

# **Chorus Open Access Deeds of Undertaking**

# **Key Performance Indicators Reporting**

May 2015

#### **INTRODUCTION**

Chorus is committed to being an open access wholesaler. This includes a commitment to provide products on a non-discriminatory or equivalence of inputs (EOI) basis.

This report presents Key Performance Indicators (KPI) to demonstrate Chorus' compliance with its non-discrimination and EOI commitments for the provisioning and restoration of Chorus products. This is the thirteenth KPI report to be published by Chorus.

This report is provided in accordance with clauses 14.5 of our Fibre and Copper Open Access Deeds of Undertakings Commitments ("the Deeds").

The KPI report is one part of our wider compliance programme, which includes quarterly surveys of our customers and service level reporting. Service level reports can be found here:

http://www.chorus.co.nz/performance-reporting

#### **Industry and Commission Consultation**

The content of the KPI reporting has been developed in consultation with both the industry and the Commerce Commission. In December 2011 a TCF working group was assembled to discuss Chorus' proposed KPI report. It was attended by members of the TCF and the Commission. Following this consultation, Chorus sent a proposed mock-up report to the working group in March 2012, which incorporated previous feedback. This report has been developed taking into consideration feedback on the mocked up report and what has been practicably achievable to report on for this reporting period.

#### Report results

For the measurements and products included in this report, the measurements indicate that Chorus is meeting its EOI and non-discrimination commitments.

While there are minor variations between customers for some products and for some metrics, these variations are within the normal range for these metrics and do not give rise to EOI or non-discrimination issues. The reasons for these variations are explained in the Results Overview section.

While this report cannot be directly compared to Chorus' operational reports, this report and the service level report both confirm that Chorus is meeting its service level commitments.

#### **Future development of KPI reporting**

This is Chorus' Thirteenth KPI report as a separately listed company. We will continue to evolve and expand the report as we develop our reporting and data capture capabilities.

Chorus currently uses shared systems in accordance with arm's length commercial agreements. As this changes over time, our reporting approach may also change. We expect to continuously improve and refine our reporting over time.

If any reporting indicates variations between the performances for individual customers, we will investigate the reasons for these variations as they arise.

#### **OVERVIEW OF THE REPORT**

This section provides an overview of this KPI report.

#### **Report Period**

This report covers three reporting periods:

- 1 August 2014 to 31 October 2014 (Quarter 4)
- 1 November 2014 to 31 January 2015 (Quarter 1)
- 1 February 2015 to 30 April 2015 (Quarter 2)

#### Measures

As noted in previous KPI reports, Chorus is committed to evolving and expanding the KPI report.

For this quarter there are no new products being reported for the first time.

There have been no changes to the way we have approached the KPI report for this quarter, however work continues to evolve the KPI reporting in future quarters. This means that for this quarter, where a product has met the volume threshold, we have reported the following non-discrimination and EOI measures for those products:

Provisioning Metrics	Met Commit Rate	Did Chorus install the service when we said we would (reported as %)
	Right First Time	Were there any faults with the service within 7 calendar days of it being provisioned (reported as %)
	Time to Complete	From the time we received the order, how long did it take us to give service (reported as working hours, 9 hours per day ) This includes all transactions where a customer requested a connection as "ASAP" and not a specific date (which would skew this data).
Restoration Metrics	Met Commit Rate	Did we repair the service when we said we would (reported as %)
	Repeat Fault Rate	Were there any subsequent faults raised within 7 days (calendar days excluding national holidays) of the fault being restored (reported as %)
	Time to Complete	From the time we received the problem ticket, how long did it take for us to restore service (reported as working hours, 12 hours per day) This includes all transactions where a customer requested a fault to be fixed "ASAP" and not a specific date (which would skew this data).

#### **Volume Threshold**

We have reported on products which meet the following volume threshold for each metric:

- at least two customers ordered the product (or had product faults)
- a minimum of five orders per customer are ordered for the quarter (or a minimum of five product faults were raised per customer for the quarter)

A product will need to meet this threshold for all of the reporting months in order to be presented. Some products may meet the volume threshold for some measurements and not others.

#### Selection of customer data

For each measurement, we have reported on the top five customers by volume (either in terms of orders or faults) where the volume threshold has been met for three consecutive reporting periods.

This data is presented on an anonymous basis. The only exception is where we show Chorus results for the EOI measures for both provisioning and restore. The anonymous label given to a particular customer will vary between different metrics (i.e. "Customer A" will not always be the same customer).

This quarterly KPI report includes the top five by volume at quarter ending 30<sup>th</sup> April 2015. This means that top five customers in this report, and the order in which they are shown, may differ from all three reporting periods contained in the February 2015 report.

For provisioning measures, the data will be added to the quarter in which service was given. There are instances where the service is provided before the 'service given date' in our provisioning systems. Where this occurs, the service given date is updated manually and can result in changes to data from previous quarters. For restoration measures, the data will be added to the quarter in which the order was closed.

#### Improvements in reporting and future reports

We intend to continue to evolve and expand the report as we develop our reporting and data capture capabilities. This will include:

- Measurement of UBA POTS on/off for Assure; and
- The ability to report HSNS Lite copper and fibre results separately for some metrics.

As we develop our reporting capabilities, it may be necessary to refine and amend our reporting metrics. When this occurs we will consult with the industry and keep the Commerce Commission informed if we think any changes are necessary.

#### **RESULTS OVERVIEW**

For the measurements and products included in this report, the measurements indicate that Chorus is meeting its EOI and non-discrimination commitments.

This report does show minor variations between customers for some products and for some metrics. We think that these variations are within the normal range for these metrics and do not give rise to EOI or non-discrimination issues.

Throughout the report, we include specific commentary where the variation may be meaningful. However, there are also some general reasons why there may be natural variations between customers month-on month. We explain these below.

#### **Provisioning**

There are a number of factors that may impact provisioning measurements and lead to variations between customers. These include:

- Volume impact on systems: bulk orders placed in significant volumes can cause Chorus' systems
  to slow down and can require manual intervention. While orders are still dealt with on a "first in
  first out basis", the slowing of the systems and the manual intervention could impact both the
  customer who has placed the bulk order and other customers placing an order around the same
  time;
- Volume impact of service companies: if Chorus receives a bulk order that has not been forecast, this can mean that the work schedule is full to capacity. If this happens, any delay due to a technician managing a complex order can have a flow on impact for subsequent orders. This can have some impact on orders placed by other customers in the same time period;
- Chorus team factors: fluctuations in the availability of trained team members (e.g. due to unplanned events or sickness) can result in some orders having different completion times, depending on the number of orders placed. Team resource is however planned to meet committed provisioning timeframes;
- **Geographic**: if a customer does a promotion in a particular geographic area, this may mean that their order volumes can be concentrated in that particular region. These volumes and the Chorus team factors can result in minor differences in time to serve. In addition there may be fewer technicians available in rural areas as opposed to urban ones, which may affect the Time to Complete metric in some areas; and
- Customer factors: there are a number of factors that fall outside Chorus' control. For example, a
  transfer that involves number portability can delay Chorus' ability to complete the order if the
  porting does not happen within expected timeframes. Errors in order entry can also impact
  Chorus' delivery.

#### Restoration

There are a number of factors that may impact restoration measurements and lead to variations between customers. These include:

• Weather events: weather events can increase fault volumes and impact Chorus' ability to fix faults. For example, heavy rain limits Chorus' ability to open the network without damaging the copper;

- Chorus team factors; Chorus uses a number of service companies. Service companies have different processes and operating models which can cause variations in fault restoration. While this does not impact service companies meeting the committed restoration targets, it can result in slightly different timeframes. Therefore if one customer has faults more in one particular region than another, this can result in minor variations in the restoration timeframes; and
- **Customer factors:** there are a number of factors that fall outside Chorus' control. This can include customer diagnosis of faults not always being correct. Often fault restoration can require a customer's faults personnel to complete work, and timeframes can be subject to their availability.

Chorus continues to have a large programme of work underway to continually improve our restoration performance. This includes initiatives targeting reducing repeat fault rates, a nationwide proactive maintenance programme, and ongoing customer training for fault diagnosis and management.

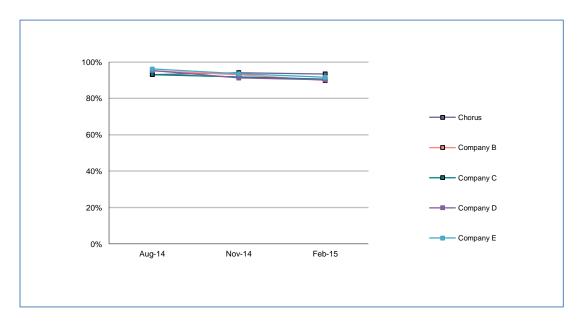
# EQUIVALENCE OF INPUTS REPORTING PROVISIONING REPORTING

#### **UCLL PROVISIONING**

#### **Met Commit Rate**

For this metric, we have included Chorus' use of UCLL as an input to the Chorus UBA without POTS product.

Met Commit Rate	Aug-14	Nov-14	Feb-15
Chorus	93%	94%	93%
Company B	95%	93%	90%
Company C	93%	92%	91%
Company D	95%	91%	90%
Company E	96%	94%	92%

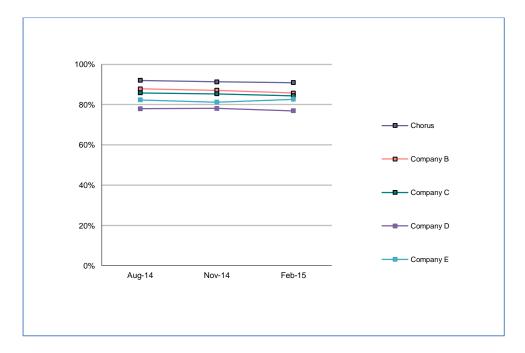


#### **UCLL PROVISIONING**

#### Right First Time

For this metric, we have included Chorus' use of UCLL as an input to the Chorus UBA without POTS product.

Right First Time	Aug-14	Nov-14	Feb-15
Chorus	92%	91%	91%
Company B	88%	87%	86%
Company C	86%	85%	84%
Company D	78%	78%	77%
Company E	82%	81%	83%



For this metric Chorus' results are consistently favourable in comparison to other customers' results, which is attributable to the dual validation of orders that occurs when Chorus self-consumes UCLL.

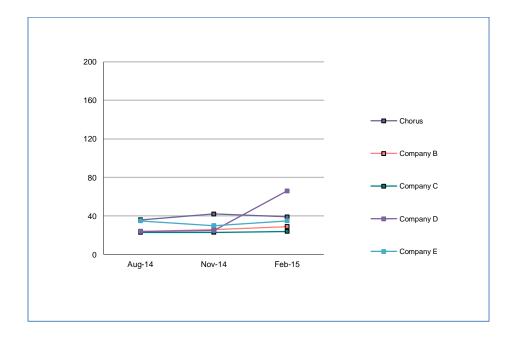
Chorus' customers have varying practises when it comes to livening circuits for testing prior to arrival of the Chorus service technician. This can lead to differences in results and has contributed to the lower result for Company D over the quarter.

## **UCLL PROVISIONING**

#### Time to Complete

For this metric, we have included Chorus' use of UCLL as an input to the Chorus UBA without POTS product.

Time to Complete (hours)	Aug-14	Nov-14	Feb-15
Chorus	36	42	39
Company B	24	26	29
Company C	23	23	24
Company D	24	25	66
Company E	35	30	35

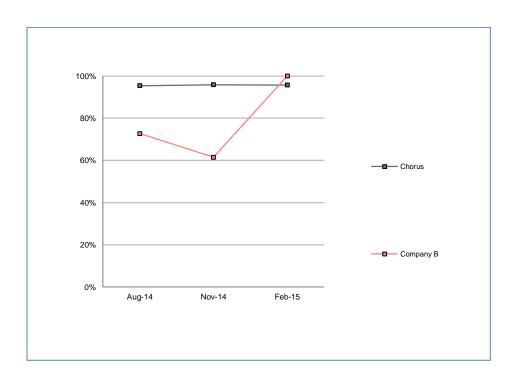


Chorus' customers have varying practises when it comes to livening circuits for testing prior to arrival of the Chorus service technician. This can lead to differences in results and has contributed to the higher result for Company D over the last quarter.

## **SLU PROVISIONING**

#### Met Commit Rate

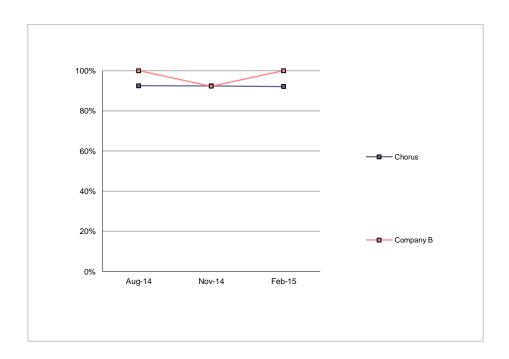
Met Commit Rate	Aug-14	Nov-14	Feb-15
Chorus	95%	96%	96%
Company B	73%	62%	100%



## **SLU PROVISIONING**

#### Right First Time

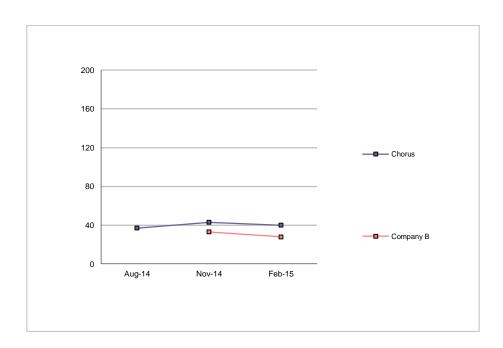
Right First Time	Aug-14	Nov-14	Feb-15
Chorus	92%	92%	92%
Company B	100%	92%	100%



## **SLU PROVISIONING**

#### Time to Complete

Time to Complete (hours)	Aug-14	Nov-14	Feb-15
Chorus	37	43	40
Company B		33	28

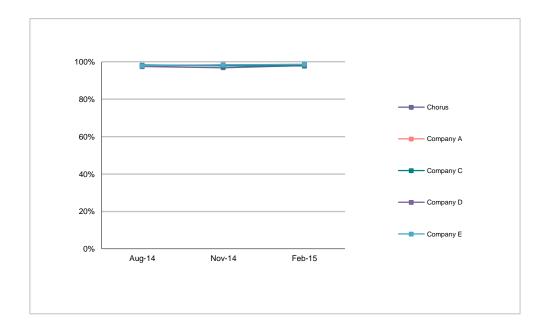


# EQUIVALENCE OF INPUTS REPORTING RESTORATION REPORTING

#### **UCLL RESTORATION**

#### Met Commit Rate

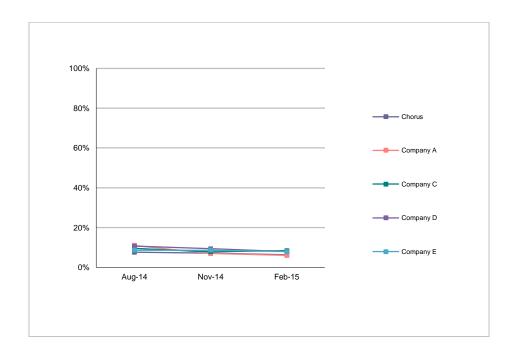
Met Commit Rate	Aug-14	Nov-14	Feb-15
Chorus	97%	97%	98%
Company A	98%	98%	98%
Company C	98%	98%	98%
Company D	98%	98%	98%
Company E	98%	98%	99%



## **UCLL RESTORATION**

#### Repeat Fault Rate

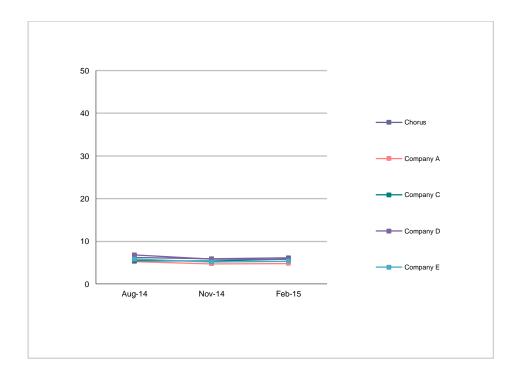
Repeat Fault Rate	Aug-14	Nov-14	Feb-15
Chorus	8%	7%	6%
Company A	11%	7%	6%
Company C	10%	8%	8%
Company D	11%	9%	8%
Company E	9%	9%	8%



## **UCLL RESTORATION**

## Time to Complete

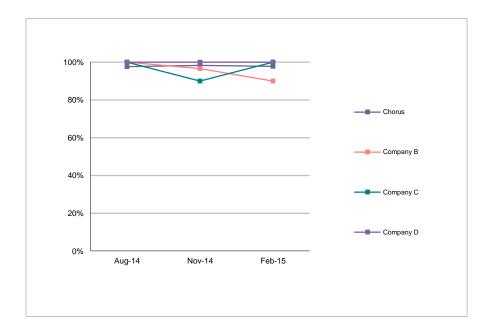
Time to Complete	Aug-14	Nov-14	Feb-15
Chorus	6	6	6
Company A	5	5	5
Company C	5	5	6
Company D	7	6	6
Company E	6	5	5



#### **SLU RESTORATION**

#### Met Commit Rate

Met Commit Rate	Aug-14	Nov-14	Feb-15
Chorus	98%	98%	98%
Company B	100%	97%	90%
Company C	100%	90%	100%
Company D	100%	100%	100%

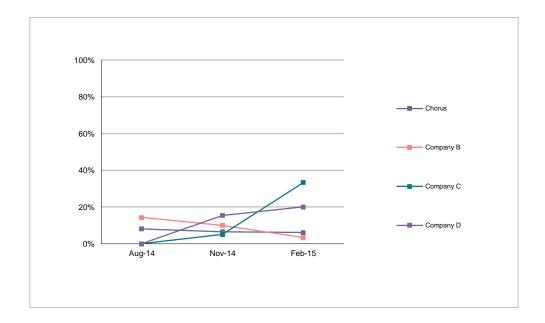


This metric can be affected by customer processes while diagnosing faults and the availability of customers' faults personnel to complete work at their site which occurred for Company B.

## **SLU RESTORATION**

#### Repeat Fault Rate

Repeat Fault Rate	Aug-14	Nov-14	Feb-15
Chorus	8%	7%	6%
Company B	14%	10%	3%
Company C	0%	5%	33%
Company D	0%	15%	20%

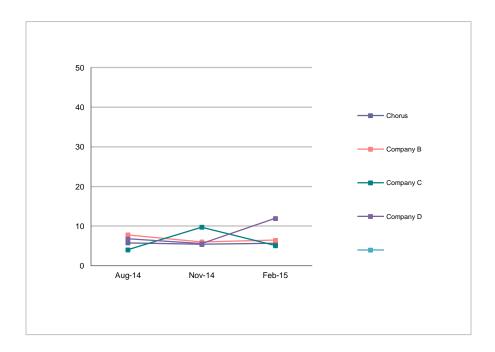


Different customers' initial troubleshooting and fault diagnosis processes can affect repeat fault rate as occurred for Companies C and D.

## **SLU RESTORATION**

#### Time to Complete

Time to Complete	Aug-14	Nov-14	Feb-15
Chorus	6	5	6
Company B	8	6	6
Company C	4	10	5
Company D	7	6	12



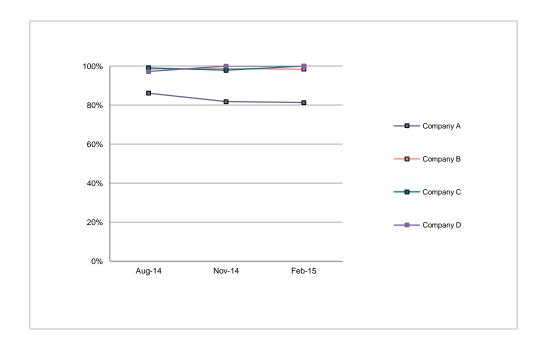
## **NON-DISCRIMINATION REPORTS**

## PROVISIONING REPORTING

#### **BASEBAND WITH UBA - PROVISIONING METRICS**

#### Met Commit Rate

Met Commit Rate	Aug-14	Nov-14	Feb-15
Company A	86%	82%	81%
Company B	99%	99%	98%
Company C	99%	98%	100%
Company D	97%	100%	100%

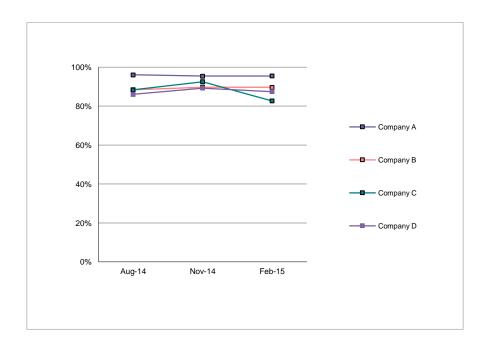


This metric is affected by customer ordering behaviour. For Company A, Chorus' systems are unable to differentiate between customer-initiated changes to the commitment date that result in metrics showing Chorus has failed to meet the commitment date.

## **BASEBAND COPPER WITH UBA - PROVISIONING METRICS**

#### Right First Time

Right First Time	Aug-14	Nov-14	Feb-15
Company A	96%	96%	96%
Company B	88%	90%	90%
Company C	88%	93%	83%
Company D	86%	89%	88%

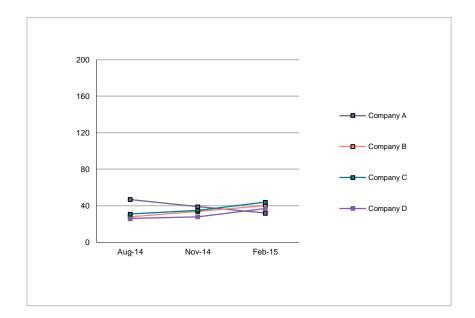


Results for Companies C and D are attributable to customer ordering behaviour.

#### **BASEBAND COPPER WITH UBA - PROVISIONING METRICS**

#### Time to Complete

Time to Complete (hours)	Aug-14	Nov-14	Feb-15
Company A	47	39	32
Company B	28	34	40
Company C	31	35	44
Company D	26	28	37

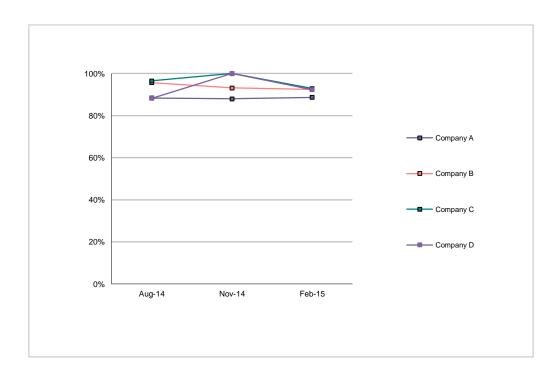


To measure Time to Complete we consider orders where customers have requested the service be connected on an "ASAP" basis. However for Company A we are not able to separate "ASAP" orders from "Future Date" orders, resulting in a higher Time to complete result for that customer.

## **BASEBAND COPPER – PROVISIONING METRICS**

#### Met Commit Rate

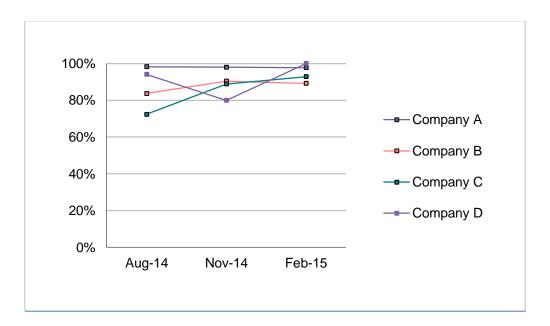
Met Commit Rate	Aug-14	Nov-14	Feb-15
Company A	88%	88%	89%
Company B	96%	93%	93%
Company C	97%	100%	93%
Company D	88%	100%	92%



#### **BASEBAND COPPER – PROVISIONING METRICS**

#### Right First Time

Right First Time	Aug-14	Nov-14	Feb-15
Company A	98%	98%	98%
Company B	84%	90%	89%
Company C	72%	89%	93%
Company D	94%	80%	100%

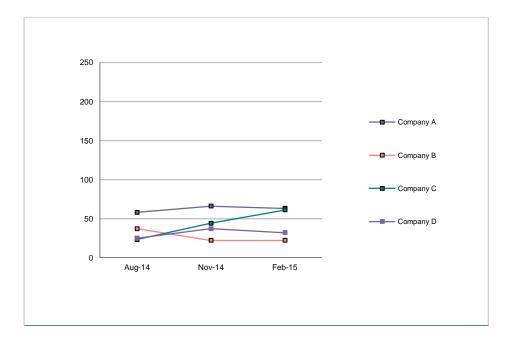


Results for this metric are affected by the proportion of a customer's orders that are for 'intact' lines rather than new connections which require truck roll. A high proportion of 'intact' lines may lower the right first time results, because they have a higher failure rate than new connections which require a truck roll which has occurred for Company C. Company B's result is attributed to customer ordering behaviour.

## **BASEBAND COPPER - PROVISIONING METRICS**

#### Time to Complete

Time to Complete (hours)	Aug-14	Nov-14	Feb-15
Company A	58	66	63
	37	22	22
Company C	23	44	61
Company D	25	37	32

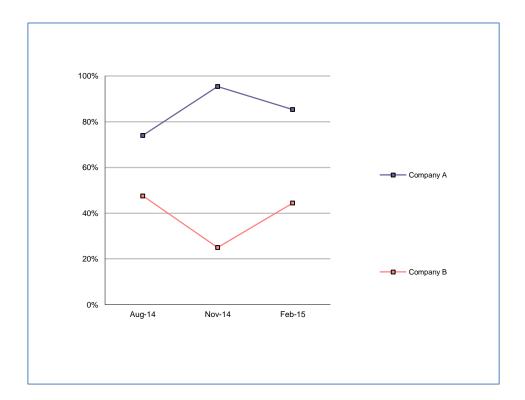


The results of Company A is attributed to our inability to separate ASAP orders for this customer. Company C's result is attributed to additional build work which was required to be carried out at customers site.

## **BITSTREAM 3 – PROVISIONING METRICS**

## Met Commit Rate

Met Commit Rate	Aug-14	Nov-14	Feb-15
Company A	74%	95%	85%
Company B	48%	25%	44%

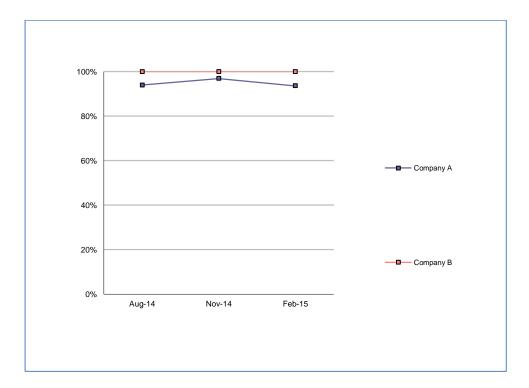


The variance in this metric is attributed to complex orders which required additional build work to be carried out at customer sites.

## **BITSTREAM 3 – PROVISIONING METRICS**

#### Right First Time

Right First Time	Aug-14	Nov-14	Feb-15
Company A	94%	97%	94%
Company B	100%	100%	100%

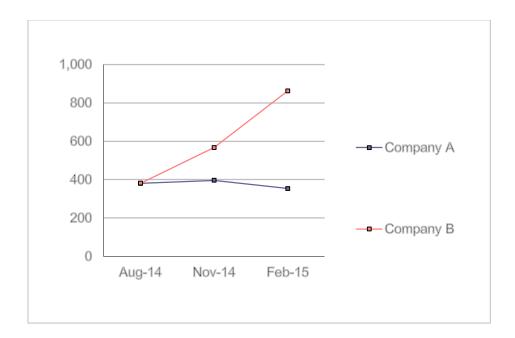


Company A's lower result is attributed to issues experienced with customer premises equipment and associated faults that were experienced in their Network.

## **BIT STREAM 3 – PROVISIONING METRICS**

#### Time to Complete

Time to Complete (hours)	Aug-14	Nov-14	Feb-15
Company A	380	396	354
Company B	381	567	862

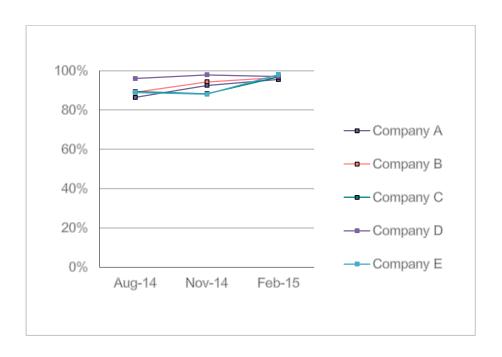


The variance in this metric is attributed to complex orders which required additional build work to be carried out at customer sites.

## **UBA ONLY (NAKED) - PROVISIONING METRICS**

## Met Commit Rate

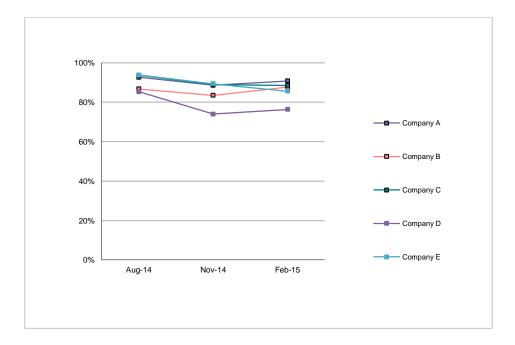
Met Commit Rate	Aug-14	Nov-14	Feb-15
Company A	86%	93%	95%
Company B	89%	94%	97%
Company C	89%	88%	97%
Company D	96%	98%	97%
Company E	89%	88%	98%



## **UBA ONLY (NAKED) - PROVISIONING METRICS**

#### Right First Time

Right First Time	Aug-14	Nov-14	Feb-15
Company A	93%	89%	91%
Company B	87%	83%	88%
Company C	94%	89%	89%
Company D	85%	74%	76%
Company E	94%	89%	86%

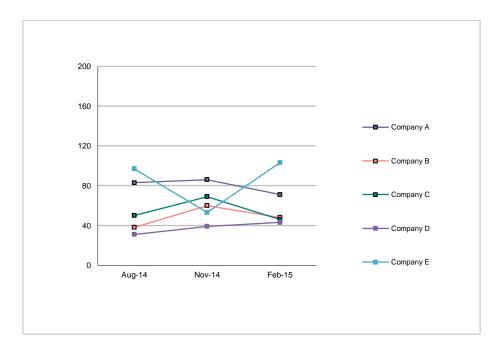


The performance of Company D is likely to have been affected by their high proportions of 'intact' orders, which have a higher failure rate then new connections which require a truck roll.

## **UBA ONLY (NAKED) - PROVISIONING METRICS**

#### Time to Complete

Time to Complete (hours)	Aug-14	Nov-14	Feb-15
Company A	83	86	71
Company B	38	60	48
Company C	50	69	46
Company D	31	39	43
Company E	97	53	103

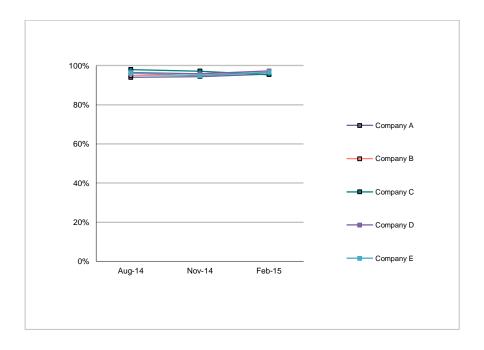


Company E's performance is attributed to customer order behaviour. Different practices by customers in terms of when they order the truck roll, and around rates of UBA ports availability, can affect the time to complete.

## **UBA & AGENCY VOICE - PROVISIONING METRICS**

#### Met Commit Rate

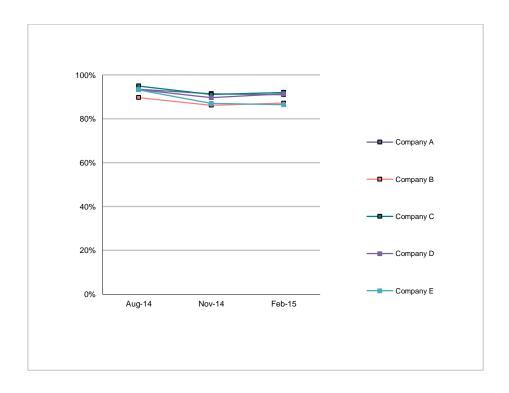
Met Commit Rate	Aug-14	Nov-14	Feb-15
Company A	94%	94%	96%
Company B	95%	95%	96%
Company C	98%	97%	95%
Company D	97%	96%	97%
Company E	96%	95%	97%



## **UBA & AGENCY VOICE - PROVISIONING METRICS**

#### Right First Time

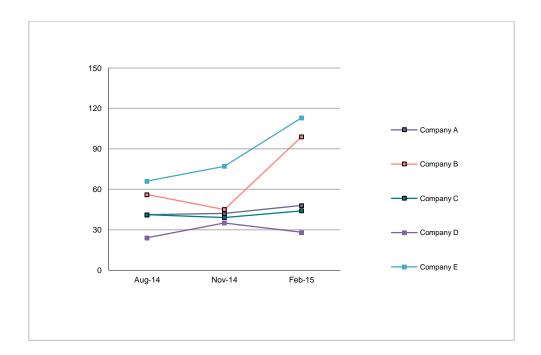
Right First Time	Aug-14	Nov-14	Feb-15
Company A	93%	91%	91%
Company B	90%	86%	87%
Company C	95%	91%	92%
Company D	93%	90%	91%
Company E	93%	87%	86%



#### **UBA & AGENCY VOICE - PROVISIONING METRICS**

#### Time to Complete

Time to Complete (hours)	Aug-14	Nov-14	Feb-15
Company A	41	42	48
Company B	56	45	99
Company C	41	39	44
Company D	24	35	28
Company E	66	77	113



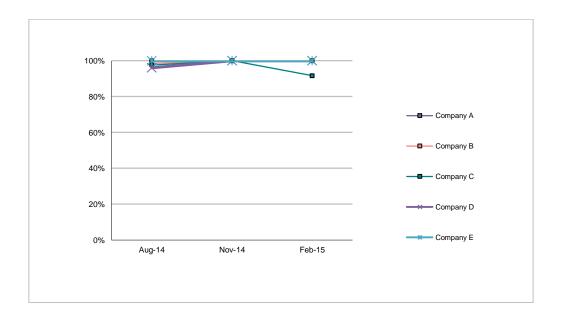
There are various reasons why this metric can change throughout the quarters including:

- A customer's proportion of orders with POTS already established on the line versus both services being newly established can have a significant effect on the time to complete e.g. long term port waiters. If POTS is already present, the copper pair is already established and therefore the provisioning time is faster.
- Different practices by customers in terms of when they order the truck roll, and around rates of UBA port intact, can also affect the time to complete.

## **DIRECT FIBRE ACCESS (DFA) – PROVISIONING METRICS**

#### Met Commit Rate

Met Commit Rate	Aug-14	Nov-14	Feb-15
Company A	100%	100%	100%
Company B	98%	100%	100%
Company C	98%	100%	92%
Company D	96%	100%	100%
Company E	100%	100%	100%

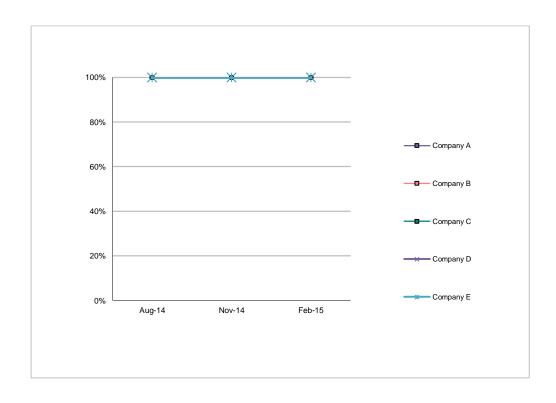


The variations between customers are impacted by our reporting system for this product, which does not capture customer-requested changes to RFS dates (so a customer-requested change of an RFS date to a later RFS date will be reported by the system as a failure to meet the original RFS date).

## **DIRECT FIBRE ACCESS (DFA) – PROVISIONING METRICS**

#### Right First Time

Right First Time	Aug-14	Nov-14	Feb-15
Company A	100%	100%	100%
Company B	100%	100%	100%
Company C	100%	100%	100%
Company D	100%	100%	100%
Company E	100%	100%	100%



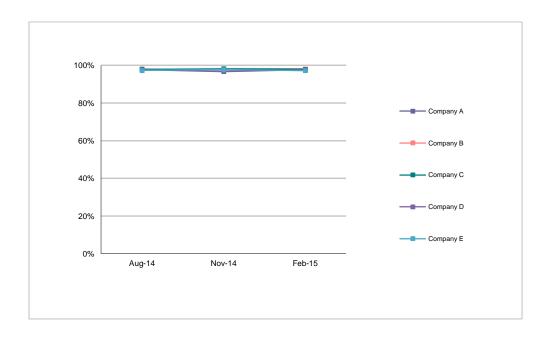
## **RESTORATION METRICS**

#### **UBA RESTORATION**

Both UBA only (naked) and UBA with POTS (clothed) faults are presented in these reports.

#### Met Commit Rate

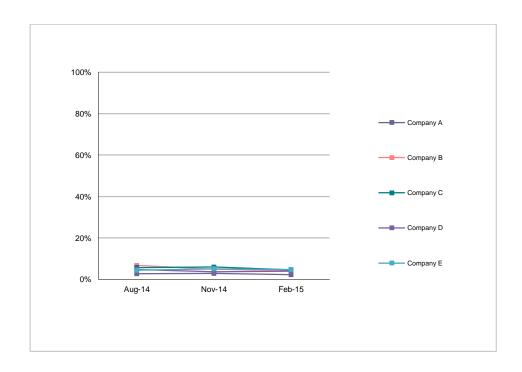
Met Commit Rate	Aug-14	Nov-14	Feb-15
Company A	98%	98%	98%
Company B	98%	98%	98%
Company C	98%	98%	98%
Company D	98%	97%	98%
Company E	97%	98%	97%



## **UBA RESTORATION**

### Repeat Fault Rate

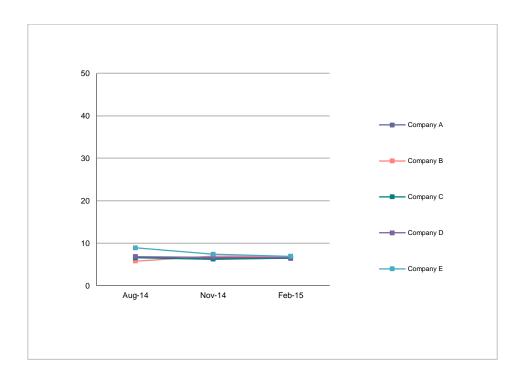
Repeat Fault Rate	May-14	Aug-14	Nov-14
Company A	2%	3%	3%
Company B	4%	7%	5%
Company C	5%	6%	6%
Company D	2%	5%	4%
Company E	5%	4%	5%



## **UBA RESTORATION**

### Time to Complete

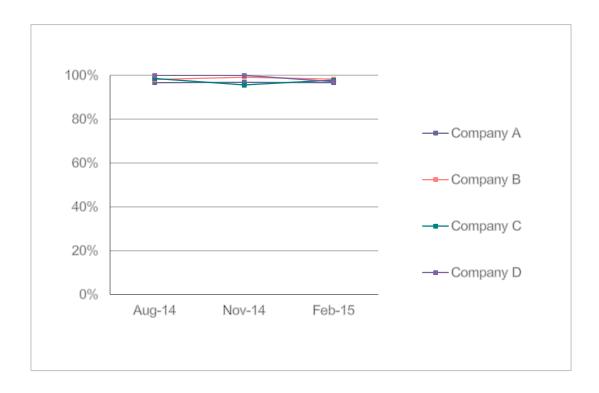
Time to Complete	Aug-14	Nov-14	Feb-15
Company A	7	6	6
Company B	6	7	7
Company C	7	6	7
Company D	7	7	7
Company E	9	7	7



### **BASEBAND COPPER RESTORATION**

#### Met Commit Rate

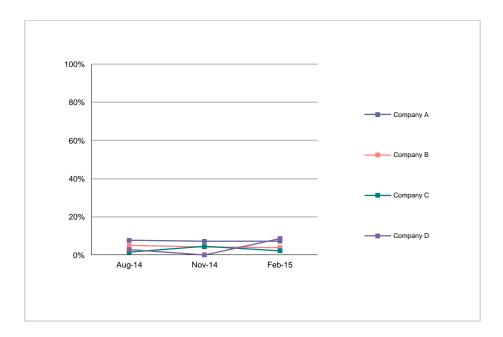
Met Commit Rate	Aug-14	Nov-14	Feb-15
Company A	97%	97%	97%
Company B	98%	99%	98%
Company C	99%	96%	98%
Company D	100%	100%	97%



### **BASEBAND COPPER RESTORATION**

#### Repeat Fault Rate

Repeat Fault Rate	Aug-14	Nov-14	Feb-15
Company A	8%	7%	7%
Company B	5%	4%	4%
Company C	1%	4%	2%
Company D	3%	0%	9%

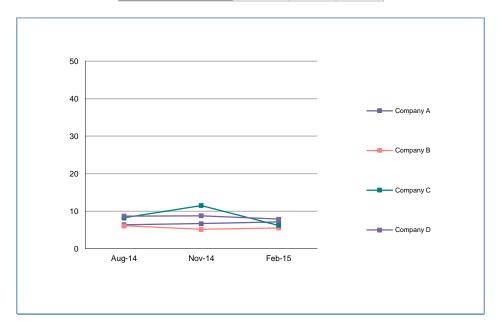


Different customers' troubleshooting and fault logging processes can impact their repeat fault rates, and this may have contributed to the variation between customers.

# **BASEBAND COPPER RESTORATION**

### Time to Complete

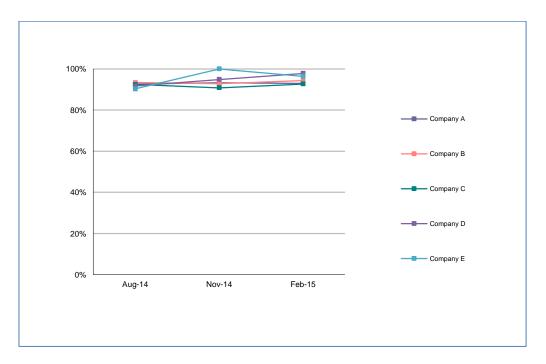
Time to Complete (hours)	Aug-14	Nov-14	Feb-15
Company A	6	7	7
Company B	6	5	6
Company C	8	12	6
Company D	9	9	8



# **NGA (BITSTREAM 2) RESTORATION**

#### Met Commit Rate

Met Commit Rate	Aug-14	Nov-14	Feb-15
Company A	93%	93%	93%
Company B	93%	93%	94%
Company C	92%	91%	93%
Company D	92%	95%	98%
Company E	90%	100%	96%

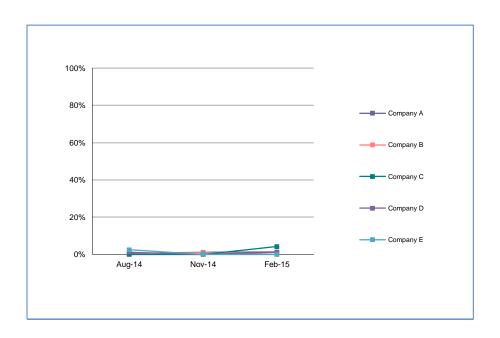


This metric can be affected by the geographical location of faults and by customer processes when diagnosing faults.

# NGA (BITSTREAM 2) RESTORATION

#### Repeat Fault Rate

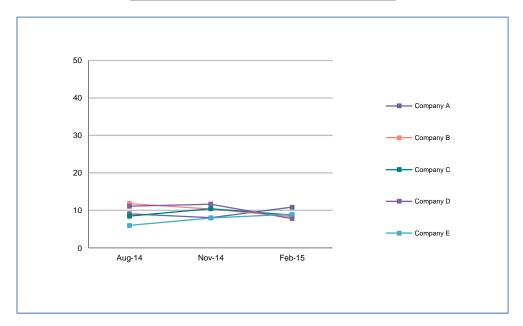
Repeat Fault Rate	Aug-14	Nov-14	Feb-15
Company A	0%	1%	1%
Company B	0%	1%	0%
Company C	0%	0%	4%
Company D	1%	0%	1%
Company E	2%	0%	0%



# NGA (BITSTREAM 2) RESTORATION

#### Time to Complete

Time to Complete	Aug-14	Nov-14	Feb-15
Company A	9	8	11
Company B	12	10	8
Company C	8	10	9
Company D	11	12	8
Company E	6	8	9

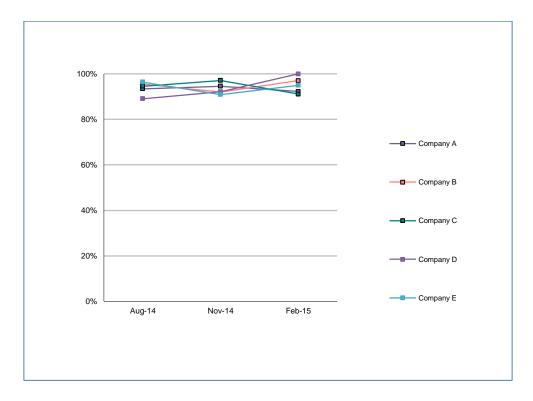


This metric can be affected by the geographical location of faults and by customer processes when diagnosing faults.

## **HSNS LITE (OVER COPPER) - PROVISIONING METRICS**

### Met Commit Rate

Met Commit Rate	Aug-14	Nov-14	Feb-15
Company A	93%	95%	92%
Company B	95%	92%	97%
Company C	95%	97%	91%
Company D	89%	92%	100%
Company E	96%	91%	95%

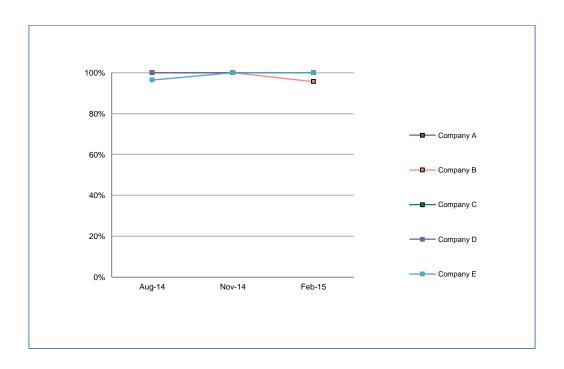


Companies A and C's performance was affected by customer ordering behaviour and site readiness.

# **HSNS LITE (OVER COPPER) - PROVISIONING METRICS**

### Right First Time

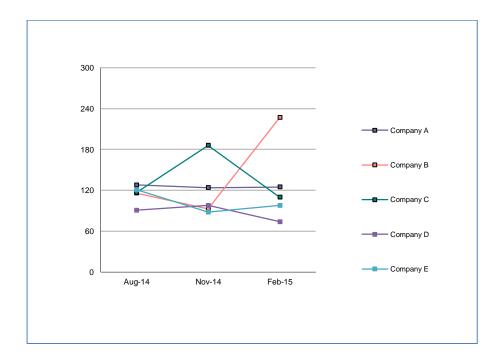
Right First Time	Aug-14	Nov-14	Feb-15
Company A	100%	100%	100%
Company B	100%	100%	96%
Company C	100%	100%	100%
Company D	100%	100%	100%
Company E	96%	100%	100%



## **HSNS LITE (OVER COPPER) - PROVISIONING METRICS**

#### Time to Complete

Time to Complete (hours)	Aug-14	Nov-14	Feb-15
Company A	128	124	125
Company B	116	93	227
Company C	117	186	110
Company D	91	98	74
Company E	121	88	98



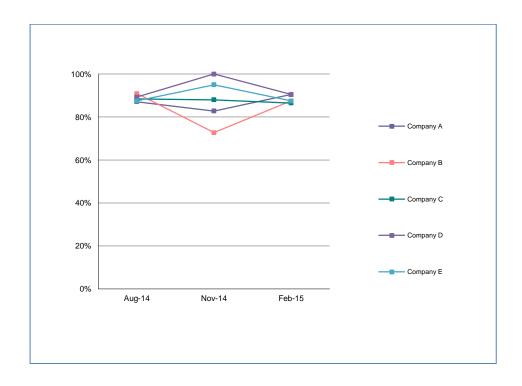
There are a number of factors that can lead to disparate provisioning times for HSNS Lite over Copper. These include geographical location of the installation sites, availability of electronics at rural exchanges, and variability in end-site contact readiness for service. This has contributed to the results for Company B.

## **HSNS LITE RESTORATION**

HSNS Lite fault reporting includes faults for HSNS Lite provided over fibre and copper.

### Met Commit Rate

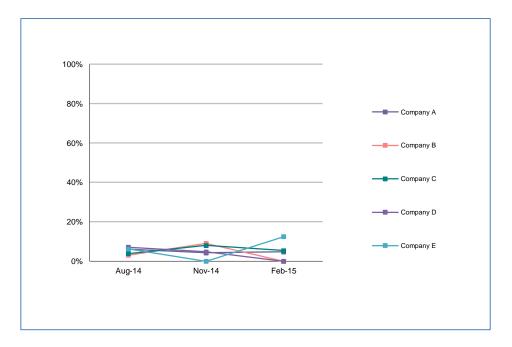
Met Commit Rate	Aug-14	Nov-14	Feb-15
Company A	87%	83%	90%
Company B	91%	73%	88%
Company C	88%	88%	86%
Company D	89%	100%	90%
Company E	88%	95%	88%



### **HSNS LITE RESTORATION**

#### Repeat Fault Rate

Repeat Fault Rate	Aug-14	Nov-14	Feb-15
Company A	6%	4%	5%
Company B	3%	9%	0%
Company C	4%	8%	5%
Company D	7%	5%	0%
Company E	6%	0%	13%

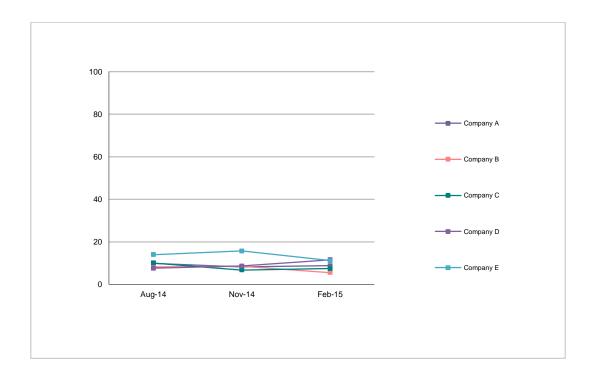


Company E's performance is attributed to an internal error experienced during troubleshooting and logging of the fault and has been addressed via remedial training.

## **HSNS LITE RESTORATION**

### Time to Complete

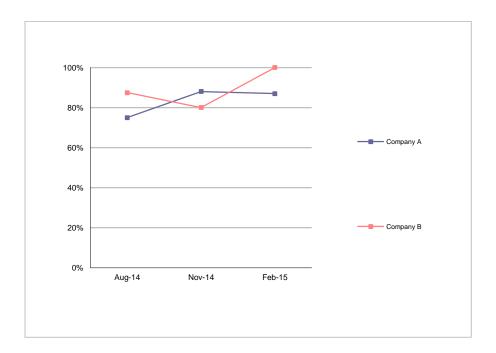
Time to Complete	Aug-14	Nov-14	Feb-15
Company A	10	8	9
Company B	8	8	6
Company C	10	7	7
Company D	8	9	12
Company E	14	16	11



### **HSNS Premium – Restore**

#### Met Commit Rate

Met Commit Rate	Aug-14	Nov-14	Feb-15
Company A	75%	88%	87%
Company B	88%	80%	100%

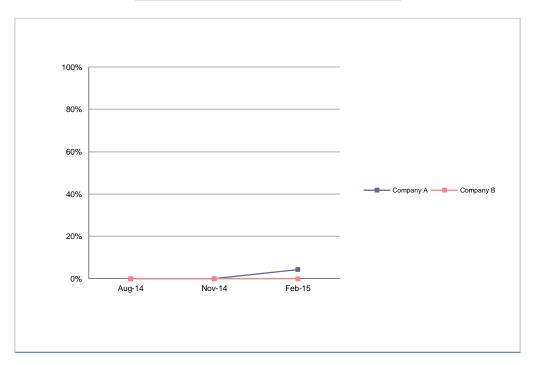


Performance for this metric can be affected by customers' different diagnosis and fault logging practices as in the case of Company A. We are working with this customers to ensure their fault logging and diagnostic processes are consistent.

## **HSNS Premium – Restore**

### Repeat Fault Rate

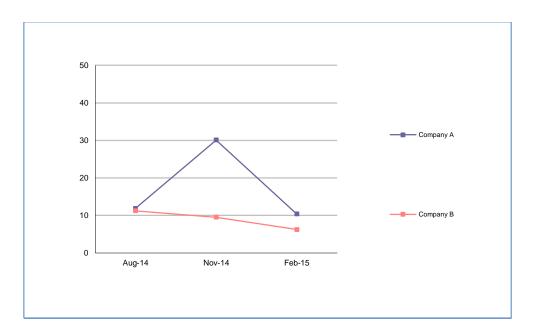
Repeat Fault Rate	Aug-14	Nov-14	Feb-15
Company A	0%	0%	4%
Company B	0%	0%	0%



## **HSNS Premium – Restore**

### Time to Complete

Time to Complete (Hours)	Aug-14	Nov-14	Feb-15
Company A	12	30	10
Company B	11	9	6

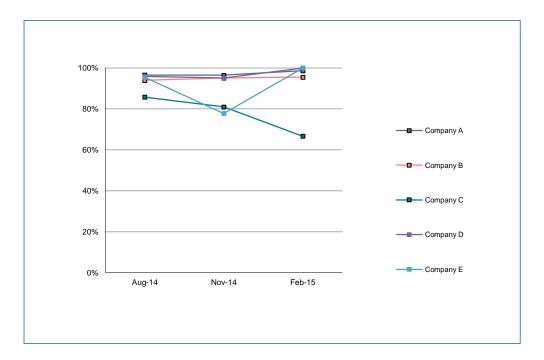


Company A's result is affected by a higher number of complex faults this quarter.

## **HSNS PREMIUM (BITSTREAM 4) - Provisioning Metrics**

### Met Commit Rate

Met Commit Rate	Aug-14	Nov-14	Feb-15
Company A	97%	96%	99%
Company B	94%	95%	96%
Company C	86%	81%	67%
Company D	96%	95%	100%
Company E	95%	78%	100%

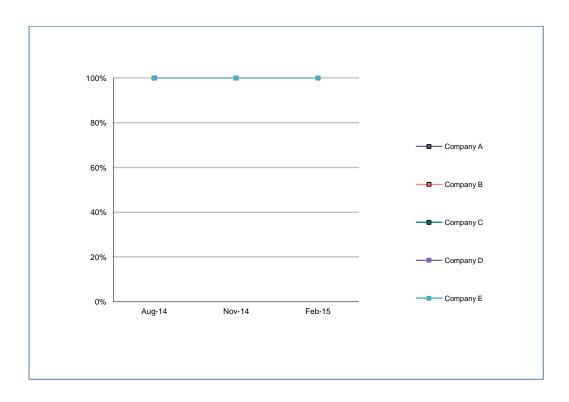


Performance for Company C was affected by customer ordering behaviour and site readiness.

# **HSNS PREMIUM (BITSTREAM 4) - Provisioning Metrics**

## Right First Time

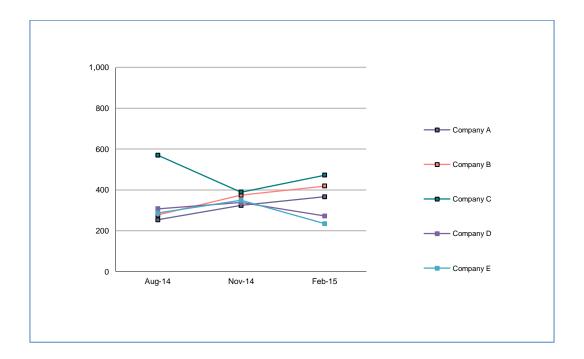
Right First Time	Aug-14	Nov-14	Feb-15
Company A	100%	100%	100%
Company B	100%	100%	100%
Company C	100%	100%	100%
Company D	100%	100%	100%
Company E	100%	100%	100%



## **HSNS PREMIUM (BITSTREAM 4) - Provisioning Metrics**

## Time to Complete

Time to Service Give (hours)	Aug-14	Nov-14	Feb-15
Company A	253	324	366
Company B	277	374	419
Company C	570	389	472
Company D	307	338	272
Company E	286	349	234

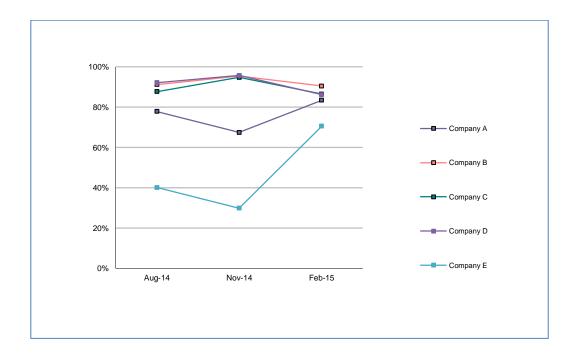


A high proportion of Company B and C's orders required complex build work which resulted in an increase in the time taken to complete them.

## Next Generation Access – NGA (BITSTREAM 2) - Provisioning Metrics

### Met Commit Rate

Met Commit Rate	Aug-14	Nov-14	Feb-15
Company A	78%	67%	83%
Company B	91%	95%	91%
Company C	88%	95%	86%
Company D	92%	96%	86%
Company E	40%	30%	71%

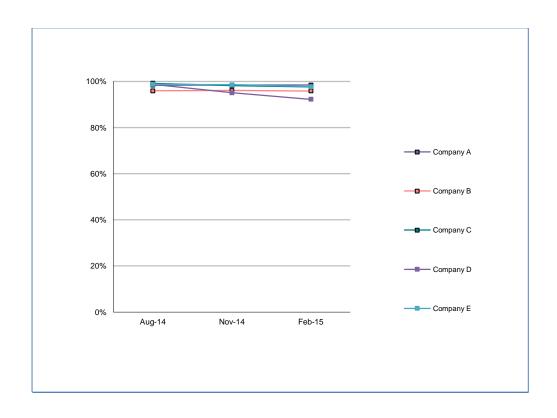


Company E's performance was affected by complex orders which required additional build work to be completed.

# Next Generation Access – NGA (BITSTREAM 2) - Provisioning Metrics

## Right First Time

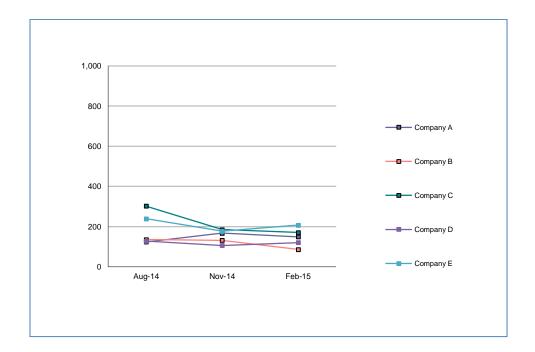
Right First Time	Aug-14	Nov-14	Feb-15
Company A	98%	98%	98%
Company B	96%	96%	96%
Company C	99%	98%	98%
Company D	99%	95%	92%
Company E	99%	99%	98%



# Next Generation Access – NGA (BITSTREAM 2) - Provisioning Metrics

#### Time to Complete

Time to Complete (hours)	Aug-14	Nov-14	Feb-15
Company A	123	167	149
Company B	135	131	86
Company C	302	185	170
Company D	127	106	120
Company E	239	177	207

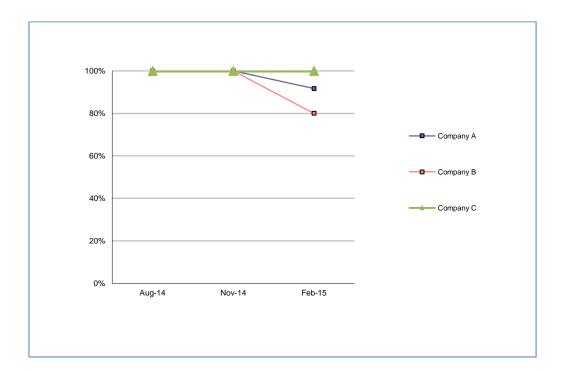


Company E's performance is affected by complex orders which required additional build work to be completed.

## Intra Candidate Area Backhaul (ICAB) – Provisioning Metrics

#### Met Commit Rate

Met Commit Rate	Aug-14	Nov-14	Feb-15
Company A	100%	100%	92%
Company B	100%	100%	80%
Company C	100%	100%	100%

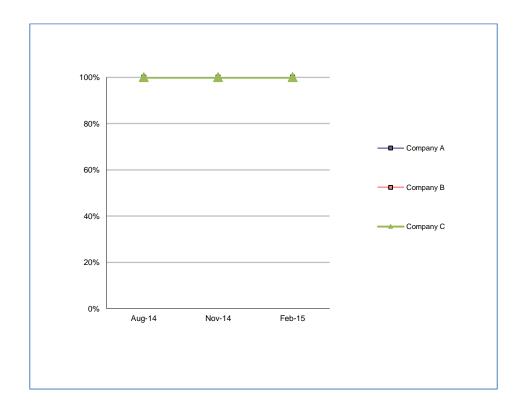


The variance between customers are impacted by reporting systems for this product, which do not reflect customer requested changes to RFS Dates.

# Intra Candidate Area Backhaul (ICAB) – Provisioning Metrics

## Right First Time

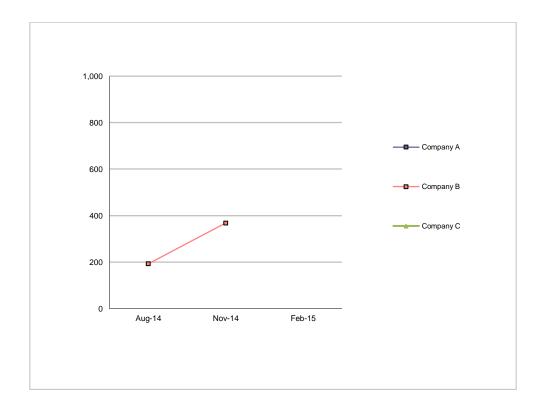
Right First Time	Aug-14	Nov-14	Feb-15
Company A	100%	100%	100%
Company B	100%	100%	100%
Company C	100%	100%	100%



# Intra Candidate Area Backhaul (ICAB) – Provisioning Metrics

### Time to Complete

Time to Complete (hours)	Aug-14	Nov-14	Feb-15
Company A			
Company B	193	368	
Company C			

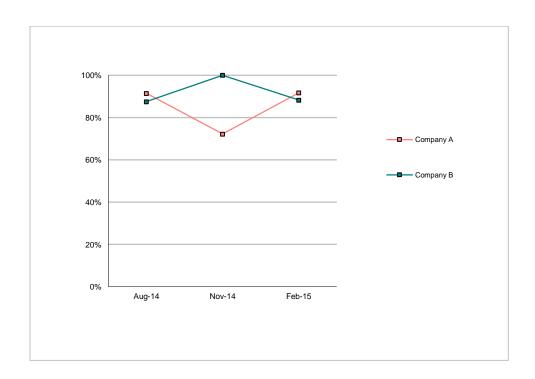


No ASAP orders were received for any companies this quarter.

# **Baseband IP – Provisioning Metrics**

### Met Commit Rate

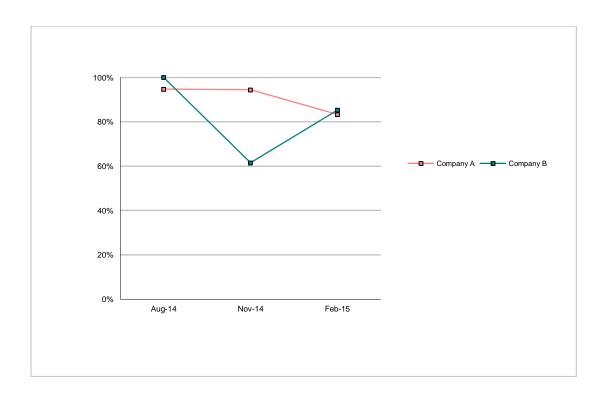
Met Commit Rate	Aug-14	Nov-14	Feb-15
Company A	91%	72%	92%
Company B	88%	100%	88%



# **Baseband IP – Provisioning Metrics**

## Right First Time

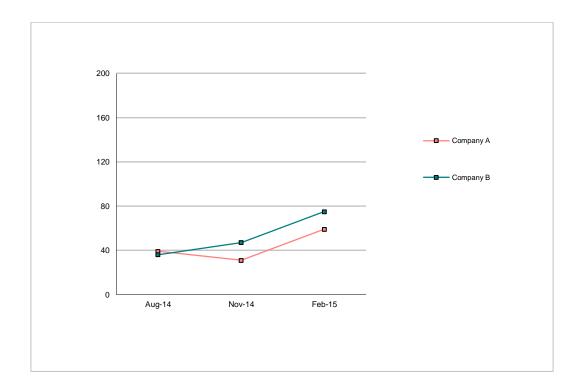
Right First Time	Aug-14	Nov-14	Feb-15
Company A	95%	94%	83%
Company B	100%	62%	85%



# **Baseband IP – Provisioning Metrics**

### Time to Complete

Time to Complete (hours)	Aug-14	Nov-14	Feb-15
Company A	39	31	59
Company B	36	47	75



The variance in this metric is attributed to a number of network and system outages which impacted results.