100Mbps Offer Changes

External Customer Change Pack

November 2021

CHORUS

Overview

What are we doing?

- After the successful 200Mbps speed boosts, this pack outlines changes to some of our 100Mbps offers in November that we need you to be aware of and ready for.
  - Evolve 100-20-2.5-2.5 will be boosted to 300Mbps (300-100-2.5-2.5).
  - Evolve 100-100-2.5-2.5 Business will be boosted to 300 Mbps (300-300-2.5-2.5).
  - Small Business Fibre 100-100-2.5-2.5 will be boosted to 500 Mbps (500-500-2.5-2.5).

- These changes will be applied to all eligible:
  - Active service instances;
  - In-flight service requests; and
  - Service requests submitted following the change.

- There will be **no** change to:
  - Product Offer Name in COM and Billing, or B2B Product Offering ID
  - ASID or Product Instance ID.

- Note that the following offers will NOT be boosted as part of this change:
  - Evolve 100-50-2.5-2.5 Residential
  - Evolve 100-50-2.5-2.5 Business
  - Evolve 100-100-2.5-2.5 Residential

- *The migration process will be identical to the successful October 200Mbps migrations.*
- *Prior to the change an indicative list of customers who will be migrated can be provided, if requested.*
- *Following the change, a list of customers who have been migrated can be provided, if requested.*

Introduction of new speeds

This migration is introducing the following three speed templates:

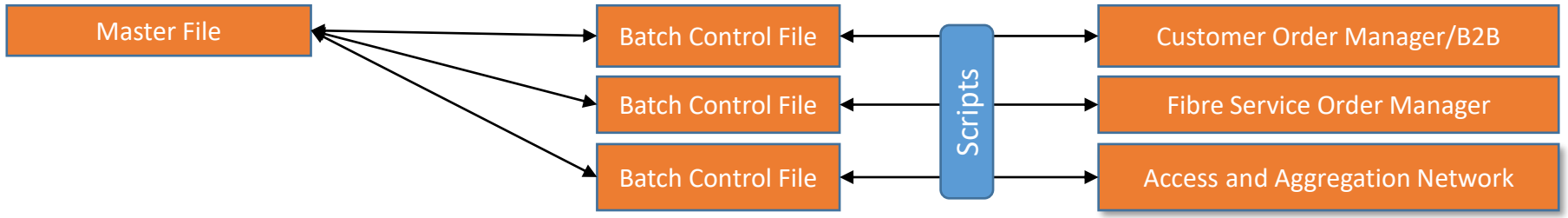
Headline		Downstream									Upstream									
(Down/Up)		Low Traffic Class (LTC)					High Traffic Class (HTC)				Low Traffic Class (LTC)					High Traffic Class (HTC)				
LTC	HTC	PIR	EIR	EBS	CIR	CBS	EIR	EBS	CIR	CBS	PIR	EIR	EBS	CIR	CBS	EIR	EBS	CIR	CBS	
Mbps	Mbps	Mbps	Mbps	kB	Mbps	kB	Mbps	kB	Mbps	kB	Mbps	Mbps	kB	Mbps	kB	Mbps	kB	Mbps	kB	
300/100	**2.5/2.5**	345	342.5	250	2.5	32	0	0	2.5	32	115	112.5	180	2.5	32	0	0	2.5	32	
300/300	**2.5/2.5**	345	342.5	250	2.5	32	0	0	2.5	32	345	342.5	180	2.5	32	0	0	2.5	32	
500/500	**2.5/2.5**	550	547.5	250	2.5	32	0	0	2.5	32	550	547.5	180	2.5	32	0	0	2.5	32	

We have several test capabilities available to support you developing your network configurations:

Test	Description	What it can be used for
CCIL	CCIL (Chorus Co-Innovation Laboratory) is a ring-fenced fibre test network that connects directly to your offices. It is available in Auckland and Wellington	Laboratory testing of BNG and Customer Routers/RGWs against new speed templates. Requires existing CCIL Connection. Access within your premises may be impacted by COVID.
Production	Manual configuration of new templates against 'friendly' live services. This will move specified product instances temporarily to the new speed templates. As this is manually applied and managed, this test is limited to small numbers for short periods. As Logical and Physical Network will not be updated, these templates can revert to the original service under some operational scenarios.	Short (1-2 days), targeted production network testing against 'friendly' live services. Requires new templates to be fully deployed into production (late October)
CCIL Test	CCIL Test is a special offer that advises our operational groups that the service is used for testing. The new speed templates can be manually applied and retained until changed (via change offer, or another test request)	Similar to production, but can be deployed for longer

Overview of the migration

- We will implement these speed boosts through synchronised network and system scripts, as shown below. This approach allows us to implement the changes in a more efficient and scalable manner than could be achieved via bulk service requests.



- A Master File will be generated immediately before migration. This will be a snapshot of current (applicable) active service instances and open service requests. If requested, we can provide you with a snapshot prior to migration, noting that any service requests submitted after this snapshot will not be in the snapshot file, but will be in the migration Master File.
- New Boosted Product and Service Specifications will be created in COM and SOM and new speed Templates deployed in the Access and Aggregation Network.
- The Master File will be replicated into three specific batch files, which will then be applied to our Customer Order Manager (COM/B2B), Fibre Service Order Manager (FSOM) and Access and Aggregation Networks using scripts. If requested, we can provide you with a snapshot of the successfully migrated services.
- Migration scripts include exception handling, to identify any connections that could not be successfully boosted. These exceptions will then be manually resolved. A pre-audit verification will check for data integrity and synchronisation to minimise such exceptions.
- Finally, the existing applicable offers will be remapped from their existing Product Specification to the Boosted Product Specifications. This ensures that any service request submitted after migration will get Fibre Max speeds.

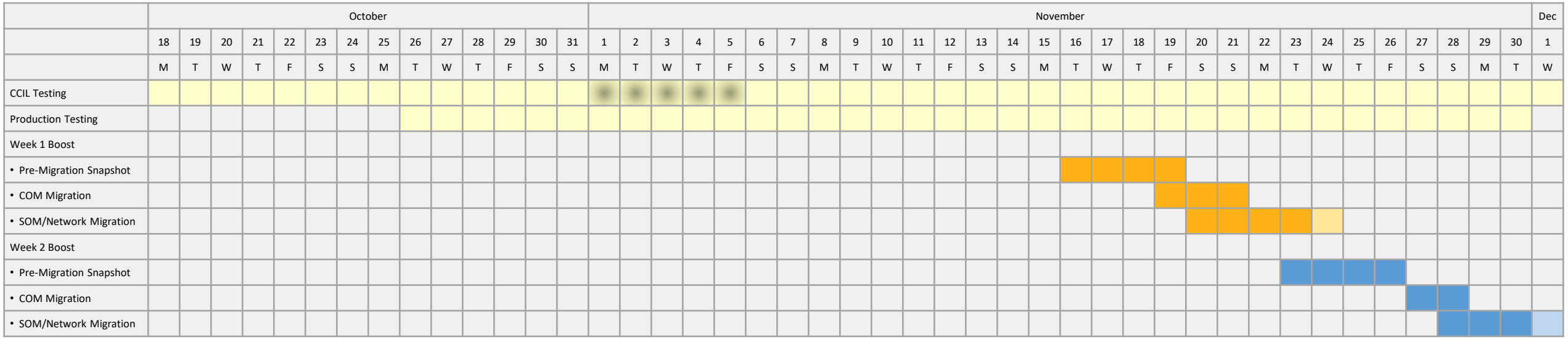
- You will not need to do anything to get these changes applied. However, it is likely that you will need to reconfigure your network profiles before customers experience the speed increase.
- The advantage of this approach is that we will not change the Product Offer, meaning that you can continue to order the same offers you do today. The configuration in Chorus' backend systems will be updated to ensure the Assurance website and API, TechMate, Customer Reporting and Broadband Availability APIs reflect the new speeds. All existing, in-flight, and future instances of these Chorus offers will receive the new speed automatically.

Anatomy of a Migration

The following shows a more detailed breakdown of the steps to complete a migration.

	Date and approx. time	Step	Notes
1	Pre-migration	New Speed Templates deployed into Chorus Co-Innovation Laboratory	Available for CCIL Template testing
2	Pre-migration	New Speed Templates deployed into Access and Aggregation Network	Available for production network testing
3	Pre-migration	New Speed Templates deployed into Service Order Manager (Logical and Physical Network Inventory)	Just prior to migration dates
4	Pre-migration	New Product and Service Specification deployed into COM and mapped to SOM Templates	Ready for migration
5	Pre-migration	Pre-migration audit and clean-up to ensure there are no record mismatches between systems	Multiple audits to minimize exceptions
6	Immediately before migration	COM Snapshot of eligible Customers to be migrated – includes historic instances, existing instances and inflight orders	Happens immediately before migration
7	Immediately before migration	COM Product Offer repointed to New Product Specification	Any new order submitted after this time will automatically receive the new speeds
8	Migration start to 5:00am next day	COM script to update inventory (includes historic instances, existing instances and inflight orders) Script checks record to confirm successful migrations and identify exceptions October baseline: 100% success rate	COM reports new speeds but customers still experience old speeds. Any inflight order that posts will automatically receive the new speeds.
9	Immediately before migration	COM snapshot broken into multiple batches of ~ 10k • Open orders (across all OLTs) done first • Then grouped by OLTs to best-fit 10k batch size	Multiple OLTs per batch, but each OLT is in one batch
10	Week 1: Saturday early to Saturday 5am Sunday early – Monday 5am	Per batch: Run SOM, Aggregation Network and Access Network scripts Script checks record to confirm successful migrations and identify exceptions October baseline: 99.9% successful rate	Speed is applied to all active service instances. No service outage Assure will report new speed.
11	Daily 6am-8am	List of successful migrations sent to Service Provider contacts	If requested, via SDM
12	Monday 8 am	Manually update any exceptions	
13	Mon-Wed 9pm – 5am	Repeat batch processing, notifications and manual exceptions until migration is complete	

When is this happening?

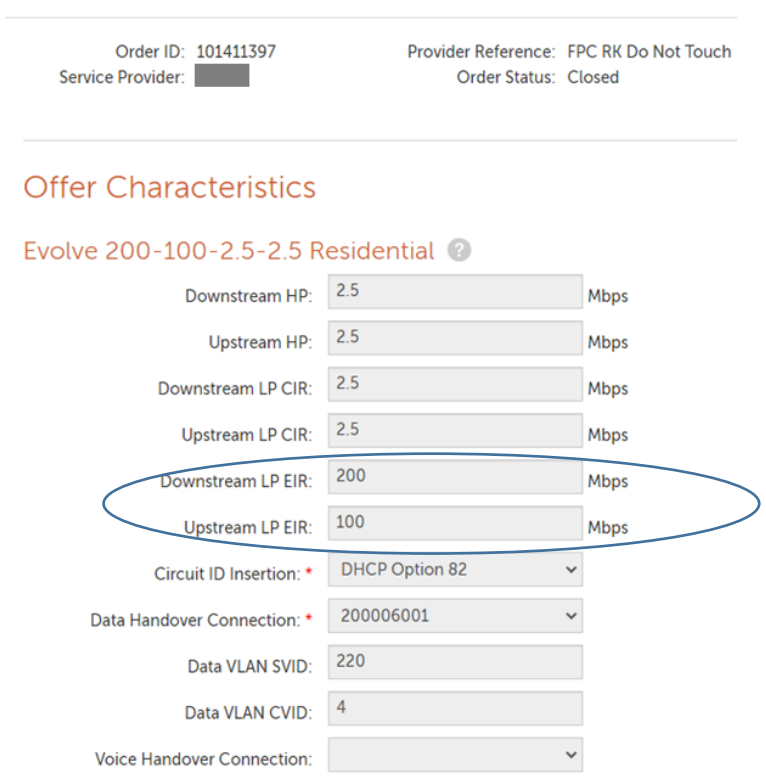


Stage	Description	Start	Finish	Notes
CCIL Testing	Allows testing of new speed templates within Chorus Co-Innovation Laboratory	18 Oct	Ongoing	CCIL Wellington is unavailable 1-5 November due to (delayed) upgrade and move. CCIL Auckland move has been deferred due to COVID lockdown and will be rescheduled
Production Testing	Allows testing of new speed templates in production network	26 Oct	30 Nov	Intended for short production tests on friendly connections only. CCIL Test can be used for longer tests
Week 1	Boost Evolve 100-20-2.5-2.5 UFB and Small Business Fibre 100-100-2.5-2.5 Customers	19 Nov	24 Nov	Planned windows: Fri 9pm to Sat 5am. Sat 9pm- Mon 5am. Mon 9pm – Tues 5am. Additional window Tues 9pm-Wed 5am if needed
W1: Pre-Migration Snapshot	Snapshot of installed eligible product instances prior to migration	16 Nov	19 Nov	This will exclude inflight orders, or any orders you have submitted following the previous Sunday. It is intended to provide you with basic auditing before migration.
W1: COM Migration	Update of COM/B2B and migration of inventory.	20 Nov	21 Nov	Inflight orders and any new orders will now provision new boosted speeds All product instance inventory will be updated to new speeds, but Customer will not get speeds until SOM/Network migration is completed.
W1: SOM/Network Migration	Update of Physical and Logical Network Inventory and application of speed templates	20 Nov	25 Nov	Customers will get new speeds as the new speed templates are applied. There will be no noticeable service outage. A list of all migrated customers will be matched against the COM Migration and sent to you on request
Week 2	Boost Evolve 100-20-2.5-2.5 RBI and non-UFB, and Evolve 100-100-2.5-2.5 Customers	27 Nov	1 Dec	Planned windows: Sat 9pm- Mon 5am. Mon 9pm – Tues 5am. Additional window Tues 9pm-Wed 5am if needed
W2: Pre-Migration Snapshot	Snapshot of installed eligible product instances prior to migration	23 Nov	28 Nov	As per Week 1, this will exclude inflight orders, or any orders you have submitted following the previous Sunday
W2: COM Migration	Update of COM/B2B and migration of inventory.	27 Nov	28 Nov	Inflight orders and any new orders will now provision new boosted speeds All product instance inventory will be updated to new speeds, but Customer will not get speeds until SOM/Network migration is completed.
W2: SOM/Network Migration	Update of Physical and Logical Network Inventory and application of speed templates	29 Nov	1 Dec	Customers will get new speeds as the new speed templates are applied. There will be no noticeable service outage. A list of all migrated customers will be matched against the COM Migration and sent to you on request

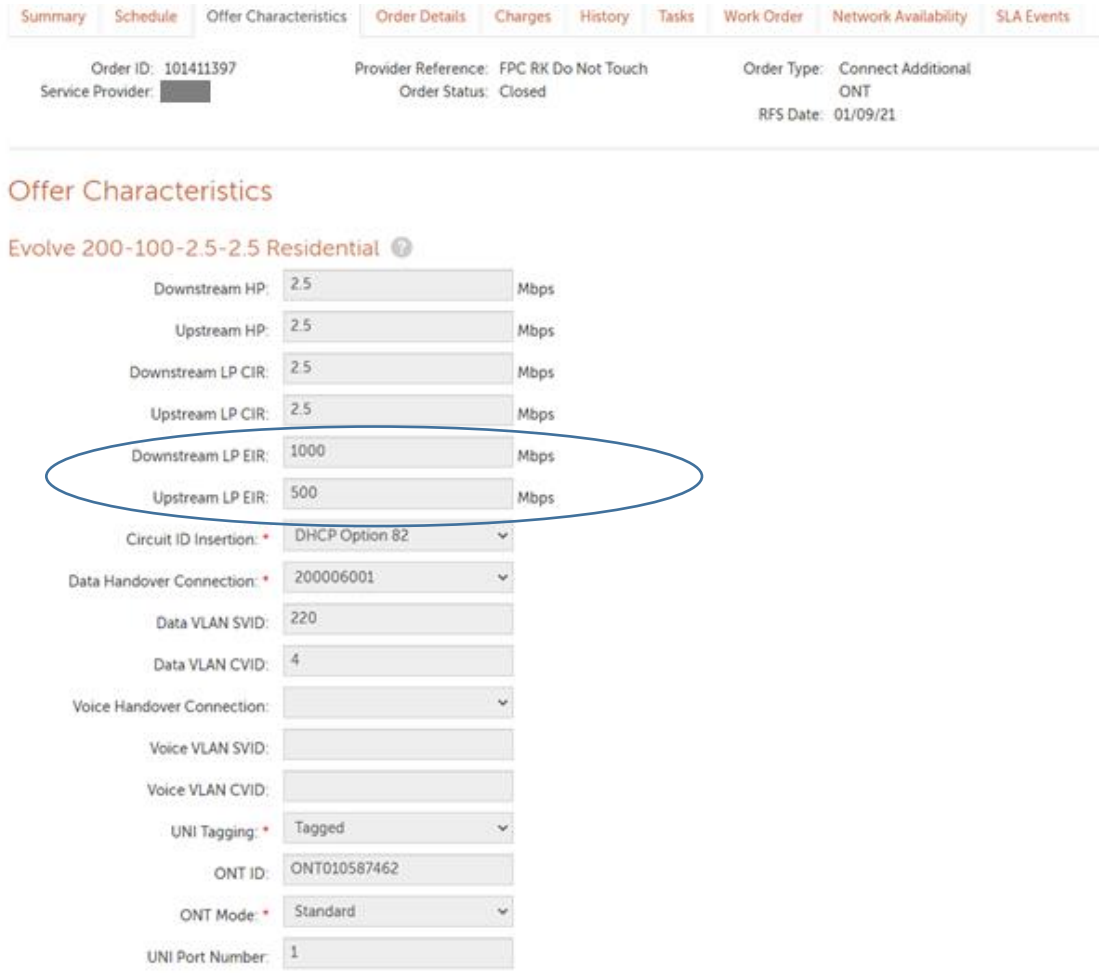
How you will see this change

The following screenshots (from our 200Mbps test environment) show how the migration will look in Chorus Portal:

- Offer name, product instance id, and offer characteristics remain the same
- Upstream and Downstream LP EIR characteristics changes to reflect the new speed



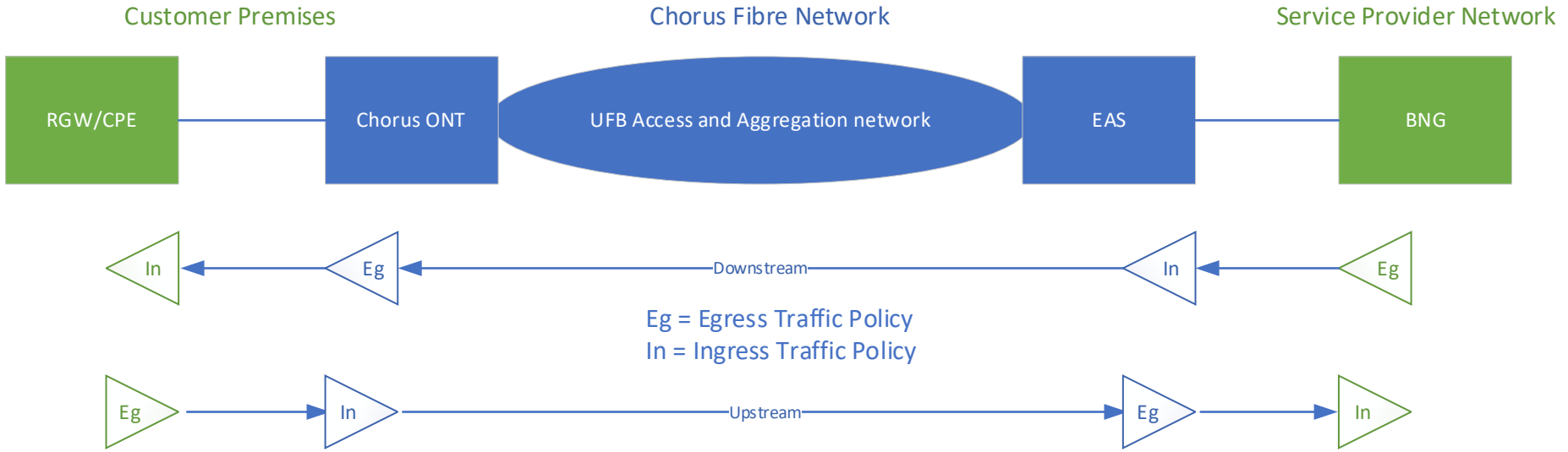
Before



After

How your Customers will see this change

Your customers' broadband experience after the speed boost will depend on when (or whether) you update your network profiles



Direction	Current	Immediately after migration	After you update your network
Downstream Speed	100 Mbps	100 Mbps (BNG controlled)	300 or 500 Mbps
Upstream Speed	20, 100 Mbps	Depends on CPE and BNG configuration	100, 300 or 500 Mbps

Post migration, we would expect your BNG to continue to limit the customer's downstream speed to 100Mbps until it is updated. The Customer's upstream speed will depend on your CPE and BNG configuration.

Customers with older CPE, especially if their devices have older Wi-Fi or 100Mbps Ethernet ports, may not be able to observe the full benefits of this migration.

Looking at network capacity impacts:

- We have assumed that customers will initially continue with their current behaviour initially, i.e. access the same content, but faster.
- Customers will eventually change their behaviour to match new speeds. This will result in a net increase of 2-3% in busy-hour throughput, which should be within the current capacity planning error margins.
- The actual impact on your network may vary, depending on your current service mix.

Phase 1 Migration

Phase 1 successfully boosted 12,019 200Mbps Services to Fibre Max on the weekend of 9/10 October:

- Success Rate was 99.9%, with zero customer faults reported.
- 12 minor data exceptions were identified, which were manually updated.
- Migration process will be tweaked to support the higher Phase 2 volumes, using learnings from Phase 1.

What do we need from you?

These changes will happen automatically, i.e. you will not need to do anything for these changes to be applied to your customers.

However, you should be aware of the following:

- You will need to reconfigure your network profiles before your customers will be able to realise the full benefits of the speed increases.
- We believe the market will expect continued improvement going forward and therefore we expect more speed migrations will be required in the future.
- The Offer Name will not change during this migration, but this will result in a mismatch between the Chorus Portal/Bill Offer name and the speeds the customer is actually getting:
    - General feedback was that this was the preferred approach at the time, to minimise your migration system impacts;
    - However, there was a desire to change the Offer Name in the future to align with their actual speeds.
    - Our current intention is to consult on this early in the new year, with a view to potentially changing the name mid 2022.