Telstra TEM Substantiation Report Quarter 1 – 2012/13

Quarter 1: 1 July 2012 – 30 September 2012

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Public Version

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1. Executive Summary

Telstra's Structural Separation Undertaking (SSU) came into force on 6 March 2012. The SSU includes new commitments by Telstra to ensure equivalence in pricing across Wholesale Customers and Telstra's retail business, and improved transparency in relation to Telstra's internal costs. Telstra will periodically publish reports based on the Telstra Economic Model (TEM) that make the revenue and cost information that Telstra itself uses to run the business transparent to the ACCC.

Where a TEM Report shows that the External Wholesale Price (EWP), the price faced by Wholesale Customers, is not within +/-5% of the effective Internal Wholesale Price (IWP) faced by Telstra for certain wholesale service bundles, Telstra will be required to submit to the ACCC a 'Substantiation Report' providing an explanation for this result.

The TEM Reports and any Substantiation Reports will be available to the ACCC for any future ACCC regulated pricing reviews.

The 2012/13 TEM Report for Quarter 1 (Q1) shows that, overall, Telstra is treating Wholesale Customers more favourably than Telstra's own Retail Business Units. While Telstra's Retail Business Units are treated more favourably for most resale services, Wholesale Customers are treated much more favourably for PSTN OTA, ULLS and LSS.

The explanations for the variances observed in the TEM Report can be summarised as:

- The methodology used to determine costs in TEM differs from that used by the ACCC's models used in setting prices for fixed line services. For example, the TEM Report uses allocation rules from Telstra's accounting systems, while the ACCC's Fixed Line Services Model (FLSM) uses allocation rules derived from its TSLRIC model.
- The TEM is based on recent historical information, while the ACCC's pricing model is based on forecasts.
- While different wholesale services tend to be purchased in different geographic areas (e.g. ULLS and LSS are typically sold in lower cost areas and resale services tend to be sold in higher cost areas) TEM is unable to differentiate costs geographically in the same way, as Telstra's financial systems do not capture this information.
- The Q1 reporting period includes the 6 August 2012 closing of the three month SSU WADSL election period for eligible Wholesale Customers. A majority of customers have elected to take the SSU or Interim Access Determination (IAD) rates so the variances between the EWPs and regulated prices are lower this quarter relative to previous quarters reported.
- The IWP calculation does not necessarily account for all economic costs that are appropriately recovered through prices.

Additionally, there will be events from time to time which impact the costs and revenue included in the TEM Report. An explanation of two such events has been added to this report as they have impacted the costs in the reporting period covered by this report. These events are the periodic reviews of the inputs used in the TEM, and the revision of employee provisions which are part of Corporate Administration costs. Both of these events have reduced the IWPs but had no effect on the EWPs.

2. TEM Report Results

Telstra provides the TEM Report to the ACCC for each reporting quarter. This report tables the financial measures for the Reportable Retail Products and the Reportable Wholesale Products specified by the SSU, and reports the IWP and EWP for the Reportable Wholesale Products and Reportable Product Bundles.

The IWP is calculated as the sum of allocated expenses, depreciation and amortisation, and cost of capital, divided by the total demand for each Reportable Product Bundle and Reportable Wholesale Product. This is effectively the internal cost for the same network requirements as required by the Reportable Wholesale Bundle or Reportable Wholesale Product.

The EWP is calculated as the total revenue divided by the total demand for each Reportable Product Bundle and Reportable Wholesale Product. This external price is in effect the average yield for each Reportable Wholesale Bundle or Reportable Wholesale Product.

Reportable Wholesale Bundles

The TEM Report for Q1 FY13 shows that, overall, Telstra treats Wholesale Customers more favourably than Telstra's Retail Business Units. It shows that prices for the bundle of all wholesale services are in favour of Wholesale Customers, relative to Telstra's Retail Business Units, by 4.5%. The results also show that prices for the bundles of voice and voice plus ADSL are favourable to Telstra's Retail Business Units by 16.2% and 13.2%, respectively, but prices for the bundle of ULLS and LSS are more favourable to Wholesale Customers by 32.2%.

Table 1. TEM Q1 FY13 Results – Reportable Product Bundles

Wholesale Bundle		Internal Wholesale Price (per qtr)	External Wholesale Price (per qtr)	Variance
All Reportable Wholesale Products	per SIO	$123.37	$117.80	4.5%
Voice and ADSL Bundle	per SIO	$150.41	$170.33	-13.2%
Voice Bundle	per SIO	$91.30	$106.10	-16.2%
ULLS and LSS Bundle	per SIO	$61.05	$41.37	32.2%

Note: See Appendix A for complete table including all Reportable Wholesale Product Charge Types.

3. Explanation of Results

Telstra commits in the SSU to include an explanation for any differences of more than 5% between the IWPs and EWPs for Reportable Product Bundles. As indicated above, for Q1 FY13, the voice bundle and the voice and ADSL bundle have a Variance between the IWP and EWP of more than 5%, while the bundle of all Reportable Wholesale Products has a Variance below 5%.

The remainder of this report explains the reasons for differences between the IWPs and EWPs in more detail.

As the EWPs tend to be similar to the regulated prices for services included in the Reportable Product Bundles, the difference between IWPs and EWPs can be explained by the difference between IWPs and regulated prices. The former is calculated from TEM and the latter is calculated from the ACCC's FLSM. TEM and the ACCC's FLSM are quite different models - some of the major differences between these models are explained in section 3.1.

As discussed in section 3.2, the TEM uses historical financial information for operating and capital expenditure and demand relating to the relevant financial period, while the ACCC's FLSM is based on forecast information.

A further explanation for differences between the IWPs and EWPs for ULLS and WADSL services is that the EWPs are largely based on geographically deaveraged prices, while the IWPs are based on geographically averaged costs. The effect this has on the difference between the IWPs and EWPs is discussed in section 3.3.

Section 3.4 explains that the WADSL EWP has fallen closer to the IAD regulated rate relative to the last quarter.

Finally, the regulated prices for services are set having regard to legislative criteria that are broader than what is measured by TEM reporting. In the setting of prices for some regulated services, those legislative criteria would be promoted by considering economic costs that are not counted in TEM. This is explained in section 3.5.

Table 2 below summarises which of the above explanations relate to the individual services and Reportable Product Bundles.

Table 2. Summary of explanations for IWP/EWP variances

<table>
<tr><th colspan="4" rowspan="2"></th><th colspan="5">Explanation affecting IWP/EWP variance (if any)</th></tr>
<tr><th>Differences between TEM and the FLSM</th><th>Difference between FLSM forecasts and TEM actuals</th><th>Geographic differentiation</th><th>WADSL IAD Pricing</th><th>Other Economic Costs</th></tr>
<tr><td rowspan="6">BUNDLE OF FIXED WHOLESALE SERVICES</td><td colspan="2" rowspan="2"></td><td>ULLS</td><td>X</td><td>X</td><td>X</td><td></td><td>X</td></tr>
<tr><td>LSS</td><td>X</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td rowspan="4">VOICE AND ADSL BUNDLE</td><td></td><td>WADSL</td><td></td><td></td><td>X</td><td>X</td><td></td></tr>
<tr><td rowspan="3">VOICE BUNDLE</td><td>WLR</td><td>X</td><td>X</td><td></td><td></td><td>X</td></tr>
<tr><td>Local Calls</td><td>X</td><td>X</td><td></td><td></td><td>X</td></tr>
<tr><td>PSTN OTA</td><td>X</td><td>X</td><td></td><td></td><td>X</td></tr>
</table>

3.1. TEM and the FLSM

The individual services underlying the Reportable Product Bundles are regulated by the ACCC and subject to either a final or interim access determination. As such, the EWPs tend to be similar to the regulated prices set for those services, although revenue allocations, product definitions, and commercially negotiated deviations from regulated rates are causes for some differences. This is illustrated in Table 3 for Q1 FY13.

Table 3. Average Monthly EWPs and Regulated Prices (Q1 FY13)

Wholesale Services			IWP	EWP	Regulated Price
TOTAL BUNDLE OF FIXED WHOLESALE SERVICES		**Per SIO**	**41.12**	**39.27**	
VOICE AND ADSL BUNDLE		**Per SIO**	**50.14**	**56.78**	
Wholesale ADSL	In-Place Connection	per connection	62.07	45.14	22.50 to 80
	New Connection	per connection	-	-	-
	AGVC	per Mbps	73.00	36.77	33.65
	Port Zone 1	per SIO	19.27	25.94	25.40
	Port Zone 2	per SIO	21.75	29.28	30.80
VOICE BUNDLE		**Per SIO**	**30.43**	**35.37**	
Wholesale Line Rental (WLR)	In-Place Connection	per connection	21.98	57.78	n/a
	New Connection	per connection	91.90	241.61	n/a
	Rental	per SIO	15.73	23.20	22.84
Local Calls	Usage	per call	0.080	0.091	0.089
PSTN OTA	Usage	per end min	0.014	0.010	0.0095
Unbundled Local Loop Service (ULLS)	Connection	per connection	120.25	71.78	Variable
	Port	per SIO	21.87	16.33	16.21 to 48.19
Line Sharing Service (LSS)	Connection	per connection	91.81	45.79	Variable
	Port	per SIO	8.70	1.95	1.80
MTAS	Usage	per end min	0.06	0.06	0.06

Because the EWPs tend to be similar to the regulated rates, differences between the IWPs and EWPs tend to be caused by differences between the IWPs and the regulated prices. For all of the reportable wholesale services except WADSL, an explanation for the difference between the IWPs and the regulated rates (and EWPs) is the fact that the former are determined by the TEM and the latter are determined by the ACCC's FLSM.

TEM is not a regulatory cost model, but rather it is the set of management accounts used by Telstra to measure costs and revenues associated with specific services and to inform internal decision making. The FLSM and TEM are fundamentally different models. Some of the major differences which have impacted on the variances in the reports include:

- methods of cost allocations;
- methods of unitisation; and
- different inputs and definitions (including the WACC).

The methodologies of cost allocation in TEM differ from those used in the ACCC's FLSM. The TEM allocation factors are based on activity accounting methodologies, guided by the allocation principles set

out in the SSU. They are also updated regularly each quarter to reflect the latest activity information. The FLSM's allocators are based on the ACCC's previous TSLRIC model (the Analysys model) and are guided by the fixed principles in the ACCC's FAD. They are set for the three-year regulatory period and so reflect forecasts made at the beginning of that regulatory period. There are also specific differences in allocation methodologies. The TEM model would allocate costs to a service, when they are specific to that service, while the ACCC has adopted a principle of pooling some costs and spreading them over a group of services (specifically, for ULLS, LSS and ADSL). Further, the TEM model allocates network costs to all services that use the network, while for some network costs (for example, CAN costs) the ACCC allocates to a specific group of services.

With respect to unitisation, the TEM Report divides annual costs by actual demand for the quarter. For some services (ULLS, WLR, and OTA) the ACCC's FLSM divides the annual revenue requirement (cost) by historical demand, where the historical demand is higher than current demand.

To illustrate this, Table 4 compares the FLSM prices produced for the Fixed Line Services FAD with the prices which would be produced by the FLSM if the demand referenced was updated to appropriate actual and forecast usage.

Table 4. Difference between average FLSM prices for 2011/12-2013/14 using historical and updated demand

[Commercial-in-confidence commences]
[Commercial-in-confidence ends]

Note: Formulas in Table E.3.3 in the FLSM were updated to reference the ACCC's forecast of total PSTN demand in appropriate year; Total SIOs in Table D.1.2 were updated to reflect forecast total SIOs with the forecast SIOs in each band calculated using the same distribution between bands as for 2009/10; Formulas in Tables D.3.1 and D.4.1 were updated to reference the total SIOs in the appropriate year.

The TEM Report also uses different inputs to the FLSM including asset lives[1], values for some assets, depreciation rates, and the WACC amongst other items. It also has different definitions for services that can affect any comparison. For example, the FLSM defines OTA and LCS to include all retail and wholesale minutes, while TEM treats retail and wholesale minutes separately.

As a further example, if we replace the WACC used in the FLSM with the post-tax equivalent of the pre-tax WACC used in the TEM Report, the resulting prices for the fixed line services would be [Commercial-in-confidence commences] [Commercial-in-confidence ends] higher.

Table 5. Difference between average FLSM prices for 2011/12-2013/14 using ACCC WACC and TEM WACC

[Commercial-in-confidence commences]
[Commercial-in-confidence ends]

3.2. Forecast versus actual data

The TEM uses financial information from Telstra's accounting systems, including historical operating and capital expenses, and demand that relate to the relevant financial period. In contrast, the ACCC's FLSM is a forward-looking model that uses forecasts for operating and capital expenses and demand (except for some assets as discussed above) over the regulatory period. Table 6 below illustrates the difference between the demand forecasts used in the FLSM and historical demand used in the TEM quarterly reports.

[1] For instance, in the FLSM the ACCC uses an average service life of 38 years, and an average remaining life of [Commercial-in-confidence commences] [Commercial-in-confidence ends years, for optical fibre (Inter-exchange cable), while the TEM Reports use an average service life of [Commercial-in-confidence commences] [Commercial-in-confidence ends years and average remaining life of [Commercial-in-confidence commences] [Commercial-in-confidence ends years.

Table 6. Differences between demand forecasts and actual

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Note: Demand for OTA and LCS in the FLSM is a combination of retail and wholesale demands that are not directly comparable to the demand figures in the TEM Report.

3.3. Geographic differentiation

While different wholesale services tend to be purchased at different prices in different geographic areas (e.g. ULLS is typically purchased in lower cost areas and WADSL services tend to be purchased in higher cost areas), TEM is unable to differentiate costs geographically in the same way, as Telstra's financial systems don't capture this information.

For example, the WADSL EWP depends on geographically de-averaged prices, while the WADSL IWP is calculated using geographically averaged costs. The revenue per WADSL Zone is identifiable but the WADSL expenses and capital are not, as Telstra's financial systems are unable to determine the same geographic split. The IWP for WADSL by Zone was calculated by allocating costs as per the proportional revenue for each Zone.

At the same time, the take-up of WADSL services in regional areas (Zone 2 and Zone 3) is disproportionate compared to the take-up of all ADSL services. As at September 2012, [Commercial-in-confidence commences] [Commercial-in-confidence ends] of WADSL services were acquired within Zone 2/3, compared to [Commercial-in-confidence commences] [Commercial-in-confidence ends] for all retail and wholesale ADSL services. As a result, the WADSL EWP, which reflects this bias in service take-up to higher-priced regional areas, will naturally be higher than the IWP, which is mostly calculated on the basis of costs averaged over all geographic areas.

ULLS exhibits similar issues, with the relative take-up of ULL services being highly skewed to ULLS Bands 1, 2 and 3, relative to the distribution of all access lines. As a result, care must be taken in comparing the IWPs and EWPs for these services in isolation.

Table 7 illustrates the bias of take-up of ULL and WADSL services and the impact on the average price per SIO..

Table 7. ULLS and DSL geographic distribution

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[Commercial-in-confidence ends]

3.4. WADSL IAD Pricing

The WADSL IAD pricing commenced part way through the Q3 FY12 reporting period, and the SSU election period commenced part way through the Q4 FY12 reporting period. Most customers remained on previously contracted rates for much of these quarters, and the EWPs reflected the average effective wholesale prices agreed by Wholesale Customers over the quarter. However, by the end of Q1 FY13, all Wholesale Customers who wished to elect to take IAD rates under the SSU have done so. The EWPs are now very close to the IAD rates and factors affecting the IWPs are having a greater impact on the Variance this quarter.

3.5. Other Economic Costs

The regulated prices for services are set having regard to legislative criteria that are broader than what is measured by TEM reporting. It is often the case that those legislative criteria would be promoted by

considering economic costs that are not necessarily counted in TEM, which measures accounting costs. For example, the legislative criteria require a different approach to valuing land assets, to that applied in TEM. Land assets are valued accounting for the cost of inflation, which promotes the legislative criteria, while the TEM values land at historic cost. Land assets in the FLSM are relevant to the pricing of ULLS, WLR, local calls and OTA.

4. Notes

From time to time there will be events which impact the costs and revenue included in the TEM Report, and flow through to the IWPs and EWPs for the Reportable Products and Reportable Product Bundles.

This quarter has demonstrated the impact of two periodic financial events on the IWPs.

4.1. Model Drivers

Telstra performs periodic reviews and updates of the inputs used in the TEM. These reviews may result in significant differences between the results reported for each quarter.

This quarter coincided with a review and update of the asset allocators used by TEM. These allocators are used in TEM to allocate asset capital values and asset related costs, and are updated on a six-monthly basis. The timing of this update of drivers means that the impact will be seen at Q1 and Q3.

Table 8. TEM Report Cost of Capital Q3 FY12, Q4 FY12 and Q1 FY13

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Recently Telstra's network investment has weighted more heavily to the mobiles network than the fixed network. At this time mobile customers and subsequent traffic have been the prime growth area of Telstra's business. These two factors have contributed to a shift in the network usage allocators proportionally away from fixed products.

TEM is a fully-allocated cost model where the relative movement of products (either growth or decline) has a direct impact on each other. For example, the Transmission Platform serves both mobile and fixed services. While PSTN lines declined by 313,000 over FY12, over the same period Telstra added 1.6 million domestic mobile customers.[2] The TEM Report highlights this shift with a decrease in Transmission platform maintenance costs allocated to both Reportable Wholesale Products, and Reportable Retail Products.

4.2. Financial Events

This quarter has highlighted the variability over the year in Corporate Administration costs, which are inclusive of certain labour related expenses.

During a financial year Telstra will review employee provisions and other related expenses. As a result of a review at Q4 FY12 of performance based incentive payments, substantial costs were incurred. Compared to Q4 FY12, at Q1 FY13 there has been a significant decrease in these costs.

Table 9 illustrates the variability of the total costs included in the Corporate Administration category over the three quarters which have been reported.

Table 9. TEM Report Corporate Administration Costs Q3 FY12, Q4 FY12 and Q1 FY13

[Commercial-in-confidence commences]
[Commercial-in-confidence ends]

[2] Telstra Corporation Limited Financial Results for the year ended 30 June 2012, Financial Highlights - Full Year ended 30 June 2012, page 4

As an example, if we compare the Voice and ADSL Bundle for FY12Q4 and FY13Q1, demand remained steady, yet the decrease in Corporate Administration costs of [Commercial-in-confidence commences] [Commercial-in-confidence ends] in FY13Q1 contributed [Commercial-in-confidence commences] [Commercial-in-confidence ends] of the decrease in the Voice and ADSL Bundle IWP.

A certain amount of volatility is expected in Corporate Administration costs over the course of a year. This can be attributed to reviews that occur at the half-and full-year which will potentially impact the Q2 and Q4 TEM Reports.

Appendix A – Quarter 1 2012/13 Results

Wholesale Services			Internal Wholesale Price (Costs Telstra retail business units faces for the same components purchased by wholesale customers)	External Wholesale Price (Average revenue from supply to wholesale customers)	% Variation
Wholesale Line Rental (WLR)	In-Place Connection	per connection	21.98	57.78	-162.89%
	New Connection	per connection	91.90	241.61	-162.89%
	Rental	per SIO	47.18	69.59	-47.51%
Local Calls	Usage	per call	0.08	0.09	-13.41%
PSTN OTA	Usage	per end min	0.014	0.010	32.34%
VOICE BUNDLE		**Per SIO**	**91.30**	**106.10**	**-16.21%**
Wholesale ADSL	In-Place Connection	per connection	62.07	45.14	27.28%
	New Connection	per connection	-	-	-
	AGVC	per Mbps	219.00	110.31	49.63%
	Port Zone 1	per SIO	57.81	77.82	-34.62%
	Port Zone 2	per SIO	65.24	87.83	-34.62%
VOICE AND ADSL BUNDLE		**Per SIO**	**150.41**	**170.33**	**-13.24%**
Unbundled Local Loop Service (ULLS)	Connection	per connection	120.25	71.78	40.31%
	Port	per SIO	65.62	48.99	25.35%
Line Sharing Service (LSS)	Connection	per connection	91.81	45.79	50.12%
	Port	per SIO	26.11	5.84	77.65%
TOTAL BUNDLE OF FIXED WHOLESALE SERVICES		**Per SIO**	**123.37**	**117.80**	**4.51%**
MTAS	Usage	per end min	0.06	0.06	0.00%