



Technical annex: SONI RAB

Draft Determination
Annex 8



About the Utility Regulator

The Utility Regulator is the independent non-ministerial government department responsible for regulating Northern Ireland's electricity, gas, water and sewerage industries, to promote the short and long-term interests of consumers.

We are not a policy-making department of government, but we make sure that the energy and water utility industries in Northern Ireland are regulated and developed within ministerial policy as set out in our statutory duties.

We are governed by a Board of Directors and are accountable to the Northern Ireland Assembly through financial and annual reporting obligations.

We are based at Queens House in the centre of Belfast. The Chief Executive leads a management team of directors representing each of the key functional areas in the organisation: Corporate Affairs, Markets and Networks. The staff team includes economists, engineers, accountants, utility specialists, legal advisors and administration professionals.



Our mission

To protect the short- and long-term interests of consumers of electricity, gas and water.



Our vision

To ensure value and sustainability in energy and water.



Our values

- Be a best practice regulator: transparent, consistent, proportionate, accountable and targeted.
- Be professional – listening, explaining and acting with integrity.
- Be a collaborative, co-operative and learning team.
- Be motivated and empowered to make a difference.



Abstract

This annex details the decisions we propose to take on the historical SONI RAB up to and including the financial year 2019/20, for the purposes of setting the 2020 to 2025 price control, and how we have made other estimates and forecasts of the RAB for the purposes of our modelling analysis. It also sets out the related rules we intend to apply.

Audience

This document will be of interest to SONI and potentially other stakeholders.

Consumer impact

SONI's TSO costs of running its business which we price control are typically around 2% of the NI consumers electricity bill. How it chooses to deploy the costs of running its business and performs its role has a larger impact on outcomes such decarbonisation, grid security and wider system costs (for example, system service, wholesale and transmission investment costs which make up part of the electricity bill for NI consumers); given the influence it has across the system. We incentivise SONI through the price control to deliver high quality service to contribute to these good outcomes.



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1. Introduction

- 1.1 In broad terms, the value of the regulated asset base (RAB) of SONI in any year represents the value of accumulated investment which is allowed to be recoverable through the price control framework but which SONI has not yet recovered through tariffs to customers (via the depreciation elements of its revenue allowances). The RAB evolves over time according to price control allowances for capital expenditure, the outturn capital expenditure of SONI and rules and policies determined by the UR as part of its price control determinations (e.g. rules on the additions to be made to the RAB, on RAB depreciation allowances and RAB inflation indexation).
- 1.2 The 2015-20 SONI price control recognises four types of RAB, or RAB components, based on the nature of the investment and differences in the rules that apply in relation to the RAB. These are summarised briefly below.¹
- **Building assets RAB.** Additions to this RAB relate to capital expenditure by SONI on buildings, facilities and premises. Additions to this RAB are depreciated over 25 years (straight line).
 - **Transmission network pre-construction projects (TNPP) RAB.** Additions to this RAB relate to expenditure by SONI on TNPP projects. Additions to this RAB are not depreciated and they remain in SONI's RAB until the value is transferred to NIE Networks (or written off the RAB and charged to SONI's customers, with our permission).
 - **Special Projects RAB.** Additions to this RAB relate to expenditure by SONI on special projects approved by us from time to time. Different depreciation periods may apply to individual special projects.
 - **Non-building assets RAB.** Additions to this RAB relate to all other capital expenditure. Additions to this RAB are depreciated over 5 years (straight line).
- 1.3 We propose to retain each of these four RAB types for the 2020-25 period.
- 1.4 For the purposes of our draft determination of the 2020-25 SONI price control we need to determine, or make forecasts of, values for the historical RAB for each year in the period up to and including the financial year 2019/20. In addition, for some of the modelling analysis used as part of our draft determinations, we need forecasts relating to the RAB over the 2020-25 price control period.
- 1.5 The bulk of this annex describes the decisions we propose to take on the historical

¹ For our financial modelling purposes, there was one further RAB component: a 2010-15 capex over-spend RAB. This was separated out in our financial model. This RAB component is a legacy matter and is not used for the 2020-25 SONI price control capital additions and should be fully depreciated by the 2019/20 financial year. We discuss the treatment of the 2010-15 capex over-spend further in this appendix.



SONI RAB up to and including the financial year 2019/20 for the purposes of setting the 2020-25 SONI price control, and outlines how we have made other estimates and forecasts of the RAB for the purposes of our modelling analysis. This annex also clarifies aspects of the rules on the SONI RAB that we propose for the 2020-25 period.

- 1.6 We take the building and non-building asset RABs first before moving on to the TNPP and special projects RAB. There is a clear distinction in the TSO licence between the treatment of these RABs, and we have found it helpful to consider them separately. We organise this material into different sections for different SONI price control periods, because the price control rules and policies that affect the calculation of the RAB differ between different price control periods.
- 1.7 In addition, in the final section of this annex we set out our proposed approach to managing the transition from RPI to CPIH indexation as far as the calculation of the RAB is concerned.



2. Building and non-building RAB: 2010-15

- 2.1 This section explains our proposed approach to the determination of values relating to the building and non-building RAB in the period from 1 October 2010 to 30 September 2015. To a large degree, these values were confirmed as part of our final determinations for the 2015-20 price control period (subject to any amendments following the outcome of the CMA appeal process). The task here is simply to identify the relevant information source for them and update for RPI inflation. However, in addition we need to consider whether any further updates or adjustments to these values are needed now that a full set of outturn expenditure data for the period to 30 September 2015 is available.
- 2.2 Although the SONI RAB stretches back before 1 October 2010, we have no reason to think that RAB values for the period before this date would need to be updated or re-opened. The RAB values for the period before 1 October 2010 are consistent with those reported in the model used for the 2015-20 price control determination.

Information from the post-CMA financial model

- 2.3 The current TSO licence does not specify the values of SONI's building and non-building assets RAB at the start of the current price control period (i.e. 1 October 2015). Instead, it lists the average values of building and non-building assets RAB in each year of the period.
- 2.4 These average values are calculated in the financial model used by the UR to implement the CMA's final determinations for the 2015-20 SONI price control as the simple average of the opening and closing values of the RAB in each year of the period. We refer to this model as the post-CMA financial model.
- 2.5 Our starting point for values for the building and non-building RAB in the period 2010/11 to 2014/15 is the post-CMA financial model.
- 2.6 This model reports the following opening values of the RAB for the year 2015/16 (i.e. opening value on 1 October 2015), which reflects the RAB value of the opening RAB on 1 October 2010 and the net effect of all RAB movements in the period 2010-2015.

Table 1: Opening values of building and non-building RAB 2015/16

RAB category	Opening value 2015/16 (April 2014 RPI terms)
Building RAB	£2.443 million
Non-building RAB	£6.431 million

- 2.7 The opening RAB values reported above are calculated within the financial model as follows:

- The opening RAB position at the start of the 2010-2015 price control period,



as recorded in the financial model; plus

- RAB additions based on ex ante capital expenditure allowances as set out in our price control final decision for each year of the 2010-2015 price control period. This does not take account of SONI's actual capital expenditure during that period, which is dealt with separately (see discussion further below); minus
- RAB depreciation figures calculated within the financial model for each year of the 2010-15 period. These figures are consistent with the depreciation allowances for the 2010-15 period set out in our final decision for the 2010-15 SONI price control period.

2.8 For the 2010-15 period, the RAB is indexed to the RPI: the RAB is inflated each year by the growth in the RPI between April of the previous year and April of the current year.

Alternative figures provided in SONI's 2020-25 business plan

2.9 SONI's business plan data submission for the 2020-25 SONI price control did not explicitly present its view on the RAB values for each individual year from 2010/11 to 2014/15. The earliest RAB figure in the business plan data submission was the closing RAB value for 2014/15 (which is the same, in a constant price base, as the opening RAB for 2015/16). We identified that SONI's closing RAB for 2014/15 differed significantly from the corresponding figures in the post-CMA financial model.

2.10 SONI's figures reported a closing value of the RAB in 2014/15 that was higher than that reported by the post-CMA financial model and higher than that implied by the current TSO licence as set out above. The table below compares the opening RAB values submitted by SONI with those from the post-CMA financial model.

Table 2: Comparison of closing values of the building and non-building assets RAB (2014/15)

RAB category	Opening values according to SONI's business plan (converted to April 2014 RPI terms)	Opening values according to post-CMA financial model (in April 2014 RPI terms)	Difference
Building RAB	£3.628 million	£2.443 million	£1.185 million
Non-building RAB	£8.279 million	£6.431 million	£1.848 million
Total	£11.907 million	£8.874 million	£3.033 million

2.11 Following a request from the UR for an explanation for the differences and the detailed calculations that underpin SONI's RAB figures, SONI provided a spreadsheet on 24 March 2020. We found material differences between the RAB



additions and depreciation figures provided by SONI for the financial years within the 2010-15 price control period and the corresponding figures in the post-CMA financial model for the same period. SONI did not provide an explanation for these differences, or any other evidence to support its proposed RAB values.

- 2.12 In the absence of any explanation or justification from SONI for its figures, we considered the possibility that these differences relate to differences between ex ante capital expenditure allowances and SONI's actual capital expenditure during the 2010-15 SONI price control period. More generally, we considered it prudent to consider whether the RAB values for any financial years in the 2010-15 period should be updated in light of information on SONI's outturn expenditure in this period. Our assessment of this issue is set out in the next section.

The treatment of 2010-2015 capital expenditure overspends

- 2.13 Our 2010-15 SONI price control final decision set out ex ante capital expenditure allowances for the 2010-15 price control period. In its 2015-20 business plan submission to us, SONI reported its actual expenditure against these ex ante allowances for the first three years of that period (2010/11 to 2012/13), as well as a forecast of its expenditure in the last two years of that period (2013/14 and 2014/15).
- 2.14 The ex ante capital expenditure allowances for the 2010-15 period along with SONI's reported actual and forecast capex expenditure during the same period are set out in the table below.

Table 3: Capital expenditure allowances and expenditure (2010-2015)

RAB category (all figures in April 2010 RPI terms)	Total capital expenditure ex ante allowances	Actual and forecast capital expenditure during the 2010- 15 period (as set out in SONI's BP submission for the 2015-20 price control)	Difference (actual/forecast less allowance)
Building RAB	£4.981 million	£6.030 million	£1.049 million
Non-building RAB	£2.534 million	£2.948 million	£0.414 million
Total	£7.515 million	£8.979 million	£1.464 million

- 2.15 The 2010-15 SONI price control framework did not include an explicit mechanism that would have entitled SONI to recover some, or all, of any overspend against ex ante allowances, such as explicit pass-through or cost-sharing arrangements.
- 2.16 However, as part of our final determination for the 2015-20 SONI price control period, we decided to allow SONI to recover an amount up to the *forecast* overspend relating to the 2010-15 period. We did so by allowing a special RAB



addition of £1.7m (April 2014 RPI) to take effect on 1 October 2018, on which SONI was allowed to earn a return and accelerated depreciation, such that this RAB addition would be fully depreciated by 30 September 2020. This special RAB addition was approximately equal to SONI's reported overspend of £1.464m (in April 2010 RPI) uplifted to April 2014 RPI.

- 2.17 Furthermore, as part of our Final Determination for the 2015-20 SONI price control period, we said:²

“The value of £1.7 million is an estimated amount for which the actual net overspend will be considered against the 2010-2015 price control and the Utility Regulator reserves the right to adjust the RAB addition to the actual net overspend up to a cap of £1.7 million. Any adjustment necessary will be considered in 2016 as part of the K factor correction applicable to the 2016/17 tariff.”

- 2.18 This clear statement of price control policy on a cap of £1.7m means that, even if the amount by which SONI's actual capex during the relevant period exceeded allowances was higher than £1.7m (in April 2014 RPI terms), SONI would only be entitled to depreciation and/or return on £1.7m of the overspend.

- 2.19 SONI's business plan and query responses do not provide any arguments for disapplying the £1.7m cap or making any further adjustments to the RAB for overspend in the 2010-15 price control period

- 2.20 Furthermore, SONI did not challenge this figure of £1.7m, or the application of a cap, as part of its appeal to the CMA. SONI submitted its notice of appeal to the CMA in April 2017. It seems likely that by that time SONI would have had information about the actual capital expenditure it had incurred in the period to 30 September 2015. SONI had an opportunity to challenge the UR's RAB adjustment and cap of £1.7m as part of the CMA appeal, but this issue did not form part of the appeal. This is especially relevant in a context where numerous other elements of the 2015-20 price control decision were appealed by SONI to the CMA.

Draft determination on building/non-building RAB 2010-15

- 2.21 On the basis of the considerations above, we do not propose to make changes to the figures from post-CMA financial model (updated for inflation using RRP indexation), which are consistent with current licence, for the 2010-2015 RAB values.
- 2.22 These figures differ from SONI's proposed figures, which we found to be insufficiently explained and inconsistent with past price control determinations.

² Paragraph 239 of Utility Regulator (2016) “Final Determination to the Price Control 2015 – 2020 for the Electricity System Operator for Northern Ireland (SONI)”



3. Building and non-building RAB: 2015-20

- 3.1 In line with the position taken in the previous section, we took the RAB values for the building and non-building RABs for all financial years up to and including 2014/15 directly from the post-CMA financial model (updated for RPI inflation). We now turn to consider the building and non-building RAB for financial years 2015/16 to 2019/20.
- 3.2 Our starting point for the 2015-20 period was the post-CMA financial model. We then updated this for several factors:
- **Update for outturn RPI inflation.** For the 2015-20 price control period, our regulatory policy was for RPI indexation of the RAB, with the opening RAB in each financial year determined as the closing RAB in the previous year uplifted for RPI inflation, calculated as the April RPI for the financial year divided by April RPI in the previous financial year. The post-CMA financial model provides RAB figures for the 2015-20 period in April 2014 prices and we updated the RAB to nominal prices using RPI figures (or forecasts of RPI for 2019/20).
 - **Update of 2015-20 RAB additions for outturn expenditure.** For the 2015-20 price control period, our regulatory policy for the capital expenditure feeding in to the RAB was a 50:50 cost sharing incentive. The figures in the post-CMA financial model are the ex ante allowances for the 2015-20 price control period. To the extent that outturn expenditure differed (or is forecast to differ) from these ex ante allowances, we made adjustments to the RAB additions, in line with the 50:50 cost-sharing approach applicable to the building and non-building RAB under the 2015-20 price control arrangements.
 - **Update RAB depreciation for recovered depreciation.** The post-CMA financial model included forecasts of the allowances for RAB depreciation that would apply during the 2015-20 period. These, in turn, reflect the ex ante allowances for capital expenditure. To the extent that outturn expenditure differed (or was forecast to differ) from these ex ante allowances, the revenue that SONI would have been entitled to recover, through its maximum regulated revenue allowance in the 2015-20 period, will differ from the forecast depreciation allowances. We updated the RAB to take account of updated information on the depreciation allowances that fed into the calculation of the SONI revenue control over the 2015-20 period.
- 3.3 The inflation adjustment above is straightforward. We explain our approach to the other two adjustments summarised above in the sub-sections below.
- 3.4 For the years 2015/16 to 2017/18, we are proposing as part of our draft determinations the figures for the building and non-building RAB that would be locked down and confirmed for the SONI RAB. For 2018/19 and 2019/20 the figures depend on the outturn capital expenditure and depreciation which are not yet



confirmed. For these years, we have made provisional forecasts, which should be finalised after all relevant information is available (i.e. a true-up approach), using the method and principles set out below.

Update of 2015-20 RAB additions for outturn capital expenditure

- 3.5 For the 2015-20 price control, our regulatory policy for capital expenditure feeding in to the building and non-building RAB was a 50:50 cost sharing incentive approach. Under this, the SONI's price control allowances for capital expenditure, and hence the RAB, should be adjusted according to the level of outturn capital expenditure in the 2015-20 period, so that 50% of over-spends or under-spends, relative to the ex ante allowances, are shared with customers.
- 3.6 The figures in the post-CMA financial model are the ex ante allowances for the 2015-20 price control period. To the extent that outturn expenditure differed (or was forecast to differ) from these ex ante allowances, we made adjustments to the RAB additions, in line with the 50:50 cost-sharing approach.
- 3.7 The post-CMA TSO licence sets out the average TSO building and non-building RAB in each year of the 2015-20 price control period. The average RAB figures set out in the TSO licence are based on calculations in the financial model used by the UR to implement the CMA's remedies for the 2015-20 price control (which involved some modifications to the UR's final determinations for that period). That financial model used the ex ante allowances for capital expenditure (RAB additions) for the building and non-building RAB set out in the table below.

Table 4: Capital expenditure ex ante allowances (RAB additions) used in the financial model for the 2015-20 price control

£m, April 2014 RPI terms	2015/16	2016/17	2017/18	2018/19	2019/20
Building RAB	0.000	0.000	0.000	0.000	0.000
Non-building RAB	1.409	1.304	1.035	1.370	1.717
Special RAB additions for 2010-15 overspends*	0.000	0.000	0.000	1.700	0.000

* See section above on RAB for 2010-15 period for explanation of this row

- 3.8 SONI's business plan submission for the 2020-25 period (Appendix B, tables B4 and B6) sets out its actual capital expenditure (for the first three years) and forecast expenditure (for the remaining two years) in relation to the building and non-building assets for the 2015-20 period. These are set out below.



Table 5: SONI outturn and forecast and outturn capex

£m, April 2014 RPI terms	2015/16	2016/17	2017/18	2018/19	2019/20
Building (facilities) assets	0.192	0.025	0.016	0.035	0.275
Non-building (IT) assets	0.915	0.719	0.395	0.920	1.688

3.9 For the purposes of implementing the 50:50 cost sharing incentive approach for the building and non-building RAB, we have calculated the RAB additions in each year from 2015/16 to 2019/20 as:

- The ex ante allowance (Table 4); plus
- 50% of the subtraction of the ex-ante allowance from the value of the SONI outturn/forecast capex (Table 5).

3.10 We consider this to be a reasonable way to implement the 50:50 cost sharing incentive approach for the purposes of determining the historical RAB feeding into the 2020-25 SONI price control.

3.11 In its proposed RAB values from its business plan for the 2020-25 period, SONI does not seem to have implemented the 50:50 cost sharing arrangement through updates to the RAB additions based on ex ante allowances. SONI does not appear to have explained the rationale for this aspect of its approach.

3.12 Further to updating the RAB additions in the 2015-20 period, we also calculated revisions to the “modelled” depreciation figures for the building and non-building assets RABs by applying our regulatory depreciation policies to the RAB after having applied the 50:50 cost sharing approach to RAB additions (as described above). These modelled depreciation figures can be seen as an update to the modelled depreciation figures for the 2015-20 period in the post-CMA financial model, which were based on ex ante allowances. Although these updated modelled depreciation figures were not directly recoverable through tariffs in the 2015-20 period, they are an important input into determining the historical RAB position for the purposes of the 2020-25 price control, and in particular the appropriate RAB depreciation values for 2020-25, as set out in the next section.

Update RAB depreciation for recovered depreciation

3.13 The RAB depreciation figures for the period 2015/16 to 2019/20 in the post-CMA financial model are essentially forecasts of the allowances for RAB depreciation that would apply during this period. They reflect the ex-ante allowances for capital expenditure and do not take account of outturn capital expenditure (which is relevant under the 50:50 cost sharing incentive) or the way that this affects the RAB additions and hence depreciation during this period.



- 3.14 In each year of the 2015-20 SONI price control period, the post-CMA TSO licence (condition 2.2(c)) entitles SONI to recover, through its maximum regulated revenue in each year of the 2015-20 period (specifically the Bit term), 50% of the value of:
- The “actual costs incurred” in relation to depreciation on non-building assets, building assets and capex overspend for 2010-15, minus³:
 - The depreciation allowance for non-building assets, building assets, and capex overspend for 2010-15 as set out in Table A of paragraph 2.2(b)(vi) of the post-CMA TSO licence.
- 3.15 This is an additional allowance/adjustment for RAB depreciation in the calculation of the maximum regulated TSO revenue, which applies in addition to the RAB depreciation allowances based on the ex ante allowances for capital expenditure.
- 3.16 The inclusion of this element within the licence means that the revenue allowances for SONI during the 2015-20 price control period can take account of the 50:50 cost sharing incentive for capital expenditure that applied during this period.
- 3.17 Under the post-CMA TSO licence, the calculation of revenue allowances for SONI for any year in the 2015-20 period does not involve any adjustment to the rate of return allowance in respect of the “actual costs incurred” by SONI; the rate of return allowance is hard-coded in the licence and the adjustment is focused on depreciation allowances.
- 3.18 While the post-CMA TSO licence Bit term involves the calculation of “actual costs incurred” in relation to the RAB depreciation for building, non-building and capex overspends in 2015-20, it does not specify the precise method to be used to carry out that calculation.
- 3.19 In principle, there might be different ways to interpret this aspect of the TSO licence. For instance, the actual costs incurred in relation to RAB depreciation might be based on an allocation of depreciation reported for regulatory accounting or statutory accounting purposes, or alternatively calculated through a modelled approach, involving assumptions on regulatory capital additions and regulatory depreciation policies (including policies on asset lives).
- 3.20 We wanted to understand how SONI had interpreted this aspect of the licence or the appropriate depreciation figures for the building and non-building RAB over the 2015-20 period. However, SONI provided very limited information in support of its proposed depreciation figures. We did not consider that SONI had explained the approach it has taken to determine actual costs incurred in respect of depreciation for the purposes of working out maximum regulated revenue, tariffs and the K factor in the 2015-20 period.
- 3.21 In response to a query from the UR, SONI told us that it was undertaking an

³ In line with our policy towards capex overspend for the 2010-15 period, we have assumed that the actual costs incurred on capex overspends for 2010-15 is equal to the depreciation allowance provided in the post-CMA TSO licence.



exercise that would reconcile the Regulatory Depreciation for the current Price Control against the updated RAB that has been put together for the current Price Control submission. It said that this would involve adjustments to take account of additional depreciation due to adjustments made to opening balances in the RAB and shorter asset life periods than initially used. However, SONI did not provide further information on this matter as part of the query process ahead of our draft determinations.

- 3.22 As far as we understand, SONI has not provide calculations that reconcile its price control business plan with depreciation figures used for tariff purposes .
- 3.23 The primary focus of this annex is our approach to determining SONI's historical RAB for the purposes the 2020-25 SONI price control determination, rather than assessment of SONI's compliance with the price control licence conditions for the 2015-20 period. For the purposes of the 2020-25 SONI price control determination, we consider that it is particularly important for there to be consistency between the RAB depreciation figures used for the purposes of determining maximum regulated revenue, tariffs; and the K factor for the 2015-20 period and the RAB depreciation figures for the 2015-20 period used for the calculation of the 2020-25 SONI price control.
- 3.24 A lack of consistency between the two sets of figures could lead to excess recovery of actual capital expenditure by SONI, or to SONI being unable to recover revenue allowances determined in past price control decisions. For instance, SONI's response implies that it has been using shorter asset life assumptions when calculating depreciation in the tariff setting process than the post-CMA financial model. If so, we should be taking this into account in the depreciation figures used to calculate SONI's RAB.
- 3.25 On this basis, we propose, as part of our modelling of SONI's RAB, to incorporate the depreciation figures that have been, or are expected to be, claimed by SONI under the Blt term (e.g. on a consistent basis to tariff approval and for purposes of K factor calculations, and taking account of any revised to figures applied by the UR).
- 3.26 More specifically, we propose to take account of depreciation values for the building and non-building RAB in the 2015/16 to 2019/20 which are the sum of two elements: (i) the depreciation allowances as set out in the post-CMA TSO licence and financial model uplifted by RPI in April of year t divided by RPI in April 2014; and (ii) the depreciation element of the Blt adjustment term for that year applied for tariff setting purposes, including for the purposes of calculating the closing K factor position on 30 September 2020 (this is expressed in nominal terms and can be positive or negative).
- 3.27 The depreciation element of the Blt adjustment term (ii. above) depends on the "actual costs incurred" in relation to the RAB depreciation for building, non-building and capex overspends in 2015-20. We have been unable to compile reasonable estimates (for 2015/16 to 2017/18) and forecasts (for 2018/19 and 2019/20) of the "actual costs incurred" as used by SONI for tariff purposes, based on the figures



provided by SONI in its business plan submission and its responses to supplementary queries. We did not have confidence that SONI's proposed RAB depreciation figures for the 2015-20 period took proper account of the RAB depreciation figures used for tariffs and K factor calculations.

- 3.28 In the absence of reasonable estimates and forecasts for these figures in SONI's business plan submission, we have made provisional estimates based on data that we hold. In particular, we have used data that had been provided by SONI as part of the tariff approval process. The data that we hold relates to the actual depreciation claimed by SONI for the purposes of the "K factor" calculations for the single year 2017/18. This is the most recent year for which outturn costs (and hence depreciation) data has fed into tariff and K factor calculations. For each year in the 2015-20 period, we have provisionally assumed that the actual RAB depreciation claimed (or forecast to be claimed by SONI) in respect of the building and non-building RABs is equal to this 2017/18 figure, which is £1.402m (in April 2014 RPI terms).
- 3.29 The RAB depreciation reported for tariff purposes is not split between building assets and non-building assets. We have used the ratio of our modelled depreciation for those two RABs to determine an apportionment to each RAB. Separately, we assumed (as set out earlier) that the actual RAB depreciation allowance used for tariff calculation in relation to the capex overspend for the 2010-15 period is equal to the specific allowance provided in the post-CMA TSO licence for the capex overspend for the 2010-15 period.
- 3.30 The figures used above are provisional estimates. Ahead of our final determinations, we intend to ask SONI to provide accurate and up-to-date actual and forecast depreciation figures for the RAB depreciation value used for the Bit for the purposes of the 2015-20 tariffs and to be used for the closing K factor position at 30 September 2020. Ultimately, we want to ensure that the RAB depreciation recovered by SONI through tariffs (including via the K factor for under- or over-recovery in previous years) is properly taken into account in determining the appropriate RAB depreciation allowances from 2020/21 onwards.
- 3.31 We then estimated the difference between the aggregate depreciation used for tariff purposes in relation to the building and non-building assets RABs over the 2015-20 period, and the aggregate "modelled" depreciation over the same period that we have estimated as described in the previous section.
- 3.32 We propose to include an adjustment to the SONI's RAB depreciation allowances (and hence maximum allowed revenues) for the 2020-25 period to reflect this difference, and to spread this adjustment evenly over the five years. If the difference is *positive* (i.e. the modelled depreciation is *higher* than depreciation allowed through tariffs), the SONI's RAB depreciation allowances in the 2020-25 period would be *increased* by the amount of this difference. If the difference is *negative* (i.e. the modelled depreciation is *lower* than depreciation allowed through tariffs), the SONI's RAB depreciation allowances over 2020-25 would be *reduced* by the amount of this difference.



4. Building and non-building RAB: 2020-25

4.1 For the purposes of carrying out some of the modelling analysis used for our draft determinations we needed forecasts of the building and non-building RAB over the 2020-25 period.

4.2 We made forecasts which were the sum of two elements:

- Our proposed ex ante allowances for capital expenditure (see technical appendix 5).
- Forecasts of additional ex ante allowances that we might approve during the price control period (e.g. capital expenditure allowances for new initiatives proposed by SONI which are not funded through ex ante allowances set at the price control review).

4.3 For the second element, we made a forecast which reflected some of the costs of new initiatives for the 2020-25 SONI price control period proposed by SONI which we are not approving in our draft determinations but which may be approved during the period, with an allocation of forecast costs between operating expenditure and capital expenditure (RAB additions). Our forecast is subject to considerable uncertainty but it seemed preferable to make an approximate forecast than to assume zero.

4.4 All of the RAB figures we have used for the 2020-25 period are provisional forecasts. The actual RAB values will depend on outturn capital expenditure and on the various principles and policies for the 2020-25 period specified as part of our determinations of the 2020-25 SONI price control (including the approach to cost remuneration and cost incentives – see Annex 5).

4.5 We briefly highlight some specific RAB principles that we propose to apply for the 2020-25 period for the building and non-building RAB:

- Opening value of RAB in year t (in nominal terms) would be calculated as the value of the closing RAB in year $t-1$ (in nominal terms) uplifted by the growth in the CPIH between the midpoint (April) of year t and the midpoint of year $t-1$.
- All additions to the SONI's building assets RAB would be depreciated in a straight line over 25 years and additions to the non-building assets RAB would be depreciated in a straight line over 5 years.
- All additions to the building assets RAB and non-building assets RAB would attract half a year's worth of depreciation in the year of addition – consistent with the assumption that the addition is made midway through the year.
- A separate legacy depreciation adjustment would be applied to reflect differences between modelled depreciation over the 2015-20 period and



depreciation values used for, and recovered via, tariffs over the 2015-20 period.



5. TNPP and special projects RAB: 2015-20

- 5.1 The post-CMA TSO licence sets out, in the form of detailed algebra, the calculations to be used to determine the opening values, additions, depreciation (in the case of special projects only) and closing values of the TNPP and Special Projects RAB in each year of the 2015-20 SONI price control period. This is a different approach to the calculation and updating of the RAB compared to that used for the building and non-building RAB.
- 5.2 For instance, the licence specifies that the opening value of the TNPP and Special Projects RAB in year t (where t is no later than the year 2019-20) is calculated as the closing value of the RABs in year $t-1$, uplifted by the growth in RPI between the midpoint (April) of year $t-1$ and the midpoint of year t .
- 5.3 The closing value of the TNPP RAB (in nominal terms) in year t is calculated as follows:
- the opening value of the TNPP RAB on 1 October of year t ; plus
 - actual expenditure on TNPP projects (subject to caps and DIWE) during year t ; minus
 - allowed write-offs or transfers to NIE Networks during year t .
- 5.4 The closing value of the Special Projects RAB (in nominal terms) in year t is calculated as follows:
- the opening value of the Special Projects RAB on 1 October of year t ; minus
 - allowed depreciation on the Special Projects RAB for the year t ; the licence allows this to be calculated on a project-by-project basis with different regulatory asset lives for each project.
- 5.5 For our draft determination, we are not making any formal determinations in respect of the calculation of the TNPP and Special Projects RAB for the 2015-20 period. We consider there to be sufficient specification in the post-CMA TSO licence conditions.
- 5.6 Some of the modelling analysis used for our draft determinations requires estimates or forecasts of the TNPP and Special Projects RABs over the period 2015-20. In particular, it requires estimates and forecasts of the inputs that feed into the algebra in the licence that is used to calculate the TNPP and Special Projects RABs.
- 5.7 In this section we set out our approach to deriving these estimates and forecasts. We take the TNPP RAB first and then turn to the Special Projects RAB. For both the TNPP RAB and the special projects RAB we have put aside the forecasts of RAB values from the post-CMA financial model and sought to use more up-to-date information, starting from SONI's business plan submissions where possible and subjecting these forecasts to some further review.

Estimates and forecasts of the TNPP RAB



- 5.8 The post-CMA TSO licence does not set out the opening value of the TNPP RAB for the year 2015/16. Instead, the licence specifies that the value of the TNPP RAB on 1 May 2014 shall be zero and it sets out the mechanism for calculating the opening and closing values of the TNPP RAB in each subsequent year up to the end of the 2015-20 price control period.
- 5.9 SONI's business plan data tables submission for the 2020-25 price control period says that the opening value of the TNPP RAB for the year 2015/16 is £2.408m (in nominal terms), which is £2.355m in April 2014 RPI terms.
- 5.10 However, based on TNPP expenditure caps approved by us under the arrangements set out in the post-CMA TSO licence, the opening TNPP RAB in the year 2015/16 (in April 2014 RPI terms) can be no higher than £1.517m.
- 5.11 SONI's business plan does not provide an explanation for this discrepancy. We therefore used the value derived from our expenditure caps for the opening value of the TNPP RAB in 2015/16, which is set at £1.517m (in April 2014 RPI terms).
- 5.12 In each year of the 2015-20 price control period, SONI's actual expenditure on TNPP projects (subject to expenditure caps and disallowances) is to be added to the TNPP RAB in the year in which the expenditure is incurred. The table below sets out the allowed expenditure caps on TNPP in each year of the 2015-20 price control, and actual/forecast expenditure for the same period reported by SONI in its 2020-25 business plan submission (converted to April 2014 RPI terms for comparison).

Table 6: TNPP expenditure caps and forecast and actual expenditure

£m, April 2014 RPI terms	2015-16 (actual)	2016-17 (actual)	2017-18 (actual)	2018-19 (forecast)	2019-20 (forecast)
Aggregate caps in each year	1.556	2.221	1.636	2.906	2.073
SONI actual/forecast expenditure	1.720	2.505	1.668	1.210	3.067

- 5.13 The post-CMA TSO licence applies the cap on a project-by-project basis. We recognise that the timing of actual expenditure may be different from the profile of expenditure assumed when calculating aggregate annual caps. This means that it cannot be deduced that SONI has exceeded a cap in a specific year by comparing actual spend against a cap for that year.
- 5.14 In order to calculate accurately the TNPP RAB for the 2015-20 period, and, in turn, to forecast the opening TNPP RAB in 2020/21, it would be necessary to review a project-by-project breakdown of actual expenditure. SONI did not provide this breakdown or review as part of its business plan submission. Whether or not SONI has exceeded any caps is not a matter that falls within the direct scope of our draft determination for the 2020-25 period. For the purposes of this annex, and until there



is any evidence of caps being exceeded, we consider it reasonable and proportionate to use estimates on the basis that the caps were not exceeded in the 2015-20 period. This is for forecasting purposes only, and is without prejudice to any decisions we may take for price control compliance purposes.

- 5.15 SONI has forecast revenue from the transfer of TNPP assets to NIEN of £0.724m and write-offs of £0.340m (both in April 2014 RPI terms), both in 2019/20.
- 5.16 We think SONI's forecast of revenue from the transfer of assets to NIE is reasonable. However, we have only approved write offs of £0.281m in 2019/20 (in April 2014 RPI terms).
- 5.17 For the purposes our RAB estimates and forecasts, and the modelling that draws on these, we have used SONI's reported aggregate actual and forecast expenditure on TNPP, and SONI's forecasts of transfers to NIE Networks. For write-offs, we have used our own figure based on approvals.
- 5.18 For the avoidance of doubt, SONI's actual TNPP RAB would be determined each year based on SONI's reported expenditure, transfers and write-offs (subject to caps and disallowances) in line with the provisions of the TSO licence.

Estimates and forecasts for the Special Projects RAB

- 5.19 The post-CMA TSO licence does not set out the opening value of the Special Projects RAB on 1 October 2015. However, the licence specifies that the value of the Special Projects RAB on 1 May 2014 shall be zero and it sets out the mechanism for calculating the opening and closing values of this RAB in each subsequent period up to the end of the 2015-20 price control period.
- 5.20 According to SONI's business plan submission for the 2020-25 price control period the opening value of the Special Projects RAB in the year 2015/16 is zero. We agree with SONI's figure and propose to use an opening value of zero for the Special Projects RAB in 2015/16.
- 5.21 In each year of the 2015-20 price control period, SONI's actual expenditure on Special Projects (subject to caps and DIWE) is to be added to the Special Projects RAB.
- 5.22 The table below sets out the UR's allowed caps on Special Projects expenditure in each year of the 2015-20 price control, and actual/forecast expenditure for the same period reported by SONI in its 2020-25 business plan submission (converted to April 2014 RPI terms for comparison).

Table 7: Special Projects RAB additions, UR caps vs SONI actual and forecast

£m, April 2014 RPI terms	2015-16	2016-17	2017-18	2018-19	2019-20
UR caps in each year	0.000	0.000	0.000	0.000	23.410



£m, April 2014 RPI terms	2015-16	2016-17	2017-18	2018-19	2019-20
SONI actual/forecast	0.000	0.000	0.000	0.000	22.711

- 5.23 SONI's forecast expenditure on Special Projects is less than the UR's cap, so we used SONI's forecast expenditure to forecast the closing value of the Special Projects RAB in 2019/20.
- 5.24 We have assumed an asset life of 5 years for all projects for the purposes of our modelling.
- 5.25 For the avoidance of doubt, SONI's actual special projects RAB would continue to be determined each year according to the licence, based on SONI's reported expenditure, transfers and write-offs (subject to caps and disallowances).



6. TNPP and special projects RAB: 2020-25

- 6.1 We are not proposing changes to the current approach to the calculation and updating of the TNPP and special projects RABs for the 2020-25 period, which is specified in the current TSO licence (though the scope of costs to be included in the TNPP RAB is to be extended slightly as explained in Annex 5, Cost remuneration and managing uncertainty).
- 6.2 For the purposes of some of the modelling analysis used for our draft determinations we needed estimates or forecasts of the TNPP and Special Projects RABs over the period 2020-25. In particular, we needed estimates and forecasts of the inputs that feed into the algebra in the licence that is used to calculate the TNPP and Special Projects RABs.
- 6.3 For the TNPP RAB, we have assumed that actual expenditure, and therefore RAB additions, over the 2020-25 period would be equal to the aggregate annual value of project caps already approved by us in each year of that period. This assumption is consistent with the assumption made by SONI in its business plan data template.
- 6.4 For the Special Projects RAB, SONI's business plan data template submission had forecast no additions over the 2020-25 period. We think that this is likely be an underestimate. We used a forecast of special project RAB additions which was around 10% of the capital expenditure allowances from our draft determinations. This is subject to uncertainty but recognises the likelihood of some approvals for this RAB over the 2020-25 period.
- 6.5 While we expect some material expenditure, we do not expect that the new expenditure allowed in the Special Projects RAB would be as high in 2020-25 period as in the 2015-20 period, because the latter included major costs relating to I-SEM which we do not expect to be repeated in the 2020-25 period.
- 6.6 For the avoidance of doubt, the actual values of the TNPP and Special Projects RABs over the 2020-25 period would be determined in line with the provisions to be set out in the TSO licence.
- 6.7 Subject to consequential effects of any other aspects of our draft determinations, we propose to maintain, for the 2020-25 period, the RAB rules and policies for the TNPP and pre-construction RABs that are set out in the current TSO licence for the 2015-20 period.



7. The transition from RPI to CPIH indexation

7.1 We have decided to move from indexing the SONI's RAB using the RPI inflation measure to using the CPIH inflation measure for the price control period from 1 October 2020 to 30 September 2025 (see Annex 7. Risk and return). This section describes our approach to the transition from RPI indexation to CPI indexation and the calculation of the new CPIH-indexed opening values of the TSO's RAB in 2020/21.

SONI's proposed approach

7.2 Appendix Q of SONI's business plan submission sets out its proposed approach to managing the transition from RPI to CPIH indexation and the implications of this transition for the opening values of the SONI's RAB in 2020/21.

7.3 Our understanding of SONI's proposed approach to calculating the opening value of the SONI's RAB (in April 2019 CPIH terms) is that it involves uplifting the closing values of the SONI's RAB in 2019/20 (in April 2014 RPI terms) by the product of:

- the ratio of the (forecast) RPI in September 2020 to the RPI in April 2014; and
- the ratio of the (forecast) CPIH in September 2020 to the CPIH in April 2019.

7.4 SONI's approach has the effect of applying an uplift to the closing RAB in 2019/20 (expressed in nominal terms) that is based on:

- five months of RPI growth (between April 2020 and September 2020); and
- seven months of CPIH growth between September 2020 and April 2021.

7.5 In response to a query from us, SONI said that this approach is consistent with the approach used by Ofwat in its recent PR19 final determination to manage the transition from RPI to CPIH indexation.

Our proposed approach

7.6 We did not consider that SONI had justified the need for a relatively complicated approach that involves the 2020-25 SONI price control determination using some RPI indexation in relation to the calculation of price control revenue allowances from 1 October 2020 onwards. Furthermore, if combined with a CPIH-stripped WACC (as proposed by SONI in its business plan), we consider that it would lead to excessive returns to SONI at the expense of customers.

7.7 We sought to take a step back. Our starting point is the principle that the closing RAB at midnight 30 September 2020 (the last day of the 2015-20 price control period) represents an "IOU" to SONI's investors at midnight on 30 September 2020. The value of the closing RAB on 30 September 2020 can be calculated independently of decisions about what approach to take to RAB inflation for the



2020-25 period starting on 1 October 2020.

- 7.8 The preceding sections of this annex concern the calculation or estimation of the SONI RAB (comprising the building, non-building, TNPP and Special Project components) up to and including the closing value of the RAB on 30 September 2020, in nominal prices. These calculations are not affected in any way by what approach to price control and RAB indexation is applied during the 2020-25 price control period.
- 7.9 So, our starting position is a nominal value for the SONI RAB at 30 September 2020. We then consider how to provide a reasonable return to investors on this RAB value.
- 7.10 Under the RAB-based model, the total return to investors comes from a combination of a WACC allowance on the RAB and the uplifting of the RAB by an inflation index. We consider that, for the purposes of transition to a different inflation index, the key requirement is that the sum of the following two elements is materially the same under the new inflation index as under the old one: (i) the expected return to investors over the period from 30 September 2020 to 30 September 2021 through the allowed WACC*RAB return and (ii) the expected return to investors over the period from 30 September 2020 to 30 September 2021 from the appreciation in the RAB arising from inflation indexation. We think this can be achieved by:
- uplifting the closing RAB at 30 September 2020 (in nominal terms) by the ratio of the CPIH in April 2021 to the CPIH in 1 April 2020; and
 - applying a CPIH-stripped WACC to the RAB to calculate the allowed return element of the price control allowance, where the forecast of CPIH inflation used to calculate the CPIH stripped WACC is consistent with CPIH forecasts used for RAB indexation above.
- 7.11 Note that for any figures to be expressed in April 2019 prices, we deflate the opening RAB at 1 October 2020 by the forecast ratio of April 2019 CPIH to April 2020 CPIH. But we consider that the RAB is primarily a nominal concept.
- 7.12 Our proposed approach has the effect of uplifting the closing RAB (in nominal terms), by a full year's worth of forecast growth in the CPIH index.
- 7.13 Under our approach, SONI would earn a return calculated using a CPIH-stripped WACC in all years of the 2020-25 price control period. We provide an illustrative example to show how our approach gives the same total allowed return to investors as if RPI indexation had been maintained and an RPI-stripped WACC applies. We also show for comparison calculations for alternative scenarios of no RAB indexation at all (and a nominal WACC) and SONI's proposed approach.
- 7.14 In this purely illustrative example we assume the following:
- closing RAB at midnight on 30 September 2020: £20m (nominal);



- annual growth in RPI: 3%;
- annual growth in CPIH: 2%;
- nominal WACC: 6.00%; and
- no RAB additions or depreciation, for simplicity.

7.15 We consider four scenarios for the indexation of the RAB:

- No indexation applied to the RAB; return calculated using nominal WACC.
- RAB uplifted by RPI; return calculated using RPI-stripped WACC.
- RAB uplifted by CPIH; return calculated using CPIH-stripped WACC.
- RAB uplifted in part by RPI and in part by CPIH; return calculated using CPIH-stripped WACC (SONI's proposed approach)

Table 8: Simple illustration of different approaches to the transition from RPI indexed to CPIH indexed RAB

£m, nominal	Nominal RAB and WACC	RPI-indexed RAB and WACC	CPIH-indexed RAB and WACC	Mixed RPI/CPIH indexed RAB and CPIH-stripped WACC
Closing RAB on 30 September 2020	20.000	20.000	20.000	20.000
Opening RAB on 1 October 2020	20.000	20.600	20.400	20.483
Closing RAB on 1 October	20.000	20.600	20.400	20.483
Average RAB for 2020/21	20.000	20.600	20.400	20.483
WACC (%)	6.00%	2.91%	3.92%	3.92%
Return (WACC * Average RAB)	1.200	0.600	0.800	0.803
RAB value appreciation	0.000	0.600	0.400	0.483
Total return to investors between 30 September 2020 and 30 September 2021	1.200	1.200	1.200	1.286

7.16 In this illustrative example our proposed approach to CPIH transition provides the same total return to investors, in the period 30 September 2020 to 30 September 2021, as if RPI indexation were kept.



- 7.17 This illustrative example also shows that if SONI's proposed approach to indexation were to be used alongside a CPIH-stripped WACC in year 1 of the 2020-25 price control period, SONI's investors would receive a higher overall return in year 1 than under the alternate scenarios. This seems unjustified and against the interests of customers.
- 7.18 It may be possible to determine an appropriate "mixed" WACC that incorporates the impact of CPIH and RPI indexation such that the same overall return to SONI's investors is achieved as if RPI indexation were kept. However, this would require changes to the way the WACC is calculated for the first year of the price control (slightly lower WACC) which raises complications that seem unnecessary.