

Quality ID working group session

9 September 2021



Welcome

- Introductions
- How to ask questions and provide feedback during the session
 - Raise hand
 - Use the session chat
- Please note that we will be recording the session and taking notes to ensure that we are able to summarise the key points for consultation accurately. We are not going to transcribe or publish the recording but will only be publishing the key points.

Purpose and scope

- Discuss practical implementation of our proposed ID requirements for Quality to help ensure that these requirements are workable
- Today's focus is the 'how' – the 'why' is set out in our reasons paper accompanying our ID draft decisions.
- Discussions today should not be taken as pre-determining the decisions. Practical implementation matters will form part of our considerations when making our final decisions.
- We will capture the main points raised in this working group and publish them on 16 September and submissions from the industry closing on 23 September.

Process outline

- Timeline

Date	Item	Author	
27 May 2020	Draft ID Decisions	Commerce Commission	✓
8 July 2021	Submissions	Industry	✓
5 August 2021	Cross Submissions	Industry	✓
9 September 2021	Working group	Commerce Commission	Today
16 September 2021	Publish working group materials	Commerce Commission	
23 September 2021	Submissions on working group materials	Industry	
Q4 2021	Final Decisions	Commerce Commission	

Format for the morning

- We will work through each metric and measure by dimension and discuss where you have raised issues such as clarification of what we mean, definitions, and your ability to provide information
- We will have a team member introduce each dimension and recap at the end

Today's agenda

Time		Agenda
9:00 am		Welcome, introduction
9:15 am	Provisioning	Time to provision ID FFLAS (5 measures)
	Faults	Incidence of faults (3 measures)
		Time to restore ID FFLAS (2 measures)
	Availability	Average downtime (4 measures)
		Notification to Access Seekers of outages (2 measures)
	Performance	Port utilisation (3 measures)
		Traffic performance (4 measures)
	Customer service	End user satisfaction (1 measure)
		Missed appointments (1 measure)
12:15 pm		Questions and next steps
12:30 pm		Close

Break at 11:00 for 15 mins

Provisioning



Provisioning

No	Metric	Measure	Disaggregation	Currently reported or required by UFB contracts	Stakeholder Issues from submissions and feedback
P1	Time to provision ID FFLAS	Number of ID FFLAS orders completed , differentiated by: 1. intact connections 2. simple new connections 3. complex new connections 4. transport services	1. geography (POI area) 2. ID FFLAS type (business services, residential services) 3. layer 1 services, and layer 2 services	1. Intact percent within agreed date	1. Business/residential split not possible
P2	Time to provision ID FFLAS	Percentage of ID FFLAS orders that met agreed provisioning dates , differentiated by: 1. intact connections 2. simple new connections 3. complex new connections 4. transport services	1. geography (POI area) 2. ID FFLAS type (business services, residential services) 3. layer 1 services, and layer 2 services	2. Layer 1, Layer 2 those $\geq 75\%$ within agreed date 3. New connections completed \leq agreed date 4. Simple cycle time 5. Complex cycle time	2. Simple and Complex definitions are not clear and do not align with UFB contracts 3. Intact not relevant for layer 1 4. Align Provisioning days and provisioning time with RSP SLA
P3	Time to provision ID FFLAS	Average time to provision ID FFLAS , differentiated by 1. intact connections 2. simple new connections 3. complex new connections 4. transport services	1. geography (POI area) 2. ID FFLAS type (business services, residential services) 3. layer 1 services, and layer 2 services	6. Average provisioning time (Residential, Business, NBAP)	5. Why is transport services separate? 6. POI Area v Candidate Area definition 7. Agreed date

Provisioning

No	Metric	Measure	Disaggregation	Currently reported or required by UFB contracts	Stakeholder Issues from submissions and feedback
P4	Time to provision ID FFLAS	Percentage of simple new connection orders that took ≥ 50 calendar days	<ol style="list-style-type: none"> geography (POI area) ID FFLAS type (business services, residential services) layer 1 services, and layer 2 services 	<ol style="list-style-type: none"> Bitstream service level terms, Qualifying orders subject to jeopardy management, para10.9 	<ol style="list-style-type: none"> Business/residential split not possible Breakdown by geography is not meaningful Do not align with RSP SLA
P5	Time to provision ID FFLAS	Percentage of complex new connection orders that took ≥ 120 calendar days	<ol style="list-style-type: none"> geography (POI area) ID FFLAS type (business services, residential services) layer 1 services, and layer 2 services 	<ol style="list-style-type: none"> Bitstream service level terms, Complex orders subject to jeopardy management, para10.9 	

Provisioning Definitions

- Definitions

Item	Definition
complex new connection	means the first connection to an address where a communal fibre network is required to be built for that connection but has not yet been built;*
simple new connection	means: (a) the first connection, or any subsequent ID FFLAS connection, to an address at which a communal fibre network has been built; or (b) the first connection to any other address;*
POI Area	POI areas are UFB geographic areas listed in the Notice of points of interconnection under section 231 of the Act issued by the Commission on 19 December 2019.**

*Commerce Commission, Fibre Information Disclosure Determination 2021 With Schedules 14-182C-21-232C-and-26-27, 27 May 2021, part 1 General Provisions

**Commerce Commission, Fibre Information Disclosures Draft Decisions Reasons Paper, 27 May 2021, para 7.78.

Provisioning recap

- Summary of key points discussed

Faults



Faults

No	Metric	Measure	Disaggregation	Currently reported or required by UFB contracts	Stakeholder Issues from submissions and feedback
F1	Incidence of faults	regulated provider faults , including faults caused by <ol style="list-style-type: none"> layer 1 layer 2 ONT 	<ol style="list-style-type: none"> geography (POI area) ID FFLAS type (business services, and residential services). 		<ol style="list-style-type: none"> Business/residential split not possible Categories need refining Can only provide non-regulated provider faults as third party (NFF)
F2	Incidence of faults	non-regulated provider faults , including faults caused by <ol style="list-style-type: none"> end-user access seeker no fault is found 	<ol style="list-style-type: none"> geography (POI area) ID FFLAS type (business services, and residential services). 		
F3	Incidence of faults	Number of regulated provider faults per 100 connections	<ol style="list-style-type: none"> geography (POI area) ID FFLAS type (business services, and residential services). 	<ol style="list-style-type: none"> Faults per 100 lines by Layer 1, layer 2 	<ol style="list-style-type: none"> Business/residential split not possible
F4	Time to restore ID FFLAS (regulated provider faults)	Percentage of regulated provider faults that met expected restoration time		<ol style="list-style-type: none"> Consumer % restored by next day Enterprise % restored same day Bitstream service level terms, Item 19 	<ol style="list-style-type: none"> Do not use expected restore date
F5	Time to restore ID FFLAS (regulated provider faults)	Percentage of regulated provider faults not restored within 2 calendar days			

Faults recap

- Summary of key points discussed

Availability



Availability

No	Metric	Measure	Disaggregation	Currently reported or required by UFB contracts	Stakeholder Issues from submissions and feedback
A1	Average downtime	Minutes of planned downtime	<ol style="list-style-type: none"> geography (POI area) network architecture (layer 1, and layer 2) force majeure events. 		<ol style="list-style-type: none"> Don't disaggregate planned, unplanned and force majeure Customer numbers are confidential Average unplanned downtime should remain a rolling average Clarity on what is planned and what is unplanned How is the number of connections calculated
A2	Average downtime	Minutes of unplanned downtime	<ol style="list-style-type: none"> geography (POI area) network architecture (layer 1, and layer 2) force majeure events 	<ol style="list-style-type: none"> Needed for average unplanned downtime calculation 	
A3	Average downtime	Number of connections	<ol style="list-style-type: none"> geography (POI area) network architecture (layer 1, and layer 2) force majeure events 	<ol style="list-style-type: none"> Needed for average unplanned downtime calculation 	
A4	Average downtime	Average unplanned downtime	<ol style="list-style-type: none"> Reporting differentiated by geography (POI area) and network architecture (layer 1, and layer 2) and by force majeure events. 	<ol style="list-style-type: none"> Layer 1, Layer 2 averaged downtime rolling average from last breach Notified force majeure events excluded 	

Availability

No	Metric	Measure	Disaggregation	Currently reported or required by UFB contracts	Stakeholder Issues from submissions and feedback
A5	Notification to access seekers of outages	Percentage of unplanned outages notified to access seekers within 2 hours	<ol style="list-style-type: none"> 1. geography (POI area) 2. network architecture (layer 1, and layer 2) 	<ol style="list-style-type: none"> 1. Bitstream service level terms, Item 15 	<ol style="list-style-type: none"> 1. Assume “notified unplanned outages” is an error
A6	Notification to access seekers of outages	Percentage of planned outages notified to access seekers 6 or more days before the planned outage occurs	<ol style="list-style-type: none"> 1. geography (POI area) 2. network architecture (layer 1, and layer 2) 	<ol style="list-style-type: none"> 1. Bitstream service level terms, Item 16 	

Availability

- Definitions

Item	Definition*
planned downtime	means: (a) for the purpose of Part 2, the length of time a connection has a planned outage to its ID FFLAS; and (b) for the purpose of Part 3, the length of time a connection has a planned outage to its PQ FFLAS;
planned outage	means a scheduled outage that a regulated provider has notified to access seekers: (a) in advance; and (b) in accordance with relevant procedures as: (i) agreed between the regulated provider and access seeker; (ii) prescribed in regulations made under Part 6 of the Act; or (iii) prescribed in a determination made under s 170 of the Act;
unplanned downtime	means: (a) for the purpose of Part 2, the length of time a connection has a fault to its ID FFLAS; and (b) for the purpose of Part 3, the length of time a connection has a fault to its PQ FFLAS;
fault	means: (a) for the purpose of Part 2: (i) an unplanned outage in ID FFLAS; or (ii) a reduction in the performance of ID FFLAS below any levels specified in an ID determination; and (b) for the purpose of Part 3: (i) an unplanned outage in PQ FFLAS; or (ii) a reduction in the performance of PQ FFLAS below any levels specified in a PQ determination;

Availability recap

- Summary of key points discussed

Performance



Performance

No	Metric	Measure	Disaggregation	Currently reported or required by UFB contracts	Stakeholder Issues from submissions and feedback
P1	Port utilisation	Percentage of ports with port utilisation equal to or exceeding 95%.	1. geography (POI area).	1. Uplink, Inter-nodal port utilisation \geq 95%	1. Do not sample at 5-minute interval
P2	Port utilisation	Percentage of ports with port utilisation equal to or exceeding 90%.	1. geography (POI area).	1. Uplink, Inter-nodal port utilisation \geq 90%	
P3	Port utilisation	Percentage of ports with port utilisation below or equal to 70%.	1. geography (POI area).	1. Uplink, Inter-nodal port utilisation $<$ 70%	

Performance

No	Metric	Measure	Disaggregation	Currently reported or required by UFB contracts	Stakeholder Issues from submissions and feedback
P4	Traffic performance	Number of exceedances of frame delay equal to or above 7mS		<ol style="list-style-type: none"> ≥99% CIR Frame Delay ≤ 5mS ≥99% UFB2 Primary CIR Frame Delay ≤ 7mS ≥99% UFB2 Secondary CIR Frame Delay ≤ 12mS No of active reference probes No of active events 	<ol style="list-style-type: none"> Measurement method is not clear CIR and EIR definitions are incorrect Measurement should be in accordance with current UFB contract (sample set of OLT probes)
P5	Traffic performance	Number of exceedances of frame delay variation equal to or above 3 mS		<ol style="list-style-type: none"> ≥99% CIR Frame Delay Variation ≤ 3mS 	
P6	Traffic performance	Number of exceedances of frame loss ratio CIR equal to or above 0.1%		<ol style="list-style-type: none"> ≥99% CIR Frame Loss ≤ 0.1% 	
P7	Traffic performance	Number of exceedances of frame loss ratio EIR equal to or above 2%.		<ol style="list-style-type: none"> ≥99% EIR Frame Loss ≤ 2.0% 	

Traffic performance proposal

- A reference network of OLT and POI probes is used to sample test network performance
 - number of probes set using Cochran's formula;
 - parameters subject to discussion, but we expect about 100 probes per network operator subject to ID.
- OLT Reference probes have one OVC to each POI reference probe
- All test traffic is low priority
- Reporting expanded to include:
 - number of successful test samples;
 - number of active probes;
 - any performance affecting network events.

Traffic performance reports

- Disaggregated by POI area
- Each report to include:
 - Number of exceedances of frame delay equal to or above 5ms;
 - Number of exceedances of frame delay variation equal to or above 3ms;
 - Number of exceedances of frame loss equal to or above 0.1%;
 - Number of exceedances of frame loss equal to or above 2%;
 - Number of five-minute test samples;
 - Number of OLT reference probes active for all or part of the reporting period;
 - Report on any missing sample data or misleading data as a result of network events.

ITU recommends use of Cochran's Formula

$$n_0 = \frac{Z^2 pq}{e^2}$$

<i>Variable</i>	<i>Description</i>
n_0	Sample size
Z	The z score that represents the desired level of confidence. $Z=1.96$ for a confidence level of 95%.
e	Desired level of precision
p	The estimated proportion of the attribute to be measured such as the proportion of ports exceeding a specific level of utilisation or violating frame delay limits
q	$= 1 - p$

Sample size for known and unknown population statistics

- Known population statistics (eg: $p = 0.02$)

<i>Confidence interval</i>	<i>Z</i>	<i>p</i>	<i>e</i>	<i>Sample size</i>
95%	1.96	0.02	±3%	84

- Unknown population statistics ($p = 0.5$)

<i>Confidence interval</i>	<i>Z</i>	<i>p</i>	<i>e</i>	<i>Sample size</i>
95%	1.96	0.5	±10%	96

Performance recap

- Summary of key points discussed

Customer service



Customer Service

No	Metric	Measure	Disaggregation	Currently reported or required by UFB contracts	Stakeholder Issues from submissions and feedback
C1	End-user connection satisfaction	End-user connection satisfaction survey		<ol style="list-style-type: none"> 1. Questions specified in NIPA 2. Customer satisfaction sample survey for new connections via Colmar Brunton 	<ol style="list-style-type: none"> 1. Concern over specifying questions, not all questions asked, other questions asked as well, questions should be the same as in the NIPA
C2	Missed appointments	Number of missed provisioning appointments			<ol style="list-style-type: none"> 1. Is the number of provisioning appointments missed those that missed first agreed date or last agreed date?

Customer Service

- End-user connection satisfaction survey

Satisfaction being measured	Question*	NIPA question
Pre installation satisfaction	How satisfied were you with the information and advice that you received before the installation?	Overall, how satisfied were you with the information and advice that you received before the installation?
Appointment satisfaction	How satisfied were you with the appointment setting process?	Overall, how satisfied were you with the appointment setting process?
Installer performance	How satisfied were you with the job the installer did installing your new fibre broadband connection?	Overall, how satisfied were you with the job the technician did installing your new fibre broadband connection?
Installation satisfaction	Based on your experience overall, how satisfied are you with the process of installing fibre broadband with [access seeker]?	Based on your experience overall, how satisfied are you with the process of installing fibre broadband with (INSERT RSP)?
Fibre broadband performance satisfaction	How satisfied are you with the overall performance of your fibre broadband since it was installed?	And using the same scale, how satisfied are you with the overall performance of your fibre broadband since it was installed?
Likelihood to recommend fibre broadband	How likely would you be to recommend getting fibre broadband installed to people you know?	Using a scale of 0 to 10, where 0 means you would definitely not recommend it, and 10 means you would definitely recommend it, how likely would you be to recommend getting fibre broadband installed to people you know?
Coordination between access seeker and regulated provider	How much do you agree or disagree that [access seeker] and [regulated provider] worked well together to ensure everything went smoothly?	And how much do you agree or disagree that (insert RSP) and (LFC) worked together well to ensure everything went smoothly.

- Missed appointments

- missed appointments for provisioning, excluding where the missed appointment was not caused by the regulated provider*

Customer service recap

- Summary of key points discussed

Questions and Next steps



End of Session Thank you



Materials relevant to this session

- [Draft Fibre Information Disclosure Determination 2021 – 27 May 2021](#)
- [Fibre ID - Draft Decisions - Reasons Paper - 27 May 2021](#)