

June 27, 2016

Independent Reasonable Assurance Report to the Directors of Telus Organisation

Scope

We have been engaged by Telus Communications, Inc. ("the Organisation") to perform a reasonable assurance engagement in respect of the following information (the "Selected Information") detailed in Appendix A, and also included within the Organisation's 2015 Annual Report to the Director (the "Report"), Environmental Quality Branch, Ministry of the Environment ("MOE") as hosted on the Organisation's and British Columbia ("BC") MOE's website¹ for the year ended December 31, 2015:

- 1. The number of collection facilities, and any changes in the number of collection facilities from the prior year in accordance with Section 8(2)(b) of the British Columbia Regulation 449/2004 Recycling Regulation ("Recycling Regulation");
- 2. The description of how recovered product was managed in accordance with the pollution prevention hierarchy in accordance with 8(2)(d) of the Recycling Regulation;
- **3.** The total amount of the producers' product sold and collected and the recovery rate for the year ended December 31, 2015 in accordance with 8(2)(e) of the Recycling Regulation; and
- 4. The performance for the year in relation to targets in the approved stewardship plan under Section 8(e) in accordance with Section 8(2)(g) of the Recycling Regulation.

Responsibilities

PricewaterhouseCoopers LLP

Our responsibility is to carry out an independent reasonable assurance engagement and to express an opinion on the Selected Information based on the procedures we have performed and the evidence we have obtained. We conducted our reasonable assurance engagement in accordance with the International Standard on Assurance Engagements ISAE 3000 Revised ("ISAE 3000"), *Assurance Engagements other than Audits or Reviews of Historical Financial Information*, published by the International Federation of Accountants, and the *Guide to Third party Assurance Requirements for Non-Financial Information in Annual Reports*, dated February 2016 ("Assurance Requirements"), published by the MOE.

We apply International Standard on Quality Control 1 and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements

 $\label{eq:product} \ensuremath{"\mathsf{PwC"}}\xspace refers to \ensuremath{\mathsf{PricewaterhouseCoopers LLP}, an Ontario limited liability partnership.$

¹ The maintenance and integrity of the Corporation's website is the responsibility of Management; the work carried out by PricewaterhouseCoopers does not involve consideration of these matters and, accordingly, PricewaterhouseCoopers accepts no responsibility for any changes that may have occurred to the reported information or criteria since they were initially presented on the website.

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In conducting our engagement, 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.

Telus Communications, Inc.

The Organisation's management is responsible for the preparation and presentation of the Selected Information as listed in Appendix A. Management is also responsible for such internal control as management determines is necessary to enable the preparation of the Selected Information such that it is free from material misstatement. Furthermore, management is responsible for preparation of suitable evaluation criteria in accordance with the Assurance Requirements as specified by the Director under section 8(2)(h) of the Recycling Regulation.

The Organisation is responsible for providing us with information about any frauds (including alleged and/or suspected instances of fraud) or illegal (or possibly illegal) acts communicated by employees, former employees, or contractors and all related known facts known by management that may relate to the Selected Information. The Organisation is also responsible for demonstrating adherence to the Recycling Regulation as outlined within Section 1 of the Report.

Methodology and Assurance Procedures

We conducted our reasonable assurance engagement in accordance with ISAE 3000. This standard requires that we comply with independence requirements and plan and perform the engagement to obtain reasonable assurance about whether the Selected Information is free of material misstatement.

A reasonable assurance engagement includes examining, on a test basis, evidence supporting the amounts and disclosures within the Selected Information. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement in the Selected Information due to omissions, misrepresentation and errors. In making those risk assessments, we consider internal controls relevant to the entity's preparation and fair presentation of the Selected Information in order to design assurance procedures that are appropriate in the circumstances, but not for the purpose of expressing a conclusion on the effectiveness of the entity's internal control. A reasonable assurance engagement also includes assessing the evaluation criteria used and significant estimates made by management, as well as evaluating the overall presentation of the Selected Information.

The main elements of our work were:

- Obtaining an understanding of the management systems, processes, and controls used to generate, aggregate and report the data;
- Testing relevant controls, documents and records on a sample basis;
- Testing and re-calculating quantitative information related to the Selected Information on a sample basis; and,
- Reviewing the consistency of the Selected Information with the related disclosures in the Annual Report to the Director.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.



Inherent limitations

Non-financial performance information is subject to more inherent limitations than financial information, given the characteristics of the Selected Information and the methods used for determining and calculating such information. Qualitative interpretations of relevance, materiality and the accuracy of data are subject to individual assumptions and judgments. Furthermore, the nature and methods used to determine such information, as well the evaluation criteria and the precision thereof, may change over time. It is important to read our report in the context of evaluation criteria.

Conclusion

In our opinion, the Selected Information for the year ended December 31, 2015 presents fairly, in all material respects, in accordance with the evaluation criteria listed in Appendix A:

- 1. The number of collection facilities, and any changes in the number of collection facilities from the prior year in accordance with Section 8(2)(b) of the Recycling Regulation;
- 2. The description of how recovered product was managed in accordance with the pollution prevention hierarchy in accordance with 8(2)(d) of the Recycling Regulation;
- 3. The total amount of the producers' product sold and collected and the recovery rate for the year ended December 31, 2015 in accordance with 8(2)(e) of the Recycling Regulation; and
- 4. The performance for the year in relation to targets in the approved stewardship plan under Section 8(2)(e) in accordance with Section 8(2)(g) of the Recycling Regulation.

Emphasis of matter

Without qualifying our opinion, we draw your attention to Appendix B which describes why certain items required by the Assurance Requirements have been excluded. Our opinion is not qualified in respect of this matter.

Other matters

Our report has been prepared solely for the purposes of the Organisation's compliance with the reporting requirements relating to Sections 8(2)(b), (d), (e) and (g) of the Recycling Regulation and is not intended to be and should not be used for any other purpose. Our duties in relation to this report are owed solely to the Organisation, and accordingly, we do not accept any responsibility for loss occasioned to any other party acting or refraining from acting based on this report.

Our opinion does not constitute a legal determination on the Organisation's compliance with the Recycling Regulation.

Pricewaterhouse Coopers LLP

PricewaterhouseCoopers LLP Chartered Professional Accountants

Appendix A to the Assurance Report

- 1. The location of collection facilities, and any changes in the number and location of collection facilities from the previous report as presented in Section 4 on page 7 of Telus' 2015 Report to the Director, Environmental Quality Branch, MOE.
- The number of collection facilities is 12 locations (2014: 10). During the year, TELUS started using the services of Canadian Energy, Burnaby BC, Schnitzer Steel Canada Ltd., Victoria BC, and Call2Recycle, Vancouver BC. TELUS also stopped using the services of Victoria Battery Direct, Victoria BC.

Evaluation criteria:

- Reporting Period: January 1st to December 31st
- "Collection Facilities" are centres that were owned by TELUS, had a signed contract with TELUS, or non-contracted with selected TELUS vendors, for the collection of Program Products as of a December 31st of the reporting year. Collection facilities owned by TELUS or TELUS Contractors/Vendors receive customer returns through recovery mechanisms. Both TELUS technicians and TELUS contractors recover equipment from customers and return to collection facilities. Additionally, TELUS has a mail-back program whereby residential customers can return items via Canada Post outlets and business customers are provided with a courier pickup service.
- "Collection Facilities" are one of the following types of centres:
 - Reverse Logistics/Triage Centres e.g., Telmar, CTDI and GEEP;
 - o Processors e.g., GEEP, Metalex, Edmonds Recycling, CCon Metals;
 - o Spare Central Stock e.g., CTDI warehouse location for spare network equipment; or
 - Redeployment Centres/Forward logistics e.g., TELUS, CTDI and Telmar warehouse locations for used equipment brought back into inventory.
- "Collection Facilities" are not Canada Post, courier service providers (e.g., FedEx), technicians or Tier 2 locations.
 - "Tier 2 locations" are TELUS locations where the technicians drop off material for return. These then are forwarded to any of the collection facilities.
 - Canada Post, couriers (e.g., FedEx), and TELUS technicians are recovery mechanisms that increase public access to the Collection Facilities. For example, Canada Post has over 6,600 retail outlets across Canada.
- The number of Collection Facilities is reported on the basis of the number of Collection Facilities that were owned by TELUS, has a signed contract with TELUS, or non-contracted with selected TELUS vendors, for the collection of Program Products as of December 31st).

2. The description of how recovered product was managed in accordance with the pollution prevention hierarchy in accordance with 8(2)(d) of the Recycling Regulation as presented in Section 6 on page 11 and of Telus' 2015 Report to Director, Environmental Quality Branch, MOE.

Acceptable Product End of Fate

Product Type	Reuse	Recycle	Recovery	Residual
TELUS TV Equipment and	Preferred	Optional	N/A	N/A
accessories				
Telsets	Preferred	Optional	N/A	N/A
Network Equipment	Preferred	Optional	N/A	N/A
GPS Equipment	Preferred	Optional	N/A	N/A
Batteries <2 kg	N/A	Preferred	N/A	N/A
Batteries >2 kg	N/A	Preferred	N/A	N/A

Estimated Product End of Fate Data for the year ended December 31, 2014

Product Type	Reuse (%)	Recycle (%)	Recovery (%)	Residual (%)	Disposition Pending (%)
TELUS TV Equipment	80	20	0	0	0
TELUS TV Accessories	1	99	0	0	0
Network Equipment	85	15	0	0	0
Telsets	25	75	0	0	0
GPS	94	6	0	0	0
Batteries <2 kg	0	100	0	0	0
Batteries >2 kg	0	100	0	0	0

Processing Pathways

"TELUS' processor that recycles our end of life electronic products are third party accredited with ISO 14001 and ISO 9001 certification, RQP (Recycler Qualification Program), R2 certification – Responsible Recycling Practices, and other certifications. The recycler of our lead acid batteries processes are regulated by the BC Ministry of the Environment, as well as industry associations."

Product Type	Estimated transfer to direct processor in British Columbia (%)	Estimated transfer to direct processor or multi-step processor in North America (%)	End of Fate Description
TELUS TV Equipment and		100	Processed for material recovery (metals, precious metals, plastics)
accessories			
Telsets		100	Processed for material recovery (metals, precious metals, plastics)
GPS		100	Processed for material recovery (metals, precious metals, plastics)
Network Equipment		100	Processed for material recovery (metals, precious metals, plastics)
Batteries <2 kg		100	Processed for material recovery (nickel, cobalt, cadmium, lead,
			iron, copper, stainless steel)
Batteries >2 kg	60	40	Processed down to commodities for reuse or further processing (lead, acid, plastic, sulfur)

Evaluation criteria:

- "Product type" is groups of products included in the program as listed in the currently approved product stewardship plan.
- "Reuse" is any Program Product which has been either reused by Telus or sold for the purpose of reuse.
- "Recycle" refers to the process of treating or processing a Program Product into an End of Fate commodity (e.g. Ferrous Steel, plastics Aluminum, Copper, Glass, Lead).
- "Recovery" is the process of generating energy in the form of electricity and/or heat from the incineration of waste.
- "Residual" refers to Program Products which have been sent to landfill or hazardous waste that is not reusable.
- "End of fate" is defined as the point where the product, component, and/or material is handled as a recognized commodity, is destroyed (e.g., through energy recovery), or is disposed of as waste.
- "Estimated Product End of Fate Data" is an estimate of the end fate of the type of product based on information provided by processors.

- Direct processors are those where the Program Product is processed on a single site.
- Multi-step processors are those where the Program Product is processed over more than one site.

Processor reporting

i. The Primary Processors are responsible for maintaining the records for Program Products processed, for Program Products, and reporting the results, including those from downstream processors, up to and including end of fate, on a consistent and timely basis to the Agency. Reporting includes both quantitative and qualitative end of fate data for Program Products.

Primary Processors by Product Type			
TELUS TV Equipment, TELUS TV Accessories, Network Equipment, Telsets, GPS	Telmar, GEEP		
Batteries	GEEP, CTDI, UTI, Metalex, Ccon Metals, Sumas, Edmonds Recycling, Great Western Metals, Call2Recycle, Schnitzer Steel Canada Ltd., Canadian Energy		

Method of reporting

- Program Products collected are reported by end of fate both by product type and by process on the Pollution Prevention Hierarchy:
- Reuse: Reused products are reported by weight reused or sold for reuse.
- Recycle: Recycled products are reported by weight.
- Recovery: N/A No Program Products are recovered.
- Residual: N/A all Program Products collected are expected to be 100% recyclable. Non- program products that may be included in shipments are not recorded or reported by the program but efforts are made to dispose of them in accordance with the pollution prevention hierarchy.
- 3. The total amount of the producer's product sold and collected and the recovery rate as presented in Section 7 on page 13 and of Telus' 2015 Report to Director, Environmental Quality Branch, MOE.

Total amount of producer's product sold is estimated as 1,240 mt

Total amount of producer's product collected is estimated as 740 mt

The recovery rate is reported under criteria 4 below

Evaluation criteria:

- "Program Products" are all products included in the program as listed in the currently approved product stewardship plan. These include:
 - Cordless phones and corded desktop, VOIP phones and analogue terminal adapters;
 - Public Access Equipment;
 - Obsolete network infrastructure equipment (switches, servers), External customer networks, Servers, Optical network termination equipment, Internet equipment (routers, modems), Network cards;
 - Video and teleconferencing equipment;
 - o TV equipment (PVRs, receivers, remote controls), Satellite TV equipment;
 - Global Positioning Systems (GPS);
 - o Batteries; and
 - Cables/accessories.
- Products not included in the program are mobile devices and their associated accessories.
- "Product Sold" is the amount of all Program Products distributed into BC by TELUS.
- "Product Collected" is the amount of all Program Products collected from sources known to be located within the province of BC that occurred through the Collection Facilities.

Product Sold:

- Quantification of Product Sold is based on data about Program Product movements as recorded in TELUS' SAP system for the Reporting Period and is broken down by each Program Product.
- Product Sold is calculated by weight, however the number of units is also available for all Program Products. Conversion factors used for converting number of units to weight are calculated based on the average weight of the electronic. The weights are provided by the collection facilities that receive the electronics.
- There are currently no eco fees charged to TELUS customers for products included in TELUS' current stewardship plan in BC.

Product Collected:

- Quantification of Product Collected is based on annual reports generated by the Collection Facilities for the Reporting Period and includes delineation of the Program Products by province of origin.

- These reports are generated from the Collection Facility's individual inventory programs for the Reporting Period.
- Consolidated values for each Program Product are reported by quantity and end fate per product type (e.g., resale, scrap, etc).
- Products Collected from unknown origin (e.g., items where the return address are not legible) are accounted for using an estimate based on products returned through that same method but of known origin.
- Products Collected can be reported as either weight or number of units and is dependent on the identified end fate of the material product type (reuse vs. recycling). Conversion factors used for converting number of units to weight are from calculated based on the average weight of the electronic. The weights are provided by the collection facilities that receive the electronic.
- **4.** The performance for the year in relation to targets in the approved stewardship plan under Section 8(2)(b), (d) and (e) in accordance with Section 8(2)(g) of the Recycling Regulation as presented in Section 9 on page 14 of Telus' 2015 Report to Director, Environmental Quality Branch, MOE.

57% recovery for the year ended December 31 2015 compared to a target of 65%

Evaluation criteria:

Target recovery rate per Telus Communications Company 2012 Amended BC Electronic Equipment Stewardship Plan.

Recovery rate is calculated as:

Total weight of units collected / Total weight of units distributed(sold)

Appendix B to the Assurance Report

Telus has not reported its performance for the year in relation to approved targets under 8(2)(b) or 8(2)(d) in accordance with 8(2)(g) of the Recycling Regulation for the year ended December 31, 2015 as there are no specific related targets in the approved stewardship plan.