



FINAL REPORT

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Audit of the Fixed Line Services Model

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Consumer Commission

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1. Introduction

The ACCC commenced an inquiry into final access determinations (FAD) for the declared fixed line services in July 2013. A draft decision was released on 11 March 2015, followed by a further draft decision in June 2015.

The ACCC currently uses the fixed line services model (FLSM) to estimate prices for the declared fixed line services. The FLSM is a building block model that produces unit prices for the declared services.

An important aspect of the FLSM is the cost allocation framework, which calculates the proportion of Telstra's total fixed line costs to be allocated to declared services. The cost allocation framework initially used in the FLSM for the 2011 and 2013 FADs (that is, the version used for the most recent FAD) was mostly developed by the ACCC, having regard to various sources of information such as the Analysys cost model (developed for the ACCC in 2007-08 by Analysys Mason) and Telstra Regulatory Accounting Framework (RAF) data. However, during this FAD inquiry Telstra developed a cost allocation framework which it has proposed be used in the FLSM.

The ACCC decided in the draft decision to adopt Telstra's proposed cost allocation framework (in principle, subject to further assessment). The ACCC has integrated Telstra's cost allocation framework into the FLSM so that prices can be estimated.

This integration involves significant changes to the FLSM. In addition, the ACCC has made other adjustments to the FLSM, such as those required to reflect the ACCC's positions on how to account for the arrangements between Telstra and NBN Co under the Definitive Agreements (this involves changes to the way asset disposals are treated in the FLSM).

Marsden Jacob Associates was engaged to undertake an audit of the model with particular regard for the key changes outlined above. The key requirements and outcomes from this analysis are:

- Reviewing the revised version of the FLSM;
- Checking for any errors or anomalies;
- Ensuring that:
 - the model is internally consistent
 - all formulas are working as intended
 - Telstra's cost allocation framework is properly integrated;
- Preparation of a final report; and
- Updating of the FLSM user manual.

1.1 Approach

In this project, Marsden Jacob undertook a comprehensive survey of the cells across the tables comprising the model. This approach was taken because it is not efficient to review every cell

within the Excel model. In this regard, the Excel highlights those formulae where variations occur. There are three dimensions that define where these variations are expected:

- across time. The current FLSM builds on the previous model. Therefore, to generate the previous outcomes, the previous regulatory assumptions and relationships were retained. The model's formulae will change with the new regulatory period;
- across assets. Different assets have different characteristics and the derivation of revenue allocation to each service can vary;
- across services. The most obvious example is that the services ULLS1-3 are derived from each of its component parts. The formulae will necessarily divert for these variations.

The sample focussed on four major issues:

- do the formulae reflect the intention of deriving a building block revenue requirement;
- are the timing and effect of changes in formulae over time, asset and service appropriate;
- are the effects of using the Telstra cost allocation framework incorporated accurately; and
- are the effects of the treatment of NBN-related adjustments (disposals) as intended.

2. Audit analysis

2.1 Recommendations

2.1.1 Critical changes

Marsden Jacob did not find any critical errors or issues in the model.

However, there were a number of formulae and relationships that required confirmation. In all cases, the ACCC confirmed our understanding was correct regarding these issues.

2.1.2 Structural changes

There were no structural problems with the FLSM.

However, except for historical purposes, the parts of the model generating the previous regulatory period's results do not provide any extra information nor would changing its parameters provide insights for the current analysis. There may be benefit if the model continues to be used for future regulatory reviews in removing these earlier elements or greying them out. If required the older model could be made available separately.

2.1.3 Cosmetic changes

There were a number of minor changes to the FLSM that would improve its “user-friendliness”.

In worksheet ‘8. RAB Roll-Forward’, the heading for table 8.3.2 changed to “Roll-Forward Capital Net Additions in Year 2009/10” to be consistent with following tables.

The Goal seek tool on worksheet *B Service prices* changed to use range names rather than cell reference for both the Goal seek target (G86) and the Common price increase (I46).

The macro does not allow the model period to vary. This is not an issue as it will be changed as the period changes.

A note was included to warn that changes to the model period will not be reflected in the Uniform price change analysis.

The following redundant Names have been reviewed:

- LS_Other_Alloc – this name is to be retained for future use;
- Print_Area – removed; and
- WADSL_WACC – this name is to be retained for information purposes.

2.2 General observations

Marsden Jacob reviewed the FLSM and found:

- the model is free from error and anomalies;
- the model is internally consistent and consistent with a building block approach to regulatory price setting;

- formulae are working as intended; and
- Telstra's cost allocation framework has been properly integrated.

Marsden Jacob found that the general structure of the FLSM was sound.

The FLSM is a building block regulatory model that generates the real revenue requirement for the legacy copper network and assigns it to a range of services.

The model is based at 2008/09 prices (with notional adjustment for the CPI to obtain nominal figures for estimating tax effects). Formulae are consistent with this base.

The ACCC confirmed that all values used in the model had been estimated at 2008/09 prices separately from the model.

Where formulae have been substituted by hard values, the ACCC confirmed that the values are as intended. These relate to the adjustment for NBN-related disposals for a number of assets.

As per the previous model, real land values are inflated by the CPI in the model. The ACCC confirmed this intent.

2.3 Treatment of NBN-related disposals

2.3.1 Background

To reflect the fact that NBN migration will cause progressive asset redundancy for some asset classes, the ACCC has treated a proportion of the RAB value of these asset classes as a disposal in each year of the regulatory period. These asset classes are as follows:

- CA02 – Copper cables
- CA03 – Other cables
- CA04 – Pair gain systems
- CA05 – CAN radio bearer equipment
- CA06 – Other CAN assets
- CO01 – Switching equipment (local)

The value of disposals is calculated in the RAB roll-forward worksheet (rows 462 to 560). The calculations for the initial RAB (that is, the depreciated value of the RAB as at June 2009) are separate from the calculations for the 'new asset RAB' (that is, the sum of the depreciated value of each year's capex from FY2010 onwards). The disposal values are intended to reflect the closing RAB value in each year multiplied by the incremental NBN rollout forecast (to be taken as given in this audit). For the local switching equipment asset class, the disposal calculation is multiplied by the proportion of the asset class whose costs are driven by SIOs (i.e. line cards etc.). This proportion is to be taken as given.

The initial RAB disposals are netted off the initial RAB in the table at row 563; the new asset RAB disposals are netted off the roll-forward of each year's capex starting from FY2015 at row 1452. Because capex in each year from FY2010 is rolled forward separately, it is necessary to spread the total value of new asset disposals over the individual new asset RABs. For example, at cell M1509, the amount that is netted off the roll-forward of FY2015 copper cables capex is calculated as the total value of copper asset disposals in FY2015 divided by the number of years that have elapsed since the model base year.

Further, the respective depreciation calculations for the initial RAB and individual new asset RABs have been adjusted with the intention of ensuring that depreciation in a given year corresponds to the RAB value of the relevant asset net of NBN disposals rather than the initial value (being either the initial 2009 value or the amount of each year's capex from FY2010 onwards). This does not change the total amount of depreciation over the life of an asset — rather, it has the effect of spreading the reduced depreciation that arises from the NBN disposals over the period for which there are disposals. If the change were not made, only depreciation in the final year (that is, the year where the asset becomes fully depreciated) would be affected.

2.3.2 Review

The NBN-related disposals are included in the worksheet 8 RAB Roll-Forward. The results are then transferred to the RAB for Tax worksheet inflating by the CPI.

We note that for CO01 in the initial RAB, the RAB value is zero before consideration of the NBN roll-out occurs. It is not included in the calculations. This has no material effect but treating it consistently with other affected assets demonstrates its inclusion in the adjustment process.

The intent of the mechanism is to remove that proportion of the regulatory value of assets in the existing network that have been made redundant by the NBN. For this proportion of the assets, the model reduces each end of year RAB so that for subsequent years, there is no return on these assets and no return of these assets.

A disposal figure for each year is calculated once for each of the groups of existing assets and once for the groups of new assets.

For existing assets, the disposal figure is deducted from the year end RAB after depreciation is removed. This becomes the new start of year RAB for the following year.

The ACCC confirmed that the figures for the NBN Migration (YoY) use incremental roll-out figures (8. RAB Roll-Forward!M463:Q463). Each increment reflects the proportion of remaining assets that are “disposed of” rather than the proportion of original assets. As a result of this approach, depreciation adjustments for the NBN rise then fall reflecting the interaction of increasing roll-out ratio applied to a declining RAB.

Allocation of disposals across asset year groups

For new assets, the NBN-related disposal is calculated at the top level, i.e., the sum of all new asset acquisitions after FY2009. The disposals are ‘allocated’ across each year/asset in a simple pro rata.

So, for example, for assets built in year 2010/11 in Table 8.3.3, the RAB is reduced solely by depreciation each year from 2011/12 to 2013/14. From 2014/15, the end of year RABs for assets classes CA02-CA06 and CO01 are set as the start of year RAB less depreciation for that year and less an allocation of disposals for that year. The disposal allocation is calculated as the disposal figure calculated for all new asset-years divided by the number of applicable asset-years. So at end 2014/15, there would have been six years of new asset additions; the allocation adjustment for disposals is divided by six. This is consistently applied across the asset-year combinations.

The depreciation for these asset-years and years is also adjusted. As noted, disposed assets do not receive a return of or return on capital. Depreciation is recalculated each year.

Depreciation of assets

The application of the adjustment at year end means that for all assets deemed to exist at the start of the year, full depreciation of that remaining value is applied.

2.3.3 NBN scale adjustment

The second worksheet that is adjusted by the decisions on the NBN is the scale adjustment. This adjustment affects the allocation of costs across all services (not just the fixed line services covered by the determination).

The ACCC estimated the unit costs of assets as if there were no excess capacity caused by the NBN. These figures are derived elsewhere and were taken as given for this audit. However, these figures are calculated using a copy of the same version of the FLSM which is the subject of this audit. The unit revenue requirement for each asset is then compared with the unit revenue requirement for each asset generated by the current model.

Where unit costs per asset are greater than that estimated from not adjusting for the NBN, the allocation of asset costs across services is reduced proportionately.

This adjustment is applied to those assets not directly adjusted for NBN disposals. That is, not CA02-06 nor CO01. For these latter assets, a hard coded figure is applied that implies there is no adjustment.

The general effect of the worksheet is to reduce the costs / revenue requirement allocated to services for assets not directly affected by the NBN disposal adjustment. The adjustment has the effect of removing costs attributed to lost economies of scale due to the NBN. The adjustments are applied across all services that use the fixed line assets.

2.4 Cost allocation framework

Marsden Jacob reviewed the application of Telstra's cost allocation framework that is incorporated in worksheet 'Cost allocation'. The hard coded figures in this worksheet are derived from Telstra's CAF workbook and forecast model.

Cost allocation factors for FY2014 onwards are calculated in the Cost Allocation sheet, and are then adjusted by the ACCC in the NBN Scale Adjustments sheet. All cost allocation factors and the ACCC's adjustments to them are to be taken as given in this audit.

The post-NBN adjustment cost allocation factors are intended to be used to calculate regulated revenue requirements. They feed into the Service Costs sheet at the tables from row 428 onwards (note, only allocations from FY2015 onwards are used).

The cost allocation figures are included for formulae from FY2015.

The cost allocation data are consistently applied across the asset classes and services for the regulatory period.

2.5 Economic parameters

2.5.1 Background

Most values in the Economic Parameters sheet have been revised since the previous regulatory period. This includes the table at row 9 and the table at row 74. The new WACC values under column F are intended to be reflected in the calculation of the real vanilla WACC at cell F35. In turn, the WACC for the FY2015-19 regulatory period is intended to be used for the calculation of the return on capital in the Revenue Requirement sheet.

Further, where there are conversions between real and nominal values for FY2015 onwards, it is intended that the inflation index in the table at row 74 is used.

2.5.2 Review

The new economic parameters are applied appropriately to the new regulatory period.

2.6 Uniform price change

2.6.1 Background

Rather than set prices for each service based on service-specific unit costs (as was done in the 2011 FAD), the ACCC has decided to determine a one-off percentage change in the price of all services (uniform price change) that will allow Telstra to recover the regulated revenue requirement, given expected levels of demand for each service. The uniform price change is calculated in the Service Prices sheet from row 40.

These tables summarise the (nominalised) regulated revenue requirement for each service, aggregated over the regulatory period. Also, they are intended to calculate the revenue that is expected to be generated based on expected levels of demand for each service and an 'X-factor' (i.e. the uniform price change).

The estimated revenue required (as calculated by the FLSM) and the estimated revenue generated are summarised in the table at row 59. The difference between the totals is calculated at cell G86. The macro labelled 'Price_change', activated by the 'Calculate uniform price change' button, is programmed to use the goal seek function to determine the uniform price change that would be required to make estimated revenue generated equal to the estimated revenue required.

2.6.2 Review

The FLSM uses Goalseek on worksheet *B Service prices* to generate a constant nominal price increase over the regulatory period. There is no adjustment for time value of money (by using an NPV) nor its real value (by deflating the target and result).

The GoalSeek macro uses a cell reference rather than a name which has the potential to result in model errors if there are changes to rows or columns in the spreadsheet or the cell is moved. Range names were applied to both the Goal seek target (G86) and the Common price increase (I46).

In addition, the macro does not allow the model period to vary. This is an issue with the section in the *B Service prices* worksheet set up for Uniform price change calculation (B.2). The section is set up solely for period, FY2016 to FY2019.

The model includes a warning that changes to the model period will not be reflected in the Uniform price change analysis.

2.7 Service specific operating costs

2.7.1 Background

Telstra has provided some forecasts of operating expenditure that specifically relate to the provision of individual fixed line services. As such, these costs need to be added to post-cost allocation revenue requirements.

These service-specific operating costs are included in the Service Costs sheet at the table at row 81. The table at row 101 provides a summary of the revenue requirements that are allocated to each service. The table below at row 119 is intended to add service-specific operating costs to these post-cost allocation revenue requirements.

2.7.2 Review

The costs are not allocated on an asset basis but solely to service. They have been included in the revenue requirement calculations at the end of the calculation process. As such, they are not adjusted for NBN effects. From there, they are incorporated into the Service Price calculation.

The implication is that these costs are not affected by the NBN scale adjustments nor are they included in the existing asset classes elsewhere modelled.

The ACCC confirms that this implication is appropriate.

Appendix A: Detailed results of general audit of worksheets

A.1 Information sheets and sheets 'No longer in use'

The following Information sheets are not critical for the operation of the model:

- A. Model Design
- C. Revenue Disaggregate
- 11. Cash Flow Analysis

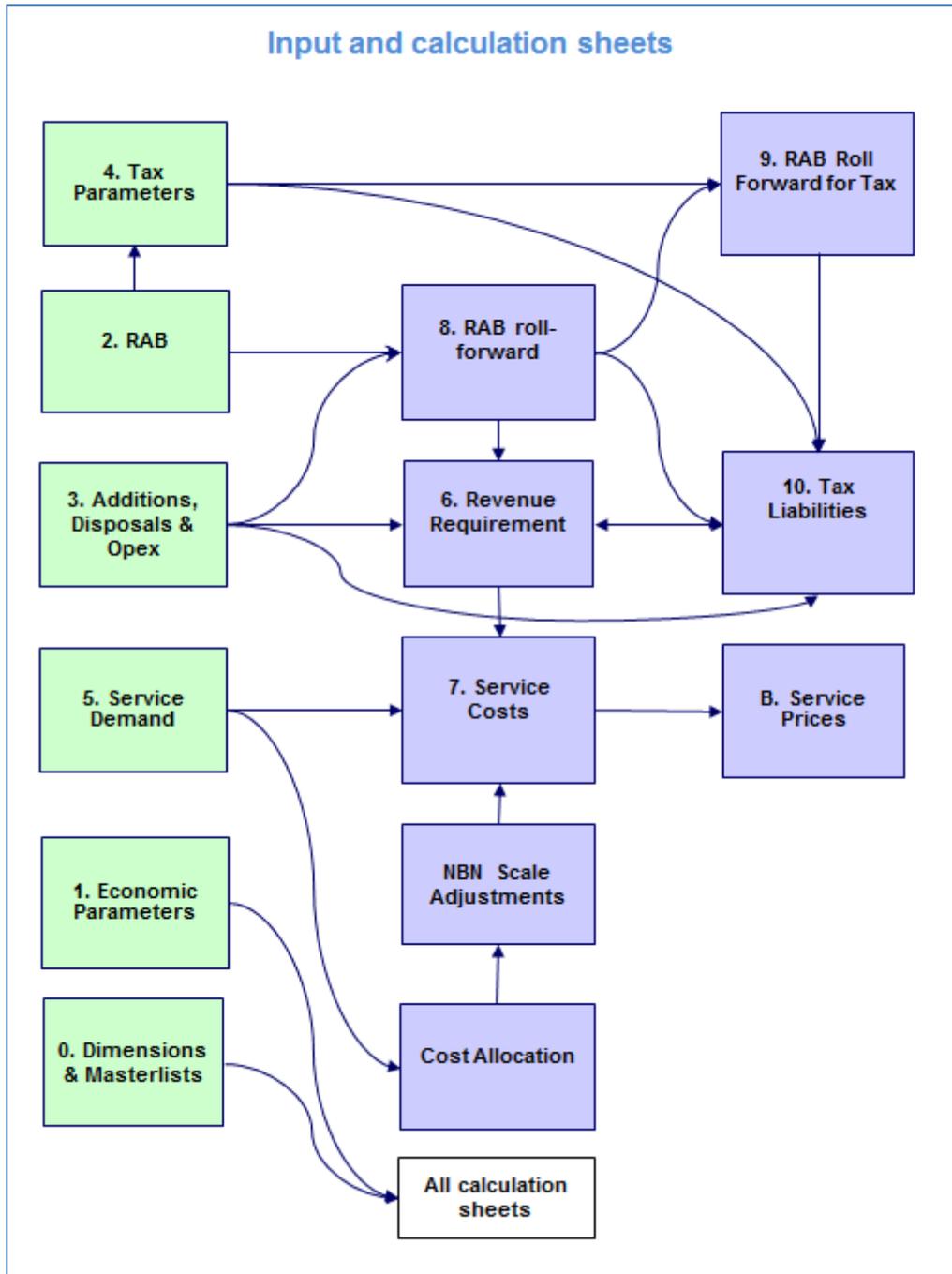
The following sheets are used to generate the historical service prices. It is noted they are 'No longer in use':

- I WADSL Allocation Factor Calc
- J. WADSL price structure
- E. Allocation Factors Calc
- D. Geographic Cos-based pricing
- F. Opex Allocations
- H. Nominal RAB Roll-forward

All of these were checked to ensure they only linked to the historical analysis. The final year of the previous regulatory period formed the start point for the current model approach/analysis.

A.2 Input and calculation sheets

We have shown the worksheets in the order provided in the Model Design worksheet. We look at the Input worksheets first, then Calculation worksheets.



4. Tax Parameters

Inputs are provided solely for Opening depreciated tax value. The figures for Standard tax life and Tax remaining years are sourced from '2. RAB'. Carried forward tax losses (Table 4.2) and Additional Taxable Income (Table 4.3) are all set to zero.

2. RAB

The Regulatory Asset Base for the start year is set with values inserted for Depreciated value, Average Asset Life and Remaining Asset Life.

The Start_year for the workbook is set here rather than in a control worksheet (such as '1. Economic Parameters').

3. Additions, Disposals & Opex

Data on Operating Cost and Overheads for the previous regulatory period are sourced from Table F. 2 of the 'F. Opex allocations' worksheet that reflects the previous model. Figures for the period 2014/15 to 2018/19 are inserted from external workbooks.

Capital expenditure Asset Class Additions (Table 3.2) are all inserted as hard numbers. The 2014/15 to 2018/19 figures are copied from an external workbook.

5. Service Demand

Section 5.1 reports Annual demand for services with a focus on FLSM services (Table 5.1.1). In Table 5.1.1, figures for demand for the previous regulatory period are hard coded. For the current regulatory period figures are selected from the overall Services used for cost allocation. Each FLSM Service (S01-S07) is simply a copy (or sum) of the equivalent in Table 5.1.2.

All figures in Table 5.1.2 are hard-coded and derive from an external workbook.

Label for row 16: LCS was "Call" and its value equates to line 32 which is labelled MOU. In 7, Service Costs, the rate for LCS is set as \$/call and equals Revenue divided by (LCS – measured as calls divided by Average call duration). The label for LCS demand was changed to MOU as it is in Table 5.1.2)

It had no material effect but may be confusing if someone refers to these intermediate tables.

1. Economic Parameters

This workbook provides inputs for the two regulatory periods modelled in the workbook: the previous regulatory period uses parameters for FY2010-FY2014 and the current regulatory period uses figures for FY2015-FY2019.

WACC input parameters (Table 1.1.1) are hard-coded. The Real vanilla WACC is then used for '6. Revenue Requirement' and 'C. Revenue disaggregate'.

Historical average consumer price expectations from the RBA (based at 2008/09) are hard-coded for 2008/09 to 2014/15. For 2015/16 and following years, the ACCC's forecast inflation is used. It is calculated as the 10-year geometric average of: RBA short term CPI forecasts for the years available; and the midpoint of the RBA target range for remaining years. Neither inflation rates nor cumulative indexes are rounded to one decimal place.

Inflation figures feed into Roll Forward for Tax, Cash Flow, Service Costs, Revenue Requirement, Service Prices and Tax Liabilities worksheets.

0. Dimensions & Masterlists

This worksheet allows selection of calculation period (from 1 to 12), the depreciation method for asset classes, the names for asset classes, the years covered. These force consistency in descriptions for lookup tables and the like.

This worksheet now contains the Starting_year noted above.

8. RAB Roll-Forward

This worksheet comprises a large number of tables used to generate the end of year Regulatory Asset Base.

Section 8.1 sets out the input data. Starting figures for FY2009 are sourced from '2. RAB'. Table 8.1.1 looks up these figures. Table 8.1.2 looks up the input figures from Table 3.2.

As noted above 8.1.3 looks up the Disposals table in worksheet '3. Additions, Disposals & Opex'.

Section 8.2 calculates the RAB.

Table 8.2.1 Net Additions subtracts (zero) Disposals in Table 8.1.3 from Additions in Table 8.1.2. For the previous regulatory period, this figure is increased by half the WACC (for the first regulatory period). As there are no Disposals, the figures for the current regulatory period equal Additions. Table 8.2.2 sets the Opening RAB to the previous year's end-of-year RAB. Regulatory depreciation is the sum of regulatory depreciation for each asset class for each investment period; so for existing assets and for the sum of asset investment in each year starting in 2009/10 (new asset-RABs).

Each RAB for existing assets and each new asset is calculated in the same way. The figures for 2008/09 are set from Table 8.1.1. Each Opening RAB is set equal to the previous year's Closing RAB. The Closing RAB is the sum of the component Closing RABs. However, for CA04 Pair gain systems in 2013/14 and CO01 Switching Equipment – Local for FY2012/13 and 2013/14, the Closing RAB is hard-coded at the total level. Regulatory depreciation was also hard-coded for these asset classes and years. The ACCC confirmed these figures are as intended.

Section 8.3 calculates the individual RABs that are summed in section 8.2. NBN-related Disposals are calculated at the higher level for the asset classes. So one set of Disposal figures are generated for existing assets (Table 8.3.1) and one set generated for all new assets (Table 8.3.2).

For all assets, the disposal ratio is set each year in the current regulatory period. This subtracts that proportion of the remaining value of assets from the asset class (either existing or all new) at the end of each financial year from 2014/15 to 2018/19. The adjustment is made at year end in conjunction with that year's depreciation. Where an asset value has been reduced zero this disposal adjustment has no effect. As the value each year is less than one, this adjustment can never reduce the Closing RAB below zero. The disposals only apply for the following assets: CA02-CA06 and CO01. For existing assets, there is no adjustment for CO01 (as it was already fully depreciated).

The disposal figure for new asset purchases (used in the new asset-RABs) is allocated across the asset class investment year. The evaluation of this aspect is provided in detail in section 2.3.

9. RAB Roll Forward for Tax

The Roll-Forward for Tax worksheet derives its opening values for Depreciated Tax Value, Tax Standard Life and Tax Remaining Life from the Tax Parameters worksheet. It uses the same Tax Standard Life for each asset class for all years. It uses the same Average Asset Life for this asset class as RAB Roll-Forward.

The opening RAB for each year is set equal to the Closing RAB for the previous year. The ACCC confirmed that while the RAB and Regulatory depreciation figures for CA04 and CO01 were hard-coded in the RAB Roll-Forward worksheet, there is no adjustment intended to either the RAB or depreciation for the equivalent asset classes and years for tax purposes.

For the calculation of the new asset-RABs for Tax the inflation rate is sourced from the Economic Parameters worksheet. As inflation adjustments are not made prior to 2014/15, this

is equivalent to the adjustment noted above for Net Additions. The inflation level adjusts the disposal figure from the RAB Roll-Forward worksheet.

The ACCC confirmed this intent.

The calculation of Depreciation includes reference to the '0. Dimensions & Masterlists' worksheet. One of the conditions in the calculation is that a lookup value is greater than zero. Inspection of the range of values it can take suggests that this is always the case (F16 and F17 in the Masterlists worksheet) indicates that this is always so. We assume that the functionality required for different depreciation approaches is not used now.

The RAB Roll-Forward for Tax uses the same adjustment as RAB Roll-Forward for NBN disposals.

6. Revenue Requirement

The revenue requirement sums the total costs associated with the assets. It is the sum of

- the Return on Capital (Table 6.1.1 which uses the previous regulatory period WACC – and separate WACCs for Core vs CAN assets in 2012/13 and 2013/14 – for the years 2009/10 to 2013/14, and the current regulatory period WACC for the period from 2014/15 and applies it to the opening RAB for that year);
- Operating costs and Overheads (Table 6.1.2);
- the Return of Capital (Table 6.1.4) sourced from Table 8.2.3 (sum of regulatory depreciation);
- a taxation allocation on the return on capital for each asset class. Where there is a Return on Capital for either CAN or Core assets in total, the allocation is generated as the ratio of CAN/Core Net Tax divided by CAN/Core Return on Capital. The Net Tax – Tax Payable less Imputation (Table 6.1.4) – is sourced from Table 10.2.9 and adjusted for inflation. If there is no Return on Capital then a notional markup uses the number of either CAN or Core asset classes.

The worksheet uses the same approach for inflation (Table 6.1.4) as for Net Additions in the RAB Roll-Forward for Tax. Assuming they are adjusted in the same way for the same reason, there may be some benefit in linking these so that changes do not lead to inconsistency.

10. Tax Liabilities

The worksheet mimics a P&L: it generates the Revenue requirement for the model (excluding tax) and deducts tax expenses and any carryover losses from the previous year. It also incorporates the allowance for extra tax from the Tax Parameters worksheet. As this latter is zero, it can be ignored. An adjusted corporate tax rate is applied and imputation credits deducted. The adjusted rate is

Corporate tax rate / {1 - [1 - Imputation rate] * Corporate tax rate}

The standard inflation indexes are used to inflate the values for each of CAN and Core values from RAB Roll-Forward opening values. Both the pre and post tax Revenue Requirements are also inflated.

7. Service Costs

This worksheet allocates the revenue requirement generated for the asset classes across the various services using the assets. The foundation for the allocation is the Telstra allocation matrix which is subsequently adjusted by NBN scale adjustments.

Section 7.1 replicates information from other worksheets. Table 7.1.1 shows the annual revenue requirement by asset class by year (including tax). Table 7.1.2 reproduces the Annual demand by service for each year from Table 5.1.2. Table 7.1.3 replicates Table 5.2. Telstra provides an extra layer of costs (Wholesale Business Unit Indirect Operating Costs) by service (Table 7.1.4). These are hard-coded and are only available from 2014/15.

Costs are allocated each year separately by service and then aggregated in section 7.2. The overall aggregation for the asset based costs is reproduced in Table 7.2.1 which is the transpose of Table 7.3.2. This is added to service specific costs to produce overall service revenue required (Table 7.2.2).

The first table is used in the calculation of the annual service price figure in Table 7.2.3. The real prices in 7.2.3 are inflated by the two-step inflation adjustment used for Net Additions (again this is separately estimated so if one changes, this must be done again here) to produce Table 7.2.4.

Table 7.2.2 is used for the final B. Service prices figure calculation in Table B.2.2 (via Table B.2.4).

Section 7.3 allocates the detail of the cost allocation framework to the asset costs. For previous regulatory period, the costs for each asset class each year are allocated to a service on the basis the allocation in E. Allocation Factors Calc. From 2014/15, the allocation factors are derived from NBN Scale Adjustments. The allocation factors are year, asset class and service specific. Each year's costs are summed across all asset classes to generate a total figure for that service.

NBN Scale Adjustments

Allocator tables and Scale adjustments checked. The worksheet shows figures for FY2014 but these are not used.

The NBN Scale Adjustment worksheet replicates the structure of cost allocation.

The worksheet compares the service cost allocated from the asset classes with a (separately calculated) cost of provision that does not include NBN-induced excess capacity. Where the latter unit costs are higher, this differential is used to scale down the asset class cost allocations for the FLSM services in each year. However, for those assets adjusted for NBN disposals there is no NBN scale adjustment.

Cost Allocation

The ACCC obtained cost allocation information from Telstra. The cost allocation figures were tracked through to subsequent spreadsheets.

B: Service prices

The Tables in section B.1 derive from the pre allocation of Telstra Wholesale Costs to Services. This section was not used for price setting for the current determination but reflects previous approach. The prospective prices should be deleted.

Macro

There is only one global macro written for this workbook. It seeks to set an average common price change across the services for :

- Unconditioned Local Loop Service Band 1-3
- Unconditioned Local Loop Service Band 4
- Wholesale Line Rental
- Fixed Originating & Terminating Access Service
- Local Carriage Service
- Line Sharing Service
- Wholesale ADSL
 - Zone 1 port
 - Zone 2/3 port
 - AGVC/VLAN

This new price is held constant through the years 2015/16 to 2018/19 inclusive.

Goalseek on worksheet B Service prices uses a range references to reduce the likelihood of an error occurring through inserting a row or column.