



WHOLESALE BROADBAND MARKET

T1652G

Second Proposed Pricing Decision - Wholesale Broadband Pricing

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1. Background and Legal Framework

- 1.1 In accordance with section 2 of the Telecommunications (Bailiwick of Guernsey) Law 2001 (**Telecoms Law**), the Guernsey Competition and Regulatory Authority (**GCRA; Authority**) may grant a licence authorising any person to establish, operate and maintain a telecommunications network or to provide telecommunications services of any class or description specified in the licence. Sure (Guernsey) Limited (**Sure**) was awarded a telecommunications licence for the provision of Licenced Telecommunications Services¹ in Guernsey (the **Licence**). Under the terms of the Licence² and of the Telecoms Law, the GCRA may regulate the prices that may be charged by a licensee which has a dominant position in a relevant market.
- 1.2 In a market subject to economic regulation, such as the telecommunications market in Guernsey, the GCRA as the relevant regulatory body may take *ex ante* steps such as introduce price controls and related remedies where appropriate. Annex 1 provides a summary of the legal and regulatory obligations and the licensing conditions that govern the GCRA's procedure for imposing a price control decision on a licensee that is found to have a dominant position in a relevant market³. The existing measures that seek to mitigate types of potential competition problems associated with Sure's dominance designation are already set out in the Licence and these are summarised in Annex 2.
- 1.3 The last regulatory price control decision for wholesale broadband was published in 2006⁴ by the Office of Utility Regulation. Based on a finding that Sure Guernsey Limited (**Sure**) (previously Cable & Wireless) was in a dominant position in the wholesale fixed-line telecommunications market, the control was a revenue-based determination⁵, at the time reducing wholesale broadband prices by 15 per cent. That control has not been revised since that date.
- 1.4 On 9 January 2019, pursuant to s.5(3)(b) of the Telecoms Law, the GCRA defined a wholesale market for broadband and concluded that Sure still held a dominant position in the provision of wholesale broadband services (**SMP Decision**)⁶.
- 1.5 The States of Guernsey's 2021 policy letter, '**Delivering Next Generation Digital Infrastructure**'⁷ subsequently set out several priorities in the telecommunications sector, including broadband services, which the GCRA has a role in delivering.

¹ As defined in section 31, Telecommunications (Guernsey) Law, 2001.

² Sure Licence Condition 31.2

³ See **Section 3**, below, for the GCRA's assessment of Sure's dominance in the relevant market.

⁴ **2006** - Investigation into Wholesale Broadband Pricing Final Decision, Document No: OUR 06/13, May 2006.

⁵ **2005** - Price Control for Cable & Wireless Guernsey – Decision Notice, August 2005.

⁶ **2019 Final Decision Broadband Market**: Review and SMP Finding, 9 January 2019. The market was defined as: "*Wholesale access to the Internet at a fixed location using an access network based on local loops that are either exclusively or partially based on the copper or fibre access network or using the 4G and ultimately 5G wireless access network via a fixed device in the whole Bailiwick of Guernsey.*"

⁷ **States of Guernsey (2021)**. *Delivering Next Generation Digital Infrastructure*, Committee for Economic Development, September 2021

- *Ensuring that competition is maintained at the retail level (the point at which customers buy network services), ensuring that consumer choice is maintained with healthy competition encouraged amongst telcos.*
- *Wholesale products and prices should be similar to those available in similar sized jurisdictions in which Sure operates, to ensure Guernsey remains competitive.*
- *Ensuring consumers' expectations of the cost and quality of services are met. This will include ensuring that telcos are able to compete fairly and procure fibre broadband services at a wholesale level based on a level playing field.*
- *All licensed operators to have non-discriminatory access to the wholesale network at regulated rates approved, ensuring competition at the retail level.*
- *Encouraging best practice in the telecoms sector, while giving new operators access to the existing network within realistic timescales and at realistic costs.*
- *Over the course of the roll-out, regular sessions overseen by the Broadband Working Group assisted, and advised by the GCRA as appropriate to its role, will take place.*

- 1.6 The GCRA, has therefore prioritised the broadband market and in its work plans⁸ committed to reviewing broadband provision, specifically whether the wholesale charges levied on Other Licenced Operators (**OLOs**) for broadband products by Sure as the incumbent infrastructure operator are reasonable.
- 1.7 On 23 May 2023, pursuant to s.5(2)(b) of the Telecoms Law (**First Proposed Pricing Decision**) the GCRA proposed a cost-oriented price control remedy which would reduce the charge made by Sure for wholesale broadband by on average 11%, with the new price control commencing on 1st January 2024.
- 1.8 The GCRA received responses from Sure, JT (Guernsey) Limited (**JT**), and Guernsey Airtel Limited (**Airtel**), which are appended to the end of this document. Those appendices include the GCRA's consideration of those representations.
- 1.9 The GCRA has considered those representations as it is required to do under s.5(3)(b) of the Telecoms Law. The GCRA also held discussions with the respondents and among other points raised, a certain respondent identified a material issue regarding Sure's requirement that other licenced operators (**OLOs**) purchase a wholesale line rental (**WLR**) service when purchasing a wholesale broadband service. This Second Proposed Pricing Decision is therefore published to take this requirement into consideration, among other information received. The issue is explained further in Section 4.
- 1.10 Taking the respondents representations into account and applying the appropriate changes to the underlying costings model, given current assumptions the GCRA proposes to set the weighted average cost-oriented charge for Sure's wholesale broadband service (which includes wholesale line

rental services) at **£26.05/month** over the 2024-2028 price control period, **essentially 32% lower on average**.

1.11 As the Second Proposed Decision contains material differences to the First Proposed Decision issued on 23 May 2023, it is providing a four week consultation period, which ends on 3 November 2023. We consider this period to be sufficient to enable parties to submit responses on the new matters raised in this consultation.

1.12 The GCRA proposes that the prices set out in Section 7 of this document should be applied from 1 January 2024 to end December 2028.

2. Consultation process undertaken.

- 2.1 As the economic regulator of the telecommunications sector, the GCRA is given powers, functions, and duties by the States of Guernsey. In particular, the GCRA has a role to protect the interests of consumers and other users in the Bailiwick in respect of the prices charged for, and the quality, service levels, permanence, and variety of utility services. As Sure has a dominant position in the wholesale broadband market, and as will be discussed below given the concerns that prices are higher than justified, the GCRA proposes to intervene to set new price controls to address that.
- 2.2 Policy and technology changes can have an impact on costs and therefore potentially on prices. There have been significant technological developments since the previous price control decision⁹. At the macro level, economic change brought about by new economic policy and wider economic factors such as inflation can affect priorities and the cost of capital. At the micro level, given the need to invest in new technology and the impact of innovation on efficiency, the capex demands are also relevant to an assessment of whether price levels are justified.
- 2.3 It is therefore appropriate for the GCRA to conduct a review of Sure's wholesale broadband pricing to ensure fair prices to retailers and ultimately end-users.

Consultation

- 2.4 Following publication of its First Proposed Pricing Decision the GCRA engaged in further extensive consultation with respondents to that document. Their representations have been considered and in some cases amendments or adjustments were applied to the underlying costing model where sufficient supporting evidence was provided.
- 2.5 Annex 4 evidences the consultation and engagement undertaken by the GCRA in its current review of wholesale broadband prices. Throughout the consultation process the GCRA has held discussions with telecommunications providers to ensure the review was conducted transparently, and that the process allowed all interested parties to provide feedback on the review's objectives, information requests, proposed timelines, and proposed remedies. Therefore, the GCRA is satisfied that those key stakeholders were given opportunity to provide all evidence they considered relevant to the review.
- 2.6 The consultation and engagement also offered Sure opportunity to provide its costing, and pricing information and engage in rounds of discussions with the GCRA and Frontier Economics, the GCRA advisors for this analysis. Those discussions and information exchanges gave Sure the opportunity to provide detailed submissions on its historical cost systems, cost allocations, internal systems and to contribute fully to the process. Given that process, the GCRA is confident that the costing model it has developed, which is central to its assessment of pricing in the wholesale broadband market, accurately reflects the data the GCRA was provided during the consultation period and is the best information available to it.

⁹ 2006 Office of Utilities Regulation, Investigation into Wholesale Broadband Prices, Final Decision.

3. Dominance and significant market power

- 3.1 The GCRA’s assessment of whether a licensee holds a dominant position and any directions related to a dominance designation are governed by its regulatory duties under the Regulation of Utilities (Bailiwick of Guernsey) Law, 2001 (**Utilities Law**), the Telecoms Law, and in accordance with the principles for economic regulation specified in the Regulation of Utilities (States’ Directions) (Bailiwick of Guernsey) Ordinance, 2012 (**Economic Principles Ordinance**).¹⁰
- 3.2 Pursuant to section 22 of the Utilities Law, the definition of a dominant position in relation to a relevant market “*shall be construed as it would be in the UK under the Competition Act 1998*” (**UK Competition Act**).
- 3.3 There is no statutory definition of a dominant position under the UK Competition Act. Rather, the concept has been developed in EU and UK case law.¹¹ According to that case law, a dominant position is a position of economic strength affording the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers, thus preventing effective competition.¹² The EU has considered the concept of Significant Market Power (**SMP**) as equivalent to dominance.¹³
- 3.4 A Guideline¹⁴ produced by the UK competition authority reflects these case law principles and confirms that an undertaking will not be considered to be dominant unless it has substantial market power. Whether or not an undertaking has such market power will depend on the facts of each case and, whilst not determinative, the market share held by the undertaking will be relevant to this analysis. There have been only a very small number of cases in which undertakings have been found to be dominant with a market share of less than 40%. Furthermore, case law establishes a rebuttable presumption that an undertaking with a market share that persistently exceeds 50% on a relevant market holds a dominant position on that market.¹⁵ This analysis is also accepted by UK courts when they consider question of dominance under the UK Competition Act.

¹⁰ Accountability, focus, predictability, coherence, adaptability and efficiency.

¹¹ Once the relevant market is defined, the next stage is to determine whether any firm, singly or jointly, holds a position of Significant Market Power, which is equivalent to a dominant position, defined in the **2018 EU SMP Guidelines** (paragraph 52) as ‘a position of economic strength affording [the firm] the power to behave to an appreciable extent independently of competitors, customers and consumers’. Also see **T1480GJ – BCMR Proposed Decision** – Market Definition & Competitive Assessment, 12 April 2022.

¹² Case 1001/1/01 *Napp Pharmaceutical Holdings Ltd v Director General of Fair Trading* [2002] CAT 1 para 156, citing para 38 of Case 85/76 *Hoffman La Roche v Commission* EU:C:1979:36.

¹³ Article 4, Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services (Electronic Communications Framework Directive).

¹⁴ “*Assessment of Market Power, Understanding Competition Law*” Office of Fair Trading, 415, December 2004.

¹⁵ Case C62/86 *AKZO Chemie BV v Commission* [1991] ECR I-3359.

3.5 In 2018, in consideration of the States of Guernsey’s telecommunications strategy¹⁶ the GCRA engaged SPC Networks to carry out a market review on the broadband market, which primarily assessed two objectives¹⁷:

- i. To define the relevant product and geographic markets, and
- ii. To assess whether any operator holds a position of Significant Market Power (**SMP**) on the market(s).

3.6 As SPC set out in its report, “a *“relevant market” is defined to set boundaries for competition analysis and is the first step in the assessment of SMP or dominance*”. The review took account of the process for market definition and assessment of SMP used by the EU, and the review documents confirmed that the assessment would be proportionate and pragmatic given the size the jurisdiction.¹⁸ Sure and JT provided full responses to the consultation documents.¹⁹

3.7 The Final Decision published in 2019²⁰, found that Sure held a SMP (a dominant position) on the wholesale broadband market which was defined as:

“Wholesale access to the Internet at a fixed location using an access network based on local loops that are either exclusively or partially based on the copper or fibre access network or using the 4G and ultimately 5G wireless access network via a fixed device in the whole Bailiwick of Guernsey”.

3.8 Sure did not challenge the accuracy of the finding in the Final Decision.

3.9 In the linked Guideline, it is also stated that *“it is also necessary to consider the position of other undertakings operating in the same market and how market shares have changed over time. An undertaking is more likely to be dominant if its competitors enjoy relatively weak positions or if it has enjoyed a high and stable market share”*²¹.

¹⁶ In 2018, the States of Guernsey published the *“The Future of Telecoms”* strategy document which sought to achieve some key objectives, specifically:

- Provision of Fibre to business districts within 2-3 years;
- Provision of high quality super-fast broadband to all residential properties within 2-3 years; and
- Provision of next generation mobile technology in line, or earlier than the UK.

¹⁷ **2018 – SPC Network Report – Wholesale Broadband Access Market Review: Market Definition and SMP Assessment**, 25 July 2018.

¹⁸ *Ibid.*

¹⁹ OLO responses are published on the GCRA website - **Case T1358HJ** Broadband Market Final Decision

²⁰ **2019 –GCRA 19/14** Final Decision Broadband Market: Review and SMP Findings.

²¹ “Assessment of Market Power, Understanding Competition Law” Office of Fair Trading, 415, December 2004, para 2.11.

3.10 It is now appropriate to consider whether any significant market developments, have occurred since the 2019 SMP Decision as well as implications of such changes for future market conditions over which a price control is set.

3.11 In 2021, the States of Guernsey published its '*Delivering Next Generation Digital Infrastructure*'²² policy and its '*Digital Framework*'. A Broadband Working Group²³ was established with responsibility for implementing policy and the framework objectives. This Group conducted a tender process for parties to put forward proposals for providing fibre to all premises in Guernsey (FTTP).

3.12 As part of the tender process, Sure proposed an island wide FTTP wholesale broadband network solution. The following features of the network solution are highlighted:

- *Capable of speeds up to 10 Gbps connecting 100 per cent of properties.*
- *100 per cent of properties able to access services delivered over a single regulated wholesale network at the same cost.*
- *All licensed operators will have non-discriminatory access to the wholesale network at the regulated rates approved by the GCRA, ensuring competition at the retail level.*
- *A time period of 5 years from start to completion – target completion end 2027 (perhaps earlier depending on the start date).*
- *Reinforcement of the critical network infrastructure role Sure provides for Guernsey leveraging and building on its existing sub-sea, fixed and mobile network assets.*

3.13 An objective in the States' Policy Letter '*Delivering Next Generation Digital Infrastructure*'²⁴ was the development of a ubiquitous fibre network which delivers resilient, fast, future-proofed, and ubiquitous digital connectivity to all homes and businesses in Guernsey.

3.14 Sure's proposal outlined its plan for a wholesale fibre network with 100% ubiquitous coverage to all premises and to achieve that objective it requested a capped £12.5million '*Digital Accelerator Investment*' from the States of Guernsey to assist with accelerating the build time but also to cover the provision of fibre connections to the uneconomic areas of Guernsey.

3.15 The Broadband Working Group accepted Sure's proposal, recommended that the States should contract with Sure and provide the grant capped at £12.5 million to assist in the roll-out of FTTP in Guernsey. An agreement was subsequently signed between the States of Guernsey and Sure setting out the terms of that agreement.²⁵ As set out in that agreement, the FTTP roll-out will be undertaken solely by Sure, using only Sure's infrastructure.

²² **2021** - The States of Deliberation of The Island of Guernsey Policy & Resources Committee and Committee for Economic Development: Delivering Next Generation Digital Infrastructure, 2021.

²³ The '*Broadband Working Group*' comprised of representatives from the Policy & Resources Committee, the Committee of Economic Development and the Committee for Education, Sport & Culture.

²⁴ **2021** - The States of Deliberation of The Island of Guernsey Policy & Resources Committee and Committee for Economic Development: Delivering Next Generation Digital Infrastructure, 2021.

²⁵ **2021** The States of Deliberation of the Island of Guernsey, Delivering Next Generation Digital Infrastructure, P.2021/106

- 3.16 JT has also built some fibre-based infrastructure in Guernsey. The GCRA has therefore considered the extent of any JT's investments in its own fibre network since the 2019 market review and SMP decision with its focus of connecting educational institutions, government departments and business districts to its network (mainly driven by the requirement to deliver on its contract with the States of Guernsey). JT rolled out its own FTTP network in some areas of Guernsey but has advised that it has no plans to extend its fibre broadband network and will instead be utilising Sure's wholesale broadband products to provide services to its customers in Guernsey.
- 3.17 Another relevant development was that Starlink received a fixed telecom licence in 2022 in Guernsey and made its satellite broadband service available.
- 3.18 As set out in the First Proposed Pricing Decision, the market developments would not appear to require an alteration to the 2019 conclusion regarding Sure's position of dominance in the provision of wholesale broadband. There is little prospect of the States of Guernsey providing an equivalent subsidy to a competing network provider. Since the size of the Sure subsidy is significant relative to the total investment, any other fibre network provider would be at a significant financial disadvantage to Sure in the wholesale market for broadband. The only alternative fixed network provider present in Guernsey is JT whose network is only partial in coverage and does not provide wholesale service on its network, nor does it have plans to do so. The agreement between the States of Guernsey and Sure arguably reduced the likelihood of other licenced operators making the decision to invest in developing their own FTTP infrastructures. Starlink uses a nascent satellite broadband technology with a target market of consumers in locations that are difficult to reach for traditional fixed and mobile broadband. Subscriber numbers are low and have not altered the market shares of current providers to any material extent and there is little expectation of this position changing.²⁶ Sure, therefore continues to hold the majority market share ($\geq 93\%$)²⁷ and this is not likely to change in the medium term since JT has no further plans to spend capital on extending its network in Guernsey.
- 3.19 Sure's dominance position would therefore, if anything, appear to have strengthened since it entered the FTTH roll-out agreement with the State of Guernsey, suggesting its current SMP designation is unlikely to change over the medium term. To deliver on the States policy objective to promote retail level competition for broadband services in Guernsey, this GCRA proposal has defined remedies that are proportionate and justified given Sure's dominance status as the ubiquitous provider of wholesale broadband in Guernsey and States of Guernsey policy priorities.²⁸

²⁶ See the GCRA's responses to Sure's representations in **Appendix 1**.

²⁷ **2019 -CIRCA**, Final Decision Broadband Market - Market Review and SMP Finding, Strategy and Policy Consultants (SPC Network) found that Sure has a market share of 93% of subscriber lines. This market share is well above the 50% at which a position of SMP is presumed.

²⁸ **2012 BEREC - BEREC** Common position on best practice in remedies on the market for wholesale broadband access (including bitstream access) imposed as a consequence of a position of significant market power in the relevant market.

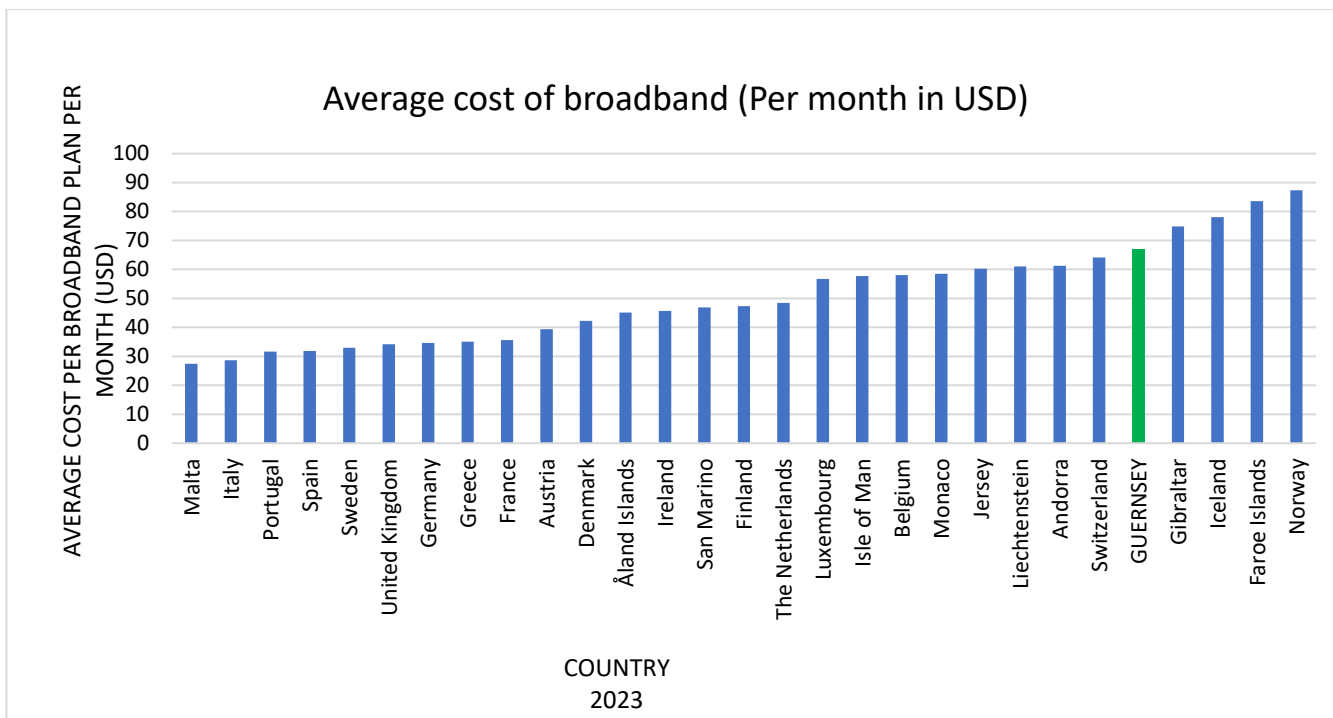
4. Wholesale broadband pricing in Guernsey

- 4.1 To support the States of Guernsey’s Digital Framework (2021-2025) objective of “*World Class Digital Connectivity*”, the GCRA recognises that significant capital investments are required. Whilst the States of Guernsey granted Sure the £12.5 million accelerating payment, the remaining costs of installing the fibre network (total costs are estimated at £37.5 million) will be borne by Sure. Given that fibre networks rollout has risks as well as costs, the GCRA also recognises Sure should be given an opportunity to earn a reasonable return on significant capital outlays in a proportionate and timely manner.
- 4.2 However, given that Sure has SMP on the relevant market, it is appropriate for the GCRA to consider if the prices charged by Sure are at a reasonable competitive level or if prices are and are likely to remain higher than this to justify the imposition of ex-ante regulatory price control remedies. Concerns about higher pricing can arise where, absent regulation, price levels are likely to be persistently high with no effective pressure (e.g. from new entry or innovation) to bring them down to competitive levels over the period of the review. Excessive pricing refers to a situation where the prices charged by a dominant undertaking (which in accordance with practice across other jurisdictions is used in this document synonymously with significant market power) are not closely related to the value to the consumer and/or the cost of producing or providing the relevant service. In market conditions where SMP exists, these are very real risks that OLOs can be exposed to – and they are risks for an OLO which can be exacerbated by market conditions where there is vertical integration, and the supplier of the essential upstream wholesale input is also their downstream retail competitor.
- 4.3 As set out in the remainder of this section and section 5, the GCRA has considered potential methodologies to be used to determine whether prices are, and are likely to remain, at levels that would require regulatory intervention, and, if so, the level to which they might need to be required by regulation to be reduced. These include benchmarking analysis and cost modelling. For the reasons set out below, we have concluded that prices controls based on a Discounted Cashflow Modelling (DCF) approach, allowing Sure to recover efficiently incurred operational and capital costs through the prices it charges for its products, to be appropriate and proportionate.
- 4.4 The GCRA has considered alternative methodologies such as benchmarking analysis, and cost modelling to assess whether wholesale broadband prices are excessive.

Benchmarking

- 4.5 In 2023, a price comparison of various jurisdictions shows that Guernsey is the fifth most expensive jurisdiction²⁹ based on the average prices of **retail** broadband service plans among 29 countries in Western Europe. See the graph below.

²⁹ 2023 Cable.co.uk Worldwide broadband prices 2023.



Source: Graph Generated from Cable.co.uk Worldwide broadband prices 2023.

4.6 The benchmarking output for **retail** broadband prices presented in the graph above suggest that retail broadband prices in Guernsey are high relative to most of the other countries in Western Europe.

4.7 It is however not possible to conclude from these benchmarking results whether comparatively higher retail pricing is due to excessive wholesale charges by the incumbent. When using benchmarking as the analysis tool, further challenges are: identifying appropriate “peer group” countries; identifying product categories to compare; taking account of time (it is essentially a snapshot of pricing at a given point in time); and securing reliable data, as not all pricing data are publicly available and where figures are available, they may not be directly comparable. Benchmarking can be a useful tool for broader analysis where the quality of comparator evidence is adequate but given the features of the wholesale broadband market in Guernsey at this time, the GCRA is of the view that this would not seem to be the best tool to set the level of those prices for this wholesale control as there are better approaches available to it.

Cost modelling

4.8 The GCRA has considered the cost-based modelling approach³⁰ to assess if wholesale broadband prices are too high. This does not have the limitations of the benchmarking approach and allows for a deeper analysis based on efficient costs.

4.9 The GCRA assessed the applicability of various options for costing models for wholesale broadband. The costing model variants being: the top-down approach, the bottom-up approach and the discounting cashflow modelling approach.

³⁰ Cost orientation is a key principle of the EU’s regulatory framework and has been imposed as a regulatory remedy following an SMP finding in many markets.

- 4.10 **Top-down Approach** - This models the actual network of the operator. Under this approach the cost-based price would reflect the actual costs incurred by the operator in building and maintaining that network, using regulatory accounting data.
- 4.11 **Bottom-up Approach** - This models the network of a hypothetical operator. It involves forecasting the efficient level of demand and identifying the specific network assets that would need to be deployed by an operator to service that demand. The objective of this approach is to proxy the “competitive level” of prices, which would then send the appropriate “build-or-buy” signals to alternative operators choosing between buying wholesale services or building a network themselves.
- 4.12 **Discounting Cashflow Modelling Approach (DCF)** - This involves calculating the future cashflows generated by the regulated products, based on forecasts of the relevant costs and revenues from those products. Under this approach the cost-based wholesale price would be set in such a way that the return made on these future cashflows is consistent with a reasonable rate of return (i.e. cost of capital), or in other words, the “*net present value*” of the future cashflows when discounted using an appropriate rate of return is zero. The calculation of cashflows can be based on a hypothetical operator or aim to reflect the actual network of the regulated operator.
- 4.13 Sure is still in the process of deploying its FTTH network. A top-down approach is usually used when a network is already built and thus when the actual costs of the network are already known. The bottom-up approach is more appropriate when there is scope for network competition. As discussed above, the scope for network competition seems limited. Bottom-up models are powerful but very resource-intensive and can therefore be disproportionate for a small jurisdiction. The DCF model is suited to smaller jurisdictions as it is less data intensive and less complex than other cost models such as the bottom-up approach. A DCF approach is also applicable to markets that set cost-based prices where networks have not yet been fully deployed and uses the operator’s current and forecasted demand data whilst also drawing on the operators’ expertise and knowledge of the Guernsey market. Based on its assessments of the various costing models, the GCRA proposes to rely on DCF modelling using forecasts based on Sure’s actual cost data as the appropriate cost modelling approach.
- 4.14 To populate the cost-based model, the GCRA requested and obtained a substantial data set from Sure, including Sure’s historical costs, forward looking investment in its fibre and legacy network, and consumer demand for different broadband products. The GCRA has also supplemented the data received from Sure with data from other sources, such as the OLOs’ demand forecasts.
- 4.15 The GCRA however recognises that the use of forecast data based on Sure’s actual costs may exceed the efficient level of costs and has therefore reviewed the cost data and made adjustments to account for expected efficiency gains.

Wholesale Line Rental

- 4.16 Responses to the First Proposed Pricing Decision identified an additional cost borne by OLOs for wholesale broadband and therefore income to Sure that was not apparent to the GCRA when it issued its Proposed Decision. The GCRA has amended its approach to take this into account and this change has informed the decision to issue a Second Proposed Decision.

- 4.17 Sure requires OLOs to pay the wholesale line rental charge for all customers they acquire if Sure is not the retailer of a customer's voice call services, irrespective of whether those customers wish to purchase 'voice only', 'broadband only' or 'voice and broadband' from an OLO^{31,32}. The reason appears to be because the equipment and services paid for by the line rental are essentially common to the provision of the broadband service and the voice call service, and some of these common costs are not covered by the wholesale broadband product rental charge. OLOs are therefore required to pay to Sure: (i) a wholesale line rental (WLR) charge per customer and (ii) a wholesale broadband product rental charge. WLR is currently £11.25 per customer per month, while the wholesale broadband product rental charge varies by broadband product.
- 4.18 Since an OLO must pay Sure for wholesale line rental and the wholesale broadband product rental to provide a retail broadband service to a customer (other than in certain circumstances³³), it follows that the wholesale rental cost of broadband services to an OLO is the total of those charges.
- 4.19 To determine the cost-based price for wholesale broadband, the GCRA's modelling aims to identify the share of Sure's efficiently incurred costs that should be recovered from wholesale broadband customers. Some of the cost allocation in the GCRA's modelling is based on estimated wholesale revenue Sure receives from different wholesale services. The model used in the First Proposed Pricing Decision did not include the WLR revenue Sure receives from wholesale broadband customers. The model therefore needed to be updated after the round of consultation from the First Proposed Pricing Decision to factor in these additional WLR revenues generated from OLOs for wholesale broadband customers. With the benefit of this information from the responses to the First Proposed Pricing Decision, the GCRA's cost-orientated price control has therefore been revised to factor in the total wholesale charge borne by OLOs they must pay Sure to provide wholesale broadband services to their customers.
- 4.20 This resulted in the share of wholesale broadband revenues being larger than in the First Proposed Pricing Decision but also, consistent with that approach, additional costs were allocated to wholesale broadband provision, and less to other services (including wholesale leased lines). This change to the modelling approach has materially altered the model and its outcomes and in the circumstances the GCRA has issued a Second Proposed Decision.
- 4.21 GCRA does not at this stage propose to set a price control for the separate WLR charge Sure makes to OLOs should they provide a customer with a 'voice only' service since this is not relevant to setting the wholesale broadband prices.

³¹ C&W Wholesale Agreement High Speed Internet Services.

³² Unless Sure provides the retail voice call service in which case the WLR charge is not made to the OLO. The customer would pay a retail line rental charge to Sure as the retail provider.

³³ Where an OLO provides only the broadband element of the service to a customer and Sure provides the voice only element, OLOs are not required to pay the WLR charge. The GCRA understands the occurrence of such a separation of services is very low.

5. Analysis and assumptions

Overview of the modelling process

- 5.1 The model developed calculates the “operational cash flows” related to wholesale broadband customers over a period corresponding to the assets’ life, calculated as Sure’s expected wholesale revenues from these customers minus its expected efficiently incurred capital and operating costs. The model allows the GCRA to identify the level of wholesale broadband prices (including WLR) that would need to be set over that period to allow Sure the opportunity to recover its efficient-incurred costs, that is, make a return on its cashflows equal to a reasonable return, as defined by its weighted average cost of capital (**WACC**). In practice, these are the level of prices that mean that the sum of Sure’s discounted cashflows for wholesale broadband products are equal to zero, when using its WACC as a discounting factor.
- 5.2 To provide a clear and transparent explanation on how the model has estimated the appropriate pricing level, the GCRA has set out its approach to each of the key assumptions deployed in the model and why the GCRA considers each assumption to be reasonable. This reflects the changes made following the representations provided by parties in response to the First Proposed Pricing Decision (which are also set out in **Appendices 1 to 3**).

Analysis and Key Assumptions

- 5.3 Key assumptions that inform the price control model, which is presented in an excel spreadsheet, are discussed below.
- 5.4 **Assumption 1: Duration of the Modelling Period** – The GCRA proposes that the model is based on a 40-year cycle. The rationale for this 40-year timespan is that the longest-lived assets in Sure’s network (poles and ducts) are taken into account. This approach is consistent with the approach in cost models in other jurisdictions.
- 5.5 **Assumption 2: WACC** - The GCRA invited Sure to produce its own WACC report, which Sure instructed Oxera to produce and was provided to GCRA on 9 January 2023.³⁴ The GCRA evaluated Sure’s submissions and considered that most of the parameters in the capital asset pricing model were reasonably well evidenced. The report findings were summarised as follows:

“We present a summary of Oxera's estimates of CAPM input parameters and the estimated WACC range in pre-tax nominal terms, arriving at a midpoint estimate of 9.1%,”

- 5.6 The GCRA agreed with the overall approach used to determine the expected returns on capital investments, however, there are two areas of the approach (an uncertainty premium and a forward rate adjustment) that the GCRA was not persuaded of (See **Appendix 1**). As a result, the GCRA proposed to use a WACC of 8.8%, which represents the mid-point of Oxera’s estimated range of 8.32% to 9.32% once these two adjustments had been removed.

³⁴ **2023 Oxera Report**, Estimating the WACC for Sure's Guernsey business, 9 January 2023.

- 5.7 In reply to the First Proposed Pricing Decision, Sure made further representations to support one of the rejected adjustments. These were considered but again not found to be persuasive by the GCRA (see **Appendix 5** for Sure’s supplemental WACC representations).³⁵
- 5.8 In its Second Proposed Decision the GCRA therefore decided to keep the WACC at 8.8%, in line with its First Proposed Pricing Decision.
- 5.9 **Assumption 3: Inflation Rate** - Sure’s future costs (except for staff related costs – wage growth was used) in the model are adjusted by the expected inflation rate. The GCRA proposes to apply an inflation rate which is the most recent at the time it makes its Final Decision. Currently the most recent figure is 6.6%³⁶ in 2023, based on the latest quarterly actual and forecast RPI-X inflation rates produced by the State of Guernsey. The GCRA assumes that the rate of inflation will decline over the long run (from 2026 and onwards) to 2.2%. The proposed long-run rate of 2.2% is based on the average of Guernsey RPIX³⁷ between 2016 and 2019 (i.e., the years immediately preceding the COVID pandemic and current high-inflationary period), which is consistent with Bank of England’s long-term target to “*set monetary policy to achieve the Government's target of keeping inflation at 2%*”³⁸.

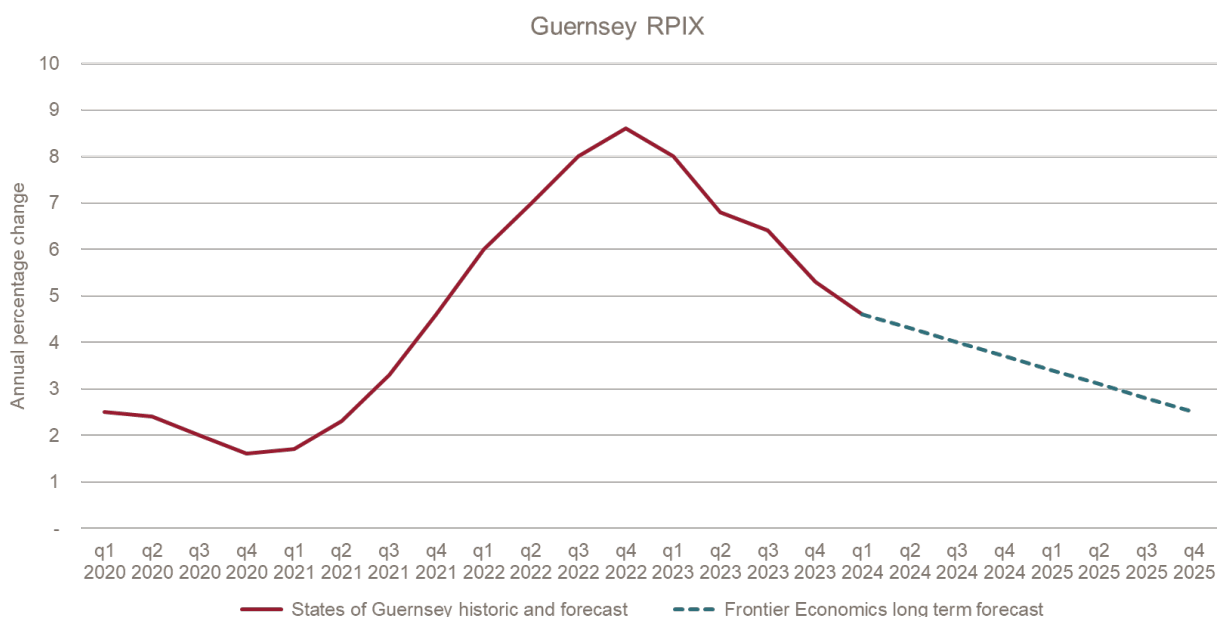
³⁵ **Appendix 1** – the GCRA’s reply to Sure’s supplemental WACC representations, pages 29 to 30.

³⁶ **2023** States of Guernsey Strategy and Policy Unit, Guernsey Inflation Forecast bulletin, published 25 July 2023 (this has been updated in consideration of Sure’s representations on the updated RPI-X figures)

³⁷ The RPIX Measures the overall level of inflation experienced by people living in Guernsey by considering inflation of a basket of goods and services, excluding mortgage interest payments.

³⁸ **2022** Bank of England (2022) retrieved 14 Mach 2023.

Guernsey RPIX – Historic and Future Inflation Rate



5.10 The model estimates future costs based on the expected inflation profile but sets the evolution of wholesale prices at the long run rate throughout the 40-year modelling period to smooth the current inflation peak for end users.³⁹

5.11 **Assumption 4: Wage Growth** – The expected wage growth is used to forecast Sure’s staff-related costs over the 40-year period. The GCRA’s assumption is based on data from Guernsey Annual Electronic Census Report. Overall remuneration growth was estimated at 3.1% in nominal terms during 2016 to 2019, when inflation was 2.2% which means that the real wage growth was 0.9% over the period. The GCRA accepts that the wage growth data does not identify whether the wage growth was due to employees earning higher salaries or an increase in the number of persons in the workforce. However, the GCRA assumes wage growth was driven by higher salaries and assumes that wage growth will continue at the same rate in real terms going forwards as it did over 2016 to 2019, i.e., wage growth at forecast inflation + 0.9% throughout the 40 year modelling period.

5.12 **Assumption 5: Efficiency Gains** – In the cost model, the assumed growth in costs due to inflation and wage growth is reduced to reflect expected cost savings over time due to expected efficiencies. This approach is consistent with that used by regulatory authorities in other jurisdictions when setting cost-orientated prices. The applied rate of cost savings due to efficiencies differs by type of cost, and over time. On average, across the whole cost base, proposed efficiency rates applied range between 2.3% in 2023 and 1.6% from 2028 onwards.

³⁹ Note that this still ensures that the proposed prices are reflective of Sure’s costs. This is because as noted above, the prices over the 40-year modelling period (taking account of the assumed inflation) are set such that Sure’s wholesale revenues for leased line services will equal its actual expected efficient costs i.e. the return on its cashflows over the 40 year period will be equal to its WACC.

5.13 Firstly, there is an estimate of Multifactor Productivity (MFP) produced by the UK's Office of National Statistics (ONS), which provide an estimate of the annual efficiency gain for the ICT sector, which is 2.4%. This rate is applied to Sure's costs relating to IT, Billing and datacentres.

5.14 Secondly, Ofcom's Fibre-to-the-Premises (FTTP) model developed as part of its Wholesale Fixed Telecoms Market Review Decision. Ofcom explicitly assumes annual efficiency gains of 1.5% for OPEX including repair and maintenance, power, and general management costs. This rate is applied to general OPEX as well as core and leased line specific OPEX (reflecting the GCRA's understanding that this OPEX relates to assets that are already fully fibre).

5.15 Thirdly, Ofcom's estimate of efficiency gains for Openreach's network costs used in its Regulatory Asset Base (RAB) model developed as part of its 2020 Wholesale Fixed Telecoms Market Review Decision was 4.5%, which relates to Openreach's legacy copper network. This rate was applied to network specific costs, with an assumption of 3.5% in 2023 reflecting that Sure's network will still be largely copper-based in this year, reducing to 1.5% by 2027, once Sure's Fibre to the Premises (FTTP) project is completed at the targeted time of 2026 (i.e. consistent with the efficiency gain rate assumed by Ofcom for Openreach's FTTP network).

5.16 **Assumption 6: Management fee costs** – The GCRA does not propose to allow management fees to be included in the cost model, as it does not consider that these have been sufficiently evidenced or justified by Sure in its submissions. And the GCRA notes Condition 2.10 of Sure's Fixed Telecommunications Licence that requires:

"The Licensee shall ensure that:

The administration and management of the business associated with the establishment, maintenance and operation of the Licensed Telecommunications Network and provision of the Licensed Telecommunications Services shall be conducted from the Bailiwick; and

its business is conducted in a manner which the Guernsey Competition and Regulatory Authority is satisfied is on a normal commercial basis and at arm's length from the business of any of its shareholders or Associated Companies."

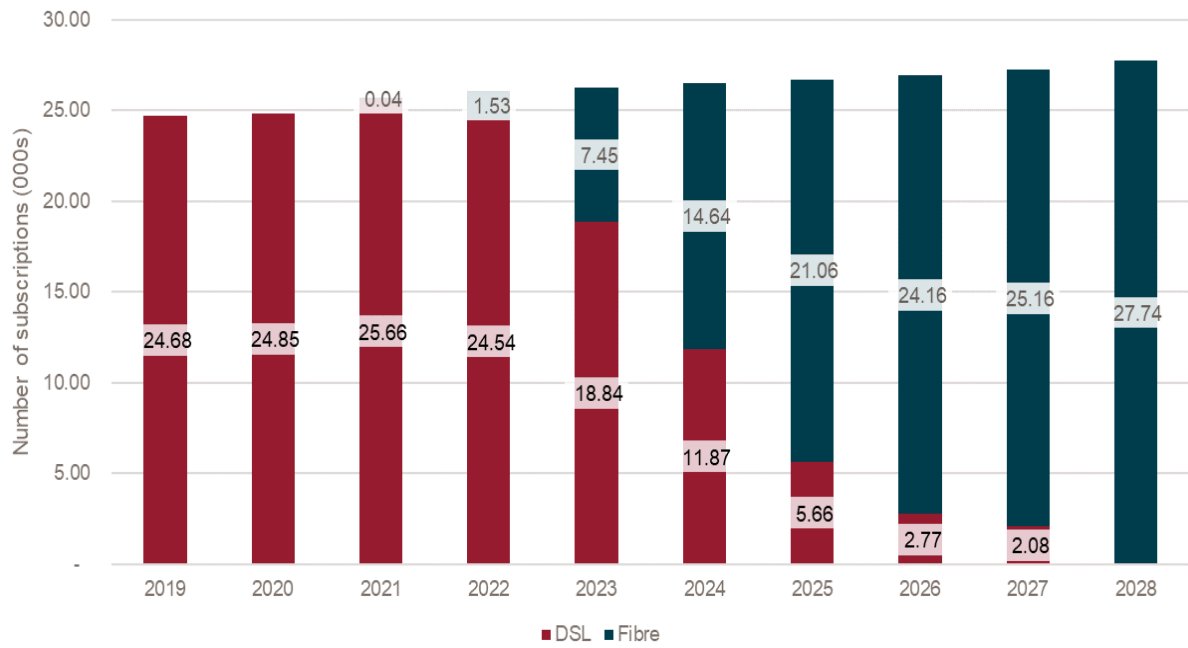
5.17 **Assumption 7: Cost Allocation to wholesale broadband customers** – The model allocates forecasted "shared costs" to wholesale broadband customers. They are designated as 'shared costs' because the activities which give rise to these costs support both the provision of wholesale broadband as well as other Sure services (incl. other wholesale services such as wholesale leased line products and fixed voice to 'voice only' customers, but also Sure's fixed retail services, mobile services and other activities). Where data was available, the costs relating to certain cost categories have been allocated on the basis of specific data on the underlying activities driving those costs (e.g., staff timesheet data for staffing costs). Where "direct" data relating to the activities underlying costs was not readily available, the cost allocation keys reflect allocation keys from Sure's previous regulatory accounting system, and other considerations such as the split of subscribers or revenues across services, which is a common approach used in cost models in other jurisdictions, such as Jersey and the UK. **The allocation of costs based on revenues across services has been amended for this Second Proposed Decision, to reflect corrected historic prices and revenues for some services that are used to**

calculate the revenue split, and to ensure that the wholesale broadband product revenues used when calculating the split included WLR charges paid for by wholesale broadband customers for reasons explained in section 4.

- 5.18 The model also considers the government’s FTTP funding of £12.5 million. This funding has been fully allocated to wholesale broadband services, to reflect that the Funding Agreement⁴⁰ references the provision of high-speed broadband services as a key objective for the funding, with no explicit reference to leased lines or other services.
- 5.19 **Assumption 8: Demand for Wholesale Broadband** - The demand forecasts within the model are informed by forecasts provided by Sure, JT and Airtel. The demand in the model covers all fixed broadband customers on Sure’s network (i.e. wholesale customers of OLOs and the customers of Sure retail), as it is appropriate to recover the relevant costs of these services over all of these customers.
- 5.20 Fixed broadband demand on Sure’s network is expected to increase from 26.1k users in 2022 to 27.7k in 2028. This growth is in line with historical growth, and it is reasonable to expect demand for broadband to continue to grow given the changes in the Guernsey market over the price control period (higher quality services delivered by the FTTP network and lower prices).
- 5.21 Customers will also migrate from copper to FTTP services over time as Sure rolls out its FTTP network. Based on the information provided by Sure, JT and Airtel and consistent with what is observed in other markets where FTTP has been deployed (Ireland, UK), the majority of customers are expected to remain on lower speed products (~70% on speeds less than 100Mbps in 2028). However, we understand that Sure has plans to upgrade its speeds over time (which can be done at a minimal cost), which means that the speeds provided by the lowest speed products would increase over time.

⁴⁰ States of Guernsey (2021). Funding Agreement Relating to Acceleration of Fibre Rollout to All Premises in Guernsey. 26 October 2021.

Forecasted for Fixed Broadband Subscriptions on SURE's Network - DSL and FTTP



Source: SURE, JT and Airtel

6. Remedies

Overview

- 6.1 Sure has been designated as having a dominant position in the wholesale broadband market, implying it has both the ability and incentive to set wholesale broadband prices which might serve its own commercial interests at the expense of those of the wider market and in particular, consumers⁴¹. The GCRA has also found that Sure's wholesale broadband prices are above the appropriate cost-based price.
- 6.2 Therefore, the GCRA considers it appropriate to impose a price control remedy pursuant to Condition 31.2 of the Sure Licence.
- 6.3 In addition to the risk of excessive prices other types of competition problems may arise, such as:
- Refusing to provide network access to other downstream service providers (or refusal to provide access on reasonable terms, conditions, and charges), which could restrict competition in the provision of retail services to the detriment of consumers.
 - Discrimination in favour of its downstream retail businesses to the detriment of competition in the retail market (including by price and/or non-price discrimination), and ultimately to the detriment of end users.
 - Engaging in a margin squeeze.
- 6.4 The existing measures that look to mitigate types of potential competition problems associated with Sure's dominance designation are set out in Sure's Licence and continue in force (See Annex 2).

Compliance with Price Control

- 6.5 The GCRA proposes to place a cap on the weighted average price covering the whole range of Sure's wholesale broadband products. A compliance-checking process will require Sure to submit a report at the end of each year demonstrating compliance with the "weighted average" price over the prior year, which reflects: the set of prices actually paid by OLOs for each wholesale broadband product variant over that period (wholesale line rental and wholesale broadband product rental); weighted by the volume of sales of the relevant broadband product in the year prior to the compliance period reported. The Figure below provides a worked example of how the control will operate.
- 6.6 The weighted average price cap will give Sure the flexibility to adjust prices during the period, provided Sure maintains the notification requirements listed in its Licence and ensures that the actual weighted average price is at the level of or below the weighted average price cap.

⁴¹ 2019 –GCRA 19/01 Final Decision Broadband Market: Review and SMP Findings.

- 6.7 The weighted average price for compliance would be calculated by weighting the price of each service by the proportion of volumes of sales attributable to the relevant service in the year prior. There are other approaches to set the weighting, such as current year weighting or what is referred to as the 'snapshot approach' (where the volumes at a point in time are multiplied by the average charge made during a period of 12 months prior to the start of the charge control year). There is a risk of specific forms of gaming by Sure involving targeting price increases on broadband products whose weights are growing over time, so that the prior year weighting understates the effect of the price increase on actual revenues. However, other approaches suffer from their own gaming risks. The GCRA considers the prior year volume weighting approach will best enable Sure to plan its charges in a year to satisfy the objectives of the control.
- 6.8 In the judgement of the GCRA, imposing a weighted average price ensures that the SMP operator's prices are cost-based overall, but gives flexibility within that to set the level of prices for individual product variants. This approach is appropriate because the broadband market is one that is generally more dynamic in nature than other telecom markets with frequent technological upgrades and the introduction of new products. By setting price caps on individual product variants, and absent other reasons to do so that might outweigh this flexibility given to an SMP operator, such a degree of regulatory control could reduce Sure's ability to respond to changes in the broadband market where there is greater uncertainty as to market developments.
- 6.9 The Authority recognised there may be extraneous circumstances which may case Sure's prices to deviate from the cap set by this control. Where these are beyond Sure's control and w not reasonably foreseeable, the Authority would not expect to take enforcement action.

7. Statutory Notice of a Proposed Decision.

Determination

- 7.1 For the reasons set out in this Second Proposed Pricing Decision, the Authority proposes to make the following determination (the **Decision**) pursuant to Licence Condition 31.2 of the Licence to set the average weighted prices that may be charged by Sure for wholesale broadband, as set out in the Decision.

DETERMINATION

1. This Determination shall apply from 1 January 2024 and shall remain in force until 31 December 2028.
2. For the purposes of this Determination:
 - “**Authority**” means the Guernsey Competition and Regulatory Authority
 - “**Compliance Statement**” means a statement of compliance consistent with paragraph 6 & 7 of the Schedule to this Determination.
 - “**Products**” means wholesale broadband products.
 - “**Weighted average broadband charge**” is calculated by multiplying, the price paid including Wholesale Line Rental (**WLR**), and after any discounts, for each broadband product variant, by the corresponding number of subscribers in the previous year. The product of this multiplication is then divided by the total number of subscribers in the previous year.
 - “**Sure**” means Sure (Guernsey) Limited.
 - “**Table A**” means the table set out in the Schedule to this Determination labelled Table A specifying the Weighted Average Price that may be charged by Sure for each of the Products.

SCHEDULE

3. The Authority proposes to regulate the total wholesale broadband charges which includes wholesale line rental plus wholesale broadband product rental, as set out in Table A below. Assuming the WLR charge increases over time with the estimated long-run rate of inflation (2.2%), the weighted average wholesale broadband charge for the period 2024-2028 proposed is presented in **Table A**.
 - a. Sure can continue to provide different wholesale broadband products to OLOs with different price points.
 - b. Sure is able to make changes to its WLR prices, subject to any regulatory restraints on its WLR product. However, the average weighted price charged by Sure for wholesale broadband across all products (wholesale line rental and wholesale broadband product rental) should not exceed that set out in **Table A**.
4. For the Products sold by Sure on or after 1 January 2024, the price to be charged by Sure for those Products shall not exceed the weighted average broadband charge for the period

stipulated.

5. Within two months of the end of each price control year, which is a calendar year, Sure shall provide to the Authority a Compliance Statement.

Table A – Weighted average broadband charge which comprises wholesale line rental and wholesale broadband product rental.

	unit	2024	2025	2026	2027	2028	2024-2028 average
New weighted average broadband charge (including WLR)	£/month	24.47	25.29	26.09	26.84	27.57	26.05
Assumed WLR charge (increases with 2.2% long-run inflation rate)	£/month	11.50	11.75	12.01	12.27	12.54	12.01
Wholesale broadband product rental charge	£/month	12.97	13.53	14.08	14.57	15.02	14.04

6. A compliance-checking process will require Sure to submit a Compliance Statement within two months after the end of each year demonstrating compliance with the “*weighted average*” price over the prior year, which reflects: the set of prices actually paid by OLOs for each wholesale broadband product variant over that period (wholesale line rental and wholesale broadband product rental); weighted by the volume of sales of the relevant broadband product in the year prior to the compliance period reported.
7. Below provides a worked example of how the control will operate.
 - a. If there are 5 broadband product variants. Each product variant has a corresponding price paid, a discount, and number of subscribers:

PRODUCT	PRICE (£), incl WLR (FOR COMPLIANCE PERIOD REPORTED)	Discount (£)	NO. OF SUBSCRIBERS (FOR PREVIOUS YEAR)
<i>Product1</i>	20		300
<i>Product2</i>	23		190
<i>Product3</i>	25		140

Product4	36	2	99
Product5	40		70

- b. The weighted average price cap is calculated by multiplying, the price paid including WLR and after any discounts for each broadband product variant, by the corresponding number of subscribers in the previous year, the sum of this multiplication is then divided by the total number of subscribers in the previous year.
- c. Using the example provided in the table above, the following formula for finding the average weighted price cap can be used:
- d. Weighted Average price cap = {Product1 Price * Product1 No. of Subscribers + Product2 Price * Product2 No. of Subscribers + Product3 Price * Product3 No. of Subscribers + (Product4 Price -Discount) * Product4 No. of Subscribers + Product5 Price * Product5 No. of Subscribers} / Total Number of Subscribers
- e. Weighted Average price cap = $\frac{\sum^n P P_i S_i}{\sum^n S_i}$
- f. Where:
 - i. \sum^n = the sum of all product variants
 - ii. P*P*_i = the product price paid for each product variant, including WLR and any discount
 - iii. S_i = the number of subscribers of each corresponding product variant in the previous year
 - iv. Weighted average price cap = $\frac{\{20 * 300 + 23 * 190 + 25 * 140 + (36-2) * 99 + 40*70\}}{\{300 + 190 + 140 + 99 + 70\}}$
 - v. Weighted average price cap = 20,036 /799
 - vi. Weighted average price cap = £25.08

Comparison of existing wholesale broadband changes with the new proposed charges

7.2 As a result of the Determination, as set out above, the cost-based wholesale broadband charge to OLOs of providing broadband will be significantly lower than the sum of Sure's current combined wholesale charges for broadband which includes wholesale line rental and wholesale broadband product rental.

7.3 As illustrated in Table B below, the new wholesale broadband price in 2024 for example would be **32% lower than Sure's 2022 price level** (adjusted for inflation).

Table B – Comparison of existing wholesale broadband changes with the new proposed charges

	unit	Current (2023)	2024	2025	2026	2027	2028	2024- 2028 average
New weighted average broadband charge (including WLR)	£/month		24.47	25.29	26.09	26.84	27.57	26.05
Weighted current broadband charge (including WLR) if increase with 2.2% long-run inflation rate	£/month	35.30	36.08	37.28	38.47	39.58	40.64	38.41
Difference	£/month		- 11.6	- 12.0	- 12.4	- 12.7	-13.1	-12.4
Difference (%)	%		-32%	-32%	-32%	-32%	-32%	-32%

8. Representations

Pursuant to s.5(2)(3) of the Telecoms Law, written representations or objections in respect of the proposed Decision may be made by interested parties.

The GCRA invites interested parties to submit written responses to this Second Proposed Decision by **1600 on 3 November 2023**.

Responses can be submitted by email to info@gcra.gg or alternatively in writing to:

GCRA

Suite 4, 1st Floor,

La Plaiderie Chambers,

La Plaiderie

St Peter Port, GY1 1WG

All written representation should be clearly marked 'T1652G - Second Proposed Pricing Decision – Wholesale Broadband Pricing'. The GCRA's normal practice is to publish responses on its website. If any part of a response is held to be commercially confidential, it should be clearly marked (by highlighting the confidential sections in colour) when the response is submitted.

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Annex 1: Legal background and licensing framework

Legal background

The Regulation of Utilities (Bailiwick of Guernsey) Law 2001 (the Regulation Law) sets out the general duties which the States and the GCRA must take into account in exercising their functions.⁴² These include the requirement to protect consumers and other users in respect of the prices charged for, and the quality, service levels, permanence and variety of, utility services; to ensure that utility services are provided in a way which will best contribute to economic and social development; and to introduce, maintain and promote effective and sustainable competition.⁴³

The Regulation of Utilities (States' Directions) (Bailiwick of Guernsey) Ordinance, 2012 sets out six principles of economic regulation, summarised below:⁴⁴

- Accountability – regulate within the framework of duties and policies set by the States.
- Focus – focus on protecting consumer interests through competition where possible, or a system replicating competitive outcomes if not, with a focus on outcomes.
- Predictability – provide a stable and objective regulatory environment.
- Coherence – develop frameworks that are a logical part of States broader policy context and priorities.
- Adaptability – evolve as circumstances change.
- Efficiency – make proportionate, cost-effective, timely and robust interventions and decisions.

Section 5(1) of *The Telecommunications (Bailiwick of Guernsey) Law, 2001 (the Telecoms Law)* provides that the GCRA may include in licences such conditions as they consider appropriate, having regard to objectives set out in Section 2 of the Regulation Law, and the enforcement of the Regulation Law and the Telecoms Law.

The Telecoms Law⁴⁵ specifically provides that the GCRA may include in any licence conditions that are:

- intended to prevent and control anti-competitive behaviour;⁴⁶ and

⁴² Section 2 of the Regulation Law.

⁴³ These broad objectives were maintained in the transfer of functions and responsibilities to GCRA, as set out in the *Guernsey Competition and Regulatory Authority Ordinance, 2012*.

⁴⁴ The Regulation of Utilities (States' Directions) (Bailiwick of Guernsey) Ordinance, 2012:

⁴⁵ The definition of dominance and abuse of dominance is not explicit in the Telecoms Law. However, the *Competition (Guernsey) Ordinance, 2012* sets out the States' approach to defining abuse of dominance and anti-competitive practice.

⁴⁶ Section 5(1)(c) of the Telecoms Law.

- regulate the price premiums and discounts that may be charged or (as the case may be) allowed by a licensee which has a dominant position in a relevant market.⁴⁷

The GCRA is obliged⁴⁸ to publish notice:

- of a proposed decision as to whether a person has a dominant position in a relevant market and of the conditions, if any, proposed to be included in the licence granted or to be granted to that person in relation to the control of that dominant position;
- of a proposed decision to regulate the prices, premiums and discounts that may be charged or (as the case may be) allowed by a licensee which has a dominant position in a relevant market; and
- of a proposed decision to include quality of service conditions in any licence.

Licensing framework

Licences are issued to fixed telecommunications providers under Part I, Section 1 of the Telecoms Law. All fixed and mobile telecommunications licences include a Part which addresses conditions applicable to dominant operators.⁴⁹ If the GCRA has found that a licensee has a dominant position in a relevant market, the provisions of this Part of the licence may apply.

The provisions which are applicable to dominant operators include (but are not limited to) measures addressing the availability and associated terms of Other Licensed Operator (OLO) access to networks and services,⁵⁰ the requirement not to show undue preference, or to exercise unfair discrimination,⁵¹ the requirement not to unfairly cross subsidise,⁵² supported by accounting processes to demonstrate compliance; regulation of prices, and transparency around pricing.⁵³

The fixed telecommunications licences also include a Part which directly obliges the licensee not to engage in any practice which has the object or likely effect of preventing, restricting or distorting competition in the establishment, operation and maintenance of telecommunications networks and services.⁵⁴

The form and implementation of the price control are addressed in licence condition 31, which deal with Price Regulated Services and the conditions that apply for Licensed Telecommunications Services⁵⁵ within a relevant market in which the Licensee has been found to be dominant.

⁴⁷ Section 5(1)(f) of the Telecoms Law.

⁴⁸ Section 5(2) of the Telecoms Law.

⁴⁹ Part IV, Fixed telecommunications licences.

⁵⁰ Condition 24, Fixed telecommunications licences.

⁵¹ Condition 29, Fixed telecommunications licences.

⁵² Condition 28, Fixed telecommunications licences.

⁵³ Condition 31, Fixed telecommunications licences.

⁵⁴ Part V, Fair competition, Fixed telecommunications licences.

⁵⁵ As defined in section 31, Telecommunications (Guernsey) Law, 2001.

Annex 2: Licence Obligations for Licensee with dominant position.

Sure, Licence condition 29 Undue Preference and Unfair Discrimination

29.1 The Licensee shall not show undue preference to, or exercise unfair discrimination against, any User or Other Licensed Operator regarding the provision of any Licensed Telecommunications Services or Access. The Licensee will be deemed to be in breach of this Condition if it favours any business carried on by the Licensee or an Associated Company or Other Licensed Operator so as to place Other Licensed Operators competing with that business at an unfair disadvantage in relation to any licensed activity.

- **Accounting separation** – licence condition 27 obliges Sure to prepare and maintain separated accounting information.
- **Sure, Licence condition 27 Separate Accounts**

27 .1 Within six months of the Licence Commencement Date, the Licensee shall prepare and maintain accounting records in a form that enables the activities specified in any direction given by the GCRA to be separately identifiable, and which the GCRA considers to be sufficient to show and explain the transactions of each of those activities. The GCRA may direct the Licensee as to the basis and timing of such reports as the GCRA may require.

- **Cost accounting** – licence condition 28 constrains Sure from unfair cross-subsidisation and maintain cost accounting obligations to demonstrate its compliance.

Sure, Licence condition 28 Cross Subsidisation

28.1 The Licensee shall not unfairly cross subsidise or unfairly subsidise the establishment, operation or maintenance of any Telecommunications Network or Telecommunications Services.

28.2 To enable the GCRA to evaluate where any unfair cross-subsidisation or unfair subsidisation is taking place, the Licensee shall record at full cost in its accounting records any material transfer of assets, funds, rights or liabilities between a part and any other part of its business, and between it and any Associated Company, and shall comply with any directions issued by the GCRA for this purpose.

- **Price control** – licence condition 31.2 provides to mechanism for the GCRA to impose a price control on any licensed telecommunications services within a relevant market in which Sure has been found to be dominant.

Sure, Licence condition 31 Price Regulated Services

31.2 The GCRA may determine the maximum level of charges the Licensee may apply for Licensed Telecommunications Services⁵⁶ within a Relevant Market in which the Licensee has been found to be dominant. A determination may:

- a) provide for the overall limit to apply to such Licensed Telecommunications Services or categories of Licensed Telecommunications Services or any combination of Licensed Telecommunications Services;
- b) restrict increases in any such charges or to require reductions in them whether by reference to any formula or otherwise; or
- c) provide for different limits to apply in relation to different periods of time falling within the periods to which any determination applies.

⁵⁶ As defined in section 31, Telecommunications (Guernsey) Law, 2001.

Annex 3: Engagement with parties

Below is a detailed account of interactions and exchanges with parties relevant to the information gathering and modelling process.

- 1.1 On 29 July 2022, the GCRA wrote to Sure and all the other licenced operators (**OLO**) to notify them that it was conducting a Broadband consultation and was considering appropriate remedies for operators with SMP in the relevant markets; and that remedies may include price regulation for the relevant wholesale services.
- 1.2 On 16 September 2022, information requests (RFI) relating to the GCRA's review were sent to Sure and the OLOs. The information requests were set out in two separate documents, one was a letter with specific questions for the operators to answer and the second part was a GCRA spreadsheet, with specific tables which the operators were required to complete.
- 1.3 On 26 September 2022, Sure provided a partial response to the RFI and requested a meeting with the GCRA to discuss the request in further detail.
- 1.4 On 30 September 2022, a meeting was held between GCRA, Frontier Economics (instructed by the GCRA to assist with the project) and Sure to discuss the information request responses and the various matters raised by in correspondence by Sure.
- 1.5 On 6 October 2022, JT provided its response to the information requests and on 7 October 2022, Airtel provided its response to the information requests.
- 1.6 On 10 October 2022, the GCRA held its round table discussion with the OLOs (JT, Airtel) and Sure and the discussion addressed the purpose of the project (GCRA), a high-level approach to the project (Frontier) and follow ups from the parties.
- 1.7 On 11 October 2022, the GCRA provided the operators with the PowerPoint slides from the roundtable meeting and the presentation from Frontier.
- 1.8 On 21 October 2022, the GCRA had a meeting with Sure to address specific questions relating to OPEX values, split by requested categories in the GCRA spreadsheet template (e.g. DSL specific, FttH specific, etc.). Sure used the meeting to provide an update to the GCRA on its General Ledger analysis and cost allocation data analysis. And on the same day Sure provided answers to the GCRA's written questions, additional information, costing data from its management accounts and an updated version 4 of the GCRA spreadsheet template.
- 1.9 On 25 October 2022, after conducting a preliminary assessment of the data provided by Sure in response to Information Request, the GCRA provided Sure with a list of information that had been received and that remained outstanding.
- 1.10 On 25 October 2022, the GCRA followed up with further and additional questions to JT and Airtel following the information both OLO had previously provided. Those questions focused on the following topics:

- i. Forecast of demand for Sure wholesale products.
 - ii. Demand for additional wholesale products.
- 1.11 On 25 October 2022, the GCRA followed up with additional questions to Sure on the information it had provided.
- 1.12 On 27 October 2022, Sure provided an updated 'version 5' GCRA spreadsheet template with additional information.
- 1.13 On 28 October 2022, Sure provided the latest backing information which reflect its version 7 of the GCRA spreadsheet template.
- 1.14 On 3 November 2022, JT provided further detailed and supplemental information in response to the request on 25 October 2022.
- 1.15 On 8 November 2022, the GCRA wrote to Sure asking for further information and clarification on the data that had been provided in the consultation. And, Sure was also asked to highlight the specific systems where historical data had been extracted from to populate the template spread sheets provided to the GCRA.
- 1.16 On 8 November 2022, there was a further meeting with SURE to discuss outstanding data and related questions. The discussions covered the following topics:
 - i. Sure confirmed it was continuing its work to provide additional data to break down costs to appropriate granularity for the GCRA's analysis (on CAPEX and staff costs in particular).
 - ii. Sure confirmed it would provide clarifications on the outstanding questions.
 - iii. Sure confirmed it was instructing external consultants to provide its assessment regarding its Weighted Average Cost of Capital (WACC).
 - iv. Discussion to validate categorisation, allocation and forecast rationales.
- 1.17 On 10 November 2022, Sure was provided with a populated spreadsheet which detailed the GCRA's work-in-progress on categorisation and allocation of OPEX.

Sure confirmed that it was happy to review the proposed refinements and would respond in a few days. Sure confirmed that it was coordinating and working on the outstanding questions and would also respond on timesheet data categorisation to inform the appropriate allocation of staff-related costs between services.
- 1.18 On 14 November 2022, Sure provided responses to the GCRA's questions along with an alternative version 7 of the spreadsheet template, which showed the source system data.
- 1.19 On 18 November 2022, the GCRA provided further clarification questions to assist Sure in its review and provision of relevant OPEX data.

- 1.20 On 22 November 2022, Sure provided two additional information spreadsheets, on its 2016 to 2022 Department Report Analysis and its Guernsey staff costs per department from 2016 to 2021.
- 1.21 On 25 November 2022, Sure provided a response to the GCRA's questions and its OPEX and CAPEX related data requests.
- 1.22 On 1 December 2022, a further meeting was held with Sure to discuss outstanding issues with information required from Sure on its OPEX categories and allocation. The following is a summary of the discussions:
- i. Frontier asked clarifications on the WLR product, clarification on one-off revenues and the underlying demand (reactivation of fibre ONT and new fibre connection).
 - ii. Frontier/Sure reviewed staff cost analysis and Sure confirmed it accepted the GCRA's proposed refinements.
 - iii. Frontier/Sure discussed the allocation drivers for biggest shared cost buckets (buildings, data centre, general OPEX, fixed access network).
 - iv. Frontier/Sure discussed whether revenue or Equi-Proportional Mark-Up (EPMU) approach should be preferable, that the approach was not settled, Frontier explained when these approaches should be preferred and Sure was agreeable with the rationale.
 - v. Sure agreed to provide more up to date information on data centre space occupied by fixed core network equipment.
 - vi. Sure raised questions on the proposed modelling approach for leased line revenues, and forecasts which were addressed by Frontier.
- 1.23 On 9 December 2022, Sure confirmed that it had instructed external consultants to undertake the work on its WACC report and it would be finalised report by 23 December 2022.
- 1.24 On 9 January 2023, Sure provided the Oxera produced report on its WACC.
- 1.25 On 10 January 2023, Sure provided further information on its billing costs, and an updated version 8 of the GCRA's spreadsheet.
- 1.26 On 12, 13 January 2023, Sure provided answers to outstanding written questions on:
- i. CAPEX forecasts for "*access network capex (e.g. ducts / poles, buildings)*" and "*core network CAPEX (transport network and core functions)*".
 - ii. Space occupied by fixed network equipment racks in data centres and buildings.
 - iii. Reinvestments.

- iv. Billing Costs.
 - v. Voice only subscriptions.
- 1.27 On 16 January 2023, Sure provided its 'Fixed Asset Review' and version 9 of the GCRA's spreadsheet.
- 1.28 On 18 January 2023, Sure was asked "*One additional question on management fees: can you describe what type of costs this encompasses? Is there a rationale to support that a share of these should be allocated to BB or LL products?*" and Sure was asked for that information on management fees again on 9 February 2023.
- 1.29 On 15 February 2023, Sure confirmed it was unable to provide the required clarifications on its management fee questions. It confirmed that "*Unless we're able to provide an update to you by then, we'd probably need to use the cost driver values from 2014.*"
- 1.30 On 22 May 2023, the GCRA provided Sure with the '*Costing Model*' for wholesale broadband which was used to produce the proposed price cap level presented in the Proposed Decision.
- 1.31 On 23 May 2023, the GCRA published its Proposed Decision for Wholesale Broadband Access.
- 1.32 On 14 June 2023, Sure provided written representations on the First Proposed Decision.
- 1.33 On 20 June 2023, and based on a review of Sure's written representations, the GCRA requested additional data from Sure based on demand and Optical Network Terminals (ONT) lifetimes.
- 1.34 On 20 July 2023, the GCRA requested data from Sure on Wholesale Line Rental (**WLR**) – specifically whether WLR and wholesale broadband services were bundled or offered as individual products that could be combined and Sure responded on the same day.
- 1.35 On 24 July 2023, GCRA asked Sure to confirm whether WLR is required to enable broadband services and Sure confirmed that a WLR landline was required for broadband services.
- 1.36 On 25 July 2023, the GCRA met with Airtel to discuss its representation on the First Proposed Decision and it's the GCRA's initial comments in response.
- 1.37 On 25 July 2023, the GCRA met with Airtel to discuss its representations on the First Proposed Decision and the GCRA's initial comments in response.
- 1.38 On 1 August 2023, the GCRA met with Sure to discuss its representations on the First Proposed Decision and the GCRA's initial comments in response.
- 1.39 On 4 August 2023, the GCRA met with JT to discuss its representations on the First Proposed Decision and the GCRA's initial comments in response.
- 1.40 On 10 August 2023, GCRA sent information requests and data clarification requests to Sure.

- 1.41 On 15 August 2023, Sure sent a partial response to the information and data clarification request.
- 1.42 On 18 August 2023, Sure provided further responses to the GCRA information request made on 10/08/2023.
- 1.43 On 22 August 2023, Sure provided further responses to the GCRA information request made on 10/08/2023.



WHOLESALE BROADBAND MARKET

T1652G – PROPOSED DECISION – WHOLESALE BROADBAND ACCESS PRICING

EXECUTIVE SUMMARY

1. Sure (Guernsey) Limited (“Sure”) welcomes the opportunity to respond to the Guernsey Competition and Regulatory Authority’s (“the GCRA’s”) Proposed Decision¹ in relation to its Wholesale Broadband Market Review (“WBMR”). We are grateful for the opportunity to comment on the GCRA’s proposals. We recognise and value the involvement of Frontier Economics² (“Frontier”), the GCRA’s external advisors, for the financial and economic aspects of this review.
2. As requested by the GCRA, we have highlighted (by our use of yellow shading) all parts of this response that are commercially confidential. **Importantly, we request that prior to publication, the GCRA provides us with its proposed redacted version of this document, so that we can confirm that the items we have marked as confidential have been removed.**
3. We note that the GCRA has not asked respondents to answer any specific questions regarding its proposals. As a result, we will not be commenting on every aspect of the GCRA’s analysis. We have instead focussed this response on the areas in which we believe further clarification or correction is required. Please note that the fact that Sure has not made comments on or representations regarding a point made by the GCRA should not be interpreted as Sure’s agreement to those points.
4. We have carefully reviewed the GCRA’s proposals and are grateful to the GCRA for providing sufficient time to conduct a review. We welcome the GCRA’s focus on ensuring fair broadband prices and agree with its pragmatic approach to determining Sure’s WACC and accounting for inflation in its cost model. Notwithstanding our support for the GCRA’s pragmatic approach regarding those aspects, we have some significant concerns about the GCRA’s approach to this remedies consultation and its conclusions. Specifically:
 - I. **Market definition and market power assessment** – we strongly disagree with the GCRA’s decision to proceed directly to an assessment of remedies, without undertaking a timely and appropriate market definition and market power assessment. As we have previously explained

¹ t1652g-proposed-decision-wholesale-broadband-access-pricing.pdf (gcra.gg)

² Frontier Economics | Frontier Economics (frontier-economics.com)

to the GCRA, this approach is not in line with regulatory best practice and has resulted in the GCRA failing to take account of important market developments. We are concerned that, due to this lack of timely market analysis, the GCRA's decision could be open to challenge and could risk setting a precedent for how the GCRA should undertake future market reviews.

GCRA Response:

The GCRA acknowledges the value of a contemporary market definition and market power assessment. Regulatory good practice is however not defined by only one approach in all contexts since the context is relevant to considering what is proportionate and effective as an approach. The GCRA has been directed by the States to be proportionate and cost effective³. Since a first principles approach to market definition and market power assessment is generally a burdensome and lengthy process, and given the existing designation on Sure was informed by very large market shares which have not on the face of it altered materially since that designation was made, the approach taken has been to first consider whether there has been or it can reasonably be expected there will be, material changes to the basis for the current designation that might alter that position. Based on evidence available to the GCRA it is not apparent that regulatory good practice in these circumstances obliges a first principles review of the market and market power that Sure is requiring. To the extent there have been developments such as technology, market entry, or observable competitor behaviour, Section 3, of the Second Proposed Pricing Decision weighs up these factors and comes to conclusion. The GCRA has taken an approach that it considers is appropriate in the context of the market in which it regulates and contemporary evidence and is therefore a sound basis on which to consider whether remedies for wholesale prices are reasonable.

- II. **Cost orientation** – The GCRA appears to have applied a narrow interpretation of 'cost orientation', without consideration of the more recent developments in the EU, such as the increasing use of economic replicability tests in place of traditional cost-based regulated charges. We remain concerned about the GCRA's further reliance on Sure's 2014 cost driver data, but in the absence of separated accounts, we feel compelled to accept its inclusion within the GCRA's model.

GCRA Response:

In the EU Recommendation⁴ referenced by Sure, is clear that the economic replicability

³ GCRA Footnote - *The Regulation of Utilities (States' Directions) (Bailiwick of Guernsey) Ordinance, 2012*
<https://www.guernseylegalresources.gg/CHttpHandler.ashx?id=75588&p=0>

⁴ GCRA Footnote - *Commission Recommendation on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment (C(2013)5761 final)*,

test is considered a safeguard for competition in cases where no cost-oriented price regulation is in place/imposed. The ex-ante economic replicability test therefore has the purpose of safeguarding competition in cases where wholesale price regulation is not imposed on the SMP operator. The GCRA has set out in its Second Proposed Pricing Decision its reasoning on why it has chosen the approach of cost modelling. Reasons given include support of the States of Guernsey's Digital Framework objective of "World Class Digital Connectivity", concerns about higher price levels that are likely to be persistently high with no effective pressure to bring them down to competitive levels over the period of the review, exacerbated by market conditions where there is vertical integration and the supplier of OLOs essential downstream inputs is also their competitor. If Sure has evidence that these are invalid concerns or has better cost-driver information than that used by the GCRA in its model these can of course be presented.

- III. **Cost model methodological issues** – in assessing the GCRA's cost model, we have identified a number of potential errors and modelling issues, which need to be addressed. This includes the estimated lifetime of Optical Network Terminals ("ONTs") and general project costs, demand volumes for fibre installations and discounts being recognised as additional revenues. These methodological and modelling issues have a material impact on whether Sure is able to make a reasonable return on its investment, and therefore must be considered and amended.

GCRA Response:

The GCRA notes Sure's comments on the cost model methodology. It is not apparent that these can be categorised as 'errors' since they are based on the best evidence available in large part provided by Sure. Where there is new or different evidence this can be presented for consideration; the issues raised are addressed in detail in Table 1 below, (pages 14-18).

- IV. **Compliance framework** – The GCRA is proposing a very basic framework for the measurement of Sure's compliance with an annual weighted average price cap. For numerous reasons, not only do we believe that the framework would be unworkable, we consider that it would be materially unfair to our business. We are therefore proposing the use of a standard prior year volume / current year price mechanism, which is much more fit for purpose in the fast-moving Guernsey broadband market.

GCRA Response:

The GCRA considers there is merit to Sure's concerns and has therefore adjusted the compliance in this Second Proposed Pricing Decision. Sure will be required to take into

account the previous year's subscriber numbers for a given product to calculate its relative weighted average price. This will assist in providing greater regulatory certainty for each price control period over which Sure sets its wholesale prices. This proposed compliance approach for the weighted average price cap is set out in detail in this Second Proposed Pricing Decision with an example to illustrate the calculation included in Section 7 to assist Sure with its compliance obligations.

- V. **Weighted Average Cost of Capital ("WACC")** – we believe that the GCRA was incorrect to remove the uncertainty premium from Sure's WACC calculations. There is both good reason and well-established regulatory precedent for including the uncertainty premium in the WACC, and failing to do so could inappropriately cause financeability issues for Sure in the longer run.

GCRA Response:

The rationale for the GCRA's approach is set out in more detail in response to paragraphs 41 to 52, below.

- VI. **Inflation** – the GCRA's cost model should be amended to take into account the updated Q2 2023 actual and Q3 2023 forecast inflation figures from the States of Guernsey. An additional short run inflation uplift should also be provided, in light of recent comments from the Bank of England, which indicate that inflation will remain higher for longer in the short run.

GCRA Response:

The GCRA agrees that the most updated inflation data (RPIX) should be used in the model, therefore, the model will be amended to use updated inflation figures from the States of Guernsey and this is set out in more detail in paragraphs 53-58.

5. As always, we remain ready to engage with the GCRA on these issues and can provide further information as and where required. We are keen to work closely with both the GCRA and Frontier, to ensure that we are not penalised as a result of any modelling-based misunderstandings.

MARKET DEFINITION AND MARKET POWER ASSESSMENT

6. The GCRA is proposing to impose remedies on Sure in the Guernsey wholesale broadband market based on a significant market power ("SMP") review that was undertaken in 2018, with reference to 2017 market data. The GCRA's position was formalised in March 2019⁵ and it has repeatedly stated that it does not intend to conduct another market definition or market power assessment, in

⁵ t1358gj-broadband-market-statutory-notice-of-a-final-decision-final-decision.pdf (gcra.gg)

connection with its currently proposed remedies, which are intended to cover the 2024-28 period. The GCRA reinforced its view in its 10 October 2022 industry round table.⁶

GCRA Response:

The GCRA has not prejudged or refused to conduct another market definition or market power assessment. The position it has taken is that a first principles approach required better justification than it had seen evidence for. This is dealt with in response to paragraph 4 (i) above.

7. In response to this industry round table, we wrote to the GCRA to express our support for the GCRA's proactive and productive engagement, but also to set out some significant reservations about the GCRA's decision to simply review Sure's wholesale broadband pricing, without conducting a full review of the wholesale broadband access market⁷. In that letter, we explained that the GCRA's proposed approach was not in line with regulatory best practice, as endorsed by the GCRA⁸. We also explained that the proposed approach risked overlooking important ongoing and future developments in the broadband market in Guernsey.

GCRA Response:

On 11 January 2023, the GCRA responded to Sure's correspondence of 28 October 2022, and 22 December 2022. That letter confirmed the following:

"As you note in the 28 October Letter, case officers are currently engaged in a process of evidence gathering. Once this process is complete, the Authority will consider what next steps, if any, should be taken. The Authority will engage with all interested parties at that time as part of an open and transparent process in which all can participate on equal terms. Sure will have a full opportunity to make representations to the Authority, including any objections to the approach that the Authority is proposing to take, at that time.

There is no route through which Sure can make informal representations to the Authority outside of that process. For reasons of transparency and procedural fairness, it would be inappropriate for the Authority to extend the opportunity to Sure to do so on a bilateral basis."

Engagement with points such as those made by Sure in its letters referred to above which sought to reopen debate on matters after a final decision had been made on market power and prior to a consultation considering possible remedies is not appropriate regulatory practice. As the GCRA

⁶ The GCRA and Frontier Economics hosted an online industry round table, in which Sure, JT, Airtel Vodafone and other interested stakeholders were invited to hear about the GCRA's proposed approach to both the Wholesale Broadband Access and Business Connectivity market reviews.

⁷ Letter from Chris Durnell to Michael Byrne on 28 October 2022.

⁸ Report for CICRA Wholesale Broadband Access Market Review: Market Definition and SMP Assessment – 25 July 2018 – Section 3.1. We also note that the Authority adopted the European framework in its review of the Business Connectivity Market in 2022.

conveyed in its letter, points made that are relevant to its decisions are most appropriately made during the legal public consultation process, since this gives transparency and opportunity for counter views to be aired. In any event Sure has taken the opportunity to do so in its response to the Second Proposed Pricing Decision and its views have been considered.

8. Regrettably, the GCRA does not appear to have considered nor responded to our concerns. Rather, in paragraph 2.10 of its Proposed Decision, the GCRA seems to conclude that despite significant changes in the market since its last review, including the launch by Sure of a £37.5m project to build out a fibre to the premises ('FTTP') network across Guernsey and Herm and the granting of a fixed telecommunications licence that permits Starlink to provide satellite based broadband services, no developments have occurred that would change the market assessment. Instead, the GCRA simply presents a very high-level summary of market developments that have already occurred and concludes that Sure would retain SMP at the wholesale level for this review period.

GCRA Response:

This is dealt with above in response to paragraph 4 (i) above.

9. This approach is disappointing and concerning, for a number of reasons. Firstly, as set out in our 28 October 2022 letter, a significant amount of time has now elapsed since the last broadband market review and regulatory best practice dictates that a full review of the market definition and SMP designation should be conducted *at least* every five years (note, five years have now elapsed since the GCRA conducted its last analysis of the wholesale broadband market in 2018).

GCRA Response:

This is dealt with above in response to paragraph 4 (i) above.

10. Secondly, we are puzzled about how the GCRA concluded that the aforementioned market developments are immaterial, without conducting an empirical assessment following the Hypothetical Monopolist Test. The purpose of conducting a market definition and market power assessment is to understand which products (existing or future) competitively constrain the focal product and whether these constraints are sufficient to mitigate against significant market power. Whether one product constrains another (i.e. can be identified as a substitute) can only be determined by assessing how customers of the focal product react to a change in price (and occasionally non-price terms). This is necessarily an empirical exercise – how else could the GCRA establish whether Starlink's broadband services or new 5G services (both expected to become widespread over this review period) competitively constrain broadband services, without first identifying whether customers consider these products as substitutable⁹? Whilst it may appear to

⁹ Regulatory best practice and European competition law dictates that this can only be established using the Hypothetical Monopolist Test, otherwise known as a SSNIP (small but significant non-transitory increase in price) Test.

the GCRA that no material changes have occurred in the market in the last five years, nor will occur over the next five, it is widely recognised that such superficial analysis is inappropriate as a basis for regulatory decisions that influence major investment decisions and the availability of state-of-the-art telecoms infrastructure to consumers and businesses in the market.

GCRA Response:

This is dealt with above in response to paragraph 4 (i) above.

11. We are concerned that the GCRA does not appear to have made any effort to determine whether the wholesale broadband market remains unchanged since 2018, nor whether it is likely to change over the period for which this decision will apply (2024-28). The GCRA's analysis and decisions regarding market definition and market power assessments must be forward-looking and empirically driven – a point that it acknowledged in its 2019 SMP finding¹⁰.

GCRA Response:

This is dealt with above in response to paragraph 4 (i) above.

12. For example, the introduction of FTTP across Guernsey and Herm and the withdrawal of copper-based services will undoubtedly materially impact the market. It may be that the market for leased lines of certain speeds will no longer be distinct from the FTTP broadband market, especially if the FTTP service offerings start to include symmetrical variants, with high service SLAs applicable to business customers. Similarly, whilst Starlink's broadband service has not yet attracted a sizeable number of customers, it has only had a licence for 12 months. There is a chance that Starlink's market share could increase substantially during the review period. Again, whilst 5G services have not yet been commercially deployed in Guernsey, both Sure and JT have made clear that they expect to provide island-wide high speed, low latency 5G networks and services before the end of this review period, both of which could act as a suitable substitute for broadband services.

GCRA Response

Most of these points are dealt with above in response to paragraph 4 (i) above.

On the suggestion that leased lines are likely to offer a material degree of substitution of broadband products in future, the evidence for this being a material change and likely outcome has not been provided and appears to be a theoretical outcome only.

It is not apparent that this substitution argument has been accepted in other jurisdictions and Sure has not provided evidence that it has or that there are particular features of the Guernsey market that make it more likely in this market. The service standards are materially different and the technical features of these two product categories are also significantly different. It is possible that

¹⁰ Section 3.26.

at the lowest leased line speeds some consumers may opt to take broadband. However, broadband as a product for household needs does not have the same or similar service level standards that leased lines which support business needs provide. The price levels are materially different between them and the GCRA understands Sure actively dissuades consumers from using broadband instead of leased lines because it does not give the same quality of service standards for broadband as leased lines. Businesses may of course use broadband as a fallback or as well as leased lines and the GCRA understands this already happens but the GCRA has seen no evidence that the leased line market and the broadband markets are likely to converge in the medium term.

13. If the wholesale broadband market definition is potentially set to change during the period where the proposed remedies are to be applied, then the GCRA ought to assess that and subsequently reassess whether Sure retains SMP in the newly defined market. Only systematic and methodical analysis of substitutability will determine whether the market definition should be changed for the relevant period. It is not possible to do this through what appears to be the ‘finger in the air’ review described by the GCRA in Section 2 of its Proposed Decision. The GCRA’s decisions must be based on thorough and transparent analysis, on which stakeholders have had the opportunity to comment. A policy position of proceeding straight to a decision on wholesale broadband remedies, without appropriately revisiting the market definition and SMP determinations, sets a risky precedent, which could result in reduced investor confidence for future significant telecoms investment in Guernsey.

GCRA Response

This is dealt with above in response to paragraph 4 (i) above. And in response to 12 above.

14. As the GCRA has refused to engage in a new market definition and SMP assessment exercise, it is not possible for us to determine whether the market would remain unchanged; nor is it appropriate for us to submit data and analysis on that matter, in response to this Proposed Decision. It is the responsibility of the GCRA that its decisions are based on relevant analysis, using up-to-date data and are forward-looking in terms of anticipated market developments over the relevant period.

GCRA Response

As outlined above, Sure has provided little evidence to support its assertions that significant changes will lead to a loss of its dominance designation over the period of the proposed price control. Should Sure be in position to “submit data and analysis” then the GCRA would welcome that and will consider it in compliance with its statutory requirements to consider all representation provided in response to a Proposed Decision. That the GCRA has not to date been persuaded by Sure’s suggestions is not evidence of a refusal to engage and it is important that the distinction is appreciated between not being persuaded by Sure’s arguments and refusing to engage.

15. We are therefore keen to prompt the GCRA to commence a new market definition and SMP assessment for stakeholders to comment on. In order to not cause undue delays to the GCRA's introduction of the new remedies (and assuming that the GCRA is confident that it will result in an unchanged market with an SMP determination for Sure), the market assessment could be conducted in parallel with the conclusion of the GCRA's review of proposed remedies, leading to a Final Decision.

GCRA Response

As outlined above, Sure has provided little evidence to support its assertions that significant changes will lead to a loss of its dominance designation over the period of the proposed price control. Should Sure be in position to evidence a contrary view then the GCRA would welcome that and will consider it in compliance with its statutory requirements to consider all representation provided in response to a Proposed Decision.

COST ORIENTATION

16. In the cost modelling section of the Proposed Decision¹¹, the GCRA states that cost orientation is a key principle in the EU regulatory framework.
17. Cost orientation can be interpreted widely, but the GCRA appears to interpret it as the setting of regulated prices based on the modelling of the regulated operator's costs of providing that service. Whilst that approach was certainly recommended for many years, more recent decision-making has seen a move away from cost-based regulated charges in favour of imposing non-discrimination remedies, such as economic replicability tests. In some contexts economic replicability tests are referred to as 'cost oriented pricing', but it differs significantly from the setting of specific regulated charges to reflect the cost of wholesale service provision. Instead, it focuses on the existence of economic space between wholesale and retail pricing.
18. This change has happened specifically in response to the need for regulated providers to invest in FTTP infrastructure and to allow them to set wholesale access prices to support that investment, providing it would be possible for the access seekers to replicate the regulated operator's retail broadband services using the regulated wholesale access services.
19. In some instances, an anchor pricing approach is used, whereby a single (popular) legacy product is subject to cost-based pricing, but the new FTTP-based services are not. The principle of this is that the regulated provider cannot profitably demand excessive premiums for FTTP services over and above the regulated legacy service price.

¹¹ Page 11.

20. In the current draft EC Gigabit Recommendation¹², this move away from cost-based access pricing has been further strengthened, with NRAs effectively needing to justify where cost-based prices are imposed for wholesale access products other than access to physical infrastructure. The Gigabit Recommendation refers to a ‘demonstrable retail constraint’, such as products offered by other providers or a legacy product (like the anchor product example explained above).
21. In the Gigabit Recommendation, the focus of cost-modelling is on the setting the pricing of access to physical infrastructure to enable competitors to build new networks, without the need to replicate the physical infrastructure, such as ducts and poles.
22. The GCRA proposes to use a discounted cashflow model, calculating the future cashflows generated by the regulated products, based on forecasts for the relevant costs and revenues from those products. However, the opening position is based on known (historic) revenues and costs, with 2021 and 2022 being periods in focus for Frontier.
23. As a general principle, an operator’s statutory accounting information does not facilitate the allocation of revenues and costs, required for cost accounting purposes. As highlighted to the GCRA on numerous occasions¹³, due to Sure no longer maintaining its annual cost model for either regulatory or commercial purposes, Frontier has needed to make numerous significant assumptions, some calculated values of which have been compounded, as to how Sure’s costs should be allocated.
24. Reliance on Sure’s cost driver data from 2014 (the last year our activity-based costing model was run), remains a major concern for us, but within the timeframe allowed by the GCRA for submission of our data, there were no means by which even Sure’s main network-focused cost drivers could be updated. The technical inputs required to do so are no longer captured by our business. Through no fault of its own, Frontier’s model is therefore materially flawed.
25. Unfortunately, Sure has little option but to accept this position, as a reestablishment of our activity-based costing system would necessitate a minimum preparatory period of 20 months, but in reality, more likely around 24 months, based on our previous experience of the establishment and population of a suitably detailed costing system. As explanation, this would consist of 8-12 months of model design and creation, followed by 12 months of data collection (which should, for reconciliation with Sure’s statutory accounts, align with the calendar year). These timeframes are way in excess of those sought by the GCRA for the purposes of price-setting for wholesale on-island leased lines and wholesale broadband services, hence our hesitant acceptance of the use of certain

¹² <https://digital-strategy.ec.europa.eu/en/library/gigabit-connectivity-recommendation>

¹³ Most recently, in Sure’s response to the GCRA’s BCMR Proposed Decision, submitted 19 May 2023.

2014 cost allocation data.

GCRA Response

As a licensee designated as having a position of market power and as the only investor in a fibre broadband network that was assisted by a significant subsidy towards that investment by the States of Guernsey, it should have been foreseeable by Sure that it would be required to justify its charges through a regulatory review of its costs and made adequate preparations for that. This price control process also commenced when Sure had already announced its intention to proceed with the fibre broadband investment. The regulatory incentives in other jurisdictions cited to promote such investment and the related forms of investment incentive regulation referred to seem to have very little relevance to the context of fibre investment in Guernsey where Sure had already made a commercial decision to do so supported by guaranteed and significant contribution to invest in fibre as an incentive.

As set out in its Second Proposed Pricing Decision the consultation and engagement offered Sure opportunity to provide its costing, and pricing information and engage in rounds of discussions with the GCRA and Frontier Economics, the GCRA advisors for this analysis. Those discussions and information exchanges gave Sure the opportunity to provide detailed submissions on its historical cost systems, cost allocations, internal systems and to contribute fully to the process. Given that process, the GCRA is confident that the costing model it has developed, which is central to its assessment of pricing in the wholesale broadband market, accurately reflects the data the GCRA was provided during the consultation period and is the best information available to it. It is emphasised that it has consistently been communicated to Sure in communications over several years that Sure is expected to maintain adequate detailed records in respect of its licensed telecoms activities as required by its licensing obligations.

COST MODELLING

General Comments

26. We note that some of the cost modelling data used by the GCRA in its WBMR and Business Connectivity Market Review (“BCMR”)¹⁴ analysis is inconsistent. In our BCMR response, submitted to GCRA on 19 May 2023, we drew the GCRA’s attention to a number of errors and omissions, but these were not corrected in the WBMR framework or associated model, which was provided to us on 23 May 2023. We had proposed to the GCRA¹⁵ that it held off publishing its WBMR proposals until it had considered our concerns and alternative proposals. It chose not to do so. As of today, we do not

¹⁴ In relation to wholesale on-island leased lines.

¹⁵ In our email of 19 May 2023.

know whether the GCRA intends to formally accept our BCMR related proposed changes, but in the Methodological Issues & Proposed Changes section, below, we have listed those key proposals, along with those that have come to light during our review of the associated WBMR model.

27. Whilst we had the opportunity to review the WBMR model in more detail than our resources allowed for the BCMR version, we note that there are certain aspects that we were unable to validate. A key spreadsheet cell in the WBMR model that could not be validated was the 2023 value of the reference product (Fibre 30/3). Rather than being a value driven by a formula, it displayed the pasted result of a calculation, which appears intended to reflect the GCRA's headline story regarding its proposed 11% price constraint on Sure's wholesale broadband charges¹⁶. This was likely done to avoid circularity within the model.

GCRA Response

The underlying costing model (which is one comprehensive spreadsheet) was split into two parts dealing separately with wholesale leased lines and wholesale broadband to accommodate the publication of two proposed decisions at different times to assist respondents including Sure. Sure has now been provided with an updated and fully complete costing model that deals with both of the proposed prices controls as there is a large amount of costs data that is relevant to both the wholesale leased line market and the wholesale broadband market. The calculations in the Second Proposed Pricing Decision are based on the updated and completed model which takes account of Sure's representations in responses to the leased lines and broadband proposed decisions.

Methodological Issues & Proposed Changes

28. In an email to Frontier on 10 February 2023 (with the GCRA copied in), we asked 'is there still a plan for us to be able to sense-check Frontier's assumptions, in case of any misunderstandings of the cost types or processes?'. This email was not answered by Frontier, nor the GCRA. And further, there is no mention of it by the GCRA in what it referred to as the 'detailed account of interactions and exchanges with parties relevant to the information gathering and modelling process', set out in Annex 4 of its Proposed Decision. Had Sure been given the opportunity to review the modelling assumptions and proposed treatments of revenues and costs, some of the incorrect assumptions would have been identified before the GCRA issued either of its Proposed Decisions (BCMR and WBMR). This would have been beneficial to all stakeholders, as market expectations for the pricing of wholesale on-island leased lines and wholesale broadband services have now been set, based on the GCRA's published proposals.

¹⁶ gcr-proposes-to-lower-cost-of-wholesale-broadband-services-by-11.pdf

GCRA Response:

The GCRA's extensive engagement with Sure was set out in detail in Annex 4 of the First Proposed Pricing Decision and that summary has been further supplemented in Annex 3 of the Second Proposed Pricing Decision. As is evidenced in both annexures, Sure was consulted extensively in relation to the provision of data and the methodological approach to be adopted in this consultation and that input was used to develop the underlying costing model on which the calculations in the Second Proposed Pricing Decision are based. This in the GCRA's view provided reasonable and appropriate access for Sure to understand the basis for the price control and the model supporting that even prior to the opportunity given as part of the formal consultation process. It is also important to emphasise that the consultation is run by the GCRA and not Frontier so engagement on matters of process are appropriately directed to the regulatory authority rather than its consultant in the first instance. Since Sure was being given extensive opportunity to understand the basis for the price control and the model supporting it, that engagement was reasonably assumed to have been responsive to Sure's request. It is certainly not a basis to infer there has been a failure of process. Whether a general query on process to the GCRA's consultant was responded to should be seen in the context of the extensive engagement and discussion that have taken place when opportunity was given to make direct substantive points or seek clarification about process.

29. On a more positive note, we are grateful to the GCRA for providing us the Frontier cost models used to underpin the financial elements of the BCMR and WBMR, based on the source data that we had provided. It appears that the two models have been designed to exist in isolation, but with each drawing its base data from a single underlying source (perhaps a Frontier master model). However, from the information available to us, whilst we cannot readily see any benefit in having separate models, we can certainly see some risks. During recent weeks, the GCRA and Frontier have helpfully enabled us to query various aspects of the models and it has become apparent that most of the informally agreed changes¹⁷ need to be applied in both models. Unfortunately, due to the GCRA's preferred timings, where the WBMR Proposed Decision was issued beyond the close of the consultation period for the BCMR Proposed Decision, we have no direct visibility of the impact that those agreed changes could have on the pricing of on-island wholesale leased lines (within the BCMR).

¹⁷ We understand that any informal acceptance of a point cannot be relied upon until the GCRA's formal position has been confirmed via the publication of its separate Final Decisions (BCMR and WBMR).

GCRA Response

See response to paragraph 27, above.

30. In Table 1, below, we have listed the key issues that we have identified, along with our other proposed changes to improve the models' outputs. Some of these changes have a noticeable impact on the Net Present Value ("NPV") calculation¹⁸ within each model and hence the GCRA's proposed annual price cap values. **We have associated our proposals below with the WBMR model, but in almost all instances the change would also need to be reflected in the BCMR model (where not already actioned as a result of our 19 May 2023 BCMR response).**

¹⁸ The NPV modelling approach is explained by the GCRA in the third bullet point on page 11 of its Proposed Decision.

Table 1: Summary of proposed changes to Frontier’s models

GCRA’s model tab	Cell or row ref.	Issue	Changes required. Note: Financial impacts shown in relation to WBMR.	GCRA Responses:
Results & controls	Cell D18	We believe that the GCRA should reinstate the uncertainty premium adjustment in its calculation of the nominal risk-free rate and reflect this in its final pre-tax nominal WACC. Based on our calculation, this would result in Sure having a WACC in the range of 8.52% and 9.52%, with a mid-point of 9.02%, with this rounded down to 9.0%.	We believe that the WACC rate needs to be adjusted from 8.8% to 9%. In isolation, the revised WACC impacts the model’s NPV by [X].	<i>The GCRA does not consider that Sure has provided sufficient regulatory precedent to persuade the GCRA that an uncertainty premium should be included in the WACC calculations for this price control. Sure’s proposed approach appears to also depart significantly from BERC’s recommendations to national regulators on WACC calculations. Moreover, the GCRA is of the view that its approach is conservative as it has accepted Sure’s proposed spot nominal gilt yield (as at 31 October 2022), which is higher than the long term average yield typically used by regulators. The GCRA does not believe that any further adjustments to the risk-free rate are therefore required as the risk it refers to has already in affect been accounted for.</i>

Revenues	Row 9	The 'recurring fee discount' appears to have been recognised as additional revenue, rather than as a reduction of revenue.	In isolation, the revision impacts the model's NPV by [X].	<i>This adjustment is accepted and the revenue will be adjusted.</i>
Demand	Row 102	<p>Cell Q14 on the Costs tab of all versions (1-9) of the Excel template that we submitted¹⁹, we included the note 'Free migration from copper to fibre. Services at new premises charged at £128.35'.</p> <p>Within the GCRA's model, forecast revenues for one-off broadband activities (e.g. connections) have been overstated. The GCRA's model applied the new premises charge to all 30,001 migrations from copper to fibre, rather than the relevant much lower actual/forecast installations figure of [X] across those years (2021-26).</p>	<p>On the Demand tab, the values shown on row 102 need to be replaced. Our forecasts can be seen in our updated version of the GCRA's WBMR model and our spreadsheet 'Guernsey landline installations (Jan 2022 – May 2023)', both of which accompany this submission, but are confidential.</p> <p>In isolation, the revision impacts the model's NPV by [X].</p>	<i>This adjustment is accepted. Sure's proposed estimates have been sensed checked and are consistent with the evolution of Guernsey's stock of property units. These changes have been reflected in the up-to-date model.</i>

¹⁹ Spreadsheets entitled 'Guernsey Price Review – template – Sure v[X]'.

		<p>Even where installation and reconnection charges are applied, they relate to landline, not broadband services, with the exception of a £12.75 copper broadband relocation fee (for a house move). For fibre broadband, no relocation charge applies.</p> <p>From each spreadsheet template that we populated, we could not ascertain that the GCRA's intention was to associate installation and relocation charges with broadband, rather than line rental. However, we acknowledge that our wholesale broadband price list is ambiguous in that regard.</p>		
Capex Forecasts – FTTP rollout specific	<p>Rows 20 to end of section. With rows proposed for inclusion, would now end on row 27.</p>	<p>The estimated lifetime for an ONT (& associated connection labour) is shown as 20 years. Adtran, the manufacturer of Sure's ONTs, has provided the following stats, showing the percentage probability of an ONT still being functional:</p> <p>At 10yrs: 95.6% At 20yrs: 91.3% At 30yrs: 87.2%</p> <p>In addition:</p> <ul style="list-style-type: none"> We know from JT that in Jersey it has begun replacing some of its ONTs at under 10 years old. An industry expert (Jonathan Kingan) believes that around 12 years would be more likely maximum period (rather than 20). <p>There is no instance where Sure would wait 20 years (with Adtran's indicative failure rate of 8.7% at that time), as that level of failure would be operationally challenging, with a high degree of customer dissatisfaction.</p> <p>In addition, ONTs are active network equipment, with built-in software, which will require multiple</p>	<p>In isolation, the revisions impact the model's NPV by [X].</p>	<p><i>This adjustment is accepted and the model was adjusted to reflect the updated information provided by Sure on ONT lifetime and split of costs.</i></p>

	<p>upgrades over its lifetime. Adtran is highly unlikely to still support software updates on ONTs that are anywhere approaching 20 years old.</p> <p>Based on the above, we believe that, even generously, Sure should not be expected to go beyond 12 years before replacing our ONTs. After just 10 years the projected failure rate is already 4.4%. We therefore request that the current 20-year timeframe is reduced to 12 years.</p> <p>As a result of more recent correspondence with Frontier, Sure has also reviewed the likely future capex requirements for the Other Equipment category. All of our Capex related proposals are detailed in our submission to Frontier (with the GCRA copied in) on 06/07/23. They are also shown in the relevant model, as part of this submission.</p>		
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Other input data	Rows 44, 49 & 50	At the time the model was created, it appears that the most recently published States of Guernsey (SoG) RPIX data related to a Q3 2022. Since that time, the results for two more quarters have been released. The SoG has also updated its forecast inflation, with the latest being issued in May 2023: Forecast inflation Q22023.indd (gov.gg)	The model needs to be updated to reflect the latest RPIX actuals and forecasts. It should be further updated once the Q2 actual and Q3 forecast become available (due 25 July 2023) In isolation, the revised RPIX impacts the model's NPV by [X].	<i>The cost model has been updated to reflect the most up-to-date actual and forecast inflation figures from the States of Guernsey, as published on 25 July 2023.</i>
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31. We do not wish to impact the timing of the remainder of the GCRA's review process but believe that it is important for the changes set out in the table above to be reflected in the GCRA's final draft version of its models (before the final decisions for both BCMR and WBMR processes are confirmed). **We are keen to discuss any aspects of our proposed changes and would request that we are actively involved in that final review of the models, to help minimise the risk of calculation errors or misinterpretations.**

GCRA Response:

The GCRA notes Sure's comments and has adjusted the Second Proposed Pricing Decision to reflect those representations. Those will be evidenced in the complete costing model which Sure has been provided with. Such a price control process requires a greater degree of interface with Sure than OLOs, particularly since the model may contain commercially confidential information. However, unfettered access or access to review the pricing model that can be effectively carried out within the formal and transparent consultation process is not favoured. It is important that OLOs are and are seen to be treated the same to the extent it is reasonable in such a regulatory consultation process. While it is recognised that Sure has certain preferences to pre scrutinise the model there are other considerations of fair process that are important and while there may be reason to do so on occasions the GCRA does not as a principle consider it appropriate to effectively pre-consult on a bilateral basis in the context of a price control of this nature.

COMPLIANCE FRAMEWORK

32. We recognise and appreciate that a basket style price cap would allow us the commercial flexibility to set our own wholesale pricing curve and product definitions – both of which may well need to change over time as the Guernsey fibre market develops. We broadly welcome the GCRA's desire to give Sure the flexibility it needs to remain active and engaged in the market. However, we are concerned about the GCRA's lack of focus regarding an appropriate compliance framework. In section 6.5 of the Proposed Decision, the GCRA refers to a compliance-checking process similar in nature to the current process for monitoring Sure's adherence to the retail minus approach on wholesale leased lines. This is extremely concerning.
33. As we have repeatedly informed the GCRA, most recently by email on 18 April 2023, that this basic approach to compliance does not provide a fair outcome. It also uses a fixed measure for compliance, based on a per-product margin, whereas the framework for any upcoming price cap for wholesale broadband services needs to account for an average price based on a basket of services, with fast-paced product volume movements. There are materially different market behaviours between wholesale leased lines and wholesale broadband services (the latter intensified during Sure's rollout

of FTTP) and this must be recognised in any price control mechanism. We are therefore concerned about what appears to be a lack of understanding on the GCRA's part. We would recommend that it seeks advice on this matter, rather than ploughing ahead with a broadband compliance framework that has materially different characteristics and requirements to the wholesale leased lines framework. If no changes were made to the existing proposals, Sure would be almost guaranteed to fail.

GCRA Response:

The proposed price control is dissimilar to the retail minus control currently in place and therefore the compliance reporting takes a different form. GCRA considers there is merit to Sure's concerns about using prior year weights and has therefore adjusted the compliance requirements in this Second Proposed Pricing Decision. Sure will be required to take into account the previous year's subscriber numbers for a given product to calculate its relative weighted average price. This will assist in providing greater regulatory certainty for each price control period over which Sure sets its wholesale prices. This proposed compliance approach for the weighted average price cap is set out in detail in this Second Proposed Pricing Decision with an example to illustrate the calculation included in Section 7 to assist Sure with its compliance obligations.

The Second Proposed Pricing Decision sets out the GCRA's consideration of approach to weighting. There are other approaches to set the weighting, such as current year weighting or what is referred to as the 'snapshot approach' (where the volumes at a point in time are multiplied by the average charge made during a period of 12 months prior to the start of the charge control year). There is a risk of specific forms of gaming by Sure involving targeting price increases on broadband products whose weights are growing over time, so that the prior year weighting understates the effect of the price increase on actual revenues. However, other approaches suffer from their own gaming risks. The GCRA considers the prior year volume weighting approach will best enable Sure to plan its charges in a year to satisfy the objectives of the control.

In the judgement of the GCRA, imposing a weighted average price ensures that Sure's prices (as the SMP operator) are cost-based overall, but gives flexibility within that to set the level of prices for individual product variants. This approach is appropriate because the broadband market is dynamic in nature with frequent technological upgrades and the introduction of new products. By setting price caps on individual product variants, and absent issues such as those seen in other markets (leased lines for example), this level of regulatory granularity can reduce Sure's ability to respond to changes in the market where there is greater uncertainty as to market developments and therefore a greater weight is given to flexibility than in the proposed wholesale leased lines price control.

For completeness a worked example was included in section 6 of the First Proposed Pricing Decision (and is also included in section 6 the Second Proposed Pricing Decision).

34. We note that the GCRA issued a proposed Direction to us on 13 July 2023 about what it considers to be non-compliance with Sure’s wholesale leased lines price control, but it has not so far been able to answer certain fundamental questions – either those recently asked (18 April 2023) or those, more importantly, asked in 2015, when the framework was established. The current framework is fundamentally flawed and unfit for purpose. It does not even appropriately allow for new and/or ceased services within the period, but instead tries to account for volumes on a net basis at the period close. As a minimum, for any broadband price cap, we would want a monthly volume measure (within an annual compliance period), rather than a single annual measure.

GCRA Response:

See response to paragraph 33 regarding this consultation process. As regards the current investigation into a breach by Sure of its compliance with the existing retail minus leased lines price control, as has been conveyed previously, the GCRA cannot respond to general descriptions about clarification Sure argues it needs and in any event considers the existing leased line price is clear as to what is expected to ensure compliance. Therefore, the GCRA does not propose to engage with Sure’s defence in a separate wholesale leased line investigation process in this wholesale broadband price control consultation process.

35. The vast majority of the island’s wholesale broadband services are provided by ‘Sure Wholesale’, with them being sold at the retail level by OLOs and ‘Sure Retail’. Sure Wholesale, rightly, has no control over the volume of broadband services sold by each retailer, their retail prices, or the likes of special offers (including duration and timing within the year). As such, any broadband price cap framework that were to require Sure Wholesale to comply on a live ‘within period’ basis, as currently proposed by the GCRA, would be inappropriate.

GCRA Response:

This appears to relate to a separate licence contravention case. See response to paragraphs 33 & 34 regarding this consultation process.

36. Were a retailer to run a major promotion in the latter part of a year, particularly with any incentive for customers to upgrade to a faster speed (with an underlying higher wholesale charge), based on a ‘within period’ current-year-only annual price cap, a compliance breach is almost unavoidable. That is because Sure would be unable to calculate year-to-date compliance, adjust wholesale charges, compliantly notify the market, apply those revised charges, and suitably influence the retail market

to increase our chance of wholesale compliance – all within a dwindling timeframe of the remainder of the year.

GCRA Response:

This appears to relate to a separate licence contravention case. See response to paragraphs 33 & 34 regarding this consultation process.

37. Looking at this issue in more detail, Sure has a requirement within its licence to provide 30 days' notice of proposed wholesale price changes, in cases where it holds SMP – wholesale broadband being one of them²⁰. This requirement is set out in Condition 31.5 of our Fixed Licence and reflects the wording of a statutory notification of 2012²¹. Although not stated in either document, we understand that the GCRA considers that Sure is required to provide 30 clear working days' notice. In this context, the count of clear working days starts on the first working day following the day on which we publish the notification and finishes on the 30th working day. The publication would take effect in the market on the following day.

38. Taking 2024 as an example, being Year 1 of proposed price cap, and working back from the year-end (the point at which compliance would be measured):

- **01/12/24:** The latest date on which Sure Wholesale could appropriately apply wholesale broadband price changes to influence the weighted average price, for compliance purposes.
- **19/10/24:** The latest date to compliantly notify the market (with 30 clear working days).
- **30/09/24:** The most recently available monthly charging/reporting data that Sure Wholesale could access to calculate its year-to-date weighted average price. We would then need to estimate how many retail sales, and of which product variants, the three retail broadband providers would be likely to make during October, November, and December – even though we would have no visibility of their Christmas campaign plans.

In summary, our year-end compliance capability would be out of our control – as it would for any wholesale operator in that scenario. The chances of compliance, in that context, would be nothing more than pot luck.

GCRA Response:

See GCRA response to paragraph 33 where in particular, the weights applied have been changed to the previous year subscriber numbers which will assist in providing greater regulatory certainty for compliance purposes.

²⁰ t1358gj-broadband-market-statutory-notice-of-a-final-decision-final-decision.pdf (gcra.gg)

²¹ CICRA 12/03: www.gcra.gg/media/4062/t12g-statutory-notification-amendment-to-cable-and-wireless-guernseys-fixed-telecoms-licence.pdf

On the wider point about how a dominant firm complies with price controls, the conclusion that year-end compliance capability would be out of Sure's control seems less of a concern given the change by the GCRA to prior year weights. These forms of control have been applied in markets with far greater complexity than exists in the wholesale broadband market in Guernsey with significantly larger numbers of competitors taking wholesale services from a dominant firm and where demand is arguably more volatile than for broadband in Guernsey.

Ongoing and diligent monitoring and proactively informing the regulator of extraordinary events is how firms that prioritise compliance manage such risks. If the scenarios cited were credible risks to compliance based on market changes outside of Sure's control then Sure is encouraged to give evidence in order to inform the regulatory consideration of how credible the suggestion that compliance is outside of Sure's control and to propose measures that protect the integrity of the price control's purpose while allowing for corrections in subsequent price control periods, for example.

39. In previous price controls of this type, where a flexible basket of services has been regulated, the GCRA's price cap framework has allowed for prior year volumes to be used in the compliance calculation, alongside current year prices. This is good practice and would avoid the risks associated with the above scenario. This standard historic volume / current price framework would also avoid the danger of unfairly penalising Sure for any material impact of retail promotions that one or more retailers might choose to offer, in the run up to Christmas. Were the GCRA minded to consider this much more fit-for-purpose framework, we would request the inclusion of a carry-over facility. This would incentivise us to smooth out wholesale broadband price changes and would avoid the risk of significant pricing swings, which would clearly benefit all retailers and their end users. Worryingly, under the GCRA's current proposals, major price changes would be an unfortunate likelihood, as there would be a year-end dead-stop. Whilst the risk could be mitigated through the setting of an artificially low weighted average price, solely to guarantee compliance, it would be entirely inappropriate for us to have to do that. We must ensure that the appropriate payback for our Guernsey Fibre project is achieved, so that we can maintain its financial viability through to its planned conclusion in December 2026.

GCRA Response:

The GCRA repeats its response to paragraph 33 & 38.

40. In summary, for the GCRA's proposed price cap to be effective, it has to be fair and therefore achievable. We therefore urge the GCRA to establish a standard prior year volume / current year

price cap compliance framework, with a carry-over facility. We would be amenable to creating a draft framework of this type, for the GCRA's consideration. Please let us know if you would like us to do so. Indeed, we had intended to include a proposal, as part of this submission, but time pressures meant that this has not been possible.

GCRA Response:

The GCRA repeats its response to paragraph 33v & 38.

WEIGHTED AVERAGE COST OF CAPITAL ("WACC")

41. On 9 January 2023, we submitted our WACC report to the GCRA²². It was produced by Oxera on Sure's behalf, and we worked closely and carefully with Oxera to ensure that it was able to come to reasonable and well evidenced conclusions about a suitable WACC for Sure (Guernsey) Limited. We are grateful to the GCRA for giving Sure an opportunity to produce its own WACC report and for its careful consideration of our proposals.
42. We also welcome the GCRA's decision to largely support our WACC proposal and its recognition that the parameters used are "reasonably well evidenced"²³. We note, however, that there are two aspects of our proposal – the forward rate adjustment and uncertainty premium – that the GCRA rejects, due to its view that Sure has not provided regulatory precedent or evidence for these adjustments. Whilst we do not agree that our proposals for a forward rate adjustment or uncertainty premium are "unsupported/unevidenced," we are pleased to be able to provide the GCRA with further explanation and justification regarding these adjustments (primarily the uncertainty premium) to the risk-free rate ('RfR').
43. Firstly, we do not agree with the GCRA's statement that there is no regulatory precedent for a forward rate adjustment or uncertainty premium. The principle behind both the forward rate adjustment and uncertainty premium is valid and has been acknowledged by economic/financial literature and adopted by regulators elsewhere, both explicitly and implicitly. It is therefore surprising that the GCRA dismisses these adjustments, based on a lack of precedence alone. For example, the inclusion of a forward rate adjustment was historically well established in the UK, with Ofgem adopting such an adjustment in its RIIO-2 decision²⁴ and the Competition and Markets Authority ("CMA") recognising that including a forward rate adjustment had become convention in its PR19 Final Decision²⁵. Academic literature has long considered forward rates as unbiased

²² 2023 Oxera Report, Estimating the WACC for Sure's Guernsey business, 9 January 2023.

²³ Business Connectivity Market Review – T1621G – Proposed Decision – Wholesale On-Island Leased Line Pricing – para-4.7.

²⁴ RIIO-2 Sector Specific Methodology Decision – Finance (ofgem.gov.uk) – see Table 6 on page 30.

²⁵ Final report (publishing.service.gov.uk) – see paragraph 9.233.

predictors of future spot rates. Notwithstanding, we acknowledge that the forward rate adjustment is not always adopted and therefore recognise the GCRA's conclusion that the forward rate adjustment may not be necessary in this current scenario.

44. Similarly, the Oxera report references at least 55 regulatory decisions in which an uncertainty premium has been applied (discussed further below). In our experience, such examples of other regulators utilising these adjustments would suggest that there *is* regulatory precedent that would support their use in the Guernsey context. We believe that there is both good regulatory precedent and good reason for including such an adjustment in Sure's WACC. As explained in the Oxera report, the uncertainty premium accounts for the risk that spot risk-free rates rise faster than that implied by the forward rate. That is, where the actual price payable for a risk-free instrument at a given future point in time (the spot rate) is higher than the forecast value for the same instrument at the point of purchase (the forward rate). Failing to account for this adjustment in regulated pricing can result in depressed permissible returns for the regulated entity, which in turn can hinder the regulated entity's ability to earn sufficient revenues in future to cover its operating costs, any debt interest payments and retain sufficient profit to attract equity investors (the financeability problem).
45. Whilst in most industries the financeability of an organisation is determined by market forces, regulated entities that are subject to economic regulation will see financeability determined by regulators. This is because regulators determine the revenues that an organisation may earn over the price control period. Given the risks that a regulated firm becoming unfinanceable as a consequence of the WACC determined by the regulator – unsuitable financial ratios, increased cost of debt and potentially financial distress – ensuring that regulated networks are sufficiently financeable is a key priority for economic regulators. The financeability issue would arise when the allowed for risk-free rate is set at a too-low level relative to the actual market risk-free rate – as recently demonstrated by sharp UK debt market volatility in the third quarter of 2022—an uncertainty premium adjustment is therefore, in our view, entirely appropriate.
46. As evidence for the validity of an uncertainty premium adjustment, Oxera explains that it has observed such a premium being applied to the risk-free rate in at least 55 separate regulatory decisions in the UK²⁶. In its analysis of these 55 regulatory decisions, Oxera found that there was ordinarily an unexplained difference between the allowed for risk-free rate and the yield on 10-year gilts, with the allowed for risk-free rate set above contemporaneous rates due to uncertainty at the time (see Figure 1, below). In other words, regulatory precedence for the uncertainty premium has typically been an implied premium adopted by regulators to address uncertainty, rather than an

²⁶ 2023 Oxera Report, Estimating the WACC for Sure's Guernsey business, 9 January 2023 – sec. 2.4, page 11.

explicit one that is included in the WACC analysis summary. Once further adjustments had been made to the sample data to remove outliers and to account for the convenience and forward premiums, Oxera found that an uncertainty adjustment of between -40bp and 50bp was apparent, with a mid-point value of 10bp. As can be seen in Figure 1, Ofcom, Ofgem and Ofwat decisions²⁷ on the allowed for risk-free rate have routinely included an ‘unexplained’ positive difference between the RfR and 10-year gilts, which in our view and the view of Oxera, can be considered an implied uncertainty premium.

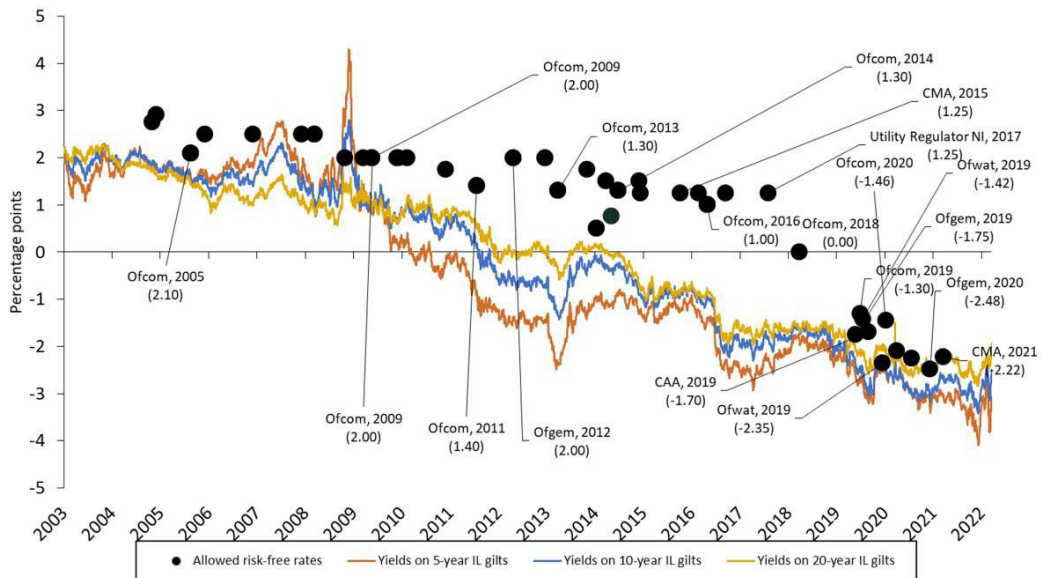
47. During our engagement with Frontier and the GCRA as part of the BCMR, Frontier stated that it did not believe that an uncertainty premium was required in the Oxera WACC model because an implied premium has been included in the RfR due to the use of 2022 spot rates to determine the RfR rather than 5-year average yields.
48. In response to Frontier’s comments, we re-engaged Oxera to better understand why it had used 2022 spot rates and why a further uncertainty premium was required. Oxera explained that its decision to use spot rates, rather than average yields, was underpinned by the need to adequately reflect current market evidence and to reflect the cost of new debt relevant to Sure more closely.
49. Adopting a focused current indicator, such as a spot in this context, provides a more accurate reflection of actual market evidence, which is especially important in a period where yields and rates have changed significantly. For example, at the time of our report, the spot rate was 3.62%, compared to the 5-year average RfR of 1.11%. It is not credible that any company would be able to finance itself anew at the 5-year average rate, especially in the case of Sure, which is debt-free.
50. Sure also currently has a net cash position. In view of our plan for considerable expansion, we expect to incur debt financing for the first time. Thus, this means that the parameters used in estimating the WACC should reflect the cost of new debt only. It would be inappropriate to use a 5-year average parameter, as we would reasonably expect to pay current market rates when it goes to market. The reason that several other precedents apply the 5-year average, is due to the consideration over embedded debt, i.e. debt raised previously, at past market rates. For example, a regulated company that has raised fixed-rate debt in the past (at lower rates), should not be permitted a materially higher cost of debt allowance now, based on spot rates alone, as this may over-compensate the company. Similarly, not reflecting spot rates in the regulatory control (when rates are higher) may mean that the allowed cost of debt is insufficient to cover the actual cost of new debt, and investors would not

²⁷ For example, see Ofcom (8 Jan 2020) Market review 2021–2026, Ofcom (28 June 2019) Business Connectivity Market Review (BCMR), CMA (4 Mar 2015) Bristol Water determination, Ofgem (24 May 2019) RIIO-2 Methodology, and Ofwat (16 Dec 2019) PR19 Final determination.

be able to recover costs, i.e. the company is not financeable.

51. Given the above, Oxera’s presented estimation does not therefore include an ‘implied premium’ due to the use of spot rates. Rather, the use of spot rates is to ensure that the RfR estimate reflects updated current market evidence and is consistent with the estimation of cost of debt, as Sure does not have embedded debt, and faces only the cost of new debt. The uncertainty premium put forward is thus necessary, as it captures the risk that spot rates may rise faster than suggested by forward rates. The current period where interest rates have increased rapidly is a good example, especially as rates have risen faster than expected since our report—if no uncertainty premium is considered within the regulatory control, there is a higher risk that the RfR would then be under-estimated (reflecting outdated, too-low market estimates), and result in a depressed WACC, leading to a financeability problem.

Figure 1: Past regulatory determinations where the risk-free rate sits above yields on ILGs.



52. Given the evidence and explanation provided above, we believe that the GCRA should reinstate the uncertainty premium adjustment in its calculation of the nominal risk-free rate and reflect this in its final pre-tax nominal WACC. Based on our calculation, this would result in Sure having a WACC in the range of 8.52% and 9.52%, with a mid-point of 9.02%, with this rounded down to 9.0%. The working for this updated WACC calculation can be found in Table 2, below.

Table 2: WACC analysis summary

Parameter		Low (%)	High (%)
Gilt yields (nominal)	[A]	3.62	3.62
Convenience premium	[B]	0.50	0.50
Uncertainty premium	[C]	0.25	0.50
RfR (nominal)	[D]	4.37	4.62
Equity beta	[E]	0.53	0.76
TMR (nominal)	[F]	9.23	9.32
ERP (nominal)	$[G] = [F] - [D]$	4.86	4.7
CoE (nominal)	$[H] = [D] + [E] * [G]$	6.95	8.19
Guernsey risk premium	[I]	0.85	0.85
Adjusted vanilla CoE (nominal)	$[J] = [H] + [I]$	7.8	9.04
Tax rate	[K]	20	20
Adjusted pre-tax CoE (nominal)	$[L] = [J] / (1 - [K])$	9.75	11.3
iBoxx bond yields	[M]	6.05	6.05
Borrowing costs	[N]	0.38	0.38
Uncertainty premium	[O]	0.25	0.50
CoD pre-tax (nominal)	$[P] = [M] + [N] + [O]$	6.68	6.85
Gearing	[Q]	40	40
WACC, pre-tax (nominal)	$[R] = [Q] * [P] + (1 - [Q]) * [L]$	8.52	9.52
WACC, pre-tax midpoint (nominal)		9.00%	

GCRA Response:

This reply addresses Sure's points raised in paragraphs 41 to 52 (above).

The GCRA notes that Sure's proposed approach departs significantly from BEREC's recommendations to national regulators on WACC calculations²⁸, which does not include an uncertainty premium. The case for Sure's proposed approach is therefore not established practice. Furthermore, the evidence provided by Oxera is not conclusive, as it indicates that the spread between the allowed risk-free rate and the yield on ten-year gilts can be both positive or negative. The interests of OLOs and consumers is therefore relevant as it is not apparent why Sure should be

²⁸ BEREC Report on WACC parameter calculations according to the European Commission's WACC Notice (WACC parameters Report 2022

accorded an uplift in its WACC when the OLOs and consumers also bear a risk of overcharging if only a positive uplift in WACC is contemplated.

In Sure's supplemental submission (See Appendix 4), Oxera justified the use of a spot rate to determine Sure's risk-free-rate as having the ability to "adequately reflect current market conditions". While the GCRA agrees that the spot rate will capture real-time market conditions, the spot rate when used as the risk-free rate is typically derived from instruments that are risk-free. The prices of these instruments reflect the expected fluctuations in economic factors such as inflation and the rate of interest and therefore an uncertainty premium is not necessary since the likely economic fluctuations are considered when the spot rate is calculated and therefore an additional uncertainty premium is not necessary otherwise OLOs and consumers are at risk of effectively 'paying twice'.

The Supplemental submission (Appendix 4) presented another justification for the use of an uncertainty premium "to more closely reflect the cost of new debt". The GCRA does not find it appropriate to apply an uncertainty premium to the spot rate for expected future debt for two main reasons. Firstly, Sure has no imbedded debt and therefore no existing interest coverage ratio, it will therefore be challenging to estimate an appropriate uncertainty premium for future debt. Secondly, the inclusion of an uncertainty premium with no recent history of imbedded debt can inflate the cost of capital and ultimately the WACC.

INFLATION

53. The GCRA proposes to utilise the inflation forecast from the States of Guernsey Strategy and Policy Unit to inform its inflation rate for 2023 and early 2024, and a Guernsey RPIX average of 2.2% from 2016 – 2019 to inform its long-run inflation target. We believe that this is a sensible approach and in line with best practice.
54. Whilst we broadly support the GCRA's proposed approach, we believe that the GCRA's model should be updated to reflect the States of Guernsey's Quarter 2 Inflation Bulletin and Quarter 3 Inflation Forecast, both of which will be issued in July 2023. The GCRA's model assumes an annual inflation rate (RPIX) of 6.15% for 2023 and 3.01% for 2024²⁹. However, the States of Guernsey's Quarter 1 Inflation Bulletin and Quarter 2 Inflation Forecast has already made clear that RPIX is likely to sit higher, and inflation developments in the UK suggest that inflation at the end of 2023 could be even higher than forecast in the Quarter 2 Inflation Forecast. The annual change in RPIX for the year ending

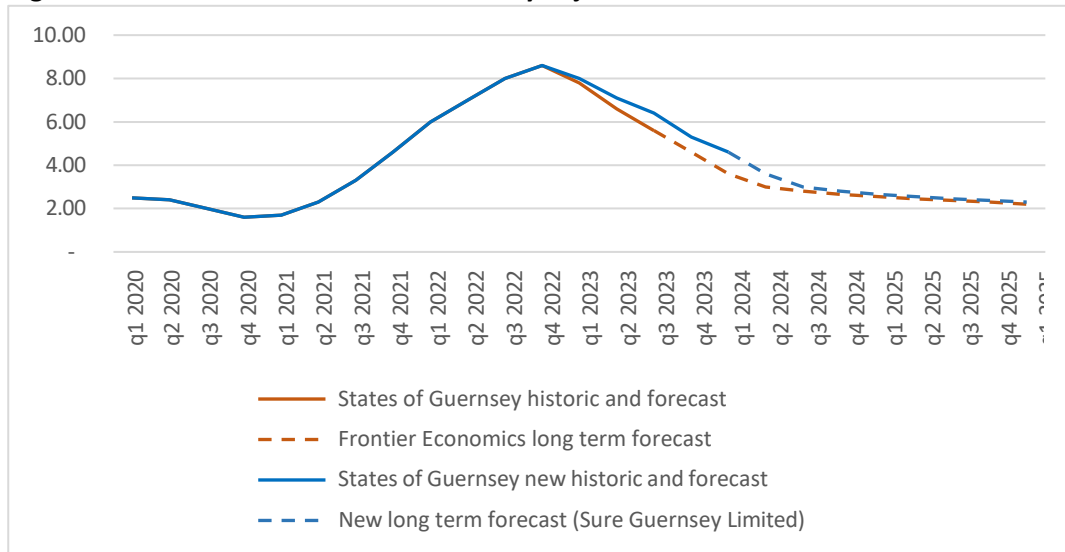
²⁹ <https://www.gov.gg/CHttpHandler.ashx?id=167167&p=0>

March 2023 was 8% (compared with the GCRA’s forecast of 7.8%). Similarly, the States of Guernsey now forecasts that inflation for 2023 will be 6.7% in Guernsey (compared to the GCRA’s forecast of 6.15%).

GCRA Response:

The GCRA accepts this point and has updated the costing model to reflect the most updated inflation figure and this is reflected in Section 5 – Analysis and Assumptions, of the Second Proposed Pricing Decision.

Figure 2: GCRA’s forecast RPIX for Guernsey adjusted to reflect the Q2 Inflation Forecast.



55. This deviation in actual and forecast RPIX can be seen in Figure 2, above. The updated RPIX forecast for Quarter 2 2023 suggests that inflation will remain higher for longer in Guernsey, with RPIX sitting slightly above the GCRA’s forecast until early 2025. Note, however, that further deviation between the GCRA’s forecast rate of inflation (as stated in its model) and the States of Guernsey’s updated assessment is likely to occur when the Quarter 2 Inflation Bulletin and Quarter 3 Inflation Forecast are published, on 25 July 2023.

GCRA Response:

The GCRA accepts this submission and repeats the comment above.

56. The States of Guernsey’s adjustments in its Quarter 2 Inflation Forecast has been supported by public comments made by the Governor of the Bank of England. For example, on 17 May 2023, he explained that ‘the likelihood of inflation topping its projection is skewed significantly to the upside’ and that this had been caused by “second-round effects” of inflation. The Bank of England has suggested that these second-round effects are being driven by internal factors, such as pay growth and domestic price rises, and has now increased its medium-term CPI forecast to 5.1% by the end of the year, from

its 3.9% February 2023 projection. More recently, further developments and public comments have been made, suggesting that inflation will remain higher for longer in the short run, as inflation data over the past few months has repeatedly defied expectations and stayed higher than predicted. In May 2023, the rate of inflation in the UK remained broadly unchanged (CPI of 8.7%), despite predictions that it would fall significantly. Core inflation continues to rise, despite the headline rate remaining static or reducing slightly. This has prompted the Bank of England to raise interest rates to 5% in June 2023, with many now believing that the end of year inflation (CPI) could sit around 6%, as opposed to the 5.1% forecast in the Bank of England's May Monetary Policy Report.

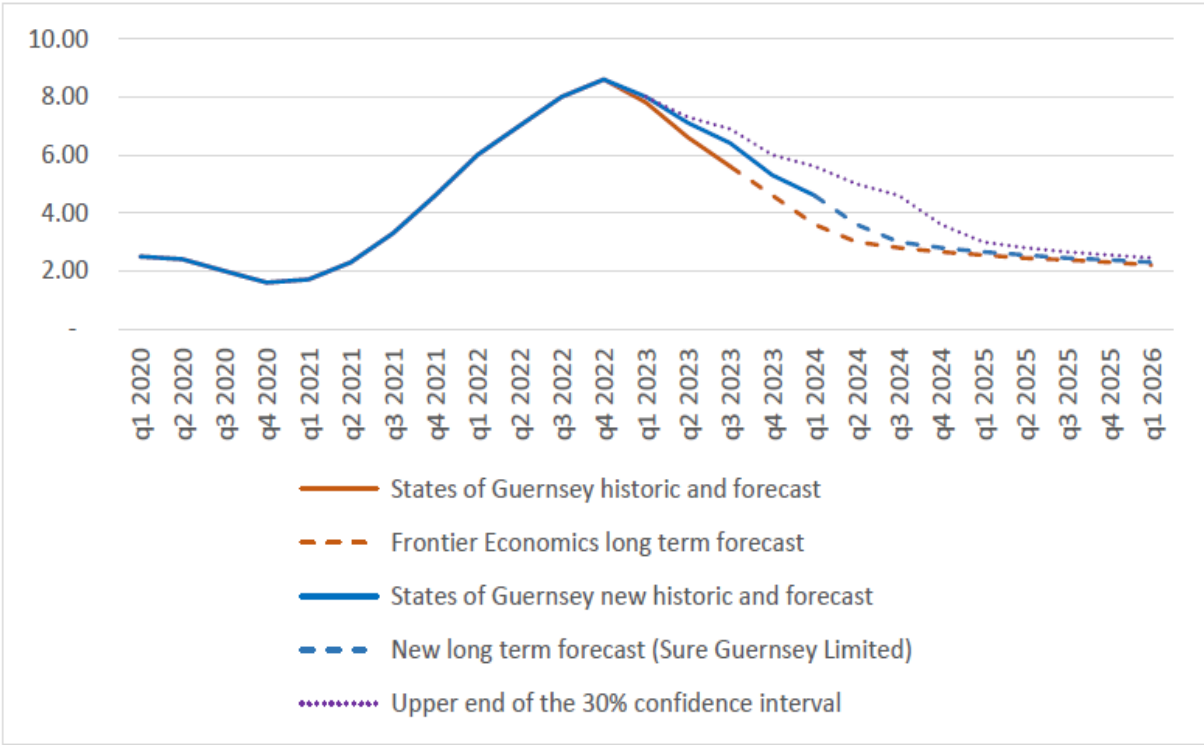
57. RPIX ordinarily sits above CPI, suggesting that the RPIX in Guernsey at the end of 2023 is likely to be higher than the 5.3% RPIX forecast by the States of Guernsey. We believe that the GCRA should make allowance for these recent reports and align its inflation assumptions with the States of Guernsey Quarter 3 Inflation Forecast, along with an appropriate uplift to reflect the uncertainty around short-run inflation rates in the UK.

GCRA Response:

The GCRA agrees with Sure's position and has incorporated the latest inflation forecasts.

58. In our view, an appropriate course of action would be for the GCRA to apply an uplift to the short-run rate of inflation by setting RPIX at the top end of the 30% confidence interval of the States of Guernsey RPIX forecasts. Doing so would apply a small but appropriate uplift to the forecast inflation for Guernsey to take into account the low level of confidence that the Bank of England has in quickly declining rates of inflation for the UK. Please note, Figure 3 below reflects the 30% confidence interval included in the States of Guernsey's Quarter 2 Inflation Forecast, so will need to be adjusted to take into account further developments included in the Quarter 2 Inflation Bulletin and Quarter 3 Inflation Forecast, when they become available.

Figure 3: GCRA's forecast RPIX for Guernsey with 30% confidence interval included.



Sure (Guernsey) Limited

14 July 2023



**JT's Non-Confidential Response to
GCRA Proposed Decision –
Wholesale Broadband Access Pricing
(T1652G)**

11th July 2023

1. Introduction and Response

1.1 JT (Guernsey) Limited (“JT”) welcomes the opportunity to respond to the Proposed decision on Wholesale Broadband Access Pricing (the “Consultation”). This is a non-confidential response and can be published in full.

2. JT Comments

2.1 JT supports the approach taken by the GCRA to set the price control for wholesale broadband access pricing to align with the cost of provision which will benefit Guernsey citizens.

2.2 As mentioned in the consultation, the States of Guernsey 2021 policy letter, “Delivering Next Generation Digitisation Infrastructure” sets out a number of factors under the heading “Ensuring competition – the role of the GCRA”. Ensuring wholesale broadband pricing is similar to those available in similar sized jurisdictions and ensuring Guernsey remains competitive, is vital to ensure Guernsey citizens benefit from high quality broadband services at prices that align with other benchmarked jurisdictions.

2.3 Significant Market Power (SMP)

2.3.1 JT agrees with the GCRA that there have not been significant changes in the broadband market that would lead it to carry out a broadband market assessment at this time. Since the 2019 SMP finding, the States of Guernsey (SoG) held a tender process with Sure being awarded the contract to provide an island wide FTTP wholesale broadband network. The FTTP broadband network roll out has been funded in part by the SoG, up to £12.5 million, and the programme is due to run to the end of 2027.

2.3.2 As stated in the Consultation, JT has made significant investments in its Guernsey fibre network, focused on connecting government buildings and enterprises. While JT has installed 1Gb fibre broadband to a small number of businesses and consumers in focused areas, it does not plan to extend its fibre broadband network further and will be utilising the wholesale broadband service provided by Sure to service its customers in Guernsey.

2.4 Ensuring Fair Prices

2.4.1 In section 4 of the Consultation, the GCRA discuss the various approaches that could be taken to set regulated cost-orientated prices. In the conclusion, the GCRA propose using

DCF modelling forecasts, based on Sure's actual demand and cost data, as the most appropriate approach. This approach has been proposed due to the fact that Sure's FTTP network is currently in the process of being built. JT agrees that this approach is the most appropriate.

2.4.2 At section 6.6 of the consultation the proposed price cap is estimated at £22.62 per month in 2024 for the average monthly broadband subscription payment, increasing to £26.48 per month in 2028. We assume that the average price is based on the combination of wholesale line rental (WLR) plus wholesale broadband (WBB), as is the case in Jersey. In Jersey the port charge is currently £26.95 (reducing to £24.51 in 2026¹) and is broken down into WLR at £11.10 and WBB at £15.85. If the Guernsey wholesale cost modelling has not been done on the basis of the two products utilising the FTTH, the proposed pricing would not align with benchmarking in similar jurisdictions (namely, Jersey being the closest island neighbour). We would welcome confirmation that the price control proposed is for both WBB and WLR. If this is not the case, we would like to understand the reasons why.

2.4.3 Without access to the information that Frontier has used to assess the 11% reduction highlighted in the Consultation we have been unable to understand the impact on pricing. We would welcome further discussion on the model and how the average price has been calculated for the price control period.

2.4.4 We have concerns that the more price sensitive customers could end up paying more than necessary with the method of assessing the average price cap. However, from the information provided in the Consultation we have not been able to carry out an assessment of the entry level price point. We would welcome more information on this aspect.

2.4.5 At section 4, the Consultation provides benchmarked data for Guernsey against other countries. From looking at the underlying data in cable.co.uk², it would appear that the comparison has been made against retail pricing but we are unsure if the comparison is based on landline plus broadband or broadband on its own.

2.4.6 At 6.5 it suggests that the compliance checking process could be similar to the current

¹ [t-011-wholesale-broadband-access-services-price-review-final-notice.pdf \(icra.ie\)](#)

² [Worldwide Broadband Price Research 2023 | Cable.co.uk](#)

process for monitoring Sure's adherence to its retail minus control on leased lines. We have not had visibility of the process that is run by Sure to ensure that it complies with its current leased line price control. We note, however, that the new price control proposed for leased lines is not based on a weighted average price but is set per product on a pricing curve and, therefore, we would welcome more transparency on the process the GCRA proposes to run to ensure compliance against the wholesale broadband price control.

GCRA's Response to JT's written representations:

- 1. On 18 July, a consultation meeting was held between the GCRA and JT. The GCRA provided clarification on how it proposed to set the weighted average price.***
- 2. JT raised concerns with the possible non-compliance by Sure with the existing wholesale leased line price control, and raised issue with how any potential non-compliance by Sure with the proposed broadband price control would directly impact JT. The GCRA further explained the proposed process for determining compliance with the proposed price control, as per the example set out in Section 6 of the Proposed Price Control Decision.***
- 3. JT also sought clarification on whether the costs of Wholesale Line Rental (WLR) had been included in the proposed weighted average price in the Proposed Decision. In response, the GCRA confirmed that the underlying costs model included WLR charges and the Second Proposed Price Control Decision provides further clarification on this issue.***



Guernsey Airtel Limited's (GAL) response to Guernsey Competition Regulatory Authority (GCRA) Case T1652G – Proposed Decision – Wholesale Broadband Access Pricing, published 23/05/2023.

- 1) GAL requests GCRA to reconsider the reasons set out below in this response before the final decision on 'Wholesale Broadband Access Price' is made. These points re-emphasise the extreme challenges being faced by GAL, and addressing of these issues will help GAL to compete effectively.

GCRA's proposed decision for 'Wholesale Broadband Access Pricing' published on 23/05/2023 after a gap of 17 years will not benefit GAL to 'compete effectively'.

- 2) GCRA states aims of ensuring '*there is effective and fair competition between businesses*' and that '*market power is not abused*' in document GCRA '*Priorities for 2023, Page 6*'.
- 3) GCRA's proposed decision T1652G published on 23 May 2023 for 'Wholesale Broadband Access Pricing' acknowledges entry of Starlink in broadband market in 2022, section 2.9, however, there is no mention of GAL's entry into the fixed broadband market in 2021 in a such a critical review.
- 4) Historically GAL always advised the Channel Island Competition Regulatory Authority (CICRA) until 2017–18 that 'bundling of all the telecom products such as mobile, broadband and landline together' is highly anti-competitive for a challenger like GAL who owns only the mobile infrastructure, and do not own other essential telecom infrastructure elements such as fibre, landline, leased lines, ISP, etc required to offer fixed broadband services to customers.
- 5) Even a challenger like JT in Guernsey owns their ISP feed, and they own many of the mentioned telecom elements as they are the incumbent in Jersey. GAL is forced to buy various wholesale products including broadband access, backhaul connectivity, etc., to compete and provide essential services to its customers in Jersey and Guernsey respectively.
- 6) Pushback from CICRA to GAL was that since wholesale access is available for the telecom infrastructure elements not owned by GAL, therefore, GAL can have wholesale access and compete too.
- 7) Further, basis the emerging strong trend of customers looking for combined deals for 'mobile and fibre' post the Covid, combined with the compulsion to remain relevant to its own customer base and market competitive, GAL had no choice but to invest in 2021 to roll out copper / fibre broadband and landline services using various wholesale products access little knowing it will result in losses for GAL.
- 8) The latest 2022 Telecom stats released by GCRA confirms how the preference for 'bundled telecom products' is ever growing year on year. The below table 1 will provide GCRA with enough insight regarding the extreme challenge GAL is facing to remain 'relevant and competitive' in local market.

█ The 'Table 1' below shows █
 █
 █

- 10) █ will lead to widening losses for GAL further.



Table 1 – [REDACTED]

[REDACTED]

[REDACTED] The 'Table 2' below illustrates current retail prices in Guernsey of Fibre and Copper broadband. [REDACTED]
[REDACTED]
[REDACTED]

Table 2 – Guernsey Retail Price comparison for Fibre and Copper Broadband:

[REDACTED]

12) GCRA's proposed 'Wholesale Broadband Access Price' will not benefit GAL [REDACTED]
[REDACTED].

[REDACTED] Since a challenger like JT in Guernsey owns their ISP feed, and they own many of the mentioned telecom elements as they are the incumbent in Jersey [REDACTED]
[REDACTED]

14) No wonder, JT possess 22.3% fixed market share against 1% of GAL as [REDACTED]
[REDACTED]
[REDACTED].

- 15) [REDACTED] doesn't factor in impact of other following costs:
- i. Sales & Distribution expenses,
 - ii. Marketing expenses,
 - iii. Network operational expenses,
 - iv. IT operational expenses
 - v. Customer Services,
 - vi. Bad Debt,
 - vii. Billing,
 - viii. Human Resources,
 - ix. Regulatory costs, etc.

[REDACTED] Even with factoring GCRA's proposed 'Weighted Average Wholesale Broadband Access Price', [REDACTED]

- 17) Points 2 – 12 proves that GCRA's proposed 'Weighted Average Wholesale Broadband Access Price' will not help with 'effective competition' and worsen [REDACTED]
And both the competitor i.e., incumbent Sure with market share of 76.2% and JT with market share of 22.3% will [REDACTED]

- 18) Therefore, GAL believes that GCRA should further reduce the prices of 'wholesale broadband access' factoring in GAL's challenges as explained above with the evidence, so that GAL can 'compete effectively' in a three-telecom operator market.

GCRA's proposed 'Wholesale Broadband Access' pricing will increase by 17% over next 4 years.

- 19) Whilst GAL has long advocated the periodic review of prices of all the 'wholesale services' including the 'wholesale broadband service', and although GCRA acknowledges in its price review after a gap of 17 years that "Guernsey is the fifth most expensive jurisdiction on the average prices of retail broadband service plans among 29 countries in Western Europe", yet GAL is disappointed to note that GCRA is proposing 'wholesale broadband access prices' will increase over next 4 years.
- 20) GAL has not come across any example either in Jersey or any other jurisdiction where price of all wholesale broadband products will increase each year. Therefore, instead of increasing the price by 17% over next 4 years, GCRA should reduce the price in range of 25-50% over the next 4 years.
- 21) GCRA's proposal that 'wholesale broadband access prices' to be lowered by 11% on average, which will increase by 17% over next 4 years will worsen the [REDACTED].
- 22) Whilst preparing this response, GAL requested GCRA to supply actual impact on current wholesale broadband access monthly price, however, GCRA refused advising we can submit the response without same which GCRA will consider later. Unlike GCRA, JCRA's draft 'wholesale broadband access price review' in 2021 clearly showed the impact on monthly price, hence, [REDACTED]. GCRA should clarify on this point ASAP before the final decision is made.



23) Therefore, instead of proposing price increase year on year until 2028, GCRA should rework their proposal to bring down current wholesale broadband access price year on year which enables [REDACTED] GAL to ‘compete effectively’.

GCRA’s proposed ‘Wholesale Broadband Access’ price comparison with Jersey.

24) The table below illustrates the stark differences that exist when comparing Wholesale fibre prices in Guernsey with wholesale fibre price in Jersey.

Table 3 – Guernsey Wholesale Fibre Pricing versus Jersey Wholesale Fibre Pricing:

Guernsey product	Guernsey price	Jersey product	Jersey price	Differential versus Jersey
Fibre 30/3	£18.33	Bitstream, up to 1Gbps Download	£14.96	123%
Fibre 50/5	£23.51			157%
Fibre 100/10	£29.73			199%
Fibre 300/30	£38.01			254%
Fibre 1000/50	£79.00			528%

25) While comparing current wholesale broadband access pricing in Jersey with the proposed prices of wholesale broadband access in Guernsey for 2024, it is observed that current Sure price is **528% higher** for 1 Gbps product than the Jersey price as highlighted in the table above for a superior wholesale broadband product i.e., bitstream rental that allows us to deliver a 1Gbps download service.

26) And, this differential of **528%** will only widen further given GCRA’s proposed whole broadband access price for year 2028. Also please note that the wholesale broadband access pricing in Jersey for 1 Gbps Bitstream will drop from £14.96 to £13.41 by year 2026, therefore, comparing like for like in 1 Gbps category, the price gap between Jersey and Guernsey will widen to **538%**.

27) This evident gap in the broadband access pricing is so high that Sure in Guernsey is selling their Fiber 30/3 product at **123%** higher price than JT’s 1 Gbps bitstream product in Jersey expected to climb to **133%** by 2026, which is totally unacceptable.

28) GCRA must address such a huge gap in broadband access pricing in their final decision across all the products / services if they are keen for GAL to ‘compete effectively’ in Guernsey against incumbent Sure with market share of 76.2% and JT with market share of 22.3%. Both the substantial fixed market share holders i.e., Sure and JT own their ISP and all other essential telecom infrastructure elements for which GAL is forced to buy from Sure or JT at prohibitive prices.

GCRA’s proposed ‘Wholesale Broadband Access’ price comparison with UK, and possible learnings for GCRA basis introduction ‘equinox’ approach in UK.

29) The table below illustrates the price difference is even more stark when comparing Wholesale fibre prices in Guernsey with wholesale fibre price in UK. The below comparison clearly illustrates that a

superior product is available to fibre service providers in the UK at far reduced pricing when compared with the current Sure portfolio of products.

- 30) In April 2023 Openreach introduced their Equinox 2 price model (also included in the table below) with further discounted prices to retail service providers over and above the standard list prices detailed, which shows pricing differentials of up to 371% when compared to Sure wholesale price.

Table 4 – Guernsey Wholesale Fibre Pricing versus UK Wholesale Fibre Pricing:

- 31) The aim of the Equinox 2 pricing offer was to incentivise retail providers to place new orders using Openreach’s full fibre over legacy copper products. Given the similarity of the situation in Guernsey where the wholesale provider is looking to retire the legacy product, GAL believes that such a discounting approach should be applied for the following reasons:
- i. Of the 10,383 properties ready for Fibre as released by Sure Wholesale as at 31/5/2023, 6106 are yet to have a fibre line connected, equating to 59% of households. In March 2023 Guernsey Fibre shared some market research with Retail service providers regarding user experience of the Fibre changeover process. Suggest GCRA review this research if not already done so. GAL believes that adopting an incentivised pricing model with discounting on levels detailed above would swiftly accelerate user adoption.
 - ii. Openreach FTTP Equinox pricing is up to 42% discounted from standard list price. Sure Wholesale offer limited discounts for a 6 months period only for customers migrating to higher speed Fibre product from Copper. In addition, the differential between Sure Wholesale legacy copper products and fibre is minimal.

GCRA has ignored GAL’s request to the Committee of Economic Development (CED) at States of Guernsey (SoG) as per letter dated 20th July 2021 ahead of publication of policy letter regarding Broadband Working Group in Guernsey.

- 32) GAL is disappointed to note that GCRA has not reviewed pricing of WLR for last 17 years, and even in this current review there is no work done to review the price of WLR access which is enforced upon the customers without any need or ask.

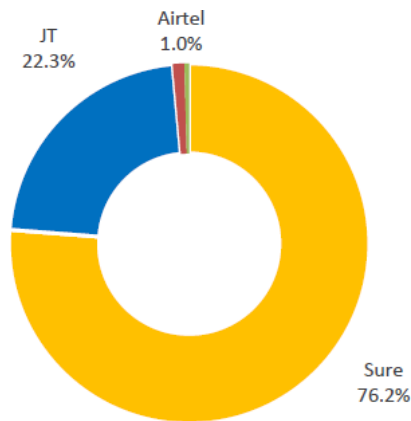
33) GCRA has ignored GAL's request to CED at SoG as per letter dated 20 July 2021 which clearly stated *"Today the WLR and WBB are offered as a combined product, which is not in line with the increasing customer demand for WBB without WLR. A customer who does not need the WLR or cannot afford the additional cost of the WLR should be free to choose the product they want and not be forced to buy the combined product. Lately there have been several demands for such products and a number of such discussion can be seen on social media where public demand such flexibility"*.

34) Therefore, GCRA needs to clarify their stand on WLR price review.

Concluding Remarks

35) Despite the pricing detailed above in Table 1 & 2 and considering GAL's [REDACTED]
[REDACTED]
[REDACTED]

36) The Telecommunication Statistics 2022 market report published on 20/6/2023 by GCRA shows that [REDACTED] of fixed broadband market share despite GAL trying every effort at the retail level to stimulate market growth.



37) With clear examples of what UK / Jersey regulators have done at wholesale level to stimulate growth, it is time for GCRA to implement these examples with significant price review. With the current wholesale pricing, the market is stagnant, and even the proposed pricing from GCRA will not help with the competition. Therefore, GAL believes that GCRA needs to address it's proposed 'wholesale broadband access price' [REDACTED] GAL to compete effectively.

Therefore, GAL requests GCRA to reconsider the reasons set out above in this response before the final 'wholesale broadband access price' decision is made. GAL is looking forward to a response from GCRA to each of the above points prior to the final decision is made at your earliest convenience.

Guernsey Airtel Limited
14 July 2023



GCRA Response:

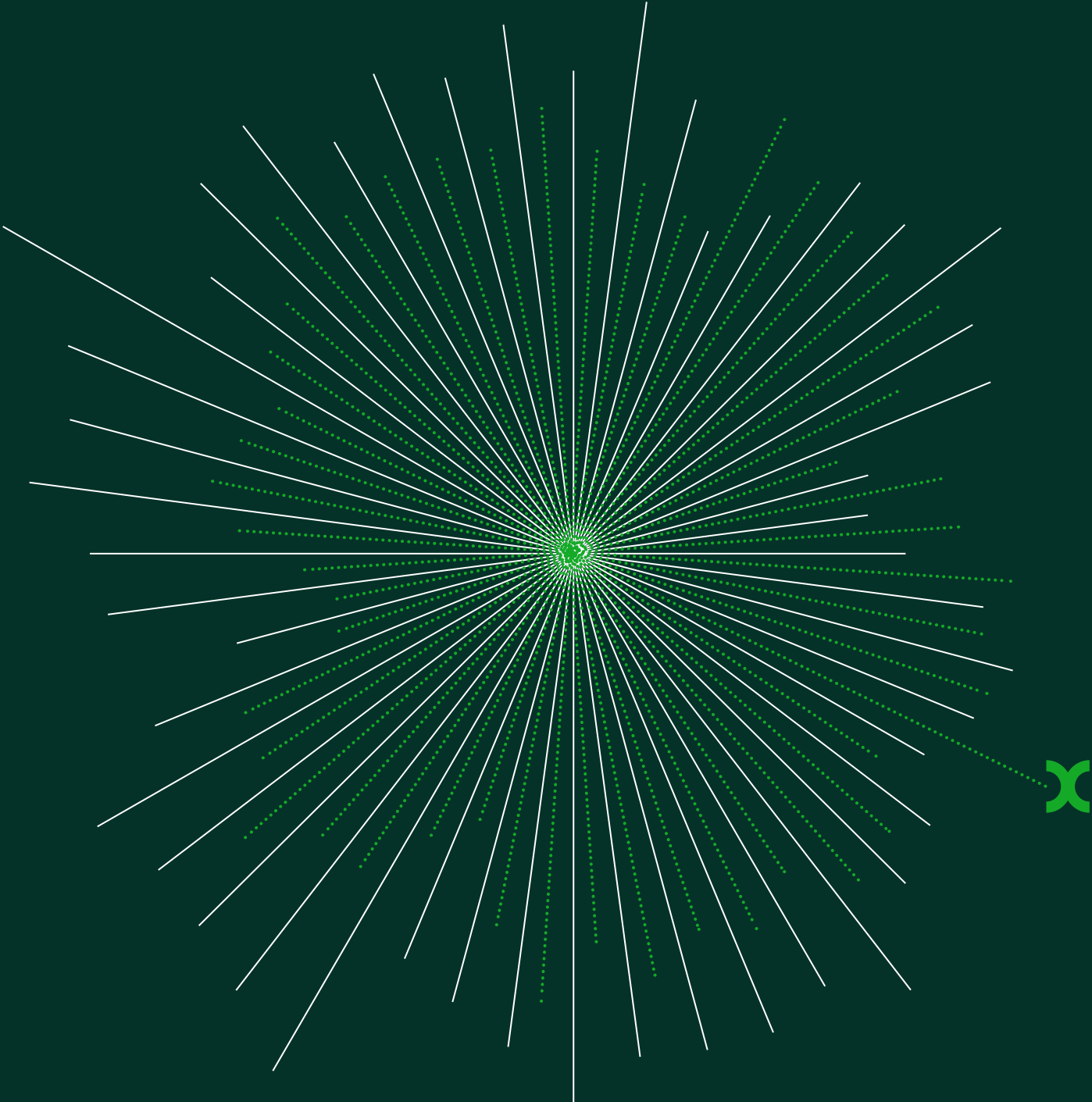
In a consultation meeting held on 25 July 2023, Airtel requested visibility of the per bandwidth price of Wholesale Broadband Access products when the proposed price control is applied. Since the wholesale broadband price control applied is in the form of a weighted average price control cap, Sure has been given the flexibility to set individual product prices provided it remains within the overall price cap. The GCRA is therefore not in a position to predict what Sure's prices would be at the product level.

The GCRA has considered Airtel's representations and the Second Proposed Price Control Decision has provided further clarification on the inclusion of Wholesale Line Rental (WLR) charges in the proposed weighted average price.

Sure (Guernsey) Limited

Estimating the WACC for Sure's Guernsey business

9 January 2023



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Executive summary

The Guernsey Competition & Regulatory Authority (GCRA) is reviewing its approach to regulating the provision of wholesale leased lines and wholesale broadband access in Guernsey. Sure (Guernsey) Ltd (Sure) has commissioned Oxera to provide advice on the appropriate methodology for setting the allowed weighted average cost of capital (WACC), and on the estimation of Sure's regulatory allowed WACC.

Estimating the WACC via the capital asset pricing model (CAPM) for the allowed cost of equity (CoE) requires the determination of a range of input parameters. These include the risk-free rate (RfR), the equity risk premium (ERP) and the total market return (TMR), the equity beta. The CoE together with the cost of debt (CoD) can then be used to derive the resulting WACC, which can be adjusted to reflect company-specific factors which generate a premium (including a 'country'-specific risk premium¹), by either applying a direct uplift, or by 'aiming-up' within the WACC range. We summarise our analyses and conclusions in the paragraphs below.

Risk-free rate

We show that referring to UK government debt as proxies for the RfR—defined as the expected rate of return on a zero-beta asset—necessitates adjusting for a convenience premium, in order to derive a measure of the 'true' RfR. We also address additional adjustments, namely the forward and uncertainty premiums.

By computing the average yield on gilts and adjusting for each of the convenience, forward, and uncertainty premiums, we derive a point estimate of the RfR of 4.5% in the lower estimate of the WACC within a range, and 4.8% in the higher estimate of the WACC.

Total market return

We explain that estimation of the TMR should be performed using historical data on stock market returns over a long time period—this should be performed by reflecting the latest Office for National Statistics (ONS) inflation data, and by taking the arithmetic rather than geometric average. Alternative estimation methods, namely the ex ante and forward-looking approaches, are shown to be sensitive to input assumptions and subjective adjustments, and thus are not given equivalent weight in the assessment.

Relying on the recommended approach, we conclude that a TMR range of 7.1% in the low case WACC, and 7.2% in the high case, in CPIH-real terms, is reasonable.

Beta

We discuss the process of forming the appropriate comparator set, and de-levering and re-levering to estimate the equity beta while

¹ As Guernsey is a Crown Dependency, the prevalent market interest rates are informed by UK gilts (see Section 2). However, as we discuss in section 6.2, adjustments to account for specific risks when investing in Guernsey are appropriate. In this report, we refer to these as the country risk premium.

ensuring sufficient comparability against comparators. We also demonstrate the appropriate estimation method of the debt beta for regulated networks.

We also highlight the role of gearing assumptions, and explain that these assumptions should preserve incentives for management to adopt an efficient capital structure appropriate to the circumstances of the business. We apply a gearing level of 40% in both the low and high case WACC, derived from our analysis of the comparator set average, notwithstanding Sure's current debt-free financial position to reflect near-term debt-raising plans. This is broadly consistent with recent regulatory precedents—specifically, the notional gearing estimate of 39% in the Isle of Man for telecommunications providers², and the forward-looking gearing estimate of 45% for BT group by Ofcom.³

For Sure's WACC assessment, our calculation presents a re-levered equity beta of 0.53 in the low case WACC and 0.76 in the high case.

Cost of debt

We detail the methodology for selecting a representative proxy for borrowing costs, by assessing the comparator average tenor and credit rating. We then identify the need to adjust for issuance premiums reflecting additional borrowing costs, and quantify this by relying on UK and Isle of Man regulatory determinations.

Based on the recommended methodology and including the upwards adjustment to account for the issuance premium, we estimate Sure's pre-tax nominal CoD to be 6.9% in the low case WACC scenario, and 7.1% in the high case.

WACC estimate and additional premiums

We present a summary of Oxera's estimates of CAPM input parameters and the estimated WACC range in pre-tax nominal terms, arriving at a midpoint estimate of 9.1%, as depicted in Table 1.1 on the following page. This estimation also includes an adjustment to reflect a Guernsey-specific premium—we address the economic argument and estimation methodology for this country risk premium in Section 6.2.

² CURA (2022), 'Telecoms WACC—Response to consultation', 6 October, para. 2.46.

³ Ofcom (2021), 'Promoting investment and competition in fibre networks: Wholesale Fixed Telecoms Market Review 2021—2026, Annexes 1—26', 18 March, para. A20.138.

Table 1.1 Summary of Oxera estimates of Sure WACC

Parameter	Low	High
RfR (nominal)	4.53%	4.78%
CoE (nominal)	7.03%	8.22%
Guernsey risk premium	0.85%	0.85%
Adj. vanilla CoE (nominal)	7.88%	9.06%
Adj. pre-tax CoE (nominal)	9.85%	11.33%
CoD pre-tax (nominal)	6.85%	7.10%
WACC, vanilla (nominal)	7.47%	8.28%
WACC, pre-tax (nominal)	8.65%	9.64%
WACC, vanilla midpoint (nominal)	7.87%	
WACC, pre-tax midpoint (nominal)	9.14%	

Source: Oxera analysis.

While we have presented a midpoint estimate, the precise choice for the WACC determination will depend on how the uncertainty of the estimate affects expected social welfare—specifically, the asymmetry between the high social welfare costs from determining a WACC that is too low and creating an underinvestment problem, against the relatively lower costs of overinvestment or potential overcharging. In this context, maximising social welfare means that the choice of point estimate should be 'aimed up', and taken from the upper end of the WACC range.

In addition, we consider the validity of the fibre to the home (FTTH, also recognised as fibre to the premises, FTTP) premium. While we do not quantify this premium in this report, we demonstrate that inclusion of the FTTH premium is necessary to compensate investors for asymmetric risks. This also implies that the allowed rate of return estimated in this report is likely to be an underestimate of the required rate of return, given it is exclusive of such an additional premium which may be required in order to attract sufficient investment in FTTH.

1 Introduction

Sure (Guernsey) Ltd (Sure) is the largest operator of both fixed and mobile telecoms services in Guernsey. Originally known as Guernsey Telecoms—the state-owned operator in Guernsey—Sure was privatised in 2002.⁴ Historically, Sure was found to hold Significant Market Power (SMP), including in the markets for wholesale broadband access and wholesale leased lines, and has therefore been subject to regulation in these markets.

Oxera understands that the Guernsey Competition & Regulatory Authority (GCRA) is currently in the process of reviewing its pricing approach. Sure has commissioned Oxera to provide advice on the appropriate methodology for setting the allowed weighted cost of capital (WACC), and to estimate Sure's allowed WACC.

Estimating the WACC using the capital asset pricing model (CAPM) requires the determination of a range of input parameters, including the risk-free rate (RfR), the equity risk premium (ERP) and the total market return (TMR), and the equity beta. These parameters then inform the CAPM-based estimate of the cost of equity (CoE), which is combined with the cost of debt (CoD) estimate to obtain an estimate of the WACC, per the equation below:

$$WACC = (1 - g) * CoE + g * CoD$$

Where g represents the gearing ratio as calculated by net debt divided by the sum of net debt and equity.

These parameters along with the resulting WACC can be adjusted to reflect company-specific factors which generate a premium (including a 'country'-specific risk premium), by either applying a direct uplift, or by 'aiming-up' within the estimated WACC range.

Separately, we also address the validity of applying a Guernsey-specific 'country' risk premium in arriving at the WACC estimate for Sure, to reflect jurisdiction-specific factors which are otherwise not captured within our CAPM calculations.

We also present economic bases for the appropriateness and estimation of the FTTH premium—while we do not quantify an estimate of the FTTH premium in this report, adjusting for this in the allowed rate of return on capital is necessary to ensure investors are compensated for undertaking asymmetric risks. An alternative approach is to allow a degree of pricing freedom for services based on new technologies.

This report is structured as follows:

- Section 2 discusses estimation of the risk-free rate (RfR). This section also details the convenience premium, which should be adjusted for in arriving at the appropriate RfR.

⁴ Refer to the Sure website for more information:
<https://www.sure.com/guernsey/about-us/company-info/history>.

- Section 3 details the total market return (TMR) and its estimation, while presenting analysis of the ex post, ex ante, and forward-looking estimation methodologies.
- Section 4 covers estimation of the equity beta, including the raw equity beta, and the appropriate de- and re-levering of the beta estimates. This section also explores the determination of the comparator set and the assessment of an appropriate gearing ratio.
- Section 5 presents a review of the CoD, with reference to the formation of a comparator set and the debt beta.
- Section 6 summarises Oxera's estimate of the CAPM input parameters and Sure's WACC. We also analyse the economic case for 'country'-specific risk premiums, and quantify the Guernsey-specific premium. Finally, we address the conceptual and economic framework for the FTTH premium, to compensate for asymmetric risks that investors face when investing in new technologies.

2 Risk-free rate

The RfR measures the expected return on a riskless asset—i.e. where the realised return on the investment will be equal to the expected return. In the CAPM framework, this notional riskless asset is also referred to as a 'zero-beta asset' (i.e. an asset with zero sensitivity to overall market risk). As the RfR is a central component in the CAPM framework, it implicitly assumes that all investors can borrow and lend an unlimited amount at the RfR. This is an important assumption because it informs the set of instruments that can be used to estimate the RfR.

In economies with low sovereign default risk, regulators have typically estimated the RfR with reference to the yield to maturity on government-issued bonds (also known as gilts in the UK). These bonds are assumed to be notionally free of default and systematic risk.⁵ Indeed, regulatory precedent in the UK for the estimation of the RfR is to rely on nominal gilt yields and inflation-linked government bonds (ILGs).

More recent discussions have however centred on the assumption highlighted above—it has been argued that market participants do not borrow at the same rate as the government. Indeed, the yield on the highest rated corporate bonds (i.e. AAA) is typically above the yield on government bonds of the same maturity. It has also been argued that government bond yields are below the return on a zero-beta asset because they have special properties that give rise to a price premium (which we refer to in this report as the 'convenience premium') that lowers their yields below the RfR. The estimated RfR must therefore be adjusted to reflect this convenience premium.

Furthermore, where the underlying proxy to the RfR does not update frequently via indexation to underlying interest rates, an adjustment for the forward premium is required, in order to match investors' expectations of future rates.

Finally, to account for the financeability risk which may arise from spot rates rising faster than forward rates, we also address the need to adjust for an uncertainty premium.

In the following subsections, we investigate the characteristics of government bonds which give rise to the convenience premium, which should be adjusted for to derive an allowed WACC consistent with financial theory. We also address each of the forward and uncertainty premiums, and present our estimate of the appropriate allowed RfR for Sure.

2.1 Regulatory precedent

There is substantial regulatory precedent relating to the use of both nominal gilts and ILGs in serving as proxies for the RfR. We investigate some of these below. Furthermore, pre-empting issues highlighted in

⁵ Note that, in the past, regulators have typically followed this approach while allowing for a certain amount of headroom.

Section 2.2, we also address the validity of alternative proxy measures to the RfR, namely the use of high-grade corporate bond yields.

2.1.1 Ofcom

In its cost of capital determination for BT, Ofcom estimated the RfR by using yields on UK government debt i.e. gilts, where the 'return of a gilt is known with near certainty (i.e. it is close to risk-less), since the probability of the UK government defaulting on its debt is very low'.⁶

Specifically, Ofcom's stated that it considered the use of both (i) short-term gilts (gilts with maturities relevant to the duration of a price control period), and (ii) long-term gilts with economic lifetimes in excess of a typical price control period. Striking a balance between the two approaches, Ofcom relied on five-year gilts to determine the RfR.

2.1.2 CMA

In its final determination for PR19, the Competition and Markets Authority (CMA) highlighted that:

The RFR is a hypothetical number as no investment has absolutely zero risk. As a result, it has become common practice to use the interest received (usually termed 'yield') on very high-quality debt instruments, often government bonds with strong credit ratings, as the best proxy for a risk-free investment rate. In the UK, this has traditionally meant using the yield on an RPI index-linked government gilt (ILG) at a relevant maturity (time until redemption).⁷

Further in its report, the CMA stated the most relevant instruments as proxies of the RfR are ILGs, and high-quality UK corporate bonds (represented by AAA-rated non-government bonds), by noting that:

[...] **ILGs do not completely meet our requirement of the RFR** as applied in the CAPM, that all market participants can borrow at the same rate. UK government can borrow at rates considerably lower than those that can be achieved by even higher-rated non-government issuers.⁸
[Emphasis added]

[...] the CMA has accepted arguments and evidence that the ILG rate available to the government is unlikely to be a perfect proxy for the RFR, and that the 'true' rate of RFR in the market is likely to be above this level.⁹

[...] we consider the yield on AAA-rated non-government bonds to be a suitable input into our estimate of the RFR.¹⁰

⁶ Ofcom (2021), 'Promoting investment and competition in fibre networks: Wholesale Fixed Telecoms Market Review 2021–2026, Annexes 1–26', 18 March, para. A20.29.

⁷ Competition and Markets Authority (2021), 'Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations – Final report', 17 March, para. 9.47.

⁸ Ibid., para. 9.104.

⁹ Ibid., para. 9.158.

¹⁰ Ibid., para. 9.162.

2.2 Special properties of government bonds and the convenience premium

In 2020, Oxera published a paper that investigated the relationship between sovereign yields and the CAPM.¹¹ In that paper, we explain that using the yield on government bonds as the RfR in the CAPM model can lead to a violation of the Modigliani-Miller (MM) theorem, which was also covered by the CMA (as cited in the previous subsection).¹² We explain that this is caused by a convenience premium, which pushes down yields on government bonds relative to the RfR.

In essence, the convenience premium is caused by excess demand for highly-rated government bonds driven by regulatory requirements and the use of government bonds in hedging strategies—e.g. interest rate hedging. Hence, the convenience premium reflects the money-like safety and liquidity characteristics of government bonds.

Therefore, when deriving the RfR for use as an input to the CAPM from government bond yields, adjustments are required to account for the convenience premium. This is also supported by the academic literature, which has attempted to quantify this convenience premium.

According to Feldhütter and Lando (2008), the magnitude of the convenience premium varies over time and can range from 30 to 90bps.¹³ Similarly, Krishnamurthy and Vissing-Jorgensen (2012) estimate the average of the liquidity component of the convenience premium to be 46bp from 1926–2008,¹⁴ while van Binsbergen et al. (2020) estimate a convenience premium of around 40bp on US government bonds over 2004–18.¹⁵

Using a methodology that is broadly consistent with that set out in Longstaff (2004),¹⁶ we have previously estimated the size of the premium since 2010. Figure 2.1 below shows that the long-term convenience premiums implied by the spreads of nine- and 11-year REFCORP bonds from 2010 to date are on average 47bp and 50bp respectively. It can be seen that the nine-year spreads widened significantly in early 2020 when the COVID-19 pandemic began, but then narrowed from the middle of 2020. At the start of January 2022 however this again reversed and spreads trended upwards. These estimates are consistent with an upward adjustment to the RfR estimate of 50–100bp, which should be added to the yield of 20-year ILGs to estimate the 'true' RfR for the CAPM.

¹¹ Oxera (2020), 'Are sovereign yields the risk-free rate for the CAPM?', prepared for the Energy Networks Association, 20 May.

¹² Ibid., p. 6.

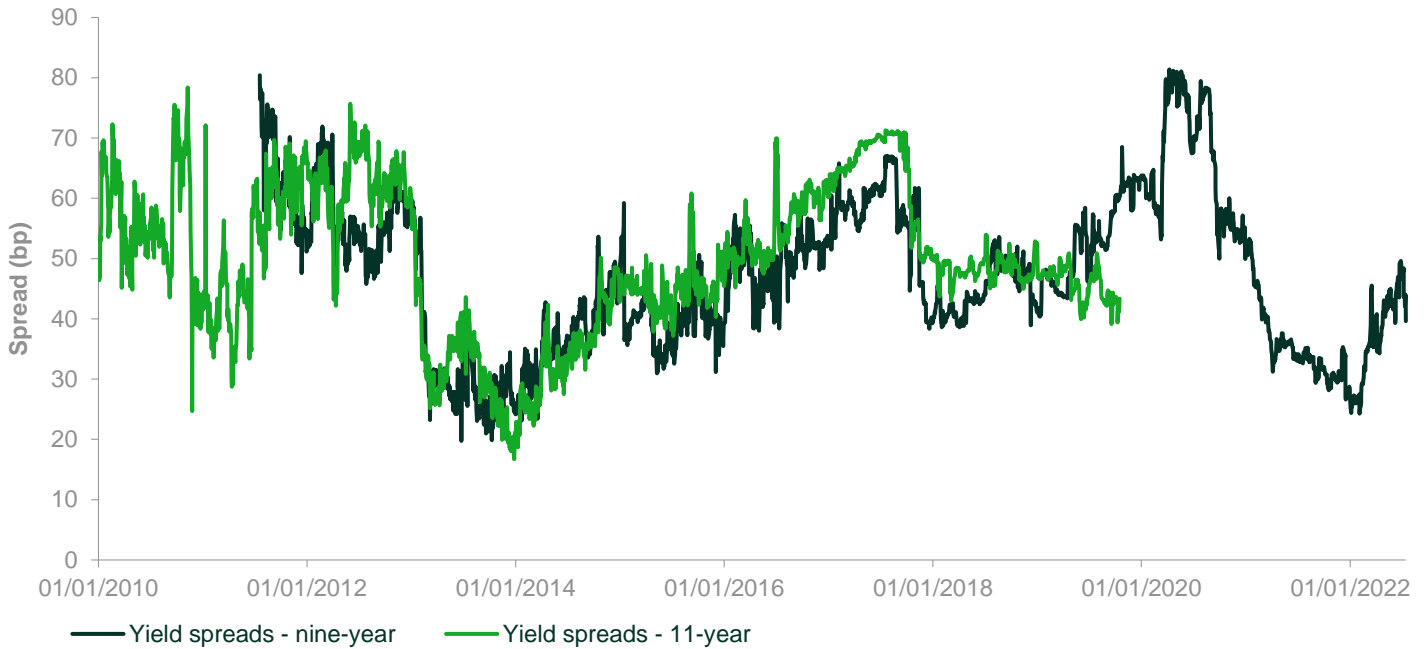
¹³ Feldhütter, P. and Lando, D. (2008), 'Decomposing swap spreads', *Journal of Financial Economics*, **88**:2, pp. 375–405.

¹⁴ Krishnamurthy, A. and Vissing-Jorgensen, A. (2012), 'The Aggregate Demand for Treasury Debt', *Journal of Political Economy*, **120**:2, pp. 233–67.

¹⁵ van Binsbergen, J. H., Diamond, W. F. and Grotteria, M. (2022), 'Risk-free interest rates' *Journal of Financial Economics*, **143**:1, pp. 1–29.

¹⁶ Longstaff, F.A. (2002), 'The flight-to-liquidity premium in US Treasury bond prices', No. w9312, National Bureau of Economic Research.

Figure 2.1 Evolution of yield spreads of nine- and 11-year zero-coupon REFCORP bond strips since 2010



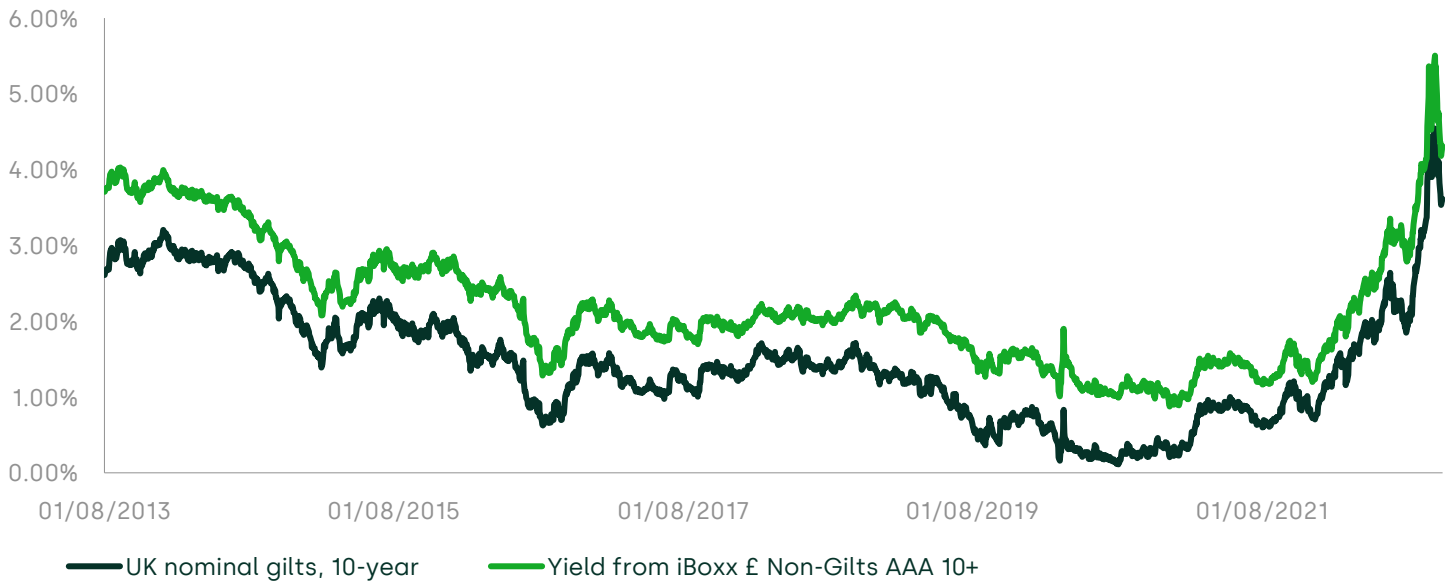
Note: Assumes a cut-off date of 1 July 2022. The yield spreads at a given point in time, are calculated by averaging the daily spreads across all outstanding REFCORP bond strips that have maturities equal to the target maturities at that time (i.e. nine- and 11-year). The spreads are calculated based on the USD US Treasury bonds/notes (FMC 82) zero-coupon yield curve, which has maturities available at yearly intervals between one and ten years, and also at 15 years, 20 years and 30 years. The gaps between these maturities are linearly interpolated.

The nine-year spreads series are not available until 20 July 2011, as before that date no REFCORP bond strips have maturities shorter than or equal to nine years. The 11-year spreads series are not available after 17 October 2019, as after that date no REFCORP bond strips have maturities longer than or equal to 11 years. Due to data limitations, it is not possible to reconstruct the time series of spreads for maturities longer than 11 years. For example, as at 1 January 2010, only six out of 34 outstanding REFCORP bond strips had maturities greater than or equal to 20 years. As at 19 October 2010, all outstanding REFCORP bond strips had maturities less than 20 years.

Source: Oxera analysis using Bloomberg data.

A pragmatic and simple approach to incorporating the convenience yield in the estimate of the RfR is to take the spread between nominal gilts and high-grade corporate debt, which can then be added to the yield on nominal gilts to arrive at the allowed RfR estimate. An intuitive representation of this is shown in Figure 2.2, depicting the yields of nominal gilts against that of the iBoxx £ Non-Gilts AAA index.

Figure 2.2 Yields on 10-year nominal gilts and iBoxx £ Non-Gilts AAA 10+



Source: Oxera analysis using Bloomberg data.

Using this approach, we quantify the average spread between the iBoxx £ Non-Gilts AAA 10–15 year index and the nominal gilt of similar maturity, in order to assess the continued validity of the 50–100bp range for the convenience premium assessed earlier. Taking the latest available market data up to 11 November 2022, the one-month average spread implies that the convenience premium now amounts to 66bp, while the six-month average spread is 53bp. This is presented in Table 2.1—both are well within the earlier estimated range of the convenience premium of 50–100bp. As such, applying a 50bp uplift to reflect the convenience premium when estimating the RfR remains appropriate.

Table 2.1 Summary of current convenience premium estimates based on nominal gilts and iBoxx £ Non-Gilt AAA 10–15 year index

Approach	Estimate
1-month average	66bps
6-month average	53bps

Source: Oxera analysis using Bloomberg data. Cut-off date of 11 November 2022.

2.3 Estimation of the forward premium

As the allowed cost of capital is fixed for a future price control period, it is necessary to account for evidence on expected future interest rates in setting the allowed RfR over the future multi-year period. These can be estimated by referring to spot rates of identical bonds by an issuer, with different maturities.

Specifically, the expected interest rate of a bond b , with maturity t_b , can be estimated by referring to bond a , with maturity t_a , using the following formula:

$$\text{Forward rate} = \left[\frac{(1 + i_a)^{t_a}}{(1 + i_b)^{t_b}} \right]^{\frac{1}{t_a - t_b}} - 1$$

Where i_a is the yield on bond a of t_a periods, and i_b is the yield on bond b of t_b periods.

The forward premium is then computed as the difference between the forward curve and the spot rate of a bond of the same maturity.

As highlighted in a previous Oxera report,¹⁷ the forward premium should reflect the yield on the expected RfR at the mid-point of a control period—the aim of which is to approximate the average RfR of the control period, assuming that capital investments are spread approximately evenly across that period. In Sure's context, we assume a regulatory period of five years, reflecting the regulatory period of the recent Isle of Man determination for the WACC of telecommunications providers.¹⁸

Table 2.2 presents our estimation of this forward premium, based on the implied forward curve of UK gilts. By calculating the forward rate based on the two-and-a-half-year gilts and 12.5-year gilts, we derive the two-and-a-half-year forward premium on a ten-year maturity bond as 17bp.

Table 2.2 Estimation of the two-and-a-half-year forward premium based on UK gilts

Parameter	Yield
Two-and-a-half-year gilt yield [i_b]	3.40%
12.5-year gilt yield [i_a]	3.71%
Ten-year forward rate [$A = \left[\frac{(1+i_a)^{t_a}}{(1+i_b)^{t_b}} \right]^{\frac{1}{t_a-t_b}} - 1$]	3.79%
Ten-year gilt yield [B]	3.62%
Forward premium [A – B]	0.17%

Source: Oxera analysis based on Bank of England data. Data as at 31 October 2022.

2.4 Estimation of the uncertainty premium

A further adjustment which needs to be made to arrive at the 'true' RfR is to allow for the uncertainty premium, which accounts for the risk that spot rates may rise faster than suggested by forward rates. Failing to account for this risk in the RfR estimate may result in a depressed allowed return which could then cause a financeability problem.

We previously estimated this premium with reference to 55 regulatory decisions made in the UK, by enumerating the difference between the allowed RfR and the yield on ten-year gilts at the time of each respective decision. As the sample data contained several outliers, our estimate truncated the distribution at the 25th and 75th percentiles. Upon accounting for the convenience and forward premiums, we find

¹⁷ Oxera (2021), 'Methodological review of the cost of capital estimation—Prepared for Prepared for Autorità di Regolazione per Energia Reti e Ambiente (ARERA)', June.

¹⁸ CURA (2022), 'Telecoms WACC—Response to consultation', October, https://www.cura.im/media/1756/20221103_-revision-of-wacc-telecom-response-for-publication.pdf.

the additional 'unexplained' spread between the allowed RfR and the yield on ten-year gilts ranged from -40bp to 50bp, with a midpoint value of 10bp.

In the context of a regulator's priorities, a key goal is to ensure that a regulated network is sufficiently financeable, in order to ensure continued provision of its services. Given that a financeability issue would arise when the allowed RfR is set at a too-low level relative to the actual market RfR—as recently demonstrated by sharp UK debt market volatility in the third quarter of 2022—an uncertainty premium adjustment towards the upper end of the distribution is reasonable. We thus apply an uncertainty premium of 25bp in our low case estimate, and 50bp in the high case.

2.5 RfR estimate conclusion

Evidence from academic literature and empirical analysis suggests that there is a positive convenience premium embedded in government bonds, which changes over time. This convenience premium pushes down the yield on government bonds below the level of the 'true' RfR. Therefore, to estimate the RfR using the yields on government bonds, it is necessary to adjust the benchmark yield upwards to account for the convenience premium.

Moreover, the RfR estimate must account for the forward premium, to ensure the allowed RfR accounts for forward-looking rates. Finally, an uncertainty premium adjustment should also be made, in order to reflect the financeability risk should spot rates rise more than what is implied by the current evidence on forward rates.

In the context of the WACC estimate for Sure, we compute the RfR by referring to evidence from ten-year nominal gilts up to the end of October 2022. We take the spot gilt yield of 3.62% as the RfR estimate in both the low and high case WACC scenarios, to adequately reflect recent market evidence of an increase in gilt yields. While yields may change in future, our use of the spot estimate crucially captures the latest market expectations. Moreover, spot yields more closely resemble the cost of new debt currently, which is especially relevant in Sure's context.

We adjust for a convenience premium of 50bp, which is the lower end of the quoted range based on current market data. We also apply a forward premium adjustment of 17bp, and uncertainty premium of 25bp and 50bp in each respective WACC case. We present a summary of our RfR estimates in Table 2.3, along with the basis for each in parentheses.

Table 2.3 Summary of RfR estimates

	Low	High
UK gilt rates	3.62%	3.62%
	(Spot nominal ten-year gilt yield as at 31 October 2022)	(Spot nominal ten-year gilt yield as at 31 October 2022)
Convenience premium	0.50%	0.50%
	(Lower-bound estimate of one-year average spread between ten-year gilts and iBoxx £ Non-Gilt AAA 10–15)	(Lower-bound estimate of one-year average spread between ten-year gilts and iBoxx £ Non-Gilt AAA 10–15)
Forward premium	0.17%	0.17%
	(One-year forward premium)	(One-year forward premium)
Uncertainty premium	0.25%	0.50%
	(From sample of 55 precedent UK regulatory decisions)	(From sample of 55 precedent UK regulatory decisions)
RfR (sum of above parameters)	4.53%	4.78%

Source: Oxera analysis.

3 Total market return

The ERP is a premium above the RfR that investors demand for investing in a market in 'normal' conditions. The ERP is calculated as the difference between total market return (TMR) and the RfR. Regulators in the UK, and the CMA, have tended to take the view that expected real TMR is relatively stable over time, and that changes in the real RfR are largely offset by changes in the ERP.

The TMR can be estimated using a range of different methodologies. In the CMA's PR19 determination, a range of different methodologies are highlighted to estimate the TMR:

- historical ex post: based on the average of observable historical returns;
- historical ex ante: based on the average of adjusted historical returns, where the adjustment accounts for 'unexpected' events that generated a return lower/ higher than the expected return;
- forward-looking: based on investor's expectations of future returns. Different methodologies can be used to estimate this, from survey evidence to dividend discount models (DDMs).

The CMA states that a combination of these should be relied upon in combination with the RfR to derive the ERP. In the next subsections we discuss each of these approaches.

3.1 Ex post TMR

The ex post TMR approach is based on the assumption that the average historical return provides an unbiased and reliable indicator of expected future returns.

This approach is adopted by many regulators in the UK. For instance, Ofcom, Ofwat, Ofgem, and the CAA used this methodology as the primary indicator to estimate the TMR in its last regulatory reviews.

To estimate the TMR using the ex post approach, one needs to average a series of historical returns. The Dimson-Marsh-Staunton (DMS) dataset¹⁹ provides a useful starting point to calculate this historical average. However, as regulators in the UK are interested in real returns, it is necessary to combine the DMS data with a reliable measure of inflation to estimate the real historical returns. In addition to this, one needs to make a choice of which averaging method to use (i.e. geometric or arithmetic).

In the next subsections, we explain how to deflate the nominal return series and how to average the real returns to obtain an unbiased and reliable measure of the TMR.

¹⁹ Dimson, E., Marsh, P., Staunton, M. (2021), 'Credit Suisse Global Investment Returns Yearbook 2021'.

3.1.1 Treatment of inflation

Historical data on market returns is expressed in nominal terms. However, where price controls are set in real terms, the TMR should also be in real terms. While regulators typically require TMR estimations to be in CPI- or CPIH-real terms, we note also that some regulators require the TMR to be estimated in RPI-real terms, e.g. the CAA.

Whichever measure of underlying inflation is used, however, historical returns must be deflated by historical inflation across a sufficiently long time window as to capture the best estimate of real equity market returns through various cycles. This means relying on official statistics on inflation, which in the case of the UK are provided by the Office for National Statistics (ONS).

In previous submissions, we have expressed our concerns with the use of the ONS backcast CPI series as an input to estimating the real CoE allowance, due to issues with the robustness of the series.²⁰

In May 2022, superseding the previous backcast series, the ONS published a new backcast series for the CPI and the CPIH for the period 1950–88, which addressed the most concerning errors found in the previous release. The new CPIH backcast should therefore be used in preference to the old CPI backcast when estimating historical returns in CPIH-real terms. Simultaneously, the historical RPI series remains valid, because it was compiled and published contemporaneously and is therefore not subject to the same estimation uncertainty as a backcast series.

Table 3.1 Impact of new ONS inflation series on real equity returns

	Former CPI series	New CPI series	New CPIH series
1900–2021 arithmetic average inflation	3.98%	3.91%	3.74%
<i>Difference from former CPI series</i>		-0.07%	-0.24%
1900–2021 arithmetic average real equity returns¹	6.85–6.94%	6.91–7.01%	7.09–7.18%
<i>Difference from former CPI series</i>		0.07%	0.24%

Note: The update from the ONS affects only the data points between 1950 and 1988. To cover the pre-1950 period, we use Consumption Expenditure Deflator (CED) data published by the Bank of England in its Millennium database. However, we note that this is an imperfect method as the CED is theoretically and empirically a closer proxy for RPI than CPI. ¹The range in real equity returns is driven by the range of potential values for the 2021 UK equity returns used by DMS. In particular, we have the yearly breakdown of the data used by DMS for the period 1900–2020, but not for 2021. We infer the estimates in the table from the 1900–2020 and 1900–2021 nominal average returns.

Source: Oxera analysis based on ONS and DMS data.

We present the impact of using the new CPIH backcast on the CPIH-real equity return over the period 1900–2021 in Table 3.1. We use UK nominal returns data published by DMS to calculate the CPIH-real

²⁰ The initial release included ex post estimation of CPI and various methodological choices, which upon our investigation suggested that estimates were materially upward-biased. The ONS was unable to locate the information used to construct those estimates, and was unable to replicate them. See Oxera (2020), 'The cost of equity for RIIO-2', prepared for the Energy Networks Association, 4 September. <https://www.northerngasnetworks.co.uk/wp-content/uploads/2020/09/CoE-Oxera.pdf>

returns. As shown, the average CPIH-real equity return over this period is 0.24% higher than the original CPI-real equity return estimate. Using the new (lower) inflation series published by the ONS leads to a higher estimated average real equity return over the period 1900–2021.

3.1.2 Averaging historical returns

There are two different ways to average a series of numbers: to calculate the geometric mean or the arithmetic mean. The geometric mean of any set of numbers is always lower than the arithmetic mean unless all the numbers are equal (in which case the means are the same). For a series of returns, equality between the geometric and arithmetic means would occur only if there is no volatility at all (i.e. if returns are constant). While there is debate about which is the more appropriate averaging method in any given context, the academic literature is broadly supportive of placing more weight on the arithmetic averages for estimating the ERP to use when computing required equity returns for valuation and capital budgeting purposes.

For these reasons, where regulators rely on calculating a geometric average, this should be uplifted to reflect the volatility and serial correlations of returns. This is especially valid where serial correlation is a risk—for example, in illiquid markets where market updating can be gradual. The unbiased estimator of the expected TMR should be derived directly using the arithmetic mean, and uplifting the geometric mean by a factor lower than one half of the variance of annual returns would result in a downwards-biased TMR. Note that this holds irrespective of the holding period that is assumed. Below, we summarise a number of points which support why the arithmetic mean should be used to estimate the expected TMR.

The issues with serial correlation and the correct methodology to average historical returns have been raised previously and were explored at length in the NATS (2020) redetermination and the CMA PR19 and the RIIO-GD2/T2 appeals. Professor Stephen Schaefer's submission to the CMA for the NATS (2020) price control redetermination highlights that the observed relationship between the arithmetic and geometric averages suggests that serial correlation is itself insignificant, or that the impact of serial correlation on the relationship between arithmetic and geometric average returns is insignificant. Professor Schaefer states that:

[...] the difference between the arithmetic and geometric mean return is given by one half of the variance. Bound up in the assumption of normality are further assumptions that both the expected return and the variance of returns are constant over time and that returns are not serially correlated.²¹

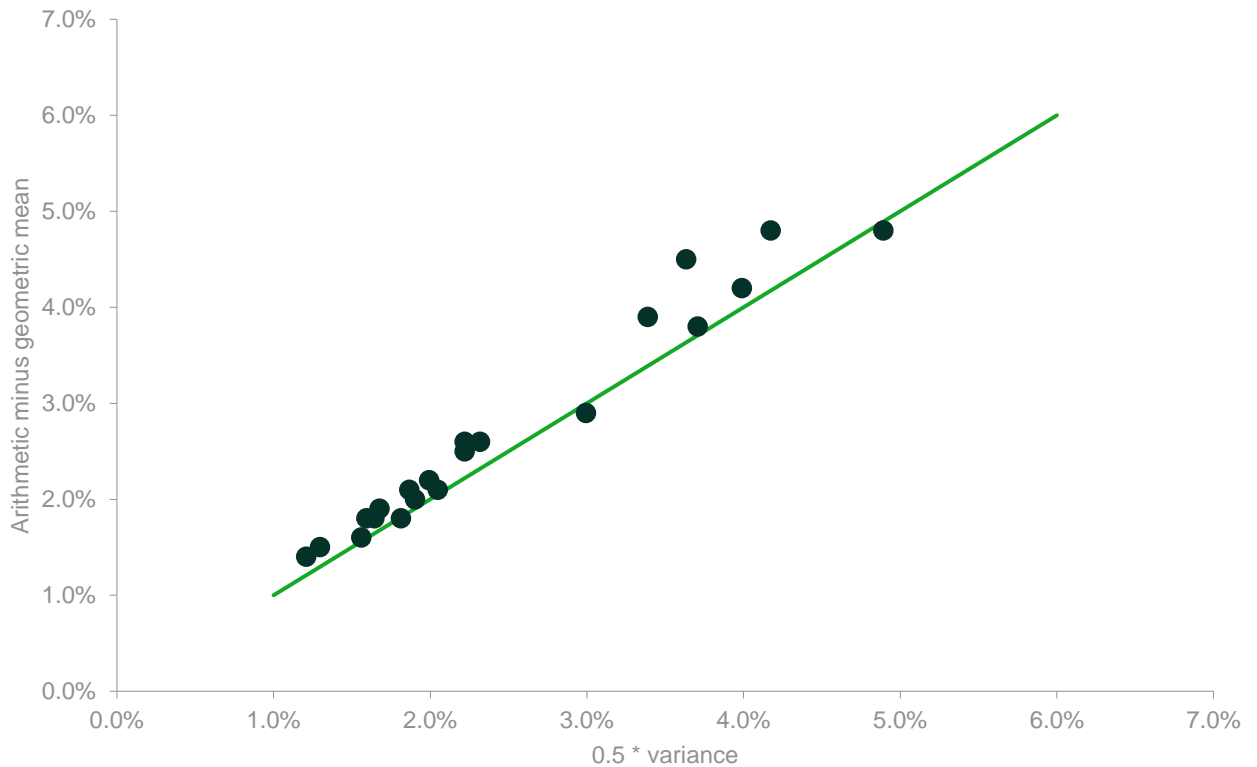
²¹ Appendix of Schaefer, S. (2020), 'Using Average Historical Rates of Return to set Discount Rates', contained within Oxera (2020), 'Deriving unbiased discount rates from historical returns', 14 February, which was submitted by the ENA to the CMA on 14 February 2020. See https://assets.publishing.service.gov.uk/media/5ea1997586650c03234ed1d7/Energy_Networks_Association_.pdf.

Professor Schaefer further shows, based on analysis of the DMS data, that:

[...] despite this, the difference between the arithmetic and geometric means is indeed well approximated in the data by one half the variance.²²

Figure 3.1 below reproduces Professor Schaefer's analysis, which plots the difference between the arithmetic and geometric mean returns in the vertical axis, against the variance of the annual returns divided by two (horizontal axis). The figure shows that the difference between the arithmetic and geometric mean is closely approximated by half of the realised variance.

Figure 3.1 Difference in mean returns plotted against variance



Note: Reproduced from Schaefer, S. (2020).

The implication is that applying the appropriate upward adjustment to the geometric mean of half the variance of annualised returns results in an estimate close to the arithmetic average.

In sum, the empirical evidence does not justify deviating from the arithmetic mean in favour of the geometric. This conclusion is

²² Ibid.

supported by the CMA decision in the PR19 redetermination,²³ where the CMA stated that:²⁴

[...] in the absence of clear modelling of the regulator's decision, the most appropriate estimate to use is the arithmetic mean. [...]

On balance, we consider that using the arithmetic mean is preferable due to its simplicity and transparency, and also given that at the current time, there is no reason to conclude that one perspective, either that of the capital budgeter or of the portfolio investor, is 'correct'. [Emphasis added]

3.2 Ex ante TMR

In the CMA's PR19 decision, it lists the historical ex ante approach as a method to estimate the TMR, by fitting models of stock returns to historical data, in order to delineate ex ante expectations from ex post good or bad fortune.

It is instructive here to clarify the use of the term 'ex ante approach'. An estimate of the TMR today, i.e. the expected future return obtained using either the decomposition methods (or even the simple historical mean return), can be described as 'ex ante' in the sense that the estimate applies to future returns. This should be differentiated against decomposition methods covered below, which instead assess whether the returns that investors were expecting in the past are well approximated by the historical mean.

Specifically, this approach attempts to identify investors' reasonable expectations of returns by making adjustments to the historical series of returns. These adjustments attempt to identify one-off periods of good or bad 'luck', i.e. those that investors might not expect to be repeated in the future.

In the appeals to the CMA PR19 decision, this ex ante approach was discussed further, with two models settled upon to derive the ex ante TMR by way of decomposition: a generalisation of the constant growth model (Fama–French method) and the DMS decomposition method. The former requires an assumption that the market dividend yield (D/P) and/ or the earnings yield (E/P) is stationary. Elsewhere, the DMS decomposition approach involves decomposing the ERP into the mean dividend yield, the growth rate of real dividends, the expansion of the price/dividend ratio, and change in real exchange rate.

The adjustment to the derived TMR then arises from subjective adjustments to the average value of one or more of these components. While not the same, the approach adopted by the Fama–French method has a similar character, in that they decompose total returns into the dividend yield and capital gain.

²³ It is important to note that the redetermination of PR19 is different from that of RIIO-2. In the latter, the CMA found that Ofgem was not wrong in applying the subjective uplift to the geometric mean. However, the legal framework of RIIO-2 requires the appellants to demonstrate that an error was made, whereas the legal framework of PR19 requires the CMA to state which methodology is superior. Hence, we refer to the PR19 redetermination to illustrate the CMA's view on the topic.

²⁴ Competition and Markets Authority (2021), 'Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations – Final report', 17 March, para. 9.329.

In effect, the CMA's PR19 ex ante decomposition approach attempts to substitute actual returns by predicted returns. While it is forward-looking, the sensitivity of input assumptions and degree of subjectivity involved makes it less reliable than the historical average of actual returns.

We thus consider this ex ante (decomposition) approach to be more appropriately labelled as an adjusted ex post approach, since it uses an adjusted historical data series to estimate the TMR. Given that decomposing the TMR (and the ERP) can include many different variables and result in many different forms, it is a subjective exercise that requires one to choose which elements to include in the decomposition, and which to be classified as 'unlikely to be repeatable'. There is no guarantee that a variable which exhibits 'unrepeatable' behaviour when included in the decomposition with another variable, would exhibit the same behaviour in conjunction with a third and different variable.

Therefore, the decomposition approach does not supply any additional information to the ex post approach. Instead, it is its inherent subjectivity which makes the results of this method different from the results of the ex post approach. While in particular periods raw returns may be classified as 'unrepeatable', the ad-hoc subjectivity of the approach would be all too evident. By applying adjustments to components in the decomposition method, the subjectivity may become less obvious, but is however no less inimical.

Considering the subjective nature of the adjustments made to derive this adjusted ex post TMR, we conclude that no weight should thus be placed on this approach in estimating the TMR.

3.3 Forward-looking measures

An alternative to the approaches covered in previous subsections is to rely on forward-looking approaches to provide near term insight into market expectations. Among the sources of evidence for these are DDMs, surveys of market practitioners, and professional forecasts. Note that the CMA has expressed its reservations against forward-looking methods such as survey evidence.²⁵ We consider each of these in turn.

First, DDM estimation is highly dependent on the assumptions underpinning its parameters, especially the long term growth rate. Moreover, the same set of assumptions that is required to estimate the DDM is also required to make adjustments to ex post returns when applying the 'ex ante' method. Therefore, similar to ex ante (decomposition) method critiqued above, DDM estimations are highly sensitive to subjectivity in input parameters, and thus should have comparatively little weight placed on them compared to the ex post TMR approach.

Second, in relation to surveys, we note that they should be interpreted with caution because there is a tendency for respondents to extrapolate from recent realised returns, making the estimates less

²⁵ CMA (2022), 'Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations. Final report', 17 March, para. 9.377-9.378.

forward-looking and prone to be anchored on recent short-term market performance. In addition, the results are based purely on judgement, which may also be influenced by the respondent's own position or biases, reducing its reliability.

Third, many market practitioners' forecasts are similarly based purely on their judgement and are produced with the primary purpose of providing cautious estimates of future returns to their clients. This conservatism in the UK is mainly a function of the regulatory framework—the FCA Conduct of Business Sourcebook—which stipulates the maximum rates of return that financial services companies must use in their calculations when providing retail customers with projections of future benefits.

Based on these collective issues, we consider it appropriate to place less weight on DDM, surveys and investment manager estimates when determining a TMR range and cross-checking the CoE.

3.4 TMR estimate conclusion

We have explained that when estimating the (real) allowed TMR using the ex post approach, a reliable inflation measure should be used to deflate historical returns. The new CPIH backcast should be used instead of the old CPI backcast when estimating the TMR in CPIH-real terms. There is also merit in considering RPI-deflated estimates given that the RPI series was compiled and published contemporaneously. Moreover, the arithmetic average should be used to estimate the expected TMR, using a series of historical annual returns.

In sum, a reasonable approach to estimate the TMR is the ex post approach, as alternative approaches suffer from material input parameter sensitivity and user subjectivity, and thus should be given comparatively less weight relative to the ex post approach. Based on the recommended ex post methodology to estimating TMR by applying the arithmetic average and reflecting the latest ONS CPIH backcast data, we present in Table 3.2 the CPIH-real and nominal TMR estimates with each of the low and high case scenarios reflecting the respective lower and upper end of the quoted range. The nominal TMR is calculated by using the Fisher equation to combine the CPIH-real TMR with long-term forecast inflation.

Table 3.2 TMR range estimate in CPIH-real terms

	Low	High
TMR based on 1900–2021 arithmetic average real equity returns, CPIH-real based on ONS data	7.09%	7.18%
TMR based on 1900–2021 arithmetic average real equity returns, nominal	9.23%	9.32%

Source: Oxera analysis based on ONS inflation data.

4 Beta

The equity beta in the CAPM is a measure of how risky an equity investment is compared with the average of the market portfolio. The risk arising because of a company's general exposure to the market is known as 'systematic risk'. An equity beta of one means that the stock return moves in line with the average market return, while an equity beta between zero and one means that it tends to move in the same direction as the market return, but to a lesser degree (or greater, for a beta above one).

While the beta is a forward-looking concept, in practice its estimation is based on historical market data, i.e. actual share returns and market returns data.

For a company listed on the stock market, estimating the equity beta using simple regression analysis is straightforward since all required market data is publicly available. However, for companies that are not listed, listed comparator companies need to be identified that can be used as a proxy. Observable equity betas for these comparators need to be adjusted to the level of gearing for the company for which the CoE is being estimated, in order to be comparable (i.e. de-levering and re-levering needs to be consistently undertaken with reference to the capital structure of the target company).

In the next subsection we discuss the process of estimation of raw equity betas and necessary inputs, including the specification of the notional company, the need to adjust for varying gearing levels to ensure sufficient comparability, and the debt beta.

4.1 Specifying the comparator set and data analysis

The current regulatory practice in the UK is to estimate raw betas of a set of 'pure play' listed companies to serve as a comparator set. Where such a list of comparator companies is unavailable, some regulatory (and analytical) judgement is required to ensure sufficient comparability. The raw equity beta of this comparator set should then be estimated via standard OLS regression, using daily data for liquid stocks, with reference to the most diversified available local index²⁶ in the relevant currency, and across an appropriate estimation window (e.g. two, five, and ten years).

In then estimating the CoE of the target company, we reiterate the importance of correct specification, when undertaking de-levering and re-levering of raw comparator betas. This ensures like-for-like comparisons, i.e. it should not be assumed that the gearing of comparator firms is the same, or that raw equity betas are directly comparable across companies. With regards to the selection of comparator companies for a specific activity, one needs to consider the following:

²⁶ In practice, this will be a national or applicable regional index, such as FTSE All Share in the UK, or the Eurostoxx for EUR-denominated listed equities

- **The distribution of revenues per activity:** Revenues should be earned in relation to the activity of interest (i.e. the regulated activity in the case of WACC-setting for regulated networks).
- **The geographical distribution of revenues:** the majority of the revenues should be in similar economies with comparable regulatory systems. For example, for telecommunications networks in the UK, the sample of comparators should include companies that generate their revenues from telecommunications networks in the UK and in mainland Europe where regulatory regimes are comparable.

In the absence of companies that fit these criteria, the sample of comparators can be expanded to other jurisdictions or industries. A degree of judgement is required in assessing how cross-industry and cross-jurisdiction differences need to be accounted for.

Another important consideration in selecting a sample of comparators is data availability and quality. Specifically, it is important to ensure that the comparators used are sufficiently liquid to allow a robust estimation of the beta. Illiquid stocks may take more than one period to reflect market information, which leads to serial correlation of returns and a downward-biased estimate of the beta. In order to gauge liquidity, the bid—ask spread, turnover volume, and free float size should be considered (we return to this in the following subsection). We also note that empirical tests suggest that the CAPM tends to under-predict the CoE for firms with a beta below one. We explain that in the box below.



Box 4.1 Accuracy of the standard CAPM

Asness et al (2013) and Fama and French (2015) show that the standard CAPM model has many 'anomalies' which suggest that the accuracy of the CAPM model decreases the further away the equity beta is from unity.

The 'low beta anomaly' was empirically observed in a dataset of US firms, where it was demonstrated that stocks with a low beta (such as utility companies) consistently outperformed high-beta stocks over the period from January 1968 to December 2008. This runs counter to the CAPM prediction that there is a linear relationship between beta and returns. As the comparator companies used to determine the asset beta of regulated companies in the UK typically have equity betas lower than one when measured at market levels of gearing, adopting an asset beta estimate in the top half of the estimated asset beta range would provide some offset to this downward bias.

Source: Asness, C., Moskowitz, T.J. and Pedersen, L.H. (2013), 'Value and momentum everywhere', *The Journal of Finance*, LXVIII: 3; Fama, E. and French, K. (2015), 'Dissecting Anomalies with a Five-Factor Model', *The Review of Financial Studies*, 29:1, 1 January 2016, pp. 69–103.

With regards to data frequency and estimation window, we note that the statistical robustness of the beta estimates is directly

proportional to the number of observations used in the regression analysis. This implies that greater data frequency (i.e. daily data) and a longer estimation window is preferable as it leads to a more robust estimation. However, where systematic risk is changing over time, appropriate selection of the estimation window is essential in seeking to assess the current (or 'forward-looking') market risk exposure of a company.

This means also appropriately assessing whether the risk exposure of a sector or a company has changed over time. For example, there could be changes in the business mix through acquisitions and disposals, or changes in market perceptions of the risk of certain business activities. There is also merit in assessing whether a dataset presents clear evidence of structural breaks that could affect the estimation of the beta.

For these reasons, a 'one-size-fits-all' approach may not be optimal in all circumstances, and a degree of judgement is required. However, this does not mean that the regulatory approach should be entirely bespoke or piecemeal—we consider that regulators should be consistent over time by taking a 'through the cycle' view and there should be a high threshold for methodology changes.

4.1.1 Comparator selection

To identify a sample set of representative comparators, we took the following steps:

- We begin with the sample of 15 comparators identified by the Body of European Regulators for Electronic Communications (BEREC), and expand this by adding a number of other relevant telecommunications companies operating in the European market;
- We filtered the comparator list to only include companies which have both an investment grade credit rating (of at least BBB- by S&P), and have revenues predominantly concentrated in Europe;
- Finally, we further filtered the comparators to ensure our sample excludes telecommunications operators without fixed line networks.

Table 4.1 shows the resulting comparator set:

Table 4.1 Set of comparable companies based on rating and geographical filtering

Company name	Lowest rating
BT Group	BBB
Deutsche Telekom AG	BBB
Elisa Oyj	BBB+
Koninklijke KPN N.V.	BBB
Orange S.A.	BBB+
Proximus S.A.	A-
SwissCom	A
Telefónica S.A.	BBB-
Telia Company AB	BBB+
NOS	BBB-
Telecom Austria AG	BBB+
Hellenic Telecommunications Organisation	BBB
Tele2	BBB
Vodafone	BBB

Source: Oxera analysis based on Bloomberg data.

Note: the table reports the lowest credit rating from S&P, Fitch or Moody's, where available. The lowest credit rating for Telecom Austria AG is determined by Moody's at Baa1 (equivalent to BBB+ in S&P and Fitch rating scales).

We excluded the following companies identified by BEREC for the following reasons:

- **DIGI Communications N.V.**—excluded as it does not have an investment grade rating (the company is rated BB- by S&P).
- **Telecom Italia**—excluded as it does not have an investment grade rating (the company is rated B+ by S&P).
- **Telenet Group Holding N.V.**—excluded as it does not have an investment grade rating (the company is rated BB- by S&P).
- **Telenor**—excluded because its revenues are concentrated in the Asia Pacific market.

We also add the following three companies to our sample, on the grounds that these are also fixed line European telecoms operators with an investment grade credit rating:

- **BT Group**;
- **SwissCom**; and
- **Hellenic Telecommunications Organisation**.

When estimating beta, it is also important to ensure that the stocks of the companies selected are sufficiently liquid. As liquidity can be a difficult concept to define and is subject to interpretation, it is useful to look at multiple measures. Therefore, in our analysis we consider the following liquidity measures:

- **The bid–ask spread as a percentage of the closing price**—the difference between the lowest price at which an asset is offered for sale in a market and the highest price that is offered for the

purchase of the asset. The lower the bid–ask spread, the more liquid the stock.

- **Share turnover**—a measure of stock liquidity, calculated by dividing the total value of shares traded over a period of time by the average market capitalisation of the stock for the period. The higher the share turnover, the more liquid the stock.
- **Free float as a percentage of shares outstanding**—the portion of shares that can be traded on the stock markets. Low values of the free float indicate a less liquid stock.

The results of our liquidity analysis for the companies in our comparator set is presented in Table 4.2:

Table 4.2 Liquidity analysis for the comparator set

Company name	Free-float	Bid ask spread as a % of closing price	Share turnover
BT Group	70.56%	0.07%	19.70%
Deutsche Telekom AG	65.03%	0.03%	0.20%
Elisa Oyj	87.37%	0.07%	0.17%
Hellenic Telecommunications Organisation	46.05%	0.14%	0.11%
Koninklijke KPN N.V.	77.89%	0.05%	0.32%
Orange S.A.	75.27%	0.03%	0.29%
Proximus S.A.	41.97%	0.08%	0.25%
SwissCom	49.02%	0.05%	0.22%
Telefónica S.A.	88.13%	0.04%	0.33%
NOS	39.51%	0.18%	0.14%
Telecom Austria AG	20.50%	0.38%	0.01%
Telia Company AB	53.38%	0.04%	0.28%
Tele2	73.78%	0.06%	0.33%
Vodafone	99.93%	0.03%	25.76%
Median	67.79%	0.05%	0.27%

Note: The red highlight indicates comparators which excluded from the final comparator set due to illiquidity. The cut-off date is 31 October 2022. The metrics in the table refers to the 1-year average from 31 October 2022.

Source: Oxera analysis based on Bloomberg data.

Based on the liquidity analysis above, we exclude three companies from our sample: Telecom Austria AG, NOS, and Hellenic Telecommunications Organisation, on the grounds of having relatively illiquid stocks. This leaves us with a comparator set of 11 companies.

4.2 De-levering and re-levering beta

Upon estimating comparators' raw equity betas, these should then be de-levered to produce each company's (unlevered) asset beta, which according to the MM theorem (Proposition I), is constant irrespective of the company's level of gearing.²⁷ This thus allows for comparison

²⁷ Proposition I states that when there are no transaction costs and no difference in the cost of borrowing across agents, a firm's cost of capital is constant regardless of the firm's capital structure. The theorem also applies to the asset beta—if a firm's weighted average cost of capital (WACC) is constant, the asset beta must also be constant.

across companies to be unaffected by their respective financial capital structure choices. This de-levering is performed by applying the Harris-Pringle formula,²⁸ and incorporating the respective company's debt beta and gearing.

To ensure robust estimation of the debt beta, we demonstrated in a previous Oxera report for RIIO-2 that OLS regression (both direct and indirect) and structural models are reasonable approaches to adopt, ahead of the spread decomposition method.²⁹ We show that the indirect regression-based approach from Schaefer and Strebulaev (2008)³⁰ supported a debt beta assumption of no higher than 0.05, taking into account similar comparator credit risk profiles.³¹ For comparison, in previous regulatory precedents, regulators have assumed debt betas typically ranging from 0 to 0.15.³²

Once the asset beta is estimated, this can then be re-levered using the notional company's gearing and debt beta, to arrive at the equity beta of the notional company for the determination of the regulatory package. The results of these computations for the comparator set is presented in Table 4.3.

Table 4.3 Summary of equity and asset betas for the comparator group

Company name	Equity beta	Gearing level	Asset beta
BT Group	0.94	47.71%	0.52
Deutsche Telekom AG	0.72	54.50%	0.35
Elisa Oyj	0.39	13.66%	0.35
Koninklijke KPN N.V.	0.54	37.03%	0.36
Orange S.A.	0.56	46.90%	0.32
Proximus S.A.	0.55	27.41%	0.41
SwissCom	0.58	24.72%	0.45
Telefónica S.A.	0.84	61.56%	0.35
Telia Company AB	0.57	34.67%	0.39
Tele2	0.54	23.78%	0.42
Vodafone	0.91	52.94%	0.46
Average	0.65	38.63%	0.40

Note: The analysis cut-off date is 31 October 2022. Equity betas are calculated with 5-year windows. The gearing level is calculated using the same 5-year window. Asset betas are estimated using the Harris-Pringle formula and 0.05 debt beta.

²⁸ This formula states that the asset beta (also unlevered beta) of a company is equal to the weighted average of its equity beta (also levered beta) and debt beta. This is reflected in the following equation:

$$\beta_a = \beta_e \cdot (1 - g) + \beta_d \cdot g$$

Where g represents the gearing ratio defined as net debt divided by the sum of net debt and equity.

²⁹ Oxera (2020), 'The cost of equity for RIIO-2', 4 September, <https://www.northerngasnetworks.co.uk/wp-content/uploads/2020/09/CoE-Oxera.pdf>.

³⁰ Schaefer, S. M. and Strebulaev, I. A. (2008), 'Structural models of credit risk are useful: Evidence from hedge ratios on corporate bonds', *Journal of Financial Economics*, 90:1, pp. 1–19.

³¹ Oxera (2020), 'The cost of equity for RIIO-2', 4 September, <https://www.northerngasnetworks.co.uk/wp-content/uploads/2020/09/CoE-Oxera.pdf>.

³² In our contemporaneous estimations, we apply a debt beta of 0.05, to improve comparability with previous regulatory precedents, and which is consistent with evidence on the appropriate level of the debt beta for regulated UK energy and water networks.

4.2.1 Gearing and the notional company

Determination of the gearing parameter is central to correctly estimating beta, return components of the WACC, and ultimately allowed revenues and financeability.

This requires the assessment of a notional company capital structure—regulators typically set this based on an average 'as-efficient' company. This allows regulators to target a credit rating, by setting allowed revenues to meet select financeability criteria. That said, the level of gearing of the notional company should be informed by observed market evidence of actual gearing ratios—the 'as-efficient' company assessment should be informed by the gearing levels of companies operating in comparable sectors, economies, and countries. Specifically, there are various sources of evidence which may be relied upon:

- Actual observed gearing of the regulated entity
- Observed gearing of comparators—this set may be identical to that used in determining the beta
- Guidance from or ranges used by credit ratings agencies
- Regulatory precedent—for example, notional gearing levels adopted in previous determinations, or by regulators in other comparable sectors

It is instructive to note that the notional capital structure is not a prescription—indeed, it is up to regulated companies to determine their optimal capital structure. In an Oxera report discussing the capital structure of UK water companies,³³ we investigated factors affecting the capital structure decision. These factors can be broadly categorised as tax effects, agency and informational issues, risk redistribution, and risk reduction.

Overall, based on the evidence including academic literature, we found that there are many parameters driving managers' financing decisions, and that a firm's capital structure will depend on managerial choice rather than a theoretical optimum-gearing level defined ex ante. Echoing Brealey, Myers and Allen,³⁴ we concluded that gearing is derived from and reflects, rather than determines, the underlying risks and performance of a firm.³⁵

In sum, the optimal level of gearing of a regulated firm should ultimately be left for managers and investors to decide, while the regulatory gearing assumption can be informed by actual gearing ratios of the company, its comparators, relevant credit rating guidance, and regulatory industry precedent.

³³ Oxera (2002), 'The capital structure of water companies', October, <https://www.oxera.com/wp-content/uploads/2018/03/Ofwat-capital-structure-of-Water-Companies.pdf>.

³⁴ Brealey, R.A., Myers S.C. and Allen F. (2009), *Principles of Corporate Finance*, Chapter 18, How Much Should a Corporation Borrow?, Tenth edition, Section 4.

³⁵ Oxera (2002), 'The capital structure of water companies', October, <https://www.oxera.com/wp-content/uploads/2018/03/Ofwat-capital-structure-of-Water-Companies.pdf>.

In Sure's context, it is currently debt-free, and in a net cash position. However, in view of its £37.5m investment to execute on the Guernsey FTTP plan (Sure is currently in year one of its five-year plan to 2026), it expects to incur debt financing. Effectively, this means that parameters used in estimating its WACC should reflect the cost of new debt only, i.e. cost of financing raised currently, instead of considering also the cost of embedded debt.

For Sure's WACC estimate, we adopt a gearing of 40% in both the low and high case WACC, rounded from our analysis of the comparator set's five-year average of gearing (39%). Note that this is relied upon notwithstanding Sure's current debt-free financial position, in order to reflect its near-term debt-raising plans. This estimate is broadly consistent with recent regulatory precedents—specifically, the notional gearing estimate of 39% in the Isle of Man for telecommunications providers³⁶, and the forward-looking gearing estimate of 45% for BT group by Ofcom.³⁷

4.3 Beta estimate conclusion

Accurate determination of the asset beta and its constituent parameters is imperative in setting the appropriate allowed return. We show that in estimating the equity beta, the comparator set should meet several appropriateness and data quality requirements, with application of well-justified analytical judgement where necessary. In the context of estimating the beta of regulated utilities which typically present an equity beta lower than one, empirical tests find that the CAPM tends to under-predict the CoE and therefore it is recommended to choose a point estimate at the top of the range.

In addition to this, we detail the de-levering and re-levering process in estimating beta in order to account for varying levels of gearing across comparators. We reiterate that estimation of the debt beta should be based on regressions and structural models, and according to our evidence around 0.05 is an appropriate level of the debt beta for regulated UK networks.

We also address the importance of gearing, and highlight that making assumptions about a notionally-efficient financing structure should be informed by market evidence on actual gearing ratios.

For Sure's WACC estimate, we adopt a gearing of 40% in both the low and high case WACC, rounded from our analysis of the comparator set's five-year average of gearing (39%).

We adopt the comparator-implied asset beta of each of the averages of the first and third quartiles in each of our low and high case, and derive a re-levered equity beta for Sure of 0.53 in the low case WACC, and 0.76 in the high case. Our results are represented in Table 4.4.

³⁶ CURA (2022), 'Telecoms WACC—Response to consultation', 6 October, para. 2.46.

³⁷ Ofcom (2021), 'Promoting investment and competition in fibre networks: Wholesale Fixed Telecoms Market Review 2021—2026, Annexes 1—26', 18 March, para. A20.138.

Table 4.4 Estimate of asset, debt and re-levered equity beta

	Low	High
Asset beta	0.34	0.47
	(Average of first quartile comparator group asset beta)	(Average of third quartile comparator group asset beta)
Debt beta		0.05
Gearing		40%
Equity beta	0.53	0.76

Source: Oxera analysis.

5 Cost of debt

Estimation of the regulatory allowed CoD in practice is typically performed by referring to two main forms of data sources:

- **Market benchmark CoD data:** estimation by referring to yields of comparable market-listed and traded debt instruments, with similar credit ratings, tenors, and debt structure.
- **Actual CoD data:** estimation with specific reference to sector- or company-specific existing fixed-rate debt obligations .

To incorporate efficiency incentives, regulators may aim to set a notional CoD which reflects the credit rating of an efficiently-financed firm. Note however that this should remain within consideration of the discussion in Section 4.2, i.e. where the CoD is sufficiently based on market evidence, and is not prescriptive.

Furthermore, estimating the cost of debt can be based on either historical costs of debt, or on a forward-looking basis. The former prioritises cost recovery, where regulators determine a CoD level that allows for recovery of efficiently-incurred debt. Instead of using multi-year historical averages however, the CoD can be estimated based on current market rates. This would be more consistent with the forward-looking Bottom-Up Long-Run Incremental Cost (BU-LRIC) model. Alternatively, a combination of both these approaches may be used, where the cost of existing (embedded) debt and new debt is estimated separately, to reflect refinancing needs throughout the regulatory cycle.

5.1 Market-implied analysis based on the comparator set

Based on the selected comparator set detailed in Section 4.1, there are currently 191 active bonds—Table 5.1 summarises the average maturity of these as of the date of issuance, which based on the cut-off date of 31 October 2022 is around 14 years.

Table 5.1 Average maturity of bonds issued by comparator set, in years

	Observations	Mean	Standard deviation	Minimum	Maximum
Maturity	191	13.88	12.99	0.25	61.29

Source: Oxera analysis based on Bloomberg data. The cut-off date is 31 October 2022.

We also assess the credit ratings of these bonds, and present our results in Table 5.2. Of the 191 observations in our sample, 103 are rated by Fitch Ratings. We thus rely on the credit ratings of these bonds according to Fitch Ratings.

Table 5.2 Credit ratings of bonds issued by comparator set

	Frequency (number of bonds)	Percentage
A	18	17.48%
A-	7	6.80%
BBB+	49	47.57%
BBB	22	21.36%
BBB-	4	3.88%
BB+	3	2.91%
Total	103	100%

Source: Oxera analysis based on Bloomberg data. The cut-off date is 31 October 2022.

Relying on the comparator set average maturity of 14 years and the evidence that the majority of the issued bonds are in the BBB rating category, we thus opt to use the iBoxx £ Non-financials BBB 10+ index as the benchmark or proxy for an appropriate allowed CoD estimation for Sure.

The estimation of the CoD by referring to the yields of the iBoxx index should also include adjustments to reflect the various costs of issuance, and other adjustments similar to those we made in estimating the RfR, namely the forward and uncertainty premiums. We investigate this in the following subsections.

5.2 Additional costs of borrowing and other adjustments

In estimating the allowed annual CoD, a regulatory price control should also include an allowance for additional costs of borrowing, to ensure that regulated networks are able to recover outlays. Reflected as an issuance premium adjustment to the CoD, these additional costs relate to direct transaction costs incurred in the issuance of its debt, and indirect factors which drive increases in demanded return by debt investors—these include the new issue premium as well as small issue and infrequent issuer (also referred to as cost of carry) premiums.

To estimate this issuance premium, we refer to regulatory precedents in the Isle of Man and the UK and opt to take the midpoint estimate between the two. In assessing the WACC for telecommunications networks in the Isle of Man, the Communications and Utilities Regulatory Authority (CURA) in its consultation response included a 50bp uplift to the allowed CoD, to reflect arrangement and other fees when raising finance.³⁸ Elsewhere, Ofgem in its RIIO-ED2 determinations assessed the additional cost of borrowing as being 31bp³⁹—this is detailed in Table 5.3.

³⁸ CURA (2022), 'Telecoms WACC—Response to consultation', October, paras. 2.18, 2.22.

³⁹ Ofgem (2022), 'RIIO-ED2 Draft Determinations—Finance Annex', June, para. 2.19.

Table 5.3 Ofgem's RIIO-ED2 estimate of additional costs of borrowing

	Ofgem estimate
Transaction costs	0.06%
Liquidity/ revolving credit facility costs	0.04%
Cost of carry	0.10%
CPIH basis risk mitigation	0.05%
Infrequent issuer uplift	0.06%
Total	0.31%

Source: Oxera analysis based on data from Ofgem (2022), 'RIIO-ED2 Draft Determinations—Finance Annex', June.

With specific reference to the Ofgem estimation, in Sure's context we opt to remove the allowance for CPIH basis risk mitigation, given that this relates to index-linked embedded debt, which Sure does not currently have. Therefore, for the purposes of estimating the issuance premium for Sure, our assessment based on the Ofgem precedent is for a premium of 26bp.

Taking the midpoint of the Isle of Man allowance of 50bp and Ofgem regulatory precedents of 26bp identified above, we set the issuance premium to Sure's CoD as 38bp.

5.3 Forward premium

Similar to our estimation of the RfR in Section 2.3, we reflect a forward premium of 17bp to account for the expected movement in future interest rates.

5.4 Uncertainty premium

Similar to our estimation of the RfR in Section 2.4, we reflect an uncertainty premium of 25bp and 50bp in each of the low and high WACC cases to account for the risk that rates rise faster over the future price control period than is currently suggested by analysis of forward rates.

5.5 CoD estimate conclusion

Using the appropriately filtered comparator set, we assessed the most representative criteria for the selection of the CoD proxy. In view of the comparator average time to maturity of 14 years and credit rating of BBB, we have used the iBoxx £ Non-financials BBB 10+ index as the CoD proxy for Sure. Referring to the average yields of the index, we select the spot and one-month trailing average, to reflect recent market pricing of debt with a similar expected risk profile, relative to Sure.

We then estimate and impute the issuance premium, as derived from the midpoint of the identified UK and Isle of Man regulatory precedents. Our summary estimates of the CoD is presented in Table 5.4.

Table 5.4 Estimate of cost of debt including the issuance premium

	Low	High
iBoxx £ Non-financials BBB 10+ index yield	6.05%	6.05%
	(Spot yield as at 31 October 2022)	(Spot yield as at 31 October 2022)
Issuance premium		0.38%
Forward premium		0.17%
Uncertainty premium	0.25%	0.50%
CoD (sum of above parameters)	6.85%	7.10%

6 CAPM WACC point estimate and adjustments

This section presents our final estimated parameters drawn from prior sections, which are used as inputs into the CAPM to derive an estimate of the regulatory allowed WACC range for Sure. We also assess the validity of the 'country'-specific risk premium, and FTTH premium. While we do not enumerate the FTTH premium, we address the conceptual and economic background, along with methodology for reflecting this premium in the WACC.

6.1 WACC point estimate summary and considerations

Following our estimated WACC parameters in Sections 2 through 5, we present a summary of our CAPM-estimated WACC in Table 6.1. Our estimate of the CoE for Sure includes an uplift to reflect a Guernsey-specific risk premium, which we investigate in the subsection below.

Table 6.1 WACC analysis summary

Parameter		Low	High
Gilt yields (nominal)	[A]	3.62%	3.62%
Convenience premium	[B]	0.50%	0.50%
Uncertainty premium	[C]	0.25%	0.50%
Forward premium	[D]	0.17%	0.17%
RfR (nominal)	[E]=[A]+[B]+[C]+[D]	4.53%	4.78%
Equity beta	[F]	0.53	0.76
TMR (nominal)	[G]	9.23%	9.32%
ERP (nominal)	[H]=[G]-[E]	4.70%	4.54%
CoE (nominal)	[I]=[E]+[F]*[H]	7.03%	8.22%
Guernsey risk premium	[J]	0.85%	0.85%
Adjusted vanilla CoE (nominal)	[K]=[I]+[J]	7.88%	9.06%
Tax rate	[L]	20%	20%
Adjusted pre-tax CoE (nominal)	[M]=[K]/(1-[L])	9.85%	11.33%
iBoxx bond yields	[N]	6.05%	6.05%
Borrowing costs	[O]	0.38%	0.38%
Forward premium	[P]	0.17%	0.17%
Uncertainty premium	[Q]	0.25%	0.50%
CoD pre-tax (nominal)	[R]=[N]+[O]+[P]+[Q]	6.85%	7.10%
Gearing	[S]	40%	40%
WACC, vanilla (nominal)	[T]=[S]*[R]+[1-S]*[K]	7.47%	8.28%
WACC, pre-tax (nominal)	[U]=[S]*[R]+[1-S]*[M]	8.65%	9.64%
WACC, vanilla midpoint (nominal)		7.87%	
WACC, pre-tax midpoint (nominal)		9.14%	

Source: Oxera analysis.

Note that as there is currently no regulatory guidance as to the treatment of inflation, we have opted to present our estimates in nominal terms. Additionally, we present the midpoint of our nominal WACC range, in both vanilla and pre-tax formats. The precise choice

of point estimate will depend on broader considerations including the balance of risks in the regulatory package, and the risk of setting the allowed return below the true, and unknown, cost of capital.

Specifically, the precise choice of point estimate should consider the uncertainty of the estimate and the consequences of under- or over-estimating the cost of capital. These consequences are likely to be asymmetric, with underestimation leading to costs to social welfare from underinvestment and overestimation leading to relatively smaller costs from overinvestment and overcharging. In practice, regulators have recognised this asymmetry by choosing point estimates that are above the midpoint of the estimated WACC range. This provides 'insurance' against the risk of underinvestment, which is particularly relevant in the case of networks that provide essential services, since underinvestment can have wider effects on users, including network failures, lack of innovation or deployment of new technologies, and lack of supply to new areas. Indeed, this was addressed by the CMA in its 2007 airport review:

If the WACC is set too high then the airports' shareholders will be over-rewarded and customers will pay more than they should. However, we consider it a necessary cost to airport users of ensuring that there are sufficient incentives for BAA to invest, because if the WACC is set too low, there may be underinvestment from BAA or potentially costly financial distress. [...] More importantly, we note that it is difficult for a regulator to reduce the risks of underinvestment within a regulatory period. Taking these factors into account, **we concluded that the allowed WACC should be set close to the top of our range.**⁴⁰

The CMA also echoed this view in its PR19 review:

There are well-established arguments that underinvestment caused by a cost of capital being set too low damages the overall welfare of consumers (and potentially the wider economy) materially more than the welfare lost through bills that may be slightly too high.⁴¹

Therefore, as the cost of underinvestment arising from a too-low WACC is greater than the costs of overinvestment or potential overcharging, regulators should 'aim up' by selecting a point estimate from the higher end of the WACC range.

6.2 Guernsey-specific 'country' risk premium

A 'country' risk premium should be applied to the CoE to reflect the premium that an investor requires to invest in a company located in Guernsey compared to an identical company located in a country perceived by the investor to be more 'safe', and/ or less costly to invest in. This risk premium thus compensates investors for factors such as an increase in the volatility of returns, an increase in downside risk, and additional transaction costs.

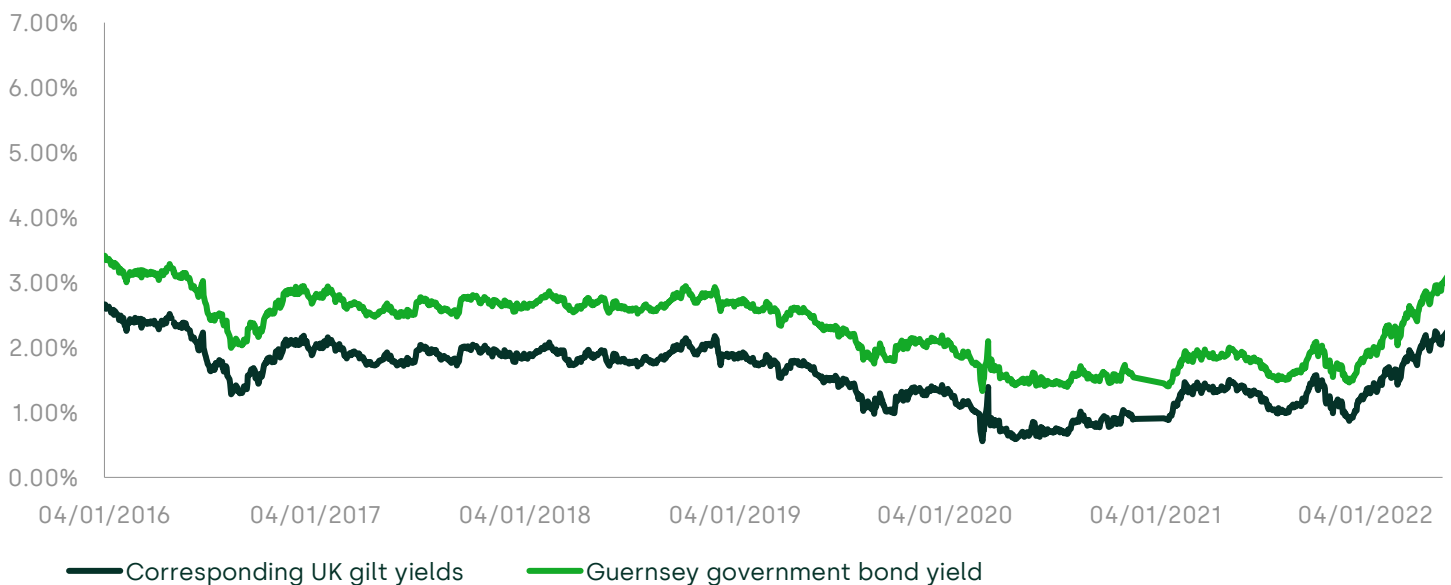
⁴⁰ Competition and Markets Authority (2007), 'BAA Ltd: A report on the economic regulation of the London airports companies (Heathrow Airport Ltd and Gatwick Airport Ltd)', 28 September, paras. 4.106–8.

⁴¹ Competition and Markets Authority (2021), 'Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations – Final report', 17 March, para. 9.667.

There is no single widely accepted methodology for quantifying a 'country' risk premium. A simple and pragmatic approach is to assume the extra returns required by the investors to be proxied by the additional debt premium required by investors to hold bonds in Guernsey. This can be quantified by calculating the spread on the Guernsey government issued bond relative to UK Government bond yields of corresponding maturity.

Figure 6.1 below shows the relative yields of the Guernsey government bond issued in December 2014 relative to UK nominal gilts with corresponding maturities over time. It is clear that market prices reflect a premium for the Guernsey issued bond. Taking the one month average spread over UK nominal gilts, the Guernsey-specific premium is equal to 85bp.

Figure 6.1 Guernsey government bond yield and UK government bond yields of corresponding maturities, nominal



Source: Oxera analysis based on Bloomberg and Bank of England data.

6.3 Fibre to the home (FTTH) premium

In this section, we consider whether it would be appropriate for an additional allowance to be made to the WACC estimated in this report for the 'FTTH premium'. Whilst quantifying this premium is outside the scope of this report, we find that—consistent with regulatory best practice—such an allowance should be included in the final WACC determined by the GCRA. The rest of this section proceeds as follows:

- Section 6.3.1 outlines the economic rationale for a regulated business being permitted to earn a return above its WACC in certain circumstances;
- Section 6.3.2 outlines the 'fair bet' framework that regulators should apply in making an assessment of how large such an allowance should be;
- Section 6.3.3 considers whether it is likely to be appropriate for Sure to be permitted such an allowance in the context of its FTTH investment;

- Section 6.3.4 concludes by setting out two channels by which it is possible to facilitate such an additional allowance.
- Section 6.3.5 recaps our findings on the FTTH premium.

6.3.1 The rationale for allowing a regulated firm to earn a return above the WACC

When investing in telecoms networks, investors will be exposed to two broad categories of risk:

- **systematic risks**, which are inherent to the entire market, and not a particular firm or industry. This is captured in the asset beta, as discussed in Section 4;
- **non-systematic risks**, which are risks relating to a specific company or industry which create uncertainty about future cash flows. For instance, risks surrounding take-up, pricing levels and costs.

Whilst the CAPM framework used to estimate the WACC does contain an allowance for systematic risks, **it does not include an allowance for non-systematic risks**. Therefore, if a fibre roll-out is associated with such risks, it would follow that in order for investors to rationally expect a normal return, some additional allowance must be made for them. Failing to do so could result in impediments to investment.

Ordinarily, it is assumed by regulators that investors are able to diversify non-systematic risks across their portfolio. This is based on an assumption that for each given investment, as well as facing the potential downside risk (for instance, poor uptake of a product or service), they would be able to enjoy any potential upside which is realised (for instance, strong demand resulting in higher pricing). **However, this upside is typically not able to be enjoyed by an SMP operator operating in a framework of price regulation.** Therefore, faced with exposure to downside risk but no corresponding upside risk, investors face sub-normal expected returns, absent an allowance being made for this.

6.3.2 The 'fair bet' framework used to assess such a premium

A 'fair bet' is one where the expected outcome is zero. This does not mean that one individual making a one-off bet will be guaranteed to neither gain nor lose; however it does imply that over a sufficiently large sample of numerous bets, the **average** return would be nil.

When considering whether to proceed with an investment in a fibre network, an investor will make an assessment of the **expected return** this provides to them. This expected return will be assessed based on the range of all possible outcomes: from the most favourable possible (for instance, where costs fall below and revenues above expectations) to the least (where the opposite applies). By quantifying the pay-off from each possible outcome, and using a probability of each outcome occurring to weight these pay-offs, the investor can arrive at an estimate of the expected return.

The investor will then only proceed with such an investment if the expected return is greater than or equal to their cost of capital. If an investor finds that the potential investment exposes them to potential losses arising from bad outcomes, whilst—due to price regulation—not

allowing them to enjoy higher profits in the event of a good outcome, the investor will form the view that the expected outcome is negative, and so not proceed. A method to remedy this is to allow an investor to earn an additional return when the outcome of the investment turns out to be favourable, in order to restore a positive expected return.⁴²

6.3.3 Is a risk premium applicable in the context of Sure's FTTH investment?

The European Commission's guidance on how regulators should approach the financing of fibre networks makes clear that regulators should include an allowance for a risk premium, where investment risk does exist.⁴³ The Commission outlines five possible drivers of such risk, which are explained in Table 7.1 below:

Table 6.2 Relevant indicators for the potential inclusion of a FTTH premium

Non-systematic risk	Qualitative assessment
Demand uncertainty	The risk that demand at either the retail or wholesale level will fall below what is expected, resulting in lower volumes and/or prices being realised.
Cost uncertainty	The risk that the cost of the roll-out (materials, contractors, management etc) will exceed budgets.
Technological uncertainty	Relating to future technological progress: for instance a risk that the network might somehow be rendered redundant.
Market uncertainty	For instance, if infrastructure competition were to emerge in the form of alternative networks by which a comparable service can be delivered to households and businesses.
Macroeconomic uncertainty	A period of poor macroeconomic performance which results in further suppressed demand.

Source: Oxera, based on European Commission (2010), 'Commission Recommendation of 20 September 2010 on regulated access to Next Generation Access Network (NGA)'. Annex 1, section 6.

Considering these factors in light of Sure's position in Guernsey, we note the following:

- there uncertainty over the strength of demand for fibre services, including (for instance) whether Sure will achieve an uplift in average revenues per user (ARPU) as a result of the greater speed offerings which FTTH will facilitate;
- this may be added to by future developments, for instance the fact that (subject to regulatory clearance), Sure itself is committed to rolling out extensive 5G across Guernsey,⁴⁴ which may result in a credible alternative to fibre;

⁴² For a more comprehensive discussion of this framework, see Oxera (2020), 'Oxera response to the targeted consultation on the revision of the Commission's access Recommendations', 7 October, section 2.2. Available online at <https://ec.europa.eu/newsroom/dae/redirection/document/71807>. Last accessed 8 December 2022.

⁴³ European Commission (2010), 'Commission Recommendation of 20 September 2010 on regulated access to Next Generation Access Network (NGA)'. Annex 1, section 6.

⁴⁴ Sure (2022), 'Sure to revolutionise mobile digital connectivity with Airtel-Vodafone acquisition'. Available online at <https://www.sure.com/guernsey/latest-news/2022/sure-to-revolutionise-mobile-digital-connectivity-with-airtel-vodafone-acquisition/>. Last accessed 8 December 2022.

- recent worldwide developments have led to a considerable shortage—as well as increases in the price of—inputs such as materials and electronic equipment. Whilst these risks are likely to be gradually mitigated as the roll-out continues, this is currently at an early stage, and in any case some risk will remain present in the form of ongoing maintenance requirements.

Given this, there would appear to at least be some evidence of **demand risk**, **cost uncertainty** and **market uncertainty**. This indicates that it is likely to be appropriate for some form of additional premium to be applicable to Sure's returns as a result of its investment in FTTH.

6.3.4 How such an allowance might be facilitated in the context of Sure's FTTH investment

Having noted in Section 6.3.3 above that it appears likely that an additional allowance should be made for the presence of asymmetric risk surrounding Sure's FTTH investment, it is therefore worth considering how this might be allowed for, in order to allow investors to expect to earn a normal return. Two possible approaches to allow for this are:

- an additional **premium** or allowance could be added to the WACC calculated for Sure;
- Sure could be permitted some degree of **pricing flexibility** with regard to FTTH.

The first of these two approaches is self-explanatory, although further work would be required in order to make an assessment of the appropriate level at which such a premium should be set. This approach has been widely used by other National Regulatory Authorities (NRAs) and has resulted in significant uplifts to calculated allowable returns, see for instance example cases in Table 6.3 overleaf:

Table 6.3 Examples of FTTH premia applied by regulators

Context	Application	Source
Spain	The NRA calculated an allowance of 4.81% for project-specific risks relating to the roll-out of an FTTH network.	WIK-Consult (2016), ' Regulatory approaches to risky bottleneck assets: International case studies ', February, p7.
Netherlands	The Dutch NRA included two additional allowances; 1% to reflect the differing mix of fixed/variable costs for fibre broadband as compared to standard broadband; and a further 1% to reflect the demand risk associated with speculative residential roll-out. Further, the Dutch regulatory process includes an ex-post review for 'excessive' profitability during a charge control period. An additional 3.5% was added to the threshold at which profits on FTTH might be deemed 'excessive' in relation to the WACC.	WIK-Consult (2016), ' Regulatory approaches to risky bottleneck assets: International case studies ', February, p7.
Italy	An FTTH premium of 3.2% was allowed for. ¹	Brattle Group (2015), ' The WACC for KPN and FttH ', 1 July, p3.
France	An FTTH allowance of 5.0% was allowed for with respect to the WACC for FTTH terminating segments, although it has been reported that this includes a degree of general allowance to incentivise FTTH, as well as for the associated asymmetric risks.	Brattle Group (2015), ' The WACC for KPN and FttH ', 1 July, p3.

Notes: All figures are in pre-tax, nominal terms. ¹ With regard to the Italian figure, we note that the original documentation [AGCOM (2019), 'Il calcolo del Risk Premium per gli investimenti in reti NGA, FTTH e FTTC'] appears to suggest that the 3.2% is in 'real' terms. However, based on subsequent publications by the regulator, we believe that this is an error and that the 3.2% figure is nominal. See, for instance, AGCOM (2022), 'SCHEMA DI PROVVEDIMENTO CONDIZIONI ECONOMICHE PER GLI ANNI 2022 E 2023 DEI SERVIZI DI ACCESSO ALL'INGROSSO ALLA RETE FISSA OFFERTI DA TIM AI SENSI DELLE DELIBERE N. 348/19/CONS E N. 333/20/CONS', p. 31.

Source: Oxera review of precedents for FTTH premium uplifts.

The concept of pricing flexibility is only slightly more complex, and essentially involves a regulator permitting a business pricing flexibility on some of the particular products to be regulated. For instance, in 2018, Ofcom imposed price regulation on BT Openreach's relatively basic 'up to 40Mbit/s' service. BT was permitted flexibility over the pricing of other services (of both higher and lower speeds). It was anticipated that the price-regulated 'anchor' product would provide a degree of constraint on the pricing of those other products.⁴⁵ Regulators in Sweden and Spain have also enacted (or considered) moving towards similar examples of pricing flexibility.⁴⁶

⁴⁵ Ofcom (2018), 'Wholesale Local Access Market Review: Statement – Volume 1 – Markets, market power determinations and remedies', March, p10. Available online at https://www.ofcom.org.uk/_data/assets/pdf_file/0020/112475/wla-statement-vol-1.pdf. Last accessed 8 December 2022.

⁴⁶ WIK-Consult (2016), 'Regulatory approaches to risky bottleneck assets: International case studies – Report for Ofcom', February, p12. Available online at https://www.ofcom.org.uk/_data/assets/pdf_file/0027/82728/wik_regulatory_approaches_to_risky_bottleneck_assets.pdf. Last accessed 8 December 2022.

6.3.5 Conclusions on the FTTH premium

The above subsections have introduced the concept of the 'FTTH premium'. Investment in the FTTH network is likely to result in non-systematic risks being faced by investors in Sure. Whilst these would ordinarily be diversified away as part of a portfolio, the nature of price regulation of Sure's wholesale product is likely to result in an asymmetric risk where investors are not able to enjoy potential upside risk (but most still bear the downside).

As a result of this, absent further allowances being made, it is possible that investors may expect a negative return when averaged across potential scenarios, and thus this will create an impediment to Sure attracting capital. Such an allowance can be made in two forms, the first possibility being an additional premium being added to the WACC used to calculate the return that Sure is to be permitted; the second being to allow Sure a degree of pricing flexibility in its product range.

Whilst a quantitative evaluation of these risks is outside the scope of this report, it is noted that this is one channel by which the WACC estimated in this report is likely to be an underestimate of the required rate of return, as it is exclusive of such an allowance.



From: [Regulatory Notifications](#)
Subject: REDACTED VERSION: 2023_06_29 Sure (Guernsey) Limited WACC - Further questions from the GCRA
Attachments: [image008.png](#)
[image009.png](#)
[image005.png](#)

From: [REDACTED]
Sent: Thursday, June 29, 2023 4:04 PM
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Sure (Guernsey) Limited WACC - Further questions from the GCRA

*** This Email Originated Outside Your Organization ***

Hi [REDACTED]

As requested, please see our response to the request by the GCRA:

The GCRA has stated that an uncertainty premium is not required in the Oxera WACC model because an implied premium has been included in the RfR. Oxera has used 2022 spot rates to determine the RfR rather than 5-year average yields as per regulatory precedent. Can Oxera please clarify why it believes that an uncertainty premium is required given its methodology for calculating the RfR?

The reasoning behind the choice of using the spot rate to determine Sure's RfR is supported by the following.

1. To **adequately reflect current market evidence**

Broadly, adopting a focused current indicator, e.g. spot in this context, provides a more accurate reflection of actual market evidence, which is especially important in a period where yields and rates have changed significantly. For example, at the time of our report, the spot rate was 3.62%, compared to the 5-year average RfR of 1.11%. It is not credible that any company would be able to finance itself anew at the 5-year average rate, especially in the case of Sure, which is currently debt-free. We expand on this latter point below.

2. To **more closely reflect the cost of new debt** relevant to Sure

Sure is currently debt-free, and in a net cash position. In view of its expansion plan, Sure expects to incur debt financing. Thus, this means that the parameters used in estimating the WACC should reflect the cost of new debt only. It would be inappropriate to use a 5-year average parameter, as Sure would reasonably expect to pay current market rates when it goes to market. The reason that several other precedents apply the 5-year average, is due to the consideration over embedded debt, i.e. debt raised previously at past market rates. For example, a regulated company which has raised fixed-rate debt in the past (at lower rates), should not be allowed a materially higher CoD allowance now

based only on spot rates alone, as this may over-compensate the company. Similarly, not reflecting spot rates in the regulatory control (when rates are higher) may mean that the allowed CoD is insufficient to cover the actual cost of new debt, and investors would not be able to recover costs, i.e. the company is not financeable.

Keeping the above points in mind, **our presented estimation does not thus include an 'implied premium' due to the use of spot.** Rather, the use of spot is to ensure that the RfR estimate reflects updated current market evidence, and is consistent with the estimation of CoD, as Sure does not have embedded debt, and faces only the cost of new debt. The **UP we put forward is thus necessary**, as it captures the risk that spot rates may rise faster than suggested by forward rates (reflected in the FP). The current period where interest rates have increased rapidly is a good example, especially as rates have risen faster than expected since our report—if no UP is considered within the regulatory control, there is a higher risk that the RfR would then be underestimated (reflecting outdated, too-low market estimates), and result in a depressed WACC, leading to a financeability problem.

We hope this helps clarify, and would be happy to assist further if needed.

Thanks,


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