss what type of customer information is collected, the extent of data collected from different groups, and/or the types of secondary uses for which demographic data is collected.

SV0303-05. Amount of legal and regulatory fines and settlements associated with customer privacy

The registrant shall disclose the amount, in U.S. dollars, (excluding legal fees) of all fines or settlements associated with incidents relating to customer privacy, including, but not limited to, violations of COPPA, Directive 2002/58/EC (ePrivacy Directive), the U.S.-E.U. Safe Harbor Program, and the Federal Trade Commission Privacy Act.

Disclosure shall include civil actions (e.g., civil judgment, settlements, or regulatory penalties) and criminal actions (e.g., criminal judgment, penalties, or restitutions) taken by any entity (government, businesses, or individuals).

Note to SV0303-05

The registrant shall briefly describe the nature (e.g., guilty plea, deferred agreement, or non-prosecution agreement) and context (e.g., unauthorized monitoring, sharing of data, children’s privacy, etc.) of fines and settlements.

The registrant shall describe any corrective actions it has implemented as a result of each incident. This may include, but is not limited to, specific changes in operations, management, processes, products, business partners, training, or technology.
All disclosure shall be sufficient such that it is specific to the risks the registrant faces, but disclosure itself will not compromise the registrant’s ability to maintain data privacy and security.

SV0303-06. Number of government or law enforcement requests for customer information, percentage resulting in disclosure

The registrant shall disclose the number of requests for customer information received from government or law enforcement agencies during the reporting year and the percentage of requests with which it complied, where:

- Customer information includes information that pertains to a user’s attributes or actions, including, but not limited to, records of communications, content of communications, demographic data, behavioral data, location data, or PII.

- Demographic data is defined as the quantifiable statistics that identify and distinguish a given population. Examples of demographic data include gender, age, ethnicity, knowledge of languages, disabilities, mobility, home ownership, and employment status.

- Behavioral data is defined as the product of tracking, measuring, and recording individual behaviors such as consumers’ online browsing patterns, buying habits, brand preferences, and product usage patterns, among others.

- Location data is defined as data describing the physical location or movement patterns of an individual, such as Global Positioning System coordinates or other related data that would enable identifying and tracking of an individual’s physical location.

- Personally Identifiable Information (PII) is defined as any information about an individual that is maintained by an entity, including (1) any information that can be used to distinguish or trace an individual’s identity, such as name, Social Security number, date and place of birth, mother’s maiden name, or biometric records; and (2) any other information that is linked or linkable to an individual, such as medical, educational, financial, and employment information.\(^{15}\)

The percentage resulting in disclosure shall include requests that resulted in full or partial compliance with the disclosure request.

The scope of this disclosure includes aggregated, de-identified, and anonymized data, which is intended to prevent the recipient from reconfiguring the data to identify an individual’s actions or identity.

The registrant may choose to discuss whether these characteristics apply to a portion of its data releases if this discussion would provide necessary context for interpretation of the registrant’s disclosure.

The registrant may choose to describe its policy for determining whether to comply with a request for customer data, including under which conditions it will release customer data, which requirements must be met in the request, and the level of management approval required.

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.30 The registrant may choose to describe its policy for notifying customers about such requests, including the timing of notification.

**Additional References**

The NIST 800 Series is a set of documents that describe United States federal government computer security policies, procedures, and guidelines. NIST (National Institute of Standards and Technology) is a unit of the Commerce Department. The documents are available free of charge, and can be useful to businesses and educational institutions, as well as to government agencies (available online [here](#)). See, for example, NIST Special Publication 800-122, Guide to Protecting the Confidentiality of Personally Identifiable Information (PII).

Data Security

Description

As Cable & Satellite companies are increasingly involved in providing Internet and voice services, they are entrusted with customer data. Companies in this industry and others are facing increasing risk from security breaches and other malicious activities. Companies need to ensure that policies and processes are in place to manage these risks and that they utilize hardware or software systems that enable them to tackle data security threats to both their own and their customers’ operations. As hackers become more sophisticated, companies’ security systems will also need to evolve.

Accounting Metrics

SV0303-07. Number of data security breaches, percentage involving customers’ personally identifiable information

.31 The registrant shall calculate and disclose the total number of data security breaches, which are defined as instances of unauthorized acquisition, access, use, or disclosure of protected information.

.32 The scope of disclosure shall be limited to data security breaches, cybersecurity risks, and incidents that resulted in the registrant’s business processes deviating from its expected outcomes for confidentiality, integrity, and availability.

• The scope of disclosure shall include incidents of unauthorized acquisition or acquisition without valid authorization, resulting from deficiencies or failures of people, process, or technology.

• The scope of disclosure shall exclude disruptions of service due to equipment failures.

.33 The registrant shall disclose the percentage of data security breaches in which customers’ personally identifiable information (PII) was breached, where:

• PII is defined as any information about an individual that is maintained by an entity, including (1) any information that can be used to distinguish or trace an individual’s identity, such as name, Social Security number, date and place of birth, mother’s maiden name, or biometric records; and (2) any other information that is linked or linkable to an individual, such as medical, educational, financial, and employment information.\(^\text{16}\)

• The scope of disclosure is limited to breaches in which customers were notified of the breach, either as required by state law or voluntarily by the registrant.

• Disclosure shall include incidents in which encrypted data were acquired with an encryption key that was also acquired.

• The registrant may delay disclosure if a law enforcement agency has determined that notification impedes a criminal investigation until the law enforcement agency determines that such notification does not compromise such investigation.

Disclosure shall be additional but complementary to the U.S. SEC’s CF Disclosure Guidance: Topic No. 2, Cybersecurity.

- At a minimum, this includes when the costs or other consequences associated with one or more known incidents—or the risk of potential incidents—represents a material event, trend, or uncertainty that is reasonably likely to have a material effect on the registrant’s results of operations, liquidity, or financial condition, or would cause reported financial information to not necessarily be indicative of future operating results or financial condition (e.g., theft of intellectual property, reduced revenue, increased cybersecurity protection expenditure, litigation costs, etc.).

Note to SV0303-07

The registrant shall describe the corrective actions taken in response to specific incidents, such as changes in operations, management, processes, products, business partners, training, or technology.

All disclosure shall be sufficient such that it is specific to the risks the registrant faces, but disclosure itself will not compromise the registrant’s ability to maintain data privacy and security.

SV0303-08. Discussion of management approach to identifying and addressing data security risks

The registrant shall identify vulnerabilities in its information systems that pose a data security threat, where:

- A data security threat is defined as any circumstance or event with the potential to adversely impact organizational operations (including mission, functions, image, or reputation), organizational assets, individuals, other organizations, or the nation through an information system via unauthorized access, destruction, disclosure, modification of information, and/or denial of service.

- Vulnerability is defined as a weakness in an information system, system security procedures, internal controls, or implementation that could be exploited by a data security threat source.

The registrant shall describe how it addresses the threats and vulnerabilities it has identified, including, but not limited to, operational procedures, management processes, structure of products, selection of business partners, employee training, or use of technology.

The registrant should discuss trends it has observed in type, frequency, and origination of attacks to its data security and information systems.

Disclosure shall be additional but complementary to the disclosure of preparation, detection, containment, and post-incident activity according to the SEC’s CF Disclosure Guidance: Topic No. 2, Cybersecurity.

- At a minimum, this includes disclosing when the costs or other consequences associated with one or more known incidents—or the risk of potential incidents—represents a material event, trend, or uncertainty that is reasonably likely to have a material effect on the registrant’s results of operations, liquidity, or financial condition or would cause reported financial information to not necessarily be indicative of future operating results or financial condition (e.g., reduced revenue, increased cybersecurity protection expenditure, litigation costs, etc.).
.41 All disclosure shall be sufficient such that it is specific to the risks the registrant faces, but disclosure itself will not compromise the registrant’s ability to maintain data privacy and security.

.42 The registrant may choose to describe the degree to which its management approach is aligned with an external standard or framework for managing data security, such as:


Definitions

NIST-defined attack vectors:

- External/Removable Media: An attack executed from removable media or a peripheral device—for example, malicious code spreading onto a system from an infected USB flash drive.

- Attrition: An attack that employs brute-force methods to compromise, degrade, or destroy systems, networks, or services—for example, a DDoS intended to impair or deny access to a service or application, or a brute-force attack against authentication mechanisms, such as passwords, captchas, or digital signatures.

- Web: An attack executed from a website or web-based application—for example, a cross-site scripting attack used to steal credentials or a redirect to a site that exploits browser vulnerability and installs malware.

- Email: An attack executed via an email message or attachment—for example, exploit code disguised as an attached document or a link to a malicious website in the body of an email message.

- Improper Usage: Any incident resulting from violation of an organization’s acceptable usage policies by an authorized user, excluding the above categories—for example, installation of file-sharing software by a user that leads to the loss of sensitive data, or illegal activities on a system performed by a user.

- Loss or Theft of Equipment: The loss or theft of a computing device or media used by the organization, such as a laptop or smartphone.

- Other: An attack that does not fit into any of the above categories.

Additional References

The NIST 800 Series is a set of documents that describe United States federal government computer security policies, procedures, and guidelines. NIST (National Institute of Standards and Technology) is a unit of the Commerce Department. The documents are available free of charge, and can be useful to businesses and educational institutions, as well as to government agencies (available online here). See, for example, NIST Special Publication 800-122, Guide to Protecting the Confidentiality of Personally Identifiable Information (PII).

Managing Systemic Risks from Technology Disruptions

Description
Cable & Satellite companies own or operate critical infrastructure that forms the basis of modern communications and business processes. Additionally, they provide communications services that form the basis for emergency communication systems, including broadcast or cable television station news and updates, emergency alert systems, and 911 call processing. Systemic or economy-wide disruption may be created if the network infrastructure of Cable & Satellite companies is unreliable and prone to business continuity risks, or if Cable & Satellite companies are not prepared to handle major emergencies. Significant growth in data volumes and increasing complexities of network management could pose risks for service continuity and quality. Companies could protect shareholder value with practices to minimize the probability and magnitude of systemic impacts and by actively investing in improving the reliability, resilience, and quality of their infrastructure and services.

Accounting Metrics
SV0303-09. (1) Average Interruption Frequency and (2) Average Interruption Duration

.43 Average Interruption Frequency is calculated as the total number of customer interruptions divided by the total number of customers served, where:

- The number of customer interruptions is the sum, for all interruptions, of the number of customer accounts that experienced an interruption in service during each incident (i.e., counting customer accounts multiple times if they experienced multiple service interruptions throughout the year).
- The number of customers served is the number of unique customer accounts with active service during the fiscal year.

.44 Average Interruption Duration is calculated as the total customer interruption duration divided by the total number of customers served, where:

- The customer interruption duration is the sum, for all interruptions, of the total downtime of each interruption multiplied by the number of customer accounts affected by each interruption.
- The number of customers served is the number of unique accounts with active service during the fiscal year.

.45 The scope of this disclosure is all forms of cable and satellite service (e.g., television, Internet, and phone service).

Note to SV0303-09

.46 For each significant service interruption, the registrant shall disclose the duration of the disruption, the extent of the impact, and the root cause, as well as any corrective actions taken to prevent future disruptions.

- Where relevant, the registrant shall indicate costs incurred, such as those due to organizational change, training or technology expenditures required for remediation, lost revenues, payment of warranties, or costs associated with breach of contract.
A service interruption is considered significant if it meets the thresholds set forth in Part 4 of the U.S. Federal Communication Commission’s (FCC) rules (47 C.F.R. Part 4) for reporting as part of the Network Outage Reporting System (NORS).

**SV0303-10. Description of systems to provide unimpeded service**

The registrant shall discuss potential business continuity risks associated with technology disruptions that affect operations. 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.

The registrant shall discuss measures to address these business continuity risks, including an identification of critical business operations as well as redundancies or other measures that are implemented to enhance the resilience of the system or to reduce the impact of technology disruptions, including insurance against loss.

The registrant should discuss the estimated amount of potential loss, the 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.
Competitive Behavior & Open Internet

Description

The Cable & Satellite industry is a classic example of a natural monopoly, where high capital costs lead to monopolies being able to offer the most efficient production. Given the concentrated nature of the industry, companies must manage their growth strategies within the parameters of a regulatory landscape designed to ensure competition. In addition to natural monopoly, Cable & Satellite companies benefit from terminal access monopolies over the so-called “last-mile” of their networks, given their contractual relationship with each subscriber and the barriers for subscribers to change service providers. The nature of this relationship is the basis of much of the discussion around the need to protect an Open Internet, where all data on the Internet is treated equally in terms of performance and access.

Accounting Metrics

SV0303-11. Amount of legal and regulatory fines and settlements associated with anti-competitive practices

.51 The registrant shall disclose the amount (excluding legal fees) of all fines or settlements associated with anti-competitive behavior, such as those related to enforcement of U.S. laws and regulations on price-fixing, antitrust behavior (e.g., exclusivity contracts), patent misuse, or network effects, as well as those related to bundling of services and products to limit competition, including violations of the Sherman Antitrust Act of 1890 and the Clayton Antitrust Act of 1914.

.52 Disclosure shall include civil actions (e.g., civil judgment, settlements, or regulatory penalties) and criminal actions (e.g., criminal judgment, penalties, or restitutions) taken by any entity (government, businesses, or individuals).

Note to SV0303-11

.53 The registrant shall briefly describe the nature (e.g., guilty plea, deferred agreement, or non-prosecution agreement) and context (e.g., price-fixing, patent misuse, antitrust, etc.) of fines and settlements.

.54 The registrant shall describe any corrective actions it has implemented as a result of each incident. This may include, but is not limited to, specific changes in operations, management, processes, products, business partners, training, or technology.

SV0303-12. Revenue from paid peering agreements with (1) content providers and (2) other networks and service providers

.55 The registrant shall disclose the revenue it receives from paid peering agreements from (1) content providers and (2) other networks and service providers, where:

- Peering agreement is defined as an arrangement whereby one Internet operation connects directly to another so that the two can trade traffic.

- Content providers are defined as companies that provide the web pages, videos, and other content that moves across the Internet.
Other networks and services include any other computer systems that comprise the Internet and are not directly affiliated with the registrant’s operations or content providers and any associated content delivery networks. Examples of other networks and services include, but are not limited to, Internet backbone companies or other ISPs.

The scope of this disclosure includes revenue received from private content delivery networks owned by content providers, where:

- Content delivery network is defined as a network of computer servers set up inside an Internet Service Provider (ISP) that delivers popular photos, videos, and other content.

The registrant should discuss its policies for engagement in paid peering agreements and settlement-free peering agreements.

SV0303-13. Average actual sustained download speed of (1) owned and commercially-associated content and (2) non-associated content

The registrant shall disclose its average actual sustained download speed in Megabits per second (Mbps) for delivery of (1) owned and commercially-associated content and (2) non-associated content, where

- Actual sustained download speed is defined as throughput in Mbps utilizing three concurrent TCP connections measured at the 25-30 second interval of a sustained data transfer, consistent with the FCC’s Measuring Broadband America program.\[1\] The registrant shall disclose its methodology for measuring download speed, such as the time period over which the test was conducted, sample size, whether it reflects peak versus non-peak speeds, whether the measurement isolates the effects of transient performance-enhancing features (e.g. throttling or “burst” speeds), and limits on accuracy.

- Owned and commercially-associated content is defined as content that is owned by the registrant directly, such as content created through media-production business segments of the registrant, its parent, or its subsidiaries, and content that is owned by companies with whom the registrant has commercial agreements, such as pay-for-priority agreements or content delivery network peering agreements.

- Non-associated content is defined as any content that is not owned by or commercially-associated with the registrant, as described above.

The average actual sustained download speed of each tier of service shall be aggregated using a sales-weighted approach on a per-user account basis (i.e., weighted by number of user accounts in each tier of service, not actual usage).

The registrant should disclose its average advertised download speed, defined as the download speed advertised for each user account based on the speed of the account type.

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\[1\] “A Report on Consumer Wireline Broadband Performance in the U.S.,” FCC’ Office of Engineering and Technology and Consumer and Governmental Affairs Bureau, http://www.fcc.gov/reports/measuring-broadband-america-2014#Actual_VS_Advert. The FCC has made available to stakeholders and the general public the open source software used on both its fixed and mobile applications, the data collected, and detailed information regarding the FCC’s technical methodology for analyzing the collected data. See http://www.samknows.com/opensource.
The average advertised speed is calculated as the average of monthly advertised download speeds on a sales-weighted user account basis (i.e., weighted by number of user accounts, not actual usage).

SV0303-14. Discussion of risks and opportunities associated with Open Internet Principles and other potential regulation

The registrant shall discuss risks and opportunities associated with the FCC’s Open Internet Principles and other potential regulation, where:

- Open Internet Principles (also called Net Neutrality) refer to the proposed rules under consideration by the FCC that would not permit behavior that harms consumers or competition by limiting the openness of the Internet. The proposed rules would ensure:
  - Transparency: That all ISPs must transparently disclose to their subscribers and users all relevant information as to the policies that govern their network.
  - No Blocking: That no legal content may be blocked.
  - No Unreasonable Discrimination: That ISPs may not act in a commercially unreasonable manner to harm the Internet, including favoring the traffic from an affiliated entity.
  - Other potential Open Internet regulation includes, but is not limited to, reclassification of Internet service providers (ISPs) as common carriers under Title II of the Communications Act of 1934 or using Section 706 of the Telecommunications Act of 1996 to regulate ISPs.

Examples of risks include, but are not limited to, potential limitations on a registrant’s ability to deliver its own content, increased competition from edge providers that stream content, and/or possible restrictions on a registrant’s ability to generate new revenue streams from peering and pay-for-priority agreements or earn capital needed to support a growing and evolving broadband infrastructure.

Examples of opportunities include, but are not limited to, growth in delivery of owned and affiliated content, increased market penetration, and/or improved advertising revenues.

Additional References

A Report on Consumer Wireline Broadband Performance in the U.S., FCC’ Office of Engineering and Technology and Consumer and Governmental Affairs Bureau

The FCC has made available to stakeholders and the general public the open source software used on both its fixed and mobile applications, the data collected, and detailed information regarding the FCC’s technical methodology for analyzing the collected data. Information available here.

FCC The Open Internet Guide

FCC 2014 Measuring Broadband America Report