"This determination contains reference to several hundred documents, some of which are considered confidential. Requests for specific referenced documents should be made to the Office in writing to foi@ofreg.ky"

UTILITY REGULATION AND COMPETITION OFFICE
THE CAYMAN ISLANDS

Publication Date: 22 June 2022

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1. Executive Summary

Note: this a simplified high-level summary only. It is provided for the convenience of the reader and does not form part of our Determination. The positions of each party, decisions we have taken, and our reasoning are set out in the full document below.

1. Infinity Broadband Ltd., doing business as C3 ('C3') submitted a Dispute Determination Request ('DDR') to the Office on 25 June 2019 regarding a number of issues it was having with obtaining infrastructure sharing services from Cable and Wireless (Cayman Islands) Limited, doing business as Flow ('Flow'). The Office undertook an extensive fact-gathering and consultation process to clarify the record and afford the parties the most opportunity to resolve their issues. Having received all the information and comments and responses from the parties, the Office made the following determinations:

   Issue 1: Whether Flow responded in a timely manner, applied appropriate prices and acted reasonably in responding to C3's request to share certain underground duct infrastructure along Shamrock Road between Spotts Dock to High Rock Road. The Office determined:

   - despite delays by both parties, Flow responded to the requests for quotes within a reasonable timeframe, however they did not provide the duct clearance and make-ready in a reasonable time (in fact the duct clearance is still not completed),
   - the mark-up on base prices Flow charged for make-ready works are to be corrected to a lower amount determined by the Office and C3 reimbursed for the difference,
   - Flow having stopped works in late 2019 was not justified in doing so and must complete the works as contracted.

   Issue 2: Whether Flow had approved C3's use of a certain size sub-duct as installed in Flow's infrastructure and whether that installation should be considered a material contract breach by C3. Whether Flow's prices for duct access were appropriate and whether Flow should compensate C3 for any unused sub-duct and associated fibre cable C3 installed. The Office determined:

   - C3 did not have Flow's permission to use the 1.5" sub-duct and was in breach of the contract although this breach was not a material breach (which would lead to a complete termination of the contract),
   - The rates proposed by Flow for 1" and 2" sub-duct were not reasonable and Flow must amend its pricing to the new lower pricing as determined by the Office,
   - C3 must either remove the 1.5" sub-duct or agree to pay Flow for that sub-duct at the 2" rates as determined by the Office,

- As C3 did not have Flow's permission to use the 1.5" sub-duct, Flow does not have to compensate C3 for any unused 1.5" sub-duct and associated cable.

Issue 3: Whether Flow acted reasonably by denying C3 permission to access and co-locate inside the Maya-1 submarine cable landing station. The Office determined:

- Flow was not justified in its reasons for saying there was insufficient space with-in the CLS and must provide C3 with space with-in the CLS to mount the C3 equipment specified.

Issue 4: Whether Flow had legal basis to refuse C3 access to part of duct from Maya-1 to Health City where access is not feasible due to lack of capacity. The Office determined:

- Flow was justified in its rejection of C3's alternative solution.

Issue 5: Whether Flow should revise the various duct survey estimates to ensure that they meet the cost orientation and transparency requirements of the Interconnection and Infrastructure Sharing Regulations. The Office determined:

- the base prices charged by Flow are acceptable,
- the loading factor applied was not in compliance with the regulations therefore Flow must correct the loading factors to a lower amount determined by the Office and reimburse C3 for the difference.

2. The Utility Regulation and Competition Office

2. The Utility Regulation and Competition Office (the '**Office**' or '**OfReg**') is the independent regulator established by section 4(1) of the Utility Regulation and Competition Act (2021 Revision) (the '**URC Act**') for the electricity, information and communications technology ('**ICT**'), water, wastewater and fuels sectors in the Cayman Islands. The Office also regulates the use of electromagnetic spectrum and manages the .ky Internet domain.

3. Under section 9(3) of the Information and Communications Technology Act (2019 Revision) (the '**ICT Act**'), two of the Office's principal functions are "*to promote and maintain an efficient, economic and harmonised utilisation of ICT infrastructure*" as well as "*to resolve disputes concerning the interconnection or sharing of infrastructure between or among ICT service providers or ICT network providers*", the ICT Act is further supplemented by the Information and Communications Technology Authority (Interconnection and Infrastructure Sharing) Regulations, 2003 (the '**Regulations**') and the Information and Communications Technology Authority (Dispute Resolution) Regulations, 2003 (the '**Dispute Regulations**').

3. The Parties

4. The complainant Infinity Broadband Ltd., doing business as C3 ('**C3**'), was licensed in December 2004 by the Office's predecessor, the Information and Communications Technology Authority ('**ICTA**') and is a fixed network operator providing a number of fixed voice, Internet and video services in the Cayman Islands.

5. The respondent Cable and Wireless (Cayman Islands) Limited, doing business as Flow ('**Flow**'), was licensed in July 2003 by the ICTA but, as the incumbent telecommunications service provider in the Cayman Islands, has been licensed and operating in the country since at least the mid-1990s. Flow is a fixed and mobile network operator providing a full range of fixed and mobile voice, Internet and video services. As the incumbent operator in the Cayman Islands, Flow has built considerable ICT facilities across the country, including both an extensive underground duct infrastructure of its own and the rights to attach to a large number of the utility poles owned by the electric utility.

4. Background

A. The Wholesale Sub-Duct Agreement

6. On 9 November 2015, C3 and Flow entered into a Wholesale Sub-Duct Agreement ('**WSDA**'), establishing a framework for C3 to access and share Flow's underground duct infrastructure.

7. Under this framework, C3 obtains access to Flow's ducts by first identifying the desired route and paying for a survey of that route. Next, Flow uses the survey to determine whether there is sufficient space for C3's ICT infrastructure and to identify unused cables that, once removed, will create additional space or any "make-ready" work (such as additional manholes) necessary to facilitate the installation of C3's infrastructure. If C3 accepts the applicable quotation and pays a deposit, Flow performs the duct clearance and make-ready work and installs C3's sub-duct at C3's expense. Upon completion of this

work, Flow delivers a Handover Certificate to C3, who is then granted access, upon suitable notice, to Flow's ducts to insert its fibre cable into its sub-duct. The use of Flow's ducts to carry C3's sub-duct and fibre cable attracts a monthly fee.

8. One feature of the WSDA framework is that C3's sub-duct is explicitly defined as a 1-inch sub-duct. However, the WSDA does not specify whether this measurement is that of the inside or outside diameter of the sub-duct.

9. It appears that C3 successfully obtained duct sharing services under the WSDA at least twice, in front of Walkers House and along West Bay Road, which it uses to roll out its ICT network and to offer its own retail ICT services to customers in competition with Flow. However, in both of those earlier cases, it is not clear that the parties followed the process described above.

B. Key Events and Timelines

10. In any event, the process of obtaining access to Flow's underground ducts along Shamrock Road from around Spotts Dock to the Maya-1 submarine cable landing station ('**CLS**') on High Rock Road (the **'Shamrock Road duct route'**) was less successful and led to the present disputes.

11. Interactions between a duct access customer and duct access supplier under the WSDA framework can be divided into two distinct phases: first, the survey for the availability of space and, second, the clearance of ducts and other make-ready activities. The second phase does not automatically follow from the first as the prospective customer must make a separate decision to proceed. For this reason, it is helpful to consider them separately.

12. C3 requested a survey of the Shamrock Road duct route on 23 June 2017. As outlined in Schedule 2 attached here, Flow completed the survey within about three months, and C3 decided to commission Flow to clear the ducts and perform other make-ready work necessary for the installation of C3's sub-ducts. However, it took another four months for the parties to agree on the scope of work (one notable change being C3 instead of Flow would install the C3 sub-ducts) and a further month and a half for the order form to be signed and the deposit paid (on 05 March 2018).

13. The key date in this process is the date a request is made, as the deadlines for responses and negotiations set out in the Regulations and the WSDA are based on that date. It appears from the evidence filed by the parties that C3 requested "*a quote from Flow for access to one of their duct from Spotts to Highrock*" in July 2016 [C3 response to 03 February 2021 RFI #10 (C3 item #2)]. C3 also included the route in a list of potential duct sharing requests discussed with Flow in September 2016 [Flow DDR Response – Item 1a]. C3 had therefore been expressing interest in the Shamrock Road duct route for some time before June 2017 without, however, submitting requests that fully complied with the requirements of the Regulations. Further, Flow interpreted C3's request in September 2016 as a request for access to a "*free duct*" instead of as a request for access to available space in a duct – and responded accordingly – even though the parties had already established a framework under the WSDA for sub-duct access. C3, however, did not clarify that it was asking for available space, as opposed to an entire free duct, until it submitted its 23 June 2017 request.

14. Because of the apparent uncertainty around what was being requested and because C3 identified it as the date of its request for access to the Shamrock Road duct route, the analysis in this Dispute Determination Request ('**DDR**') adopts 23 June 2017 as the relevant date of C3's request.

*For detailed timelines see **Schedule 2** included.*

5. Process and Methodology

A. High-level Approach to the Issues

15. In this Determination, the following approach is adopted in order to address the issues in dispute in the DDR, namely:

a. Identify the issues - this involves reviewing all evidence and the DDR, identifying any issues that may emerge from the evidence and, where applicable, re-framing the issues in a form that can more readily be analysed by the Office;

b. Identify the relevant statutory provisions - this includes the provisions in the ICT Act or the Regulations which set out the obligations and rights of the parties and which will be used to assess their behaviour and determine the disputes. This also includes the provisions in the ICT Act which establish the Office's jurisdiction to address the issues and the process that the Office must follow in any given case;

c. Identify the appropriate procedure for the various issues. This includes determining whether an issue should be addressed at this time or should be addressed under a separate proceeding.

d. Assess the evidence to determine the relevant facts.

e. Assess those facts in light of the applicable statutory obligations.

f. Set out a determination of the applicable issues in dispute between the parties.

B. The Dispute Determination Request

16. After having followed the process of Notice of Grievance and negotiation required by regulations 3 and 4 of the Dispute Regulations, C3 submitted a DDR to the Office on 25 June 2019 regarding a number of issues it was having with obtaining infrastructure sharing services from Flow, including access to duct infrastructure on the Shamrock Road duct route and access to the CLS. Included with the DDR were fifty attachments.

17. The DDR identified 5 inter-related issues:

Issue 1: Duct clearance along the route from a point on Shamrock Road to the CLS
Issue 2: Sub-duct size issue along the route from a point on Shamrock Road to CLS
Issue 3: Access to the CLS
Issue 4: Rejection of alternative Solution

Issue 5: Duct Survey Estimates

18. At paragraph 132 of the DDR, C3 requested a remedy for each issue:

> "*a. Issue 1 regarding the duct clearance: C3 requests Ofreg to require FLOW to carry out the duct clearance work between Spotts Dock to High Road Shamrock Road in line with the agreement between the parties and mandate FLOW to revise the invoice to include a reduction in the 50% price due on completion in order to reflect FLOW's severe delay in carrying out the work and a refund for the amount overcharged as determined by Ofreg.*
>
> *b. Issue 2 regarding the sub-duct size issue: C3 requests Ofreg to determine that C3 is permitted to use its 1,5" sub-duct and cable as was agreed between the parties. If Ofreg was not to accept C3's position, at the very least, Ofreg should agree to act as an adjudicator to enable the parties to resolve this issue. In that case, C3 requests that the outcomes of such mediated discussions be binding between the parties.*
>
> *c. Issue 3 regarding co-location access within the Maya-1 landing station: C3 requires Ofreg to mandate that FLOW make C3 a viable commercial offer for co-location inside the Maya-1 landing station. Further, C3's request that Ofreg, in exercising its function of promoting effective and fair competition, takes into account the importance of access seekers' ability to connect directly at the landing station to ensure that one single market player does not control such a significant bottleneck.*
>
> *d. Issue 4 regarding FLOW's rejection of alternative solution: C3 requests that Ofreg mandates FLOW to provide infrastructure sharing services in relation to this route between Maya-1 and Health City and to remedy any lack of capacity by removing any redundant copper cables along other sections of the route.*
>
> *e. Issue 5 regarding various survey estimates: C3 requires Ofreg to mandate FLOW to revise the various survey estimates to ensure that they reflect costs and do so in a transparent manner and request that FLOW agrees to provide cost orientated and transparent survey and other services estimates going forward*." [footnotes omitted]

19. Flow filed its response to the DDR on 30 July 2019, including its own bundle of twenty-eight documents.

20. These are, however, not the only issues in dispute between the parties:

    a. Flow included in its 12 March 2019 letter to C3 a statement that Flow would not consider further duct sharing requests and would suspend additional duct surveys and make-ready activities on behalf of C3 until what Flow considered to be "*material breaches*" of the WSDA between the parties were resolved. In subsequent correspondence between the parties, Flow has maintained this position, to which C3 has continued to object.

b. Flow has since its 12 March 2019 letter to C3 refused to consider other infrastructure sharing requests, including additional requests to access and share other Flow ducts, a duct survey in central George Town, which at the filing of the DDR C3 had already commissioned and paid for.

21. Additionally, the parties have questions on whether C3 should pay Flow for the use of Flow's dark fibre infrastructure along a portion of the Shamrock Road duct route, which is Flow is providing until the completion of the duct access work or whether Flow should provide "Utility Locate" information to C3 to allow C3 to build its own duct network.

22. With respect to these additional issues, despite neither party referring a determination request to the Office under the Dispute Regulations, it is clear to the Office that there are a number of separate issues at dispute. Therefore, the Office intends to exercise its powers under Section 67A of the ICT Act to consider and where appropriate determine these disputes under its own initiative separately.

C. Supplementing the Record

23. In order to clarify the issues and to complete the record, the Office took a number of steps, including issuing a number of Requests for Information ('**RFIs**') to the parties. The RFIs include:

a. on 15 July 2019, querying the status of the duct clearing activities and the survey cost estimates [document #160],

b. on 14 August 2019, to Flow regarding certain matters at the CLS [document #183],

c. on 2 October 2019, to both parties regarding certain missing attachments to the DDR and to the Flow DDR Response, with follow-up emails to C3 during October 2019 [documents #189 & 190],

d. on 9 December 2019 to Flow and C3 regarding 2016 "infrastructure sharing requests" and requesting the resubmission of certain documents [documents #213 & 214],

e. on 3 February 2021, to both parties soliciting additional information and documents to complete the record [document # 306],

f. on 09 August 2021 a follow-up RFI to Flow, requesting additional information and queries regarding the construction costs of manholes, sub-duct services, and InSpan Backhaul Services [document # 334],

g. on 09 February 2022 a follow-up RFI to Flow, requesting clarity on certain items related to man-holes. [document # 360].

24. The Office staff members also conducted two site visits as part of its investigation of the issues set out in the DDR, namely, a visit to the CLS on 07 August 2019 and a visit to a Flow manhole on the Shamrock Road duct route containing the C3 sub-duct on 18 September 2019. Draft Site Visit Reports were sent to Flow for their comment on 31 October 2019, with Flow responding on 08 November 2019.

25. The Office held a meeting with the parties on 18 September 2020 to discuss the issues raised in the DDR and other duct-related issues between the parties, with the intention of achieving some resolution. This effort was ultimately not successful.

D. The Draft OfReg Investigation Report

26. On 30 April 2021, a draft version of the OfReg Investigation Report dated 27 April 2021 ('**the Draft Report**') was sent to C3 and Flow for their review and comment. Flow responded on 21 May 2021, and C3 responded on 25 May 2021. While both parties commented on the findings of the Draft Report and Flow provided two additional authorities in support of their position on 'material breach', neither party provided additional documentary evidence relating to the facts around the issues in dispute. These comments were addressed in the Draft Determination which the Office shared with the parties on 08 December 2021.

E. The OfReg Draft Determination

27. On 08 December 2021, the Office sent a draft version of the Determination ('**the Draft Determination**') to C3 and Flow for their review and comment. Several extensions to response time were granted. C3 provided its final response on 21 February 2022, and Flow submitted its final response on 02 March 2022. Both parties commented on the findings of the Draft Determination and provided additional information in support of their respective positions. These comments are addressed below.

F. Parties Comments and Cross Comments on the Draft Determination and Office responses

December 24th, 2021, Comments on Draft Determination

C3

28. *"The Draft Report appears to use a test of reasonableness in determining any questions of fact. This test is vague and undefined. The usual standard of proof in civil matters of the balance of probabilities should be applied instead.*

A number of findings in the Draft Report are reached on the basis that there is no evidence available, notwithstanding the proper burden of proof. For example, in para 43 the Draft Report concludes that there is no evidence that Flow's costs are not reasonable, even though the burden of proof is properly on Flow to demonstrate that such costs are in fact reasonable. C3 has no access to the materials necessary to determine this issue itself."

Office Response

29. In all cases where the Office made a finding of fact, there was evidence upon which to base that finding of fact.

30. In some cases, where the expression "no evidence" is used, it refers to the party making a claim and submitting nothing in support of the claim. Therefore, the Office rejected the claim because there was no evidence provided, i.e., the party did not discharge the burden of proving the claim.

31. The Office notes the comment regarding lack of access to Flow's confidential cost information. However, the information in question was submitted in confidence pursuant to the Confidentiality Regulations. We also note that, while the overall level of redaction was modified, following agreement from Flow on 23 July 2021 to waive certain confidentiality claims with respect to disclosure to C3, Flow did not waive confidential treatment of the cost information in question. The Office considers that the harm to Flow likely to result from disclosure would outweigh C3's interest and the public interest in disclosure. The Office further considers that it is able to discharge its regulatory responsibilities in this instance without the disclosure of Flow's confidential cost information to C3.

Flow

32. *"Flow also responds to several non-price decisions and omissions in the Draft Determination that we believe are inappropriate, infeasible or require resolution in the final Determination. Further, since the Office explains that it has given only a limited 'consultative period' of two weeks because the matter has been under discussion and subject to investigation since 2019, in our view, the Office clearly do not expect that the Parties will be able to provide detailed comments on the merits of the Draft Determination."*

33. *"Flow is not in agreement with any findings by the Office that are not arrived at based on the facts, the evidence before the Office and the law. Flow's responses are not exhaustive and Flow's decision not to respond to any particular statement in the Draft Report does*

not necessarily represent agreement in whole or in part with OfReg's stated position on the issues; nor does any position taken by Flow in this document mean a waiver of any sort of Flow's rights in any way."

Office Response

34. See Office response to 01 March updated comments

Flow

35. "*We note that time was spent discussing issues that were not in dispute before the Office– for example, the other ducts in which Flow provides service to C3, and pertinent issues such as Flow's dark fibre infrastructure, which the Office instructed Flow to make available to C3 without compensation."*

Office Response

36. The Office did not issue instructions for Flow "*to make* [dark fibre] *available to C3 without compensation*." The Office notes that, instead, clear directives were issued in its letter of 15 July 2019, namely "*Flow not to issue to C3 any invoice for any services not expressly agreed to in writing and currently in dispute.*"

37. The Office also notes that the March 2021 procedural Advisory Guideline sets out the issues within the scope of this Determination. To the extent issues outside the scope of the procedural Advisory Guideline were discussed in this Determination, they were because one or both parties raised them. However, they will be addressed, if necessary, separately.

Flow

38. *"Flow has asked the Office to make a determination on the dark fibre issue, but the issue is only mentioned in paragraph 20 on page 14 of the Draft Determination. We note the Office comment in paragraph 21. However, we again ask the Office to make a decision on this issue in the Determination and to instruct C3 to compensate Flow for use of our dark fibre infrastructure from the date of original use until the date of termination of the service, since C3 continues to benefit commercially from our dark fibre infrastructure, while Flow has been forced by the Office to provide C3 with the service. Natural Justice demands that Flow be compensated for use of its dark fibre infrastructure, especially in light of directives given to Flow by the Office."*

Office Response

39. The Office notes that it set out in the Draft Investigation Report, the Draft Determination and again here in the Determination that, as necessary, it will dispose of certain other connected matters in a separate procedure.

Flow

40. *"Flow is also of the strong view that some of the requirements imposed by the Office and the time limits within which those requirements should be fulfilled are impractical, and we therefore request that the time periods imposed in the Draft Determination be extended. For example, the requirement to take several actions "**within 15 days of publication of this Determination**" should be extended to at least within 45 days. The reason being, the law gives the Parties within 45 days from the date of Final Determination to appeal the Determination."*

41. *"The Office rejected Flow's point that the FLLRIC model does not provide information for markups for make ready work. It cites a 2015 determination by the New Zealand's ComCom regarding a cost model for Chorus and states that it should be possible to use a mark-up approach:*

    This suggests that the mark-up approach to allocating overhead expenses for nonrecurring charges relating to duct access make-ready work should normally be the same as the mark-up approach applied by Flow to allocating overhead expenses for recurring charges based on the FLLRIC model. It then asserts that the percentage of common overheads over total operational expenses represents an appropriate proxy for this mark-up."

42. *"Flow respectfully disagrees. Firstly, the situation with Chorus is wholly different from that of Flow when the FLLRIC model was generated. Chorus was originally created with the operational separation of Telecom New Zealand ("Telecom") mandated by Parliament in 2006. It has existed since 2008 when Telecom implemented the operational separation of its business units in accordance with undertakings finalized following the 2006 amendments to the Telecommunications Act 2001. Thus, by the time the cited determination was made, Chorus would have been offering wholesale services for years. Its entire raison d'etre was to provide the kinds of services that C3 is seeking and on a scale that dwarfs Flow's operations in the Cayman Islands. Flow is NOT primarily a wholesale network service provider and was not even providing the access services when the FLLRIC model was created. The Chorus experience is simply not relevant and therefore we reject its use by the Office in supporting its Draft Determination."*

43. *"The Office's choice to pick out common overheads from total operational expenditure is therefore arbitrary. As a compromise, Flow proposes to apply a mid-point between our approach, which uses common overhead and opex from our company accounts, and that proposed by the Office based on FLLRIC data. That is* [redacted] *+* [redacted] */2=* [redacted] *"*

44. *"The Office indicated that it objects to the higher price proposed by Flow because its provided evidence in the form of a quote rather than an invoice. It insists that unless Flow can produce such an invoice, the unadjusted costs from the FLLRIC model should be used.*

    The Office should be aware that it is a rare occurrence that a network operator will procure materials and services in the manner that is fully consistent with the unit costs of a hypothetical model."

45. *"We have conducted a further search for more back up evidence, and were able to find an invoice for a 2017 JRC-12 Manhole deployed in asphalt (see, confidential attachment "JRC12 invoice 2017"), but this particular purchase involved a deployment without the cover, which Flow currently deploys at a cost of around CI$[redacted]. The cost in 2017 of a JRC-12 Manhole is therefore significantly above the CI$[redacted] + a share of the mobilization found in the invoice. We note that the mid-point between the Office's proposed cost and the Flow proposed value come very close to this range for the 2017 costs. We therefore propose the average of the two proposed figures."*

46. *"The Office asserts that a jointing box may not be required under a wholesale sub-duct access agreement, and if that is the case, the costs related to the jointing box would need to be deleted. With respect, we do not understand the relevance of whether the wholesale sub-duct access agreement specifically requires a jointing box and ask the Office to clarify its assertion."*

47. *"The fact is that in this circumstance, a jointing box is necessary. Without these boxes, C3 would be deploying its fiber outside of standard specifications, which not only increases C3's risk of deploying excessive fiber lengths and limited distribution options, but would potentially increase costs to Flow for having to accommodate C3 remedial actions in the future. In principle, Flow would be willing to allow C3 to install its own jointing boxes, but depending on C3's specifications and procedures for splicing the fibre, Flow might insist on C3 building a separate manhole for those boxes. Without a separate manhole, Flow would face the prospect of increased costs of having to accommodate C3 remedial work resulting from sub-standard installation."*

48. *"The Office states that Flow's justification for using the "adjustment factor" is likely to result in over-recovery of duct costs. It proposes a solution that implicitly assumes that, with the C3 subduct, the duct system is fully utilized. Flow does not agree with the Office's statements on this issue and is of the strong view that the pricing should not only be a function of the relative size of the C3 sub-duct, but also how much of the duct is used. This is the point the Jamaican Office of Utility Regulation ("OUR") has incorporated in its methodology. By rejecting this basic tenet, the Office is forcing Flow to accept a price that does not reflect the full cost of providing the facility.*
To illustrate our point, we simplify the situation by considering a more straightforward usage scenario and examining only one element of the costing—the duct deployed in a carriageway. We note that the logic is applicable to all the other elements as well, i.e., footways duct, jointing boxes and manholes."

49. *"The unit capex for the 2-bore duct deployed in a carriageway was CI$[redacted] per kilometer in 2017 as indicated in the Sub-duct Costing Methodology. The capacity of the 2-bore ducts is, together, eight 1" subducts. We note that if 2" subducts were deployed then the capacity would be four subducts.*

If only one 1" subduct is deployed, then the cost borne by that subduct is the entire CI$[redacted]. If two 1" subducts are deployed, the cost per subduct would be half of the total, i.e., CI$[redacted], and so on. The table below shows the cost borne as a function of the number of 1" subducts deployed."

50. *"The Office's proposal is that Flow is to recover only CI$[redacted] from C3, as if the entire duct system was fully utilized. This is unfair and unreasonable as it implicitly requires*

Flow to recover a higher percentage of cost from its own services than from its competitor. Thus, if Flow has two 1" subducts installed it would need to recover CI$[redacted] CI$[redacted]=CI$[redacted] or CI$[redacted] per sub-duct. Requiring Flow to recover a higher percentage of the cost of the duct (and other network elements) runs counter to the practice generally employed by regulators, including the OUR in Jamaica."

51. *"While we agree that an over-recovery of costs is not appropriate, the pricing proposed would only result in over-recovery if the prices remain unchanged were more sub-ducts to be deployed in the duct. So, we agree that "over-recovery" may take place if, going forward, the price of the sub-duct does not reflect an increase in utilization. That is, to say, that if an access seeker's prices are based on a utilization at the time of the agreement, but utilization subsequently increases, then over-recovery will take place."*

52. *"Further, we understand that the use of [redacted] is not intuitive as it reflects a utilization that varies across the 2-bore system over the relevant route. To simplify and make the calculation more intuitive, we propose the following. In the 2-bore system at issue, Flow reserves one bore for its own purposes. Therefore, we propose then that:*

> *1) the model reflect that at the moment C3 is the only service provider in the second bore, so it must recover half of the two bore cost and other elements (manholes and jointing box) associated with that system; and*
>
> *2) should Flow or other competitors deploy additional sub-ducts, the price of the sub-duct for C3 would be revised downward correspondingly."*

53. *"Finally, with respect to the observations made by the Office on the OUR's infrastructure sharing model, Flow notes that the costs that the OUR introduced were hotly debated in its consultation and, in any case, are not comparable with costs in the Cayman Islands."*

Office Response

54. See Office response to 01 March updated comments

February 21st, 2022, Comments on Draft Determination

C3

55. *"C3 requests that OfReg determine the dispute between the parties as to whether the definition of Customer Sub-duct in the WSDA refers to the inside or outside diameter of the duct. There is no compromise or half-way answer possible, and the parties have been unable to agree the issue since 2019. It is wholly unrealistic for OfReg to suggest that the parties should now be able to resolve within 2 weeks an issue which has been incapable of resolution for 3 years."*

Office Response

56. The Determinations on Remedies at Section 11 contain directions for the parties to reach an agreement on the Sub-duct size and amend the contract going forward to ensure clarity for both parties in the future. The purpose of those directions is to ensure clarity going forward, not to correct the disputed sub-duct size installed in the past. This latter issue is the subject of other parts of the Determinations on remedies at Section 11. The Office considers that it is consistent with the intent and wording of the Infrastructure Sharing Regulations that the parties negotiate and seek agreement on this term (definition of sub-duct size) in the first instance.

C3

57. *"C3 notes the comments by Flow in its response to the draft determination to RFI 11C, concerning the costs of installation of manhole covers. Although much of the relevant information has been redacted, C3 notes the reference by Flow in its reply to costs per unit of between CI$[redacted] and CI$[redacted], plus mobilisation costs. We enclose for comparison a recent invoice paid by C3 in respect of manhole construction, showing a cost per unit of CI$750.00. It appears therefore that the costs claimed by Flow are significantly exaggerated."*

Office Response

58. The invoice attached to C3's submission refers to a quantity of four (4) items described as '*Man hole Industrial Park*'. However, the information contained in the invoice does not provide sufficient evidence to support a conclusion that a cost per unit for '*Man hole Industrial Park*' should constitute a relevant benchmark for [redacted] for [redacted], for the purposes of determining the cost-oriented price for access to subducts provided by Flow to C3. The information provided by C3, for example, does not permit a comparison of engineering and construction standards which would allow such conclusion.

C3

59. *"Flow's breach of its obligations is continuing. As stated in an email from Simone Wynter dated 19 January 2022 (copy attached) Flow is still refusing to progress any requests by C3 for infrastructure sharing. This regrettable stance on the part of Flow highlights the inadequacy of the determination, in that OfReg has failed to impose any consequences on Flow for its breach, and Flow has clearly determined that it can continue to flout its obligations with impunity. The result of this anti-competitive conduct is continued losses both to C3 and to the public."*

Office Response

60. The Office notes Flow's 19 January 2022 email to C3 stating "*Flow will not action this request and is unable to accept any further requests from C3 until C3's existing breach of the Wholesale Sub-duct Agreement is resolved.*" However, the Office also notes that C3 and Flow have recently successfully entered into Commercial Agreements, namely the InSpan Service at Maya 1 and OTS completed in late 2021. Further, the Office wishes to remind the parties of its 16 July 2019 email [document #162], wherein the Office advised:

"*The Office has been asked to provide clarity on whether C3 can apply to Flow for further duct access in light of the filed determination request and the Office's 15th July 2019 notice in this matter.*

The Office responds as follows: The Office's letter dated 15th July 2019 relates to the matters in dispute as stated. All parties should consider their usual rights and obligations as set out in the relevant laws, regulations and licences and be guided accordingly."

61. As noted previously, matters outside the scope of the procedural Advisory Guideline will be addressed, if necessary, separately.

March 1st, 2022, Comments on Draft Determination

Flow

62. *"On December 8, 2021, Cable and Wireless (Cayman Islands) Limited ("Flow") received via e-mail at 4:30pm, a copy of the ICT Draft Determination 2021-1 ("Draft Determination") of the Utilities Regulation and Competition Office ("the Office" or "OfReg") on the infrastructure sharing dispute between Infinity Broadband Limited ("C3") and Flow. On February 9, 2022, Flow also received via e-mail at 3:46pm, a letter with a set of follow-up questions in respect of jointing boxes ("**the Follow-up Letter**")."*

63. *"In this document, Flow responds to the Draft Determination's findings on infrastructure sharing prices, and in particular the findings set forth in Schedule 3 of the Draft Determination, which make determinations on the information received by the Office per its Requests for Information ("RFIs") on Flow's infrastructure prices, issued to Flow in August 2021, as well as its Follow-up Letter on 9th February 2022."*

64. *"Flow also responds to several non-price decisions and omissions in the Draft Determination that we believe are inappropriate, infeasible or require resolution in the final Determination. Further, since the Office explains that it has given only a limited 'consultative period' of two weeks because the matter has been under discussion and subject to investigation since 2019, in our view, the Office clearly do not expect that the Parties will be able to provide detailed comments on the merits of the Draft Determination."*

Office Response

65. The Office notes that as pursuant to guideline 38(f) of the Office's Consultation Procedure Guidelines a response time of 14 days, was initially provided for by the Office. This was further extended as follows:

    a. Request for additional 2 days from C3 – extended from 22 December 2021 to 24 December 2021

    b. Office solicited more detailed comments from the parties, an additional 14 days – extended until 01 February 2022
    c. Request for additional 14 days from Flow – extended from 01 February 2022 to 04 February 2022, upon objection from Flow extended a further 18 days until 22 February 2022

d. Request for additional 7 days from Flow – extended from 22 February 2022 to 01 March 2022

The Office considers that the foregoing does not represent, as alleged, *"a limited 'consultative period'…"*

Flow

66. *"Flow is not in agreement with any findings by the Office that are not arrived at based on the facts, the evidence before the Office and the law. Flow's responses are not exhaustive and Flow's decision not to respond to any particular statement in the Draft Report does not necessarily represent agreement in whole or in part with OfReg's stated position on the issues; nor does any position taken by Flow in this document mean a waiver of any sort of Flow's rights in any way."*

67. *"Flow's response is also without prejudice to Flow's right to exercise its right of appeal against the Final Determination, when issued."*

68. *"We note that time was spent discussing issues that were not in dispute before the Office for example, the other ducts in which Flow provides service to C3, and pertinent issues such as Flow's dark fibre infrastructure, which the Office instructed Flow to make available to C3 without compensation was not addressed."*

Office Response

69. The Office is of the opinion that all matters discussed in the Draft Determination were pertinent as these matters have all come to light during the Dispute Determination process. However, per the March 2021 procedural Advisory Guideline, this Determination is focused on the in-scope issues. As set out in the Draft Investigation Report, Draft Determination and here in the Determination, associated matters which have come to the sight of the Office will be dealt with subsequently as required.

Flow

70. *"Flow has asked the Office to make a determination on the dark fibre issue, but the issue is only mentioned in paragraph 20 on page 14 of the Draft Determination. We note the Office comment in paragraph 21, however, we again ask the Office to make a decision on this issue in the Determination and to instruct C3 to compensate Flow for use of our dark fibre infrastructure from the date of original use until the date of termination of the service, since C3 continues to benefit commercially from our dark fibre infrastructure, while Flow has been forced by the Office to provide C3 with the service without receiving any compensation. Natural Justice demands that Flow be compensated for use of its dark fibre infrastructure, especially in light of directives given to Flow by the Office."*

Office Response

71. As set out in the procedural Advisory Guidelines, Draft Investigation Report, Draft Determination and here in the Determination, associated matters which have come to the sight of the Office will be dealt with subsequently as required.

Flow

72. *"Flow is also of the strong view that some of the requirements imposed by the Office and the time limits within which those requirements should be fulfilled are impractical, and we therefore request that the time periods imposed in the Draft Determination be extended. For example, the requirement to take several actions "within 15 days of publication of this Determination" should be extended to at least within 45 days. The reason being, the law gives the Parties within 45 days from the date of Final Determination to appeal the Determination."*

Office Response

73. The Office notes Flow's comments, and have adjusted timelines accordingly in this Determination.

Flow

74. *"OfReg in its Draft Determination (paragraphs 58 and 59) has stated that, although from a technological point of view, the InSpan Backhaul Service proposed by Flow is appropriate, due to the lack of support for the proposed pricing, it is not."*

75. *"It is important for OfReg to be aware that, prior to the issuing of the Draft Determination, Flow and C3 came to a commercial agreement on two separate InSpan facilities, which were put in place towards the end of 2021. In particular, InSpan backhaul facilities were put in place and activated for C3's access to CJFS 10G services on 11th November 2021 and for C3's access to Maya 10G services on 1st December 2021. Flow also extended C3's 5G service when it was unable to make timely arrangement on the far-end (USA) arrangements for its 10G circuits."*

76. *"The contracts were signed for the InSpan facilities and associated international circuits on 26th October 2021 and 24th December 2021. The contract duration for the Maya InSpan was for three years."*

Office Response

77. The Office expects Flow to comply with its statutory obligations relating to infrastructure sharing, notwithstanding that C3 and Flow may have a dispute regarding a specific infrastructure sharing service.

78. The Office notes Flow's statement that C3 and Flow have recently entered into Commercial Agreements, namely the InSpan Service at Maya 1 and OTS completed in late 2021. The Office also notes that, in an email to Randy Merren from Simone Wynter on 19 January 2022 (i.e. subsequent to the date of the Commercial Agreements), Flow has stated "Flow will not action this request and is unable to accept any further requests from C3 until C3's existing breach of the Wholesale Sub-duct Agreement is resolved." This statement is similar to others that Flow has made in the past, including as early as 12

March 2019 (i.e. well before the date of the Commercial Agreements) in a letter to Randy Merren from Simone Wynter, where Flow stated that it was placing "a hold on all remaining sub-duct requests for C3 until the material breach identified is remedied." By entering into the Commercial Agreements towards the end of 2021 in the face of these statements, it appears to the Office that Flow does not consider the Commercial Agreements to be infrastructure sharing agreements.

79. In any event, the Office is resolving the dispute between C3 and Flow relating to the Shamrock Road route through this Determination. There is therefore no impediment, except as may be permitted under the Act and Regulations, to Flow sharing its ICT infrastructure with C3 or other ICT licensees.

Flow

80. *"The Office notes that, after further review of the FLLRIC model, the duct unit costs shown in the FLLRIC model are fully allocated to the cost category* [redacted] *and not to the cost category* [redacted]*. This, it believes, requires determining the expense factor for duct costs based on ratio of opex and overhead expense over* [redacted] *for the cost category* [redacted] *to ensure the expense factors used match the cost categories."*

81. *"While Flow believes that the relevant network element at issue here relates to the* [redacted]*, Flow acknowledges that FLLRIC model does allocate all duct cost to* [redacted]*, so we have made that amendment to the model, i.e., we have amended the expense factor value in* [redacted] *to* [redacted]*."*

Office Response

82. The Office notes Flow's comments.

Flow

83. *"The Office rejected Flow's point that the FLLRIC model does not provide information for markups for make ready work. It cites a 2015 determination by the New Zealand's ComCom regarding a cost model for Chorus and states that it should be possible to use a mark-up approach:*

> *This suggests that the mark-up approach to allocating overhead expenses for nonrecurring charges relating to duct access make-ready work should normally be the same as the mark-up approach applied by Flow to allocating overhead expenses for recurring charges based on the FLLRIC model."*

84. *"It then asserts that the percentage of common overheads over total operational expenses represents an appropriate proxy for this mark-up."*

85. *"Flow respectfully disagrees. Firstly, the situation with Chorus is wholly different from that of Flow when the FLLRIC model was generated. Chorus was originally created with the operational separation of Telecom New Zealand ("Telecom") mandated by Parliament in 2006. It has existed since 2008 when Telecom implemented the operational separation of its business units in accordance with undertakings finalized following the 2006*

amendments to the Telecommunications Act 2001. Thus, by the time the cited determination was made, Chorus would have been offering wholesale services for years. Its entire raison d'etre was to provide the kinds of services that C3 is seeking and on a scale that dwarfs Flow's operations in the Cayman Islands. Flow is NOT primarily a wholesale network service provider and was not even providing the access services when the FLLRIC model was created. The Chorus experience is simply not relevant and therefore we reject its use by the Office in supporting its Draft Determination."

Office Response

86. The Chorus example is relevant as it provides an example of how the ICT Act and the Regulations expect Flow to provide such services to other licensees in the Cayman Islands in a transparent, unbundled, non-discriminatory and cost-based manner. The fact that Chorus is a purely wholesale provider and that Flow is a combined retail and wholesale provider is not relevant to how Flow should be operating when providing wholesale services to other licensees.

Flow

87. *"The Office's choice to pick out common overheads from total operational expenditure from the FLLRIC model without recognition that this service did not exist at the time of the FLLRIC model's creation is therefore arbitrary. It does not allow as required by Section 6(h) of the Information and Communications Technology Authority (Interconnection and Infrastructure Sharing) Regulations, 2003 (INI Regulation) that a proportionate contribution to the responders fixed and common costs are made. Flow have had a long-history of working together in a reasonable manner to bridge the gap between the reality that existed at the time the FLLRIC model was created and the present day, i.e., in cases in which services are offered today that were not offered at the time the FLLRIC model was created. In that spirit, Flow proposes to apply a midpoint between our approach, which uses common overhead and opex from our recent company accounts, and that proposed by the Office based on FLLRIC data. That is ([redacted] + [redacted])/2=[redacted]."*

88. *"The Office indicated that it objects to the higher price proposed by Flow because it provided evidence in the form of a quote rather than an invoice. It insists that unless Flow can produce such an invoice, the unadjusted costs from the FLLRIC model should be used.*

The Office should be aware that it is a rare occurrence that a network operator will procure materials and services in the manner that is fully consistent with the unit costs of a hypothetical cost model."

89. *"We have conducted a further search for more back up evidence and were able to find an invoice for a 2017 JRC-12 Manhole deployed in asphalt (see, confidential attachment "JRC12 invoice 2017"), but this particular purchase involved a deployment without the cover, which Flow currently deploys at a cost of around CI$[redacted]. The cost in 2017 of a JRC-12 Manhole is therefore significantly above the CI$[redacted] + a share of the mobilization found in the invoice. We note that the mid-point between the Office's proposed cost and the Flow proposed value come very close to this range for the 2017 costs. We therefore propose the average of the two proposed figures.*

Office Response

90. The Office notes the comment and additional evidence from Flow. The Office also notes that decisions by the Office must be supported by relevant evidence. In this particular case, the Office does not consider a quote to be evidence of actual expenditure.

91. For revised [redacted] in [redacted] in the [redacted] spreadsheet, Flow has proposed to apply the average of the following two values taken from the FLLRIC model:

- [redacted] - corresponding to the costs related to [redacted] in cell [redacted] in tab [redacted], and
- [redacted] - corresponding to the costs related to [redacted] or [redacted] in cells [redacted] or [redacted] in tab [redacted].

92. For revised [redacted] in cell [redacted] in the [redacted] spreadsheet, Flow has proposed to apply the average of the following two values taken from the FLLRIC model:

- [redacted] - corresponding to the costs related to [redacted] in cell [redacted] in tab [redacted], and
- [redacted] - corresponding to the costs related to [redacted] in cell [redacted] in tab [redacted].

93. Flow has inappropriately applied the costs related to [redacted] or [redacted] and [redacted] to calculate the costs related to [redacted] *and* [redacted] respectively in cells [redacted] and [redacted] in the [redacted] spreadsheet.

94. Furthermore, Flow's submission of an invoice related to the purchase of one item in 2017 that is labelled as [redacted] does not provide an explanation as to whether that single item is directly related to the provision of duct access services to C3 or whether the item refers to the costs of [redacted] and/or [redacted] (or [redacted]). Therefore, there is no sufficient evidence that the costs related to the purchase of this single item by Flow in 2017 represent a relevant benchmark for [redacted] for [redacted] for the purposes of determining the cost-oriented price for duct access service provided by Flow to C3.

95. Accordingly, Flow is required to apply [redacted] of [redacted] (as taken from cell [redacted] in tab [redacted] of the FLLRIC model) in cells [redacted] and [redacted] in the [redacted] spreadsheet.

96. Additionally, Flow's response that the mark-up approach recommended by the Office based on the percentage of common overheads over total operational expense from the FLLRIC model is arbitrary because the duct access service did not exist at the time the

FLLRIC model was created, is inconsistent with Flow's decision to adopt the costing methodology and cost inputs from the FLLRIC model for other cost components in the [redacted] spreadsheet, such as the use of the expense factor value of [redacted] for duct costs based on ratio of opex and overhead expense.

97. Accordingly, Flow is required to apply the mark-up of [redacted] on make-ready costs.

Flow

98. *"The Office asserts that a jointing box may not be required under a wholesale sub-duct access agreement, and if that is the case, the costs related to the jointing box would need to be deleted. With respect, we do not understand the relevance of whether the wholesale sub-duct access agreement specifically requires a jointing box and ask the Office to clarify its assertion."*

99. *"The fact is that in this circumstance, a jointing box is necessary. Without these boxes, C3 would be deploying its fiber outside of standard specifications, which not only increases C3's risk of deploying excessive fiber lengths and limited distribution options, but would potentially increase costs to Flow for having to accommodate C3 remedial actions in the future. In principle, Flow would be willing to allow C3 to install its own jointing boxes, but depending on C3's specifications and procedures for splicing the fibre, Flow might insist on C3 building a separate manhole for those boxes. Without a separate manhole, Flow would face the prospect of increased costs of having to accommodate C3 remedial work resulting from sub-standard installation."*

100. *"With respect to the Frame cover carriage way No. 3, we were able to locate the invoice in question. However, the question OfReg poses is unclear. Flow is unable to determine if that specific piece of equipment is still part of the Flow network as it was purchased 9 years ago. Given that the asset is relatively long-lived, we have no reason to doubt that it is still installed. As manholes, vaults and jointing boxes are all part of the duct infrastructure, if it is still installed, then that particular piece of equipment is part of Flow duct infrastructure."*

101. *"With respect to definitions, it is important for OfReg to note that the use of terminology is not standardized, thus for example in many cases the terms "manholes", "junction boxes", "jointing boxes" and "vaults" are used often interchangeably or not in a uniform manner. The way Flow is using the terms are as follows. The "manhole" includes the cover, frame and collars or rings that form the hole providing entrance and exit as well as the enclosure (vault) into which the ducts enter."*

Office Response

102. Flow claims that they have no reason to doubt that the equipment in question, which is taken as reference for [redacted] for [redacted] and [redacted], as inputted in cells [redacted] and [redacted] in the [redacted] spreadsheet, is still installed, and that if it is still installed, then that particular piece of equipment is part of Flow duct infrastructure.

103. Flow has therefore added the following two values from the FLLRIC model as relevant cost inputs in cells [redacted] and [redacted] in the [redacted] *spreadsheet:*

- [redacted] - corresponding to the costs related to [redacted] or [redacted] in cells [redacted] or [redacted] in tab [redacted] in the FLLRIC model, and
- [redacted] - corresponding to the costs related to [redacted] in cell [redacted] in tab [redacted] in the FLLRIC model.

104. Although Flow claims that the equipment in question is part of Flow duct infrastructure, Flow has allocated all [redacted] to [redacted] in cells [redacted] and [redacted] in the [redacted] spreadsheet. This approach is inconsistent with the treatment of all other equipment that is part of Flow duct infrastructure in the [redacted] spreadsheet, namely [redacted] *and* [redacted], as shown in rows [redacted] respectively.

105. Clarity having been provided by Flow on the interchanging use of terms to reference a *"manhole"*, the Office accepts that a jointing box/manhole/junction box as described by Flow would naturally form a part of the Flow Duct Infrastructure.

Flow

106. *"The Office has proposed updates to the inputs in the calculation of the WACC. At this time, Flow has no material objection with the WACC adjustments proposed by the Office[1]."*

Office Response

107. The Office notes Flow's comment.

Flow

108. *"The Office states that Flow's justification for using the "adjustment factor" is likely to result in over-recovery of duct costs. It proposes a solution that implicitly assumes that, with the C3 sub-duct, the duct system is fully utilized. Flow does not agree with the Office's statements on this issue and is of the strong view that the pricing should not only be a function of the relative size of the C3 sub-duct, but also how much of the duct is used. This is the point the Jamaican Office of Utility Regulation ("OUR") has incorporated in its methodology1. By rejecting this basic tenet, the Office is forcing Flow to accept a price that does not reflect the full cost of providing the facility."*

109. *"To illustrate our point, we simplify the situation by considering a more straightforward usage scenario and examining only one element of the costing—the duct deployed in a*

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carriageway. We note that the logic is applicable to all the other elements as well, i.e., footways duct, jointing boxes and manholes."

110. *"The unit capex for the 2-bore duct deployed in a carriageway was CI$[redacted] per kilometer in 2017 as indicated in the Sub-duct Costing Methodology. The capacity of the 2-bore ducts is, together, eight 1" subducts. We note that if 2" subducts were deployed then the capacity would be four subducts."*

111. *"If only one 1" subduct is deployed, then the cost borne by that subduct is the entire CI$[redacted]. If two 1" subducts are deployed, the cost per subduct would be half of the total, i.e., CI$[redacted], and so on. The table below shows the cost borne as a function of the number of 1" subducts deployed."*

112. *"The Office's proposal is that Flow is to recover only CI$[redacted] from C3, as if the entire duct system was fully utilized. This is unfair, unreasonable and contravenes the INI Regulations. It contravenes Section 6(h) of the INI Regulations which requires rates to be set to allow the responder a proportionate contribution towards its fixed and common costs, of which unused duct space is one. It also contravenes Section 10(1)(b) of the INI Regulations which requires that the responder's charges be non-discriminatory in the sense that a responder applies equivalent conditions in equivalent circumstances in providing equivalent services, as the responder provides for itself. The Office's approach would require Flow to recover a higher percentage of cost from its own services than from its competitor. Thus, if Flow has two 1" subducts installed it would need to recover CI$[redacted]-CI$[redacted]=CI$[redacted] or CI$[redacted] per sub-duct. Flow would be recovering a higher percentage of the cost of the duct (and other network elements) from itself than from the requestor. We note that the Office proposal also runs counter to the practice generally employed by regulators, including the OUR in Jamaica."*

113. *"While we agree that an over-recovery of costs is not appropriate, the pricing proposed would only result in over-recovery if the prices remain unchanged were more sub-ducts to be deployed in the duct. So, we agree that "over-recovery" may take place if, going forward, the price of the sub-duct does not reflect an increase in utilization. That is, to say, that if an access seeker's prices are based on a utilization at the time of the agreement, but utilization subsequently increases, then over-recovery may take place."*

114. *"Further, we understand that the use of [redacted] is not intuitive as it reflects a utilization that varies across the 2-bore system over the relevant route. To simplify and make the calculation more intuitive, we propose the following. In the 2-bore system at issue, Flow reserves one bore for its own purposes. Therefore, we propose then that:*

> *1) the model reflect that at the moment C3 is the only service provider in the second bore, so it must recover half of the two bore cost and other elements (manholes and jointing box) associated with that system; and*
>
> *2) should additional sub-ducts be deployed, the price of the sub-duct for C3 would be reviewed."*

Office Response

115. Flow's revised proposal to charge C3 for one 1" subduct a duct access price that corresponds to one half of the 'Unit capex' of an entire 2-bore duct is likely to be in breach of Regulation 10 of the Infrastructure Sharing Regulations, which requires a responder's charges for interconnection or infrastructure sharing to be *"non-discriminatory in order to ensure that a responder applies equivalent conditions in equivalent circumstances in providing equivalent services, as the responder provides for itself."*

116. For example, if Flow provided to itself two 1" subducts in a 2-bore duct, Flow would incur an internal charge that is equivalent to CI$[redacted] per kilometer per one 1" subduct (assuming the total cost of a 2-bore duct at CI$[redacted] per kilometer, as estimated in 2017). On the other hand, C3 would incur a charge that is equivalent to CI$[redacted] per kilometer per one 1" subduct. In such case, pricing conditions that Flow would apply to C3 for accessing a service that is equivalent to the service Flow provides to itself (i.e., access to one 1" subduct), would be discriminatory.

117. Therefore, in order to comply with Regulation 10 of the Infrastructure Sharing Regulations, Flow is required to implement the following changes in [redacted] in the [redacted] spreadsheet:

[redacted]

Flow

118. *"Finally, with respect to the observations made by the Office on the OUR's infrastructure sharing model, Flow notes that the costs that the OUR introduced were hotly debated in its consultation and, in any case, are not comparable with costs in the Cayman Islands."*

Office Response

119. The Office notes Flow's comment.

Flow

120. *"With respect to a), in its 10th September 2021 response to the 9th August 2021 RFI, Flow submitted a model that contained all the cost components for the InSpan Service at Maya 1 CLS as well as the sources for the inputs. Flow notes that the costing for the InSpan has effectively been a moving target as the discussion for the costing of the Sub-duct has continued throughout this proceeding in that there are methodological similarities between the two costings."*

121. *"Attached to this submission (Diagram of Maya_2022_02_22_Confidential) is a diagram that illustrates the physical components of the InSpan Maya CLS (Analogous arrangements were made for the InSpan at OTS) that Flow offered and were accepted by*

C3. The components that Flow is providing are indicated with "A" [redacted], "B" [redacted] "C" [redacted]. We have also included a charge for the survey and oversight of C3 entry and exit from the zero manhole."

122. *"Other elements in the Maya facilities that Flow provides [redacted] are covered in C3's capacity service. We note that in the diagram the circuit provided to C3 is indicated as 5Gbps; however, Flow made ready-for-service, at C3's request, a 10Gbps circuit."*

123. *"In the costing attached to our 10th September 2021 submission, these physical components are listed in cells C4 to D10. We have indicated whether these elements are shared or not. In column H we provided the source of the cost information. The FLLRIC model does not provide information on all the cost elements. Where absent in the FLLRIC model, Flow has supplied any significant information either in the context of the sub-duct costing inquiry or, in case of the OSP panel, as an attachment to the confidential version of this filing."*

124. *"The non-recurring costs calculation for the planning, designing, ordering and site preparation for installing the new components are given in cells [redacted]"*

125. *"With respect to b), in our 12th March 2021 response to the OfReg 3rd February 2021 RFI, we presented the following non-recurring and recurring monthly recurring charges:*

> *The Charges corresponding to our InSpan costing modelling are the "Passive Access to Include Panel, Fiber & Duct Rental". The non-recurring costs of US$[redacted] in the charges above is [redacted] in the charges above. The recurring cost of US$[redacted] has dropped to US$[redacted] in the InSpan costing modelling due primarily to the changes in the specifications of the InSpan since the original offer."*

126. *"With respect to c) and d), there are not active elements in the InSpan Service and thus these queries are not relevant."*

Office Response

127. Flow did not provide any clarifications on the approach adopted and the assumptions applied in calculating both recurring (monthly) and non-recurring costs in the [redacted] spreadsheet.

March 15th, 2022, Cross Comments on Draft Determination

C3

128. *"In the absence of the pricing information which has been redacted from Flow's submissions and from the decision, it is impossible for C3 to either:*

> *1. Give proper comments on the draft decision; or*

2. Engage in any meaningful negotiation with Flow as to amendment of the WSDA as directed.

C3 therefore requests the reinstatement of all redacted pricing information from Flow's submissions and/or the determination, in accordance with regulation 5(2)(d) of the Information and Communications Technology Authority (Confidentiality) Regulations."

Office Response

129. The Office having accepted the initial requests for Confidentiality from Flow, and following agreement from Flow on 23 July 2021 to waive certain confidentiality claims with respect to disclosure to C3, the relevant documents were provided to C3 on 08 July 2021. The Office considers that the harm to Flow likely to result from disclosure would outweigh C3's interest and the public interest in disclosure. The Office further considers that it is able to discharge its regulatory responsibilities in this instance without the disclosure of Flow's confidential cost information to C3.

C3

130. "*Noting above C3 has provide comments on areas it is was able to:*

A. C3 use of Flows Dark Fibre during dispute period

Once gain Flow is attempting to suggest that C3 has gained from the use of their dark Fibre and therefore should compensate Flow for the use of the dark fibre, as they normally do they view everything in a one sided manner. Flow has failed to consider the revenue C3 has lost and continues to lose by Flow failing to do the make-ready they were paid for but never did. Maybe Flow, since they have access to the true numbers of the subscribers in those area, should do an exercise to see how much revenue C3 would have gained had it been allowed access to the ducts had Flow completed the make-ready in the time as suggested in the Infrastructure Regulations. C3 would have been a first mover in those areas along that route, areas that the Regulator and Flow knows full well Flow is just building and FTTH GPON network along that route. C3 would have been able to breakout anywhere along that route to expand its network, quickly converting many Flow customers in those areas to C3 customers. Flow knew full well of C3's plan and purposefully did not do the make-ready, first citing that they did not have the manpower to do the work and offered C3 the dark fibre (4 strands) so we could get to Health City, a mere token of what C3 could have gained had they had access to the ducts and installed their own cables. For Flow to suggest C3 should pay them U$20,000 per month for these is in itself proof that they don't, and continue not to, use the FFLRIC model for pricing infrastructure. What formula did they use to calculate that basically 2 strands of fibre in their ducts warrant a cost of U$20,000 per month? Flow's actions were clearly done to block C3 from expanding it's network east until they had time to make a business case to get corporate approval to build a FTTH plant to the Eastern Districts."

Office Response

131. The Office notes C3's allegations, but also notes C3 did not provide supporting evidence.

C3

132. *"C. Appropriateness of Alternative to Access to the Maya CLS Building*

This simple false, C3 was always under the impression we would be given access to the landing station, when we brought our fibre into the Zero Manhole C3 left enough cable to go inside to the patch panel. When C3 pulled in their cables to the Zero Manhole we were told Flow would be slicing our cables in at the Zero Manhole. We questioned this immediately, but agreed to it for the time being, until the Final Determination was made by the Regulator. Today Flow continues to overcharge C3 for Infrastructure, as part of getting access to CJFS and Maya-1 Cable, Flow is charging U$1266.00 and U$1457.00 per month respectfully for duct rental for access to the Zero Manhole. It can't be charging C3 for anything else because Flow brought their cables to the Zero Manhole and spliced in C3 fibre. Even now Flow is not transparent at this stage and this issue forms part of the dispute - Flow over charging C3 for Sharing Infrastructure."

Office Response

133. The Office notes C3's assertions. These appear to relate to the Commercial Agreements recently concluded between C3 and Flow and not to the matters included within the scope of the procedural Advisory Guidelines. The Office refers C3 to its rights as set out in the relevant law, its ICT License, and the Regulations.

C3

134. *"Flow makes a further statement "Flow also extended C3's 5G Service when it was unable to make timely arrangements on the Far-end (USA) arrangements for it's 10G Circuit. This is a factual falsehood by Flow, C3 has always been told that Columbus Network and Flow are two separate entities, and the entire reason we could not breakout our backhaul from the Flow as per the Infrastructure Regs (S)6(f) "cost and tariffs shall be sufficiently unbundled so that the requestor shall be obliged to pay the responder only for the network elements or infrastructure sharing services that it requires", therefore clearly if it was Flow providing the 5G circuit as they have suggested C3 should have been allowed to unbundle and would have dropped the backhaul that Flow has been charging Columbus Networks under a contract that has never been provided to C3."*

Office Response

135. The Office notes C3's assertions. These appear to relate to the Commercial Agreements recently concluded between C3 and Flow and not to the matters included within the scope of the procedural Advisory Guidelines. The Office refers C3 to its rights as set out in the relevant law, its ICT License and the Regulations.

C3

136. *"G. RFI #47 Flow is to provide a detail justification….*

It is again difficult for C3 to provide substantive comments because of the redaction.

1. The model reflects that at the moments C3 is the only service provider in the second duct bore, so it must recover half of the two bore cost and other elements (manholes and joining box) associated with the system; and

2. Should additional sub-duct be deployed, the price of the sub-duct for C3 would be reviewed.

137. *This suggestion if considering proposing to charge C3 reservation fee, like DataLink proposed and was a matter of another dispute, but in this case C3 would be paying Flow a fee for the subduct it installs and then a reservation fee for the two space it can never access. The Regulator already issue a draft determination on this proposed model but in this case it is even more draconian and sinister than DataLink's Reservation Fees. Flow would let C3 into the duct, charge them for the entire bore but C3 can only use 1/3 of the bore and when another service provider ask for access then only then "review". C3 assumes they would split the charge in this case the two service providers would be then pay 1.5 times each for their subducts in the bore but still only access to 1/3 of the bore each, this would seem to be contrary to the InI Regs 6(c) "interconnection and infrastructure sharing services shall be provided by the responder to the requester at reasonable rates. On terms and condition which are not less favorable than those provided to the responder to itself….""*

Office Response

138. The Office notes C3's comments and refers C3 to the Office's response to Flow above regarding Flow's proposed pricing approach.

C3

139. *"I. Pricing of the InSpan Solution*

It is again difficult, but it is C3's view, that C3 should be granted access to both CLS, the agreement to the InSpan was only a temporary measure so C3 was able to backhaul its own capacity from the landing stations. We know there is room in each CLS and in case of OTS we are aware that other businesses that are not licensed by OfReg have equipment in this location."

Office Response

140. The Office notes C3's comments and also notes that Flow and C3 have entered into Commercial Agreements in late 2021 and that this Determination addresses the matter of access to the Maya -1 CLS.

Flow

141. *"Issue 2A- Duct Size Determination*

C3 requests that OfReg determine the issue between the parties regarding whether the definition of sub-duct refers to the inside or outside diameter of the duct. Flow's view is that this matter is clear and that the diameter referred to in the Wholesale Sub-duct Agreement and subsequent discussions between the parties on the issue, is the external diameter, and therefore, entire diameter of any sub-duct. We would also respectfully direct the Office's attention to the fact that a finding that the definition of diameter refers to the inside of the sub-duct, will lead to further confusion and dispute. If the Office were to hold that the reference to the diameter refers only to the inside of the sub-duct, the implication of this ruling would be that the size of the external diameter could conceivably be significantly larger. The result would mean that licensees could utilize any size of sub-duct, provided the internal diameter was one inch only. This would lead to an insufficiency of space and other problems for duct-sharing. In our view, this matter is straightforward, and the standard to be applied is clear. There is simply no basis for a finding that the meaning of the diameter of the sub-duct refers to the "inside only" of the sub-duct. C3's request in this regard is purely self-serving and is intended to allow them to avoid responsibility for following the commitments they have made, by complying with the standards applied to other licensees. We reiterate our previous submissions made to OfReg on this issue and we ask the Office to accept our submissions that at all material times, C3 was aware that the diameter being referenced was external and reject C3's attempt to redefine the meaning of "diameter.""

Office Response

142. The Office notes Flow's comments, and notes the paucity of evidence to support Flow's claim that "*C3 was aware that the diameter being referenced was external*".

Flow

143. *"RFI 11C - Manhole Costs*

We note the C3 invoice for "manholes" at CI$750. Flow suspects that this cost does not represent fully the relevant civil works involved. We have no reference as to what the cost of $750 involves and what specifications were used. The term "manhole" has often been used to refer to merely the frame and cover, as well as to the complete vault, but the costs involved vary considerably, depending on what is actually being referred to . In any case, Flow has provided invoices of various types to the Office over the years that indicate clearly that CI$750 could not be the relevant price to this costing."

Office Response

144. The Office notes Flow's comments.

Flow

145. *"Continuing Breach by Flow*

Flow denies that it continues to breach any obligations on infrastructure sharing, or otherwise. Flow is entitled to limit its economic and other exposure to C3, or any other party which has breached an agreement with Flow. Given the history of C3's conduct in this matter, Flow awaits the establishment of clear and specific rules governing the terms of infrastructure sharing in order to avoid further disputes and or losses in the future."

Office Response

146. The Office notes Flow's comments and reminds Flow of its rights and obligations as clearly set out in their ICT License, relevant law and regulations.

6. The Issues for Determination

147. The issues included by C3 in the DDR, were formally referred to the Office in a dispute determination request in accordance with the process required by the Dispute Regulations.

148. As none of the reasons to decline to deal with the DRR as set out in Regulation 10 of the Dispute Regulations are applicable, the DDR was accepted by the Office and addressed under the process contemplated by section 67 of the ICT Act and the Dispute Regulations.

149. As noted above, the DDR identified five inter-related issues. However, the DDR is not the model of clarity. In fact, as much information about the nature of the disputes can be found in the section on "History of commercial negotiations" as in the section on "The issues in dispute." In any event, a review of the five issues identified by C3 reveals that the first three contained a number of embedded questions. For example, while the primary issue under Issue 1 is the time taken by Flow to respond to the request and provide the service, C3 also raises additional questions regarding the cost orientation and reasonableness of the prices charged. After recasting the issues as stated by C3, in order to include these embedded questions, the Office concluded that issues in dispute in the DDR are:

Issue 1. Duct clearance along the route from a point on Shamrock Road to High Rock Landing station:

A. Did Flow respond to the Shamrock Road route duct access request and provide services within the timelines as per the ICT Act and the Regulations? (DDR paragraphs 76-86)

B. Do the prices charged by Flow for the Shamrock Road route duct survey comply with the Regulations? (DDR paragraphs 88-89)

C. Do the ICT Act and or the Regulations or the WSDA permit Flow's refusal to complete the duct clearance and make-ready work on the Shamrock Road duct route? (DDR paragraphs 85-87)

Issue 2. Sub-duct size issue along the Shamrock Road to CLS route:

A. Did Flow agree to C3 using a 1.5-inch sub-duct? (DDR paragraph 90-95)

B. If not, was C3's use of a 1.5-inch sub-duct and not a 1-inch sub-duct a material breach of the WSDA? (DDR paragraph 96)

C. Does Flow's proposed price for sub-duct service using a 1.5-inch sub-duct comply with the Regulations? (DDR paragraph 98)

D. Should Flow compensate C3 for the unused 1.5-inch sub-duct and fibre cable? (DDR paragraph 98)

Issue 3. Access to the CLS:

A. Has Flow provided a lawful reason to refuse access to the CLS building? (DDR paragraphs 99-100)

B. Has Flow provided a lawful reason to refuse access to land within the CLS site for a separate building? (DDR paragraph 101)

C. Is Flow's proposed alternative for access to the CLS building (InSpan Back-haul Service) appropriate? (DDR paragraphs 99 & 105)

Issue 4. Is Flow's rejection of the C3 Alternative Solution (installation of shared fibre cables where sub-duct is not feasible) lawful? (DDR paragraphs 106-108)

Issue 5. Are the Duct Survey Estimates provided by Flow in compliance with the Regulations? (DDR paragraphs 109-113)

7. Applicable Substantive Law

150. The issues raised by C3 in the DDR and the other issues between the parties contained in the evidence before the Office involve the construction, use and sharing of ICT infrastructure, and the prices for infrastructure sharing services. The key provisions in the ICT Act regarding the sharing of infrastructure can be found in Sections 65, 66, 68 and 69. The Regulations give effect to these provisions and set out in greater detail the rights and obligations of licensees in respect to the sharing of ICT infrastructure.

8. Office Jurisdiction

151. As an administrative tribunal, the Office's jurisdiction and powers are limited by its enabling statutes, in this case, the URC Act and the ICT Act. This jurisdiction and these powers are both substantive (i.e., is the Office responsible for the subject matter?) and procedural (i.e., can the Office address the matter and follow a certain process?).

152. It is beyond question that the Office has substantive jurisdiction in this case. Section 6(5) and Schedule 1 of the URC Act assigns responsibility for "*Information and Communications Technology markets…*" to the Office. Sections 6(1) and 6(2) of the URC Act and Sections 9(3) and 9(4) of the ICT Act set out the Office's powers to regulate those markets. Those powers, though, are circumscribed by the procedural and fairness requirements imposed on the Office by Sections 6(4) and 7 of the URC Act.

153. The Dispute Regulations also impose procedural requirements on the Office's jurisdiction. For instance, a complainant who wishes to submit a Determination Request to the Office must first send a Notice of Grievance to the other party and make "good faith and reasonable efforts to settle such dispute directly with the respondent" as required by Regulation 4 of the Dispute Regulations. As noted in section 4.b (The Dispute Determination Request) above, C3 appears to have followed this process.

9. Summary of Conclusions and Determinations

Issue 1: Duct clearance along the route from a point on Shamrock Road to High Rock Landing station

Issue 1A: Did Flow respond to the Shamrock Road route duct access request and provide services within the timelines in the Act and the INI Regulations?

154. Flow addressed C3's request and provided a survey of the Shamrock Road duct route within the timeframes set out in the ICT Act and the Regulations

155. Despite the fact that Flow took more than 30 days to provide the quote for clearance and make-ready work, C3 was responsible for a significant portion of the delay. As the scope of the services to be provided by Flow changed during the process, necessitating a new quote, the final quote was provided within the time frames as set out in the ICT Act and the Regulations.

156. Flow did not provide the duct clearance and make-ready work within a reasonable time, as per Section 65(3) of the ICT Act. Indeed the record suggests the work still has not been completed (it is difficult to say with certainty as there are differences between the views of the two parties as to when the work began and ended, and Flow's communications with C3 are inconsistent with Flow's representations to the Office). Further, the record does not provide reasonable justifications for Flow's inability to complete the work in a timely manner.

157. Flow did not respond to C3's requests for status updates with any reasonable level of detail, and Flow's answers to C3 do not appear to match Flow's actions. However, there is not sufficient evidence to conclude that Flow's actions amounted to a breach the good faith obligation in Regulation 8(11)(d) of the or the obligation to provide information under Regulation 13(1).

Issue 1B: Do the prices charged by Flow for the Shamrock Road route duct clearance and make-ready comply with the INI Regulations?

158. The base charges for the services used to develop the price for the duct clearance and make-ready work on the Shamrock Road route, whether they are third–party charges (which flow through to C3) or are Flow's own Special Service charges (which Flow applies to its own retail customers) appear to be non-discriminatory. There is no evidence that they are not reasonable.

159. The loading factor applied to Flow's Special Service charges when applied to duct clearance and make-ready work performed for C3 was not cost-oriented and was inconsistent with the Regulations. Application of the mark-up calculated in Schedule 3

attached here, based on the FLLRIC cost model, i.e. a mark-up of [redacted], would be consistent with the Regulations.

160. The associated make-ready cost of the new manhole required in order to accommodate C3's use of Flow's ducts was lawfully charged to C3.

Issue 1C: Is Flow permitted, either under the ICT Act and INI Regulations or the WSDA to refuse to complete the duct clearance and make-ready work on the Shamrock Road route?

161. Flow's reasons for ceasing duct clearance and make-ready work on the Shamrock Road route did not fall within one of the reasons listed in the ICT Act or the Regulations for refusing to provide infrastructure sharing services and, in the circumstances (including Flow's agreement to separate clearance and make-ready activities from sub-duct installation activities), Flow's decision to cease duct clearance and make-ready work on the Shamrock Road route contravened the ICT Act and the Regulations.

Determinations:

Issue 1A & Issue 1C – The Office determines that Flow shall:

a. Within 75 days of this Determination advise C3 when Flow will resume works on the contracted Duct Clearance and Make-Ready works.

b. Resume the works referenced in (a) above no later than 105 days after publication of this Determination, unless otherwise agreed in writing with C3. Such agreement shall be submitted to the Office within 7 days of it being established.
c. Provide the Office and C3 within 75 days of the date of this Determination, a project plan including start date as to when works will resume.

d. Provide bi-weekly updates to both the Office and C3 as to the progress of works through to completion Duct Clearance and Make-Ready works.

Issue 1B - The Office determines that within 75 days of publication of this Determination, Flow is to amend the mark-up on the base charges for Duct Clearance and Make-Ready works to [redacted] and negotiate with C3 on how any monies owed to C3 shall be applied to the C3 account. Within 7 days of arriving at a negotiated agreement, both Flow and C3 are to confirm to the Office how any monies owed are to be applied to C3's account.

Issue 2: Sub-duct size issue along the Shamrock Road to CLS route

Issue 2A: Did Flow agree to the use of a 1.5-inch sub-duct?

162. Based on the past behaviour of the parties, C3's belief, that the WSDA could be amended to allow sub-duct greater than 1-inch without a formal written and signed amending agreement was not unreasonable.

163. However, in the case of the Shamrock Road duct route, the parties did not clearly agree, and Flow did not unambiguously promise, to allow C3 to use 1.5-inch sub-duct. A reasonable person would have concluded from Flow's November 2017 emails that the parties had not yet reached a firm mutual understanding on the matter. Therefore, C3 did

not have Flow's agreement and, where C3 installed a sub-duct that is not 1-inch in size, C3 was in breach of the WSDA.

164. There is no evidence that the parties ever explicitly discussed, let alone agreed, whether to measure "one inch sub-duct" by reference to its inside diameter or outside diameter.

Issue 2B: If not, was C3's use of non-1-inch sub-duct a material breach of the WSDA?

165. Based on all of the relevant factors advanced by the parties for determining whether a breach is "material", taken together, and based on Flow's own behaviour in response to C3's breach of the WSDA, C3's breach was not a "material breach" for the purposes of clause 8.2.2 of the WSDA.

Issue 2C: Does the proposed price for access using 1.5-inch sub-duct comply with the INI Regulations?

166. Flow's proposed pricing structure, i.e. charging for 1.5-inch sub-duct two times the price it would charge for a 1-inch sub-duct, is reasonable in these circumstances, even though the sub-duct is clearly not twice as large, because, on the evidence, the 1.5-inch sub-duct prevents Flow from providing access for two 1-inch sub-ducts. In any event, this is consistent with the output of the cost model submitted by Flow, once the model is corrected as set out in the next paragraph.

167. The prices Flow proposed to charge for duct access for 1-inch and 2-inch sub-ducts were not reasonable or cost-oriented. If Flow makes the changes to its model and to the inputs to its model, as described in Schedule 3 attached here, the resulting prices for duct access service for 1-inch and 2-inch sub-ducts would be reasonable and cost-oriented, consistent with the requirements of the Regulations.

Issue 2D: Should Flow compensate C3 for the unused 1.5" sub-duct and fibre cable?

168. There is no basis to require Flow to compensate C3 for the unused 1.5-inch sub-duct and associated fibre, as Flow had not agreed or promised to allow C3 to use it.

Determinations:

Issue 2A - The Office determines that within 75 days of publication of this Determination, the parties are to:

a. negotiate and execute an amendment to Clause 1.1 of the WSDA to the Definition of "Customer Sub-duct" to address whether a reference in the WSDA to a measurement of a sub-duct is referring to the Inside Diameter or Outside Diameter of the 'Customer Sub-Duct'.

b. negotiate and execute an amendment to the WSDA to change the monthly recurring charge for access for use of a 1-inch sub-duct along the Shamrock Road Duct route to the prices as set out in Schedule 3 attached here.

c. negotiate and execute amendments to the WSDA to include in the WSDA any other agreements made by the parties for changes to the WSDA, including the Shamrock Road, Walkers House and West Bay Road duct routes.

d. within 7 days of the negotiated agreements in a, b, and c above, provide the Office with details of the new agreement/clause.

Issue 2A and Issue 2C - The Office determines that, within 50 days of publication of this Determination C3 shall indicate to Flow (and shall copy the Office) whether C3 proposes to:

a. Remove the 1.5-inch sub-duct C3 has installed in Flow ducts along the Shamrock Road Duct Route where Flow has not given C3 permission to install 1.5-inch sub-duct and replace it with a 1-inch sub-duct. If C3 proposes to remove the 1.5-inch sub-duct this is to be completed in a similar time frame as was required for C3 to install the sub-duct, however no later than 90 days from C3 notifying Flow of its decision to remove the 1.5-inch sub-duct.

Or

b. Agree to compensate Flow for C3's use of the 1.5-inch duct where Flow has determined there is space available, at the amended prices for the 1.5-inch sub-duct of twice the price for a 1-inch sub-duct once the prices for the 1-inch sub-duct have been amended as per Schedule 3 attached herewith.

c. Within 7 days of C3's notification to Flow, provide the Office with details of C3's decision.

Issue 2B - The Office determines that C3's use of a sub-duct other than a 1-inch sub-duct was not a material breach of the WSDA.

Issue 2C - The Office determines that within 50 days of publication of this Determination, Flow is to amend the monthly recurring charge for access to its ducts along the Shamrock Road Duct route for the use of 1-inch and 2-inch sub-duct as set out in Schedule 3 attached herewith. Within 7 days of the amendment, notify the Office that such amendment to the monthly recurring charge has been applied.

Issue 2D - The Office determines that Flow is not required to compensate C3 for the unused 1.5-inch sub-duct and fibre cable.

Issue 3: Access to the CLS

Issue 3A: Has Flow provided a lawful reason to refuse access to the CLS building?

169. None of the reasons listed in the ICT Act or the Regulations for refusing to provide infrastructure sharing services apply to the CLS building, other than to the Maya-1 equipment room itself. Flow, therefore, contravened the ICT Act and the Regulations by refusing access to C3 for C3's equipment within the CLS building for C3 to connect to capacity on the Maya-1 cable system.

170. In particular, space for co-location equipment, namely a dedicated co-location rack, is available in the [redacted] rooms, and space is available within the CLS

building and within the ducts between the CLS building and the manhole in Seaview Road, to connect C3's network in Seaview Road to C3's capacity on the Maya-1 cable system.

Issue 3B: Has Flow provided a lawful reason to refuse access to land within the CLS site for a separate building?

171. None of the reasons listed in the ICT Act or the Regulations for refusing to provide infrastructure sharing services apply to the CLS site. Flow is not currently refusing access to the site, so is not in contravention of the ICT Act or INI Regulations.

172. Notwithstanding this, the building as proposed by Flow is not a reasonable solution in light of the high cost and the fact that it exceeds C3's reasonable needs.

Issue 3C: Is Flow's alternative to access to the CLS building (InSpan Backhaul Service) appropriate?

173. From a technological point of view, the InSpan Backhaul Service proposed by Flow could be an appropriate alternative to co-location in the CLS and, contrary to C3's concerns, would not require C3 to place C3's sensitive electronic equipment in a manhole.

174. There is no evidence on the record that the proposed prices satisfy the requirements in the ICT Act and the Regulations for reasonableness and cost-orientation. The InSpan Backhaul Service as currently proposed is, therefore, not an appropriate alternative to co-location within the CLS.

Determinations:

Issue 3A - The Office determines that within 75 days of publication of this Determination, Flow is to initiate good faith negotiations with C3 for the provision of space to accommodate C3's 2 Rack Units of equipment within the CLS, outside of the Maya-1 Equipment Room. Within 7 days of the negotiated agreement, provide the Office with a copy of the new agreement.

Issue 3B - no determination required.

Issue 3C – No determination required. C3 is not required to accept, but may if it wishes, the In-Span Backhaul solution proposed by Flow. The Office understands that C3 has entered into such a commercial arrangement with Flow.

Issue 4: Rejection of Alternative Solution (installation of fibre cables where sub-duct is not feasible)

175. Flow is justified in refusing access to the segment of the Shamrock Road route between the CLS and Health City on the grounds of lack of capacity.

176. The parties were unable to negotiate a mutually acceptable alternative solution, and Flow was justified in refusing the 2-fibre-cable alternative on technical grounds.

177. In any event, the issue is moot as alternative duct facilities have since been built.

Determination:

Issue 4 - The Office determines that Flow is not required to accept the alternate solution of 2 fibre cables as proposed by C3.

Issue 5: Duct Survey Estimates (compliance of the prices with the Regulations)

178. The base charges for the services used to develop the price for the duct surveys for various duct routes appear to be non-discriminatory. There is no evidence that they are not reasonable.

179. The loading factor applied to Flow's Special Service charges when applied to duct survey work performed for C3 was not cost-oriented and was inconsistent with the Regulations. Application of the mark-up calculated in Schedule 3 attached here, based on the FLLRIC cost model, i.e. a mark-up of [redacted], would be consistent with the Regulations.

Determinations:

Issue 5 - The Office determines that Flow shall:

a. Within 50 days of publication of this Determination, amend the mark-up on the base charges for the Survey works to [redacted].

b. Within 50 days of publication of this Determination, initiate good faith negotiations with C3 on how any monies owed to C3 based on the adjustments to the survey costs as set out in paragraph a above shall be applied to the C3 account. These negotiations shall be concluded within 60 days of the publication of this Determination.

c. Within 7 days of arriving at a negotiated agreement, both Flow and C3 are to confirm to the Office how any monies owed are to be applied to C3's account.

10. Analysis of the DDR Issues

Issue 1A Did Flow respond to the Shamrock Road route duct access request and provide services within the timelines in the Act and the Regulations?

C3 Position

180. Flow took 5 months to respond to the request, took too long to complete the surveys, is not providing requisite information on duct clearance, and has not completed duct clearance (DDR paragraph 8)

181. "Ultimately, FLOW has an obligation not to obstruct or in any way impede another licensee in the making of any infrastructure sharing arrangement. Delaying works over two years to provide an infrastructure access service constitutes an obstruction to the obligation to share infrastructure." (DDR paragraph 58).

182. Timelines (as described by C3):
C3 infrastructure sharing request submitted to Flow on 22 January 2017[2],

C3 received the Flow response with a quote for the duct survey on 03 July 2017,

The Flow quote for the duct survey was accepted and paid for by C3 on 17 July 2017,

Flow completed the duct survey on 10 September 2017,

C3 did not receive information on the progress of the duct survey until they raised this with Flow on 19 October 2017,

Flow provided C3 the quote for duct clearance and duct sharing service on 23 January 2018,

Flow provided C3 with an invoice for duct clearance on 23 February 2018, C3 paid the required deposit on 05 March 2018,

C3 wrote to Flow requesting updates on the duct clearance work on 26 July 2018, and again in numerous emails between August 2018 and October 2018,
various exchanges between C3 and Flow in December 2018 and January 2019 showed the Flow had not started on the duct clearance work,

In February 2019 there were attempts between C3 and Flow to resolve issues as stated by Flow,

However, C3 received a letter from Flow on 12 March 2019 stating that clearance work ceased because C3 had materially breached the WSDA (DDR paragraph 76-86).

[2] As discussed in Section 4.B (Key Events and Timelines) above, this date is an error. Note also that C3 does not refer to 2016 correspondence with Flow on this duct route.

Flow Position

183. "… *at all material times, Flow has acted in a timely manner …"* (Flow DDR Response page 15).

184. Timelines (as described by Flow):
The C3 infrastructure sharing request was sent to Flow on 22 June 2017 and acknowledged as received by Flow on 23 June 2017, not 22 January 2017 as stated by C3,

The C3 infrastructure sharing request was replaced on 05 July 2017 by one of greater scope; the new infrastructure sharing request was acknowledged by Flow on 17 July 2017; in any event, this infrastructure sharing request was not binding because it was incomplete as per the Regulations,

There was substantial correspondence between the parties regarding the state of the duct survey during August 2017 and September 2017,
C3 requested additional surveys on 20 September 2017,

Flow advised C3 on 27 September 2017 that the duct survey to the CLS was complete,

Flow provided C3 with additional duct survey quotes, which C3 did not pay for,

In a 27 September 2017 letter to C3, Flow proposed that they provide a single consolidated report to C3 for the various duct surveys; C3 acknowledged receipt of the Flow letter on 28 September 2017 but did not confirm acceptance of the proposal for the consolidated report,

Flow provided C3 with a quote for duct clearance and duct sharing service to the CLS on 03 November 2017,

Flow provided C3 with a revised quote for the duct sharing service to the CLS on 22 January 2018, which reflected that C3 would supply and install its own sub-duct in the Flow ducts,

Flow advised C3 by telephone on 06 December 2018 and again by letter on 12 March 2019 that Flow halted on the partially completed duct clearance works due to C3 use of a 2-inch sub-duct which was a material breach of the WSDA (Flow DDR Response pages 3-13).

Relevant Law

185. When considering Issue 1A the Office was guided by Sections 65(1) and 65(3) of the ICT Act and Regulations 4(1), 5, 6(a), 6(j)(i), 6(j)(iii), 6(k), 8(1) to (7), and 24 of the Regulations. These are reproduced in full in Schedule 1 attached to this Determination.

Analysis

186. The ICT Act Section 65(1) establishes the fundamental obligation on licensees to provide infrastructure sharing services; the ICT Act section 65(3) establishes a general obligation to act in a timely manner.

187. This is implemented by the Regulations, in Regulation 5 and Regulation 8, which establish detailed timelines for responding to requests.

188. The Regulations require a formal "Request" include specific information and be accompanied by a $2,000 deposit.

189. C3's 22 June 2017 letter to Flow, emailed on 23 June 2017, is missing some of the information as set out in the Regulations in Regulation 8(2) and the deposit required by the Regulations in Regulation 8(3). Both parties confirmed in their responses to the 03 February 2021 RFIs that C3 did not provide a deposit.

190. Therefore, C3's 22 June 2017 letter is not a formal "Request" as set out in the Regulations.

191. However, the Regulations in Regulation 5 states that all "*arrangements*" must be concluded within the timeframes contained in the Regulations. The timeframes in the Regulations in Regulation 8(5), Regulation 8(6), Regulation 8(7), Regulation 8(8) & Regulation 8(10) apply to the C3 request in any event, whether or not the infrastructure sharing request satisfied all of the requirements in the Regulations in Regulation 8(2) and Regulation 8(3).

192. Further, while the Regulations impose specific requirements on formal "Requests," the ICT Act does not require infrastructure sharing requests to meet specific criteria, other than being in writing, in order to be "binding", contrary to the Flow position (Flow DDR Response page 6).

193. That said, the Regulations in Regulation 5 refers only to timeframes, not other obligations imposed on respondents to formal "Requests" (e.g., the content of quotations).

194. Requesting duct access is a two-stage process, consisting of first surveying availability of space and second clearing the ducts and making the ducts ready for sharing. The second stage I separate from the first because it requires a decision by the requestor on whether to proceed.

195. Further, each stage consists of requesting a quote and, once the applicable charges or deposit are paid, then the performance of the work. The timeframes referenced in the Regulations in Regulation 5 apply separately to each stage of the process, and the analysis below reflects this.

Duct Survey

196. The date of the C3 infrastructure sharing request to Flow as set out in the C3 DDR is in error.

197. Flow acknowledged the C3 request for duct sharing within the same day of receipt on 23 June 2017.

198. Flow provided C3 with a quote for the duct survey within 30 days of the C3 request for service; the duct survey was completed sometime between 10 September 2017, when C3 says it learned the duct survey was completed, and 27 September 2017, when Flow wrote to C3 saying the duct survey was completed. Either way, this is approximately two months after the quote was accepted by C3 on 17 July 2017, which, on balance, appears reasonable as per section 65 of the ICT Act and is not inconsistent with Regulation 24 of the Regulations.

199. This part of the two-stage process, delivery of the quote for the duct survey and performance of the duct survey, appears to be compliant with the timeframes in Regulation 8 of the Regulations.

200. However, neither the C3 infrastructure sharing request, nor the Flow duct survey quotation appears to have fully complied with the non-time-related elements of Regulation 8 of the Regulations.

201. As the C3 request on 23 June 2017 did not meet the requirements for a formal “Request” under the Regulations, Flow was not obligated to provide certain details in its quotation as required by the Regulations.

Clearance and Make-Ready Quotation

202. Flow acknowledged the request for a quote for duct clearance and sub-duct installation five days after C3 sent the request and provided C3 with the quotation thirty-five days after receiving the request; however, Flow did not inform C3 at the time that the request received was incomplete. Both activities, therefore, were completed slightly outside the timeframes set out in Regulation 8 of the Regulations.

203. The record shows that C3 queried the Flow quote twice on 07 November 2017 and again on 17 November 2017, which Flow answered within a few days in each instance, within nine days and four days, respectively.

204. C3 then took about a month to ask for a revised quote on 03 January 2018, the exact time frame unclear as this followed up a meeting in late December 2017 which was poorly documented on the record: neither party recorded any minutes of the meeting and, per their responses to the 03 February 2021 RFIs, neither party can recall the precise date on which the late December 2017 meeting took place.

205. Flow then took about three weeks to provide the revised quote; the time between C3's request for a revised quote on 03 January 2018 and when Flow provided the revised quote 22 January 2018 was 19 days. Therefore, by considering the C3 request for a revised quote as a “new” infrastructure sharing request and the Flow response in 19 days, the Flow response time is not inconsistent with Regulation 8 of the Regulations.

206. Upon receipt of the revised Flow duct clearance and make-ready quote, C3 took a little more than three weeks to accept the revised quote, and Flow then took a further week to counter-sign the order form/revised quote, it is not clear why this step would have taken

an additional week as there were no changes to the document issued by Flow some six weeks earlier.

207. In any event, Flow issued the invoice within a day of counter-signing, which C3 then paid ten days later.

208. Flow's acknowledgements of receiving requests and quotations were provided either within prescribed time frames or just outside the prescribed time frames as per the Regulations.

209. The time taken by the parties to conclude the post-quotation arrangements was outside the 20 days specified in Regulation 8(10) of the Regulations, and there was no evidence of an alternative time period expressly agreed by the parties.

210. It appears neither party acted particularly expeditiously or slowly with regard to other elements of the negotiation process, and both were responsible for delays – of the 122 days between the initial quote from Flow and the date on which C3 paid the deposit for the clearance work, responsibility for action was on C3 for 82 days and on Flow for 40 days.

211. There was a legitimate process of queries and negotiation between the parties, which contributed to the delay. Therefore, the 157 days between the C3 request for duct clearance service on 29 September 2017 and C3's deposit payment on 05 Mar 2018 was in and of itself not unreasonable or contrary to Section 65(3) of the ICT Act.

Clearance and Make-Ready Work along the Shamrock Road duct route

212. As per the arrangements between the parties and clause 3.3 of the WSDA, duct clearance/make-ready work was to begin upon or shortly after Flow received payment of the deposit for clearance work.

213. Section 65(3) of the ICT Act requires the provision of service, in this instance, the duct clearance/make-ready, within a reasonable time; furthermore, Regulation 24 of the Regulations requires completion promptly.

214. Flow estimated that the project would take sixty non-consecutive days of work to complete, as they set out in their 16 November 2017 and 21 November 2017 emails [Flow DDR Response Item #20]. However, this time estimate was not updated when the parties agreed in December 2017 that C3 could install its own sub-duct [see Flow response to 03 February 2021 RFI #3c].

215. While Flow completed some of the duct clearance and make-ready works, the record suggests that Flow did not complete the duct clearance and make-ready project before Flow ceased working on the project as stated in Flow's 12 March 2019 letter to C3 (see also Flow DDR Response page 13). Flow's response to the 03 February 2021 RFI #4 makes it clear that Flow does not seem to have a clear record of when it started, completed or stopped work on any given task associated with the duct clearance and make-ready project for any given segment of the Shamrock Road duct route to the CLS.

216. Further, Flow's evidence on when it began and stopped duct clearance and make-ready work is inconsistent. On the one hand, Flow "*believes*" it ceased works between 04

September 2018 and 06 December 2018 [Flow response to 03 February 2021 RFI 16b]. On the other hand, Flow advised C3 that work began in late August 2018 or early September 2018 [C3 response to 03 February 2021 RFI #5 (Item #1)], and that work was ongoing on 10 December 2018 [C3 DDR item #20(b)].

217. In any event, it is clear that all duct clearance and make-ready work by Flow ceased by 12 March 2019.

218. Ostensibly, taking more than a year to do sixty non-consecutive days of work and, even at that, not completing the job is not consistent with the obligation in the ICT Act Section 65(3) to "*provide the ... infrastructure sharing service in a reasonable time.*"

219. The same conclusion would apply if Flow had ceased work immediately upon discovering the sub-duct size discrepancy on or before 04 September 2018 [see Flow DDR Response Item #21 (internal email) and Flow response to 03 February 2021 RFI #4] – on balance, it appears to be unreasonable to take even 6 months to do sixty non-consecutive days of work.[3]

220. There is no explanation on the record for why it took Flow this length of time to perform the duct clearance and make-ready work, likely in part at least because Flow did not retain detailed records of when and where it worked on the Shamrock Road duct route to the CLS.

221. There is, therefore, no evidence available which might explain or excuse Flow's performance, with such performance being on its face inconsistent with Section 65(3) of the ICT Act.

222. The Office concludes that Flow's performance of duct clearance and make-ready work on the Shamrock Road duct route to the CLS contravened the obligation in Section 65(3) of the ICT Act to provide services "*in a reasonable time*" and there is nothing on the record which might excuse such breach.

Responsiveness of the parties

223. There is a separate question as to the level of communication between and responsiveness of the parties. However, here also, the parties' record-keeping practices lead to a paucity of evidence.

224. Specifically, C3 asks Flow for a status update on 26 July 2018, 143 days after C3 paid the required deposit for the duct clearance and make-ready works.

225. C3 followed up on 09 August 2018, 07 September 2018, and, despite a response from Flow on 07 September 2018, which C3 acknowledged, C3 again followed up on 05 October 2018, to which Flow responded on 10 December 2018.

[3] This would raise additional questions. If Flow had indeed ceased work by this date, why was C3 not notified until some 6 months later and why was C3 told on 10 December 2018 that work was on-going?

226. Flow's two responses, however, were brief: on 07 September 2018 - "*My understanding is that this was started last week and we should have commenced pulling through the sub-duct*" [C3 response to 03 February 2021 RFI #5 (Item #1)] and on 10 December 2018 - "*…please be advised that this is currently being worked on …*" [C3 DDR Item #20(b)].

227. Flow does not appear to provide a substantive answer in writing on the progress of the clearance work until 12 March 2019. However, Flow provided this answer 228 days after C3's first request for an update on 26 July 2018 and 371 days after C3 paid the deposit. Additionally, in the 12 March 2019 letter, Flow notified C3 that Flow had ceased all work due to C3's alleged material breach of the WSDA.

228. However, Flow states that it "*provided C3 access to portions of the route that were already cleared and secured*" [Flow DDR Response page 12], and the evidence shows that C3 was obviously able to install some of its sub-duct as Flow later objected to the sub-duct installed by C3 [see documents # 142 to #144].

229. There must therefore have been some other communication between the parties regarding the status of works being carried out.

230. In their responses to the 03 February 2021 RFI #10 to 12, C3 notes that it was notified by phone when it could enter segments of the route to install sub-duct, but C3 provided no record or other details of those calls; additionally, Flow stated that it has no records of communications between the parties relating to C3's access to the Flow ducts for installation of the C3 sub-duct.

231. In light of the limited evidence provided by C3 and Flow, the Office cannot conclude that Flow breached any other obligations under the ICT Act or the Regulations.

232. However, it does appear that neither party made much of an effort to comply with the terms of Schedule 5 of the WSDA, which requires C3 to provide written notice to Flow before it enters Flow's ducts to do work. If the parties had complied with Schedule 5 of the WSDA, more information would have been available on C3's activities whilst working in Flow's ducts.

Conclusions

233. Flow addressed C3's infrastructure sharing request and provided a survey of the Shamrock Road duct route was compliant with the timeframes contained in the ICT Act and the Regulations.

234. It took Flow more than 30 days to provide the quote for clearance and make-ready work, but C3 was also largely responsible for some of the delays. Despite C3 changing the scope of the services requested from Flow during the process, thereby necessitating a new quote, Flow provided the final quote within the time frames as set out in the ICT Act and the Regulations.

235. Flow did not complete the duct clearance and make-ready work within a reasonable time frame. Thus, admittedly, the record suggests the work remains unfinished; and further, the record does not provide lawful justification for Flow's inability to complete the works in a timely manner as required by Section 65(3) of the ICT Act.

236. Flow did not respond to C3's requests for status updates with precise details, and Flow's answers to C3 do not appear to match Flow's activities. However, the record does not support a conclusion that Flow contravened the good faith obligation in Regulation 8(11)(d) or the obligation to provide information under Regulation 13(1).

Issue 1B Do the prices charged by Flow for the Shamrock Road route duct clearance and make-ready comply with the Regulations?

C3 Position

237. "Flow is proposing to overcharge C3 in relation to this work" (DDR paragraph 88).

238. On 28 December 2018 C3 requested a breakdown of the duct survey estimates costs as well as duct clearance costs on the Shamrock Road duct route [C3 DDR Item #21, Flow response to 03 February 2021 RFI #5]. Based on Flow's letter of 12 Mar 2019, giving information on the duct clearance costs, "*Flow break-down of the costs illustrated that Flow was overcharging C3*." (DDR Paragraph 88).

239. C3 should not have to pay for a new manhole (DDR paragraph 89).

Flow Position

240. Make-ready provided at standard week-day per-hour charge for a truck roll, supervision provided at standard week-day labour rate (relevant Flow hourly rate plus % loading factor).

241. Locate and raise manholes, pumping manholes and new manhole provided at cost (external party charge plus % loading factor). (Flow DDR Response, pages 14-15 and 28-29).

Relevant Law

242. When considering Issue 1B the Office was guided by Sections 65(5), 68(1) and 68(3) of the ICT Act and Regulations 6(c), 6(d), 6(f), 6(g), 6(h), 9 and 10 of the Regulations. These are reproduced in full in Schedule 1 attached to this Determination.

Analysis

243. The total cost to C3 for duct clearance and make-ready work comprises the charges for various types of activities involved.

244. The cost of each route will be based on the specifics of the route, (e.g., route length, number of manholes, new construction required, amongst other things).

245. There are two types of charges at issue here: first, Flow's internal costs for a truck roll and supervision and second, external suppliers' charges.

246. The ICT Act in Section 65(5) and Section 68(3) requires these charges to be cost-oriented, reasonable, transparent and unbundled, with supplementation by the Regulations, which contain more detail on how charges are determined, consistent with the ICT Act.

247. Flow's invoices to C3 incorporate two types of charges; third-party charges, which Flow passes on to C3 and Flow's own charges. Each type will be analysed separately below.

Third party charges

248. These are passed through at cost plus a mark-up (a "*loading factor*"). Rate for [redacted] are flow-through (plus loading).

249. Actual 3rd-party invoices are not on the record. However, there is no evidence or allegation that Flow was charged a different price by the supplier(s) for the work done on behalf of C3.

250. The costs would be reasonable, transparent, and unbundled to the extent that the base costs are what Flow was charged and would pay for the work if the work was done for Flow itself.

251. However, note that the loading factor increases the cost to C3 by [redacted] above what the 3rd party supplier charged Flow, and what Flow would have paid the same supplier for the same work for its own account.

252. Administering 3rd-party invoices for work performed by C3 could result in Flow incurring some costs.

253. Evidence submitted by Flow in response to the 03 February 2021 RFI #7 suggests that their overhead OPEX is [redacted] of their total OPEX.

254. However, Flow suggests in its response to the 03 February 2021 RFI #7a that, while it applies this factor to its wholesale customers, it does not charge its retail customers this same factor to recover overheads, on the basis that "*the retail prices that retail customers pay generally include a mark-up to recover indirect, including overhead, costs*" [Flow response to the 03 February 2021 RFI #7a].

255. This argument might be valid only if Flow's other wholesale charges to its wholesale customers do not include any indirect or overhead costs.

256. If this condition does not apply, the application of the factor would not be reasonable or non-discriminatory.

257. If Flow's other prices charged to wholesale customers include indirect or overhead costs, then they are similar to Flow's retail prices. Therefore, the wholesale customers should not be charged a loading factor on the Special Services charges.

258. Flow's response to 03 February 2021 RFI #25, "Sub-duct Costing Methodology.xlsx" includes [redacted]

259. Further information was sought via the 09 August 2021 RFIs to assess Flow's analysis of its overhead OPEX in its response to the 03 February 2021 RFI #7a or the "Sub-duct

costing methodology" spreadsheet included in its response on the 03 February 2021 RFI #25.

260. C3 also raised the question of who should pay for the manhole.

261. Section 68(1) of the ICT Act states:

> "*the cost of making any interconnection or infrastructure sharing to the ICT network of another licensee shall be borne by the licensee requesting the interconnection*". Regulation 6(g) of the Regulations states:
>
> "*costs shall be borne either by the requestor or the responder or both based on whether their respective requests and compliance with those requests cause those costs to be incurred…*".

262. Evidence on the record is that the manhole is required in order to accommodate C3's request for duct sharing and that Flow would not have incurred the cost but for C3's request [Flow DDR Response page 15].

263. Therefore it is appropriate that C3 pay for the additional manhole.

Flow's internal costs

264. Flows stated costs of: [redacted]

265. The Office does not consider these rates to be unreasonable. Also, the base rates are applied equally to retail and wholesale customers.

266. Therefore the rates are likely transparent, unbundled and non-discriminatory as required by Section 68(3) of the ICT Act.

267. There was insufficient information available to assess whether the base rates are cost-oriented for the purposes of the Regulations. Note that the base rates are retail rates and, therefore, likely not calculated taking the requirements of the Regulations into account. However, there is no evidence that the base rates are not reasonable.

268. However, the [redacted] loading factor for the same reasons as set out above, that application of that loading factor would be reasonable and non-discriminatory only if the other charges applied to wholesale customers do not already cover overhead costs.

269. It is also unclear why Flow would incur an extra cost or additional overhead in administering an internal cost (i.e. which does not involve a 3rd party invoice) that would not already be reflected in the base cost. In other words, why would a Flow truck roll be more expensive to Flow merely because of the customer's identity?

270. Application of a loading factor for indirect and overhead costs to Flow's Special Services Charges seems on its face to be unreasonable and discriminatory.

271. Further information was sought via the 09 August 2021 RFIs in order to assess whether the loading factors were cost-oriented.

Conclusions

272. The base charges for the services used to develop the price for the duct clearance and make-ready work on the Shamrock Road duct route, whether they are third–party charges (which flow through to C3) or Flow's own Special Service charges (which Flow applies to its own retail customers) appear to be non-discriminatory. There is no evidence that they are not reasonable.

273. The loading factor applied to Flow's Special Service charges when applied to duct clearance and make-ready work performed for C3 was not cost-oriented and was inconsistent with the Regulations. Application of the mark-up calculated in Schedule 3 based on the FLLRIC cost model, i.e. a mark-up of [redacted], would be consistent with the Regulations.

274. The cost of the new manhole required in order to accommodate C3's use of Flow's ducts was lawfully charged to C3.

Issue 1C Is Flow permitted to refuse to complete the duct clearance and make-ready work on the Shamrock Road route?

C3 Position

275. The size of the sub-duct used by C3 is immaterial to whether Flow should have started and completed duct clearance work. Flow has contractual and regulatory obligation to carry out the work (DDR paragraph 86)

Flow Position

276. At the point that Flow halted work, Flow had partly completed the duct clearance and make-ready works. Flow halted works until C3 replaced its non-compliant sub-duct as advised by telephone 06 Dec 2018 and in writing 12 Mar 2019 (Flow DDR Response pages 12-13).

277. On 25 Jun 2019, Flow made it clear to C3 that C3 could resolve the issue either by replacing non-compliant sub-duct or paying a higher fee for already-installed non-compliant sub-duct.

278. C3 rejected both of Flow's offers, and as of 30 July 2019, C3 had not provided an acceptable alternative solution. (Flow DDR Response page 13)

Relevant Law

279. When considering Issue 1C the Office was guided by Sections 65(4) and 69(3) of the ICT Act and Regulations 4(1), 4(3), 6(j), 6(k) and 24 of the Regulations. These are reproduced in full in Schedule 1 attached to this Determination.

Analysis

Statutory Obligations

280. Licensees have a broad obligation to consider, negotiate and provide infrastructure sharing services to other licensees as set out in Section 65(1) of the ICT Act, and Regulation 4(1) and Regulation 8(1) of the Regulations.

281. Licensees have limited grounds for lawful refusal to provide infrastructure sharing services as set out in Section 69(3) of the ICT Act and Regulation 4(3) of the Regulations.

282. Licensees also have an obligation to treat requests in good faith as set out in Regulation 6 and Regulation 8(10) of the Regulations.

Contractual Obligations

283. The WDSA does not include any clauses which expressly allow the suspension of performance of obligations in the event of a dispute.

284. The WSDA provides in the event of a relevant breach for termination of the agreement. However, the WSDA does not provide for the suspension of some services in the event of a relevant breach.

Discussion

285. The duct clearance and make-ready are separate activities from sub-duct installation as acknowledged by Flow in their revised quote to C3 on 22 January 2018.

286. Under the framework of the WSDA, Flow typically performs both the duct clearance and make ready along with the sub-duct installation. The Office considers that it is reasonable for both the duct clearance and make ready along with the sub-duct installation to happen at or near the same time.

287. When Flow provided C3 with the second duct clearance and make-ready quote on 22 January 2018 [C3 DDR Item #10, Flow DDR Response Item #14] following the verbal agreement at the late-December 2017 meeting between C3 and Flow, Flow effectively waived the requirement in the WSDA that Flow must install the sub-duct.

288. This waiver of the requirement that Flow installs the sub-duct was not documented with a formal signed amendment to the WSDA as set out in clause 19.1 of the WSDA. However, the evidence on the record suggests that there was an agreement loosely documented in writing via an exchange of emails which is consistent with Section 66(1) of the ICT Act, Regulation 19 of the Regulations.

289. C3 paid Flow a deposit for duct clearance and make-ready, but not for sub-duct installation based on the Flow 22 January 2018 revised duct clearance and make-ready quote. The Office considers in the circumstances that it was reasonable for C3 to expect completion of the duct clearance as contracted.

290. Flow, having agreed to separate the duct clearance and make-ready works from the sub-duct installation activities, and having taken the agreed deposit from C3 for the duct

clearance and make-ready, and having waived its contractual right to do the sub-duct installation, had a contractual obligation to complete the duct clearance and make-ready works. C3's possible breach of the sub-duct size requirement would not have affected Flow's ability or obligation to perform duct clearance and make-ready activities as the sub-duct installation had already been separated out as an activity to be carried out by C3.

291. Furthermore, none of the reasons as permissible in Section 69(3) of the ICT Act allowing a licensee to refuse to provide infrastructure sharing services arose with respect to Flow's duct clearing and make-ready services simply because C3 might have been in breach of the sub-duct size requirements, C3's breach did not create "*insufficient capacity taking into account reasonably anticipated requirements; … reasons of safety or security; or … technical and engineering matters which would make such access difficult or impossible*" in segments of the route that were still to be cleared.

292. Having already severed the duct clearance and make-ready work from the sub-duct installation work, Flow's ability and obligation to perform the duct clearance work were unaffected by the alleged breach by C3 relating to sub-duct installation.

Conclusion

293. Under the ICT Act, the Regulations and the WSDA, Flow's termination of works was not permissible due to a dispute between the parties regarding sub-duct size; therefore, Flow was obligated to complete the agreed duct clearance and make-ready works.

294. Further, as discussed under Issue 1A above, there is a paucity of records from Flow detailing its work along the Shamrock Road duct route. Flow did not provide evidence to demonstrate that Flow had reasonable excuse for not completing the duct clearance and make-ready works within six or twelve months, irrespective of whether Flow's claim of breach by C3 is a valid reason which permitted Flow to cease work.

295. Therefore, as concluded previously, Flow did not provide the duct clearance service within a reasonable time consistent with Section 65(3)) of the ICT Act or promptly as required in Regulation 24 of the Regulations.

Proportionate Approach

296. Assuming for the purposes of argument that C3 was in breach of its obligations regarding sub-duct size under the WSDA, was Flow's cessation of duct clearance and make-ready works the appropriate and proportionate remedy, especially considering Flow's decision to separate the duct clearance and make-ready activities from the sub-duct installation activities and waive its right to install the sub-duct?

297. Clause 2.1 of the WSDA limits C3's right to enter the Flow duct system under Agreement in the normal course (i.e. other than as may be agreed separately) to installation and maintenance of C3's cable (i.e. not sub-duct) on notice. Clause 2.1 of the WDSA does not contemplate the installation of sub-duct by the customers. In other words, Flow's waiver to allow C3 to install sub-duct also involved the waiving of at least some of the restrictions on C3's right to enter the Flow duct infrastructure.

298. Clause 2.1(i) of the WSDA requires that entry into the Flow duct system is subject to prior notice of a minimum of five working days and three to five working days as per Schedule 5 of the WSDA.

299. The procedures in Schedule 5 of the WSDA are not on their face limited to the installation of fibre, so logically they would also apply to the installation of sub-duct and would not necessarily have been waived by Flow when it waived the right to install the sub-duct.

300. Nothing on the record suggests Flow waived the notice procedures contained in Schedule 5 of the WSDA in relation to C3's sub-duct installation activities.

301. As noted under Issue 1A, the evidence suggests that C3 failed to provide Flow such written notice. This lack of notice by C3 was confirmed by Flow in it its response to the 03 February 2021 RFI #10. In the 03 February 2021 RFI, C3 was asked the same question, and in response, C3 provided its requests to Flow to access the Flow ducts and not copies of its notices to Flow to enter Flow's ducts for the purposes of working in the Flow ducts, as required by Schedule 5 of the WSDA.

302. However, Flow had the means under the WSDA to mitigate the issue of C3's use of incorrectly sized sub-duct. Flow had the option to withdraw the waiver of the right to install the sub-duct and not permit C3 to enter the Flow ducts to install sub-duct until the matter of sub-duct size was resolved.

303. Flow could have implemented these mitigations by informing C3 in writing of its decision and not advising C3 of when and where it could install sub-duct as C3 could not have known where clearance had been completed without Flow's phone calls advising C3 of such.

304. In other words, the appropriate and proportionate remedy for the alleged breach of the WSDA due to C3's use of differently-sized sub-duct is not the cessation of all clearance work by Flow but rather only of installation work by C3 until the size issue was resolved.

305. Had Flow taken this approach, it would have allowed Flow to protect its interests while continuing to perform its statutory and contractual obligations. This approach would also satisfy Regulation 6(j) and Regulation 24 of the Regulations, meaning the ducts would be ready for installation activities as soon as the sub-duct size issue was resolved.

Conclusions

306. Flow's reasons for ceasing duct clearance and make-ready work on the Shamrock Road duct route did not fall within one of the reasons listed in the ICT Act or the Regulations permitting the refusal to provide infrastructure sharing services. In the circumstances, including Flow's agreement to separate clearance and make-ready activities from sub-duct installation activities, Flow's decision to cease duct clearance and make-ready work on the Shamrock Road duct route, and therefore, contravened the ICT Act and the Regulations.

Issue 2A Did Flow agree to the use of 1.5" sub-duct?

C3 Position

307. Flow represented to C3 on 27 July 2017 and again on 30 November 2017 that C3 could use a 1.5-inch sub-duct, C3 has relied on that representation to its detriment (DDR, paragraph 90).

308. Flow did not object at the time of C3's installation of the subduct to the use of a 1.5-inch sub-duct (DDR, paragraph 92).

309. C3 was surprised to hear Flow's claim of material breach on 12 March 2019, and C3 has tried to find a commercial resolution to the issue (DDR paragraphs 93-98).

310. Standard industry practice is to rely on the inside diameter measurement of sub-ducts (DDR paragraph 94).

Flow Position

311. Flow rejects C3's claim that Flow indicated that C3 could use sub-duct larger than 1-inch on the Shamrock Road duct route (Flow DDR Response page 16).

312. The notes from the 27 July 2017 meeting between C3 and Flow only document what was discussed, not what was agreed. Flow only agreed to check on space availability for C3 to use a 1.5-inch duct; however, upon Flow checking, there was not space available. (Flow DDR Response pages 17-18).

313. In Flow's 16 November 2017 and 21 November 2017 emails, Flow instructed C3 to use a 1-inch sub-duct as stipulated in the WSDA (Flow DDR Response pages 17-18).

314. Clearly, there was no agreement reached in July on C3's use of a sub-duct larger than 1-inch, as C3 was still requesting in November 2017 to install a 2-inch sub-duct. The 30 November 2017 C3 internal email is not proof of Flow agreement for C3's use of a sub-duct larger than 1-inch. In fact, Daniel Tatum of Flow advised Martin Bould of C3 that there was only space for a 1-inch sub-duct (Flow DDR Response page 18).

315. The 2-inch sub-duct which C3 installed used up all the available space within the particular duct in which it was installed, leaving Flow to deny access to a third party who also requested access to the Shamrock Road duct route (Flow DDR Response page 19).

316. The actions of the Flow on-site supervising engineer do not indicate Flow's accession to C3's installation of a 2-inch sub-duct in the Flow ducts (Flow DDR Response page 20).

317. There is no industry standard measurement for the diameter of a sub-duct stating that sub-duct diameter is measured as the inside or outside diameter. By either measurement, C3 is in breach of the WSDA. The purpose of size restriction in the WSDA is to conserve usable space in Flow's ducts; therefore, only the outside diameter of the sub-duct is relevant, and C3 was aware of this (Flow DDR Response pages 20-21).

Relevant Law

318. When considering Issue 2A the Office was guided by Sections 65(5), 66(1) and 69(3)(a) of the ICT Act and Regulations 4(3)(a), 6(c), 6(j)(i), 6(j)(iii), 6(k), 8(11)(d) and 24 of the Regulations. These are reproduced in full in Schedule 1 attached to this Determination.

Analysis

319. Analysis of C3's and Flow's conflicting claims requires answering three separate questions:

    a. Was C3 in breach of the WSDA by installing a 1.5-inch sub-duct?
    b. Was that breach "material" and
    c. Could C3 have cured that breach?

320. It is unnecessary to address the last two questions if the first question is answered negatively.

321. Therefore, the first question, which will be addressed under this issue, Issue 2A, is whether C3 breached the WSDA by installing the larger sub-duct. Alternatively, put another way, did Flow agree to the larger sub-duct? If Flow did agree to the larger sub-duct, then C3 might not be in breach of the WSDA.

Applicable Rules

322. Section 66(1) of the ICT Act states that infrastructure sharing agreements must be in writing.

323. Regulation 6(k) of the Regulations states that infrastructure sharing services are to be provided in accordance with the terms of an agreement between the two parties.

324. Therefore, the first step is to consider what the parties agreed, and then secondly to consider whether the performance of the parties is consistent with that agreement.

325. In this case, there is no disagreement between the parties about the fact that C3 installed a sub-duct larger than 1-inch; the disagreement is about whether C3 was permitted to install that sub-duct; and if the relevant sub-duct diameter is the inside or outside measurement.

326. Therefore, the principal question is, did C3 and Flow agree to C3 using a larger than 1-inch sub-duct? Or, as alternatively claimed by C3, whether Flow made a unilateral promise to C3 and is now estopped from enforcing the use of the originally-agreed sub-duct size.

The Written Agreement

327. The WSDA Agreement defines the Customer Sub-Duct as a 1-inch sub-duct.

328. The WSDA does not specify whether that is an inside diameter or outside diameter measurement.

329. As discussed below, there is little evidence on the record that the outside diameter is the relevant measure, as Flow asserts, or that the parties even discussed this matter prior to this dispute.

330. Clause 19.1 of the WSDA specifies that it may only be amended in writing signed by a "*duly authorized representative*" of both parties.

331. There is no evidence on the record of any formal amending agreement "*signed by a duly authorised representative of each Party*" for any purpose (e.g., for adding new routes, agreeing to larger sub-duct, amongst other things).

332. The parties confirmed this in their answers to the 03 February 2021 RFI #19d regarding the West Bay Road duct route. C3 claimed it was a verbal agreement, and Flow supplied, as evidence of an agreement, the email correspondence between the parties and Flow's invoice to C3.

333. As evidence of the current "agreement" between the parties, Flow provided in confidence [redacted] [Flow response to the 03 February 2021 RFI #18]. In the case of the West Bay Road duct route, the arrangements were further documented in series of emails provided in Flow's response to the 03 February 2021 RFI #19 [see documents #2 through #21].

334. Given that the WSDA was not amended in accordance with clause 19.1 of the WSDA, it is necessary to consider whether the parties intended to amend it informally or verbally.

Intentions of the Parties

335. C3 relies on two documents to support its claim that there was an agreement from Flow for C3 to use a 1.5-inch sub-duct:

    a. The notes from the meeting between C3 and Flow in the 27 July 2017 email and,

    b. A C3 internal email of 30 November 2017.

336. However, neither of these are clear and unambiguous evidence of an agreement from Flow for C3 to use a 1.5-inch sub-duct.

The 27 July 2017 meeting

337. The notes of the 27 July 2017 meeting [DDR Item #6, Flow DDR Response Item #6] are not absolutely clear about whether Flow agreed to C3's use of 1.5" sub-duct or only agreed to investigate whether space was available for it. In other words, it does not appear to be an unambiguous promise or, if it is, it appears limited to where Flow determined that space might be available.

338. The only other contemporaneous document recording the details of the 27 July 2017 meeting that is available on the record appears to be an internal Flow document which is

focused on the issue of access to the CLS and does not mention sub-duct, let alone sub-duct size [Flow DDR Response Item #23]

The C3 Internal Email

339. The internal C3 email of 30 November 2017 [DDR Item #33] cannot be considered unambiguous evidence of agreement by Flow to C3's use of a 1.5-inch sub-duct in the absence of other supporting documentation. That is, an internal document of one party is insufficient evidence of a bilateral agreement between two parties. Additionally, the C3 internal email was not copied to the Flow representative Daniel Tathum, who C3 alleged to have agreed to C3's use of a 1.5-inch sub-duct, so Daniel Tathum would not have had an opportunity to correct or confirm C3's statement at the time.

340. Other than a description in the Flow DDR Response on page 18 (which is not contemporaneous with the meeting), the record does not include minutes or details of the 30 November 2018 meeting between Martin Bould of C3 and Daniel Tathum of Flow where the alleged agreement to C3's use of a 1.5-inch sub-duct was reached.

341. Considering that Flow denies that it agreed verbally to C3's use of a 1.5-inch sub-duct in the 30 November 2018 meeting and that Daniel Tathum of Flow (the person alleged to have made that agreement) did not originate or receive the email evidencing the agreement, the Office considers that a reasonable person would not conclude that the 30 November 2017 C3 internal email is evidence of an agreement between the parties or of a promise by Flow.

Other Documents

342. To the extent that the other documents on the record are unambiguous, they suggest that the parties had not agreed to allow C3 to use a 1.5-inch sub-duct or that Flow had not promised C3 that C3 could use a 1.5-inch sub-duct.

343. The 03 November 2017 quotation and cover letter [Flow DDR Response Item #11] could be said to refer indirectly to the use of a 1-inch sub-duct by referring to relevant clauses in the WSDA. However, the 03 November 2017 documents do not explicitly mention a 1-inch sub-duct and the clauses in the WSDA address many matters besides sub-duct size. Further, the focus of the comment in the 03 November 2017 letter is on the use of sub-duct versus coloured flex tubes, not sub-duct size.

344. Therefore, the 1-inch sub-duct size requirement would not likely come to the mind of a reasonable reader of the 03 November 2017 quotation and cover letter.

345. However, Flow expressly insisted on C3's use of a 1-inch sub-duct in its emails to C3 on 16 November 2017 [Flow DDR Response Item #20] and on 21 November 2017 [Flow DDR Response Item #20]. Notably, Daniel Tathum of Flow was copied on each such email.

346. Flow claims in its DDR Response to have made the same statement regarding the required use of a 1-inch sub-duct in an email to C3 on 6 November 2017 [Flow DDR Response Item #20], but this is not specified in the 06 November 2018 email itself. Further, the relevant attachments are not specified, other than the WSDA, which addresses so many matters that it cannot reasonably be said to focus on the question of sub-duct size.

347. The Order Request Form signed by the parties [DDR Item #11, Flow DDR Response Item #15] does not refer to sub-duct, nor the WSDA; therefore, it is not helpful either way as evidence for or against an agreement between the parties regarding the use 1-inch or 1.5-inch sub-duct.

Analysis

348. Given the clear statement in the WSDA regarding the use of a 1-inch sub-duct, C3 would have the burden of proving the parties intended to deviate from that standard. The evidence on the record is not conclusive that the parties did, in fact, agree to deviate from the WSDA.

349. Based on the absence of a signed amendment to the WSDA permitting the use of a 1.5-inch sub-duct, and also based on several statements from Flow during November 2017 insisting on the use of a 1-inch sub-duct; it is unlikely the parties reached a common understanding to use a sub-duct other than a 1-inch sub-duct in July 2017.

350. While it is possible that Daniel Tathum of Flow might have agreed to the use of a 1.5-inch sub-duct at the 30 November 2017 meeting; however, it is unlikely that he would have done so without documenting this internally or minuting the agreement in some form, given that he is likely to have been aware of sub-duct size being an item of discussion as it was addressed squarely in several emails on which he was copied. In any event, Flow disputes that Daniel Tathum made any such statement [Flow DDR Response page 18].

351. It is possible that Martin Bould of C3 misapprehended something Daniel Tathum of Flow stated in the 30 November 2017 meeting, but this is speculation in the absence of a contemporaneous written record of the meeting.

Conclusion

352. On balance, the Office considers that Flow did not agree to allow C3 to use a sub-duct greater than 1-inch on the Shamrock Road duct route.

Past Practices

353. Flow claims, however, that any such agreement could only be effective if reduced to writing in an amending agreement under clause 19.1 of the WSDA.

354. Put another way, was it unreasonable for C3 to have thought that the terms of the WSDA could have been changed without a formal amending agreement?

355. The parties agreed to the use of a 2.5-inch sub-duct on the West Bay Road duct route as referenced in C3's 14 October 2020 letter [document #279] and also in the exchange of emails between the parties in early 2016 [documents #2 through #21]). However, the parties did not document this change by a formal written amending agreement as required by the WSDA.

356. Indeed, the WSDA was not amended to reflect the addition of the West Bay Road route, let alone the use of a different sub-duct size as required by clause 19.1 of the WSDA.

Therefore, it appears that neither party has insisted previously on strict adherence to the WSDA amendment procedures.

357. In other words, there was a clear precedent that the parties could agree to vary the arrangements in the WSDA without signing a formal amending agreement as required by clause 19.1 of the WSDA.

358. However, there were extensive email communications between the parties between January and March 2016 regarding the proposed and agreed changes for the West Bay Road duct route compared to the arrangements set out in the WSDA [see documents #2 through #21].

359. Flow is somewhat self-serving to insist on strict performance of the WSDA amendment procedures for the Shamrock Road duct route, given that Flow did not require the same for the West Bay Road duct route.

360. Given the back-and-forth via email, the express statements made by Flow about the use of a 1-inch sub-duct in November 2017, and given the extensive email communication at the time the parties agreed to the use of a 2.5-inch sub-duct on the West Bay Road duct route, it is not easily seen how a reasonable observer could conclude where the parties might have come to a common understanding in 2017 regarding the use of sub-duct larger than 1-inch on the Shamrock Road duct route, even if the parties did so in 2016 on the West Bay Road route.

Conclusion

361. There was, therefore, no “meeting of the minds” in July 2017 regarding the use of a 1.5-inch sub-duct. C3’s understanding of the July 2017 statement regarding the use of a 1.5-inch sub-duct is inconsistent with Flow’s later statements in November 2017. It is not reasonable to discount those later statements and conclude that the earlier statement represented a full and final agreement or promise on the matter. At the very least, a reasonable person would have concluded in November 2017 that the matter was not truly settled and would have further discussed the matter with the other party.

362. Further, given that there is no evidence of a clear and unambiguous promise by Flow that C3 could use a 1.5-inch sub-duct, the doctrine of estoppel does not apply to prevent Flow from requiring the use of a 1-inch sub-duct.

363. C3’s use of a 1.5-inch sub-duct on the Shamrock Road duct route without Flow’s express agreement was, therefore, in breach of the WSDA.

Appropriate Measurement Standard

364. There is another matter that is not necessary to decide whether C3 and Flow had agreed to the use of a 1.5-inch sub-duct but that the parties raised and is helpful to address here.

365. Whether the parties accepted 1-inch or 1.5-inch sub-duct differs from a shared understanding of what "1-inch *sub-duct*" represented or if the measurement referenced the inside or outside diameter. That is, they could hypothetically have nominally agreed on "1-inch" without having a shared understanding of what "1-inch" represents. While the

parties are being a bit more precise in more recent communications, there is little evidence on the record of the parties' understanding before the dispute.

366. There is little to no evidence of discussions between the parties on size before Flow's 12 March 2019 letter demanding that C3 remove its oversized sub-ducts, at which point the parties' commenced discussions on whether the sub-duct was 2.75-inch, 2-inch or 1.5-inch sub-duct, depending on whether the inside or outside was measured.

367. In response to the 03 February 2021 RFI #21, where the Office asked for evidence of discussions prior to the 27 July 2017 meeting, Flow advised that it "*prepared no minutes of this meeting*", and C3 stated that "*No discussions were had regarding the meaning of one-inch sub-duct. C3 has always assumed that the dimension was the inside dimension for the duct*." The Office infers from this that the parties had not discussed the matter before July 2017.

368. It may have been discussed during the 06 December 2018 call between Gregory Larkland of Flow and Randy Merren of C3. However, neither party kept a record at the time of the detail of what was discussed on that call [see C3 and Flow responses to the 03 February 2021 RFI # 15]. While C3 provided a summary of the discussion in its response to the 03 February 2021 RFI #15(d), that summary focuses on the size of the sub-duct (1-inch versus 1.5-inch) and not on how to measure the size.

369. In 2016, when the parties were negotiating the West Bay Road duct route, Flow asked C3 on 07 March 2016 to "*Please provide the specification of this duct including the outside diameter*." However, there was no follow-up besides the approval of the duct size and no other mention of the possible importance or significance of the outside diameter. It would be difficult for a person to reasonably conclude from that one statement that the measurement in the WSDA unequivocally referred to the outside diameter measurement.

370. A Flow email on 25 February 2016 stated "*a 3 inch sub-duct will not fit into our existing 3 1/2*" [C3 response to 03 February 2021 RFI #19 (Item #6)] but does not explain why. This email, therefore, does not help clarify if the parties understood sub-duct measurements referred to the inside or outside diameter.

371. Given that the parties do not appear to have addressed directly the question of whether the "1-inch" measurement was the inside or outside diameter, the existence of an industry-standard might shed some light on the intentions or expectations of the parties when the WSDA was signed in 2015 or when the various duct routes were being negotiated. C3, in particular, advanced this position (see 11 April 2019 letter from C3 to Flow [DDR Item #35], DDR paragraphs 17, 61, and 94).

372. However, a duct supplier and duct sharer would have different interests and so would likely focus on different measures. The duct supplier would likely be more concerned with the outside diameter as it would need to know whether there is space in its ducts for the sub-duct. In contrast, the duct sharer would likely be more concerned with the inside diameter as they would need to know the capacity of the sub-duct.

373. C3 supplied several documents purporting to support its claim "*that in accordance with standard industry practice worldwide the size of sub-duct is measured with reference to the internal diameter*." (DDR paragraph 61 and footnote 91) – including Smoothwall spec

attached to the DDR and 'Power & Tel' spec attached to the 11 April 2019 letter [DDR Item #35].

374. The Power & Tel spec is not actually on the record, so it is unconfirmed whether the Power & Tel spec states what C3 claims it does.

375. The Smoothwall spec includes both inside and outside diameter measurements for its products. The Inside diameter varies by product line (SDR-9, SDR-11, amongst others.) but what is consistent is the outside diameter measurement for a given "Pipe Size". In other words, the pipe wall thickness varies by product line, but a pipe said to be 1-inch in size, for example, is consistently 1.315-inch in outside diameter, irrespective of the inside diameter (which varies from 0.936-inch to 1.141-inch). This suggests that outside diameter is the reference measurement, contrary to C3's position, and inside diameter merely reflects the thickness and other pipe characteristics as desired for a given application.

376. Further, when the West Bay Road duct route was being negotiated, C3 provided Flow with a link to the applicable specs for the sub-duct C3 wanted to use (7 March 2016 email attached to Flow's response to 03 February 2021 RFI #19). That link no longer works, but the currently-available specifications on the Four Star Industries website (http://fourstarind.com/index/wp-content/uploads/2011/01/sdr.pdf) also appear to use outside diameter as the reference measurement. That is, the options for "1.5-inch duct" for example, have a consistent outside diameter of 1.900-inch, while the inside diameter varies from 1.358-inch to 1.656-inch depending upon the specific specification chosen. Therefore, this specification sheet also does not appear to support C3's claim that the industry standard refers to the inside diameter.

377. In all fairness to the parties, how manufacturers describe their product is an imperfect guide to what the parties to a separate contract thought when they agreed to a given size of sub-duct.

378. Unfortunately, as noted previously, there is little evidence of what the parties were thinking when they agreed to the WSDA in 2015.

379. Ideally, the parties would negotiate this for future sub-duct installs and amend the WSDA accordingly.

Conclusions

380. Based on the past behaviour of the parties, C3's belief, that the WSDA could be amended to allow sub-duct greater than 1" without a formal written and signed amending agreement was reasonable.

381. However, in the case of the Shamrock Road duct route, the parties did not clearly agree, and Flow did not unambiguously promise to allow C3 to use a 1.5-inch sub-duct. A reasonable person would have concluded from Flow's November 2017 emails that the parties had not yet reached a firm mutual understanding on the matter. Therefore, C3 did not have Flow's agreement and, where C3 installed a sub-duct that is not 1-inch in size, C3 was in breach of the WSDA.

382. There is no evidence that the parties ever explicitly discussed, let alone agreed, whether to measure a “one inch sub-duct” by reference to its inside diameter or outside diameter.

Issue 2B If not, was C3's use of non-1" sub-duct a material breach of the WSDA?

C3 Position

383. Flow has not demonstrated that C3's failure to use a 1-inch sub-duct is a material breach of the WSDA. Clause 8.2.2 of the WSDA does not define material breach; therefore, there is the need to rely on common law when assessing whether there was a material breach. As a material breach triggers the termination of the WSDA, it must be in a condition; however, not every term in the WSDA is contained in a condition, notably size is not (DDR paragraph 62).

384. Flow has not demonstrated that C3 is in breach of an undertaking in Clause 5 of the WSDA, that the undertakings are ‘conditions’, and that any loss by Flow is caused by C3’s sub-duct size and not by other factors. C3's actions are unlikely to be the cause of other access seekers’ lack of access (DDR paragraphs 63-64).

385. Flow has an obligation to provide infrastructure sharing services to maximize the use of public ICT networks, enable competition in a timely manner, and in good faith (DDR paragraph 65).

Flow Position

386. The duct installed by C3 is a material breach of the WSDA whether one looks at internal or outside diameter (Flow DDR Response page 20).

Analysis

387. Having found that C3’s use of a 1.5-inch sub-duct on the Shamrock Road duct route was in breach of the terms of the WSDA, it is necessary to consider whether that breach was “material” or, if “material,” was capable of being cured by C3, in these particular circumstances and in the context of the WSDA.

388. C3’s position is that a “material breach … triggers termination, … only serious breaches of contract can amount to a material breach. A ‘serious breach’ is for example, the breach of a condition” (DDR paragraph 62).

389. To the extent that this appears to equate “material breach” with “breach of condition,” this is not correct.

390. While it is true that breach of a condition triggers the right to terminate the contract, there may be breaches of other terms of a contract (i.e., which are not ‘conditions’) that also could trigger a right to terminate.

391. Breaches of so-called “innominate” terms could lead to termination in the appropriate circumstances [see para 20 in Grand China Logistics].

392. In any event, Flow is not relying on the common law concept of 'condition' [Flow response to 03 February 2021 RFI #23, paragraph 1.2] but on the written terms in the WSDA entitling it to terminate if certain conditions-precedent are satisfied (see Flow DDR Response, page 20).

393. In its 12 March 2019 letter to C3 and in its 30 July 2019 DDR Response, Flow did not explain why it considered the breaches to be "material" other than by association with alleged breaches of undertakings in clause 5 of the WSDA.

394. As Flow relies on the written terms in the WSDA, the first step is to review those terms.

Terms of the WSDA

395. The WDSA provides for termination at clause 8.

396. Clauses 8.1 and 8.2.3 of the WSDA give C3 the right to terminate on six months prior written notice or if Flow persistently fails to maintain its ducts, respectively. Clauses 8.2.1 and 8.2.4 of the WSDA give both parties the right to terminate if the other experiences an "*insolvency event*" or if so ordered by a "*competent authority*."

397. None of these clauses apply in the present circumstances.

398. The relevant clause in the present circumstance is 8.2.2, giving Flow the right to terminate if C3 "*commits*:

> *(a) a material breach of this Agreement and fails to remedy the breach within thirty (30) days of a written notice so to do; or*
>
> *(b) commits a breach which is incapable of remedy;".*

399. However, the WSDA does not define "*material breach*."

400. The WSDA at clause 5 sets out certain "*undertakings*" imposed on C3.

401. Arguably a breach of these "undertakings" could be considered "material" for purposes of clause 8 of the WSDA.

402. The only clauses which might be relevant in these circumstances are 5.1.3 and 5.1.4 of the WSDA; indeed, Flow alleges in its 12 March 2019 notice to C3 that "*C3 is also in breach*" of these clauses:

> *"5.1.3 it shall not do or allow to subsist anything within its reasonable control which may materially prejudice the proper use of Supplier Infrastructure along the Route;*
>
> *5.1.4 it shall not do anything nor allow to subsist any circumstances within its reasonable control likely to materially damage Supplier Infrastructure along the Route or detract from or impair its performance or operation;".*

403. However, neither of these clauses apply in this case.

404. There is no evidence that C3's use of larger sub-duct damaged Flow's ICT infrastructure, prevented Flow from using its existing ICT infrastructure or impaired the performance or operation of Flow's ICT infrastructure.

405. Further, it should be noted that, even if breaches of undertakings under clause 5 of the WSDA could reasonably be considered as "material breaches" for the purposes of clause 8 of the WSDA, that does not mean that only breaches of clause 5 undertakings could be considered as "material breaches".

406. Given that the terms of the WSDA do not provide much guidance as to the meaning of "material breach," the second step is to consider how the courts or other authorities may have interpreted the meaning of the term "material breach".

407. The parties were asked by the 03 February 2021 RFI #23 to provide their views and relevant authorities on the meaning of "material breach".

Authorities provided by the Parties

408. Flow provided two cases, each setting out a number of factors to be considered in assessing whether a breach is "material".

Glolite

- *Whether a breach of an agreement is "material" must depend upon all the facts of the particular case, including the terms and duration of the agreement in question, the nature of the breach, and the consequences of the breach.* (emphasis added)

Phoenix Media

- *…the actual breaches, the consequences of the breaches… the explanation for the breaches, the breaches in the context of the Agreement, the consequences of holding the Agreement determined, and the consequences of holding the Agreement continues…*

409. Flow noted that this issue of material breach is separate from the issue of breach of a condition of a contract. Flow did not discuss breach of condition in any detail, but it should be noted that the Office's 03 February 2021 RFI focused on the topic of "material breach," not "breach of condition." Flow's answer was, therefore, consistent with the Office's 03 February 2021 RFI.

410. C3 provided Halsbury's Law of Contracts as its authority. C3 submitted that "the test of whether or not a breach is material should be whether or not it gives rise to the right of a party to terminate the Agreement." As the right to terminate is more likely to be a consequence of a breach rather than a defining characteristic of a breach, this is perhaps not the most helpful formulation of the test of whether a breach is a "material breach".

Halsbury's, (at paragraph 344)

- The present position is that there is a right to terminate for repudiatory breach in the following situations: (1) a substantial, or serious, failure to perform; (2) breach of 'condition'; and (3) repudiation (emphasis added).

411. It should be noted that Flow had claimed that C3 had committed a material breach of the WSDA in its 12 March 2019 letter to C3, not that C3 had breached a condition or that C3 had repudiated the WSDA. As a result, the focus of the Office's 03 February 2021 RFI #23 was on the meaning of 'material breach'.

412. In any event, because, among other things, C3 has argued that the sub-duct size was not a condition of contract (and therefore C3 did not breach a condition), all three situations presented by Halsbury's are addressed below.

Repudiation

413. C3 installed a sub-duct of a size that Flow says C3 was not entitled to install. C3's installation does not appear to amount to actions showing intent to refuse "to perform a material part of the contract" or to repudiate the WSDA. It may have been a failure to perform part of the contract but appears to have been done with the intent that the contract would continue.

414. This installation by C3 would not be a basis for Flow to terminate for repudiatory breach.

Breach of condition

415. C3's discussion of "conditions" at paragraph 38 of their response to the 03 February 2021 RFI #23 overlaps considerably both Flow's discussion of repudiatory breach at paragraph 1.2 of the Flow response to the 03 February 2021 RFI #23 and C3's test of "material breach".

416. In any event, a condition is a term, the breach of which goes to the root of the contract or deprives the innocent party of substantially all of the benefit of the contract. [See Grand China Logistics, paragraph 18, citing Hongkong Fir Shipping, Suisse Atlantique paragraph 422].

417. The sub-duct size does not appear to go to the root of the WSDA such that the innocent party (in this case, Flow) would be deprived of substantially all of the benefits of the WSDA resulting from C3's breach.

418. Admittedly the breach prevents Flow from selling the additional capacity in the duct taken up by C3's larger sub-duct to a third party, but it does not necessarily prevent Flow from satisfying its statutory duty to make efficient use of its infrastructure by sharing with third parties or from receiving appropriate compensation for doing so.

Substantial or serious failure to perform

419. Halsbury's description at paragraph 346 of "substantial failure to perform" submitted by C3 is quite similar to the test for breach of "condition" [see paragraph 26 of C3's response to the 03 February 2021 RFI #23]:

> "*The general requirement to be met before there is a right to terminate for defective performance is that the breach in question amounts to a substantial failure to perform. This may be expressed in a number of ways (which are also employed to determine whether there has been a repudiation), such as whether the beach goes to the root of the*

contract, or frustrates the purpose of the innocent party in making the contract, or deprives the innocent party of substantially the whole benefit of the contract but such expressions provide no indication of precisely when a breach will be found to have reached the necessary level of seriousness."

420. Halsbury's does include a set of factors to be considered, including:

(1) "the extent of the failure to perform when assessed against the performance undertaken …";

(2) "where a failure to perform has created uncertainty as to future performance …";

(3) "whether, if the innocent party is confined to damages, that would be an adequate remedy";

(4) "the fact that a breach is deliberate … is a factor which may be taken into account … support a claim of repudiation".

Analysis

421. Based on a review of the authorities submitted by the parties, there is, therefore, no 'bright line' test allowing determination of whether there was a "material breach."

422. Ultimately, the Office and the parties are left to work with a set of factors to consider in order to assess whether the breach was "material" in the specific factual context and within the terms of the WSDA, including:

- the terms and duration of the WSDA
- the nature and extent of the failure to perform when assessed against the performance undertaken
- the consequences of the breach
- the explanation for the breaches
- the breaches in the context of the WSDA
- the consequences of terminating or continuing the WSDA
- whether the failure to perform created uncertainty as to future performance
- whether damages alone would be an adequate remedy
- whether the breach is deliberate

423. A number of these factors support the view that the breach was "material", while others support the view that it was not:

a. The WSDA is a long term contract, signed in 2015, currently scheduled to end on 21 Jan 2028 unless extended or otherwise terminated, currently used to provide duct access service on two other routes apparently without controversy, namely the Walkers House duct route and the West Bay Road duct route. Given that the parties expected to derive benefits from the WSDA over the long term, a breach would presumably have to rise to a higher level before it could be said to be "substantial" or "material".

b. C3's breach on the Shamrock Road duct route did not affect its performance on the other two routes, nor did it suggest that C3 would fail to perform its obligations under the WSDA in the future in respect of those two routes.

c. Nor did C3's breach damage Flow's existing ICT infrastructure or affect Flow's own ability to use that infrastructure.

d. Flow's own behaviour in response to their discovery of the breach does not suggest that Flow considered it to be so "material" as to justify termination of the WSDA, discovery on or before 04 September 2018, but first communication with C3 about the issue on or about 06 December 2018 via a phone call. That 06 December 2018 phone call apparently did not convey the idea that there was a breach, merely that there was a "discrepancy." Flow did not document or minute the 06 December call; rather, Flow appears to rely on C3's email of that date as evidence of the call (see Flow response to the 03 February 2021 RFI #15). Presumably, the call would have been better documented or the matter more clearly communicated to C3 if Flow considered at the time that the issue rose to the level of something that entitled Flow to terminate an infrastructure sharing contract. In any event, despite C3's general update requests later in December 2018 and early in February 2019, there was no further communication from Flow about the sub-duct size issue until 19 February 2019. Flow's 19 February 2019 email states, "… *the larger Sub ducting that you are using presents space issues in our conduits along the proposed route*" [document #113, attached to C3's response to the 03 February 2021 RFI #5 (Item #1)], notably again, Flow did not mention 'breach'. Flow's 12 March 2019 notice to C3 is the first that mentions Flow's position that C3 is in "material breach." In the meantime, Flow conducts an audit of third party use of its ducts, which no doubt took place. However, Flow was unable to confirm with any degree of specificity to the Office when it commenced or concluded [see Flow responses to the 03 February 2021 RFI #14 and #15], or to provide any audit report other than an email sent well after the 12 March 2019 notice of the breach to C3. The lack of urgency and timeliness implied by the timeline of events and the lack of detailed documentation surrounding the audit strongly suggests that Flow did not truly consider the breach was so "material" as to trigger the termination provisions in clause 8 of the WSDA.

e. However, contrary to C3's position [DDR paragraph 62], the fact that the size of the sub-duct is mentioned only once in the WSDA is not, in and of itself, evidence of the lack of importance of this term of the WSDA. The size mentioned in the WSDA clearly guided Flow's expectations as to the scope of the task when it was surveying its ducts to determine whether it had space to accommodate C3 and what it could provide to C3 or other licensees.

f. Further, C3's breach prevented Flow from selling the additional space it thought it had in the ducts along the Shamrock Road duct route to a third party.

g. In other words, it was not just additional space that C3 took through its breach; rather, C3's actions prevented the use of the remaining space for any other purpose.

h. C3's breach was deliberate, insofar as it was not "accidental", C3 clearly intended to buy and install 1.5-inch sub-duct on the Shamrock Road duct route, having ordered it two days after paying the deposit on the duct clearance work, i.e. before they could reasonably have known whether there was space available for the 1.5-inch sub-duct [see documents attached to C3's response to the 03 February 2021 RFI #27]. C3's explanation was that it thought it had an agreement with Flow to use the 1.5-inch sub-duct. As noted earlier, that belief was not reasonable. However, the evidence does not suggest C3 set out to harm Flow; rather, C3 set out to give itself an advantage for which it was not entitled.

i. Termination of the WSDA would significantly affect C3's ability to roll out and support its ICT network. Termination of the WSDA would not affect Flow's network and would still leave Flow the opportunity to offer the space in the ducts vacated by termination with C3 to other licensees. Flow provided evidence that there is some demand for duct access along the Shamrock Road duct route at least. In other words, the consequences of termination for breach would be significantly more significant for C3 than for Flow, and C3 can be assumed to have been aware of this.

j. C3's breach deprived Flow of the opportunity to monetize the last portion of available duct space on the Shamrock Road duct route. There is clear evidence that this was a real opportunity, as another licensee had expressed interest in using it. Flow's interest, however, is primarily monetary. Flow would have been adequately compensated if C3 paid Flow appropriately for the use of that space.

Conclusion

424. No one factor trumps all others to clearly support the proposition that C3's breach was "material" or, conversely, that it was not.

425. However, taking all factors together, as a whole, C3's breach was not so "material" or "substantial" as to justify termination of the WSDA pursuant to clause 8.2.2 of the WSDA.

426. Alternatively, if the breach was sufficiently "material," the breach could be cured, for example, either by removing and replacing the inappropriately sized sub-duct or by paying for the additional space that C3 used without Flow's express authorisation.

427. Flow offered C3 the solution of paying for the additional space required for the larger sub-duct; to date, C3 has not taken up either option, removing the incorrectly sized sub-duct, or paying for the additional space required.

428. However, Flow made its most current offer to C3, which would permit the 1.5-inch sub-duct to remain conditional on another company accepting to share sub-duct with C3; apparently, that company is unwilling to agree to do so.

Conclusions

429. Based on all of the relevant factors advanced by the parties for determining whether a breach is "material", taken together, and based on Flow's own behaviour in response to

C3's breach of the WSDA, C3's breach was not a "material breach" for the purposes of clause 8.2.2 of the WSDA.

Issue 2C Does the proposed price for access using 1.5-inch sub-duct comply with the Regulations?

C3 Position

430. Flow offered on 07 June 2019 to allow C3 to keep its already-installed 1.5-inch sub-duct but to pay three-times the standard rental rate for a 1-inch sub-duct (DDR paragraph 98).

Flow Position

431. The Office should decline the determination request and require C3 to respond to Flow's 25 June 2019 offer, and to negotiate in good faith and with a reasonable effort to settle directly with Flow (Flow DDR Response, pages 21-22)

Relevant Law

432. When considering Issue 2C the Office was guided by Sections 9(4), 65(5), 65(6) and 68(3) of the ICT Act and Regulations 6(c), 6(d), 6(f), 6(g), 6(h), 9, and 10 of the Regulations. These are reproduced in full in Schedule 1 attached to this Determination.

Analysis

433. Flow did not indicate in its DDR Response or in its correspondence with C3 how it arrived at its first price for 1.5-inch sub-duct access, i.e. equal to three times the standard rate for sub-duct access, other than to say it had to forego other commercial opportunities because C3's sub-duct occupied the available space.

434. In any event, the offer appears to have changed post-dispute, as confirmed in Flow's response to the 03 February 2021 RFI #24. The current offer to C3 (per Flow's 02 Oct 2020 letter [document #272]) is two times the price for a 1-inch sub-duct: [redacted] of 2-inch outside diameter sub-duct on a ten-year term, compared to [redacted] for a 1-inch sub-duct on a ten-year term. The offer in June 2019 was [redacted] for C3's sub-duct greater than 1-inch provided, that either, Logic agree to sharing that sub-duct with C3 or that the Office determined that the sub-duct must be shared by Logic and C3.

435. A price two times greater for a sub-duct two times larger seems a reasonable approach.

436. Note that what C3 installed is described as a 1.5-inch sub-duct, not a 2-inch sub-duct. However, doubling the 1-inch sub-duct price seems reasonable in these circumstances as the 1.5-inch sub-duct effectively takes the place of two 1-inch sub-ducts.

Cost orientation

437. Nevertheless, the reasonableness of the two times price is still predicated on the price for 1-inch sub-duct complying with the Regulations.

438. In its response to the 03 February 2021 RFI #25, Flow submitted in confidence its cost basis for duct access for 1-inch and 2-inch sub-duct ("Sub-duct Costing methodology.xlsx"). It purports to show how the price of [redacted] per meter for a 1-inch sub-duct is cost-oriented and based on the Flow Forward-Looking Long-Range Incremental Cost model ('**FLLRIC model**').

439. Based on what is in the record at the time of the Draft Report, it was not possible to assess the price of [redacted] of 1-inch sub-duct against the provisions of the Regulations.

440. More detailed costing and other information was required from Flow than was available on the record in order to assess whether the price is reasonable or cost-oriented. This additional information was sought from Flow via the 09 August 2021 RFIs [document #334].

Conclusions

441. Flow's proposed pricing structure, i.e. charging two times the price for a 1.5-inch sub-duct that it would charge for a 1-inch sub-duct, is reasonable in these circumstances, even though the sub-duct is clearly not twice as large, because, on the evidence, the 1.5-inch sub-duct prevents Flow from providing access for two 1-inch sub-ducts. In any event, this is consistent with the output of the cost model submitted by Flow, once that model is corrected as set out in the next paragraph.

442. The prices Flow proposed to charge for duct access for 1-inch and 2-inch sub-ducts were not reasonable or cost-oriented. However, if Flow makes the changes to its model and to the inputs to its model, as described in Schedule 3 attached here, the resulting prices for duct access service for 1-inch and 2-inch sub-ducts would be reasonable and cost-oriented, consistent with the requirements of the Regulations.

Issue 2D Should Flow compensate C3 for the unused 1.5" sub-duct and fibre cable?

C3 Position

443. C3 must be compensated for the unused 1.5-inch sub-duct and fibre cable (DDR Paragraph 98).

Flow Position

444. [not specifically stated, presumably Flow is asking that this aspect of the determination request also be declined, and the parties sent off to negotiate the matter].

Relevant Law

445. When considering Issue 2D the Office was guided by Regulation 6(k) of the Regulations. This is reproduced in full in Schedule 1 attached to this Determination.

Analysis

446. As concluded earlier, C3 and Flow did not have an agreement that C3 could use a 1.5-inch sub-duct, and Flow had not promised C3 that it could use a 1.5-inch sub-duct [See Issue 2A above].

447. C3's purchase order for the 1.5-inch sub-duct is dated 07 March 2018 [C3 response to the 03 February 2021 RFI #27], was issued only two days after C3 paid Flow to start the duct clearance and make-ready work.

448. C3 purchased the 1.5-inch sub-duct from Power & Tel in the spring of 2018, i.e. well after the exchange of correspondence and the meeting with Flow in November 2017, when it should have been obvious to C3 that there was no settled agreement and no unambiguous promise [C3 response to the 03 February 2021 RFI #27].

449. To the extent there is no agreement or promise to use anything other than a 1-inch sub-duct on the Shamrock Road duct route, there is no basis for requiring Flow to compensate C3 for purchase of 1.5-inch sub-duct – because C3 bought the 1.5-inch sub-duct at its own risk.

450. Even if there were an agreement or promise that C3 could use a 1.5-inch sub-duct where space is available, there is still no basis for requiring Flow to compensate C3 for purchase of 1.5-inch sub-duct – because C3 could only use it "*where space is available*" and C3 should have first determined whether and where sufficient space is available before deciding how much, if any, 1.5-inch sub-duct to purchase.

451. There is no record of when Flow contacted C3 to advise C3 that they could start installing sub-duct (C3's evidence is that they received phone calls [C3 response to the 03 February 2021 RFI #11]). However, it is unreasonable to assume Flow advised C3 within a day or two of the commencement of the work that there was space available for a 1.5-inch sub-duct along 176,000 linear feet (30+ miles) of duct. In other words, C3 appears to have bought that sub-duct at its own risk.

452. Note that C3 stated in its 15 Jun 2019 [DDR Item #44, Flow Response Item #18] email that *"C3 will accept this offer [use of 1" where not already installed] if Flow can assist C3 with the unused sub duct and fibre which was ordered on the basis that it could be used. Alternately Flow could buy the unused sub duct and fibre from C3."*

453. Note that Flow has, in fact, attempted to assist C3 in finding ways of using that sub-duct so that it is not a wasted asset, by identifying routes where there might be space to use it - see emails of 07 Jun 2019 [DDR Item #43, Flow DDR Response Item #18] and 25 Jun 2019 [Flow DDR Response Item #18].

Conclusions

454. There is no basis to require Flow to compensate C3 for the unused 1.5-inch sub-duct and associated fibre, as Flow had not agreed or promised to allow C3 to use it.

Issue 3A Has Flow provided a lawful reason to refuse access to the Maya-1 CLS building?

C3 Position

455. The Regulations apply to the CLS, Flow has limited grounds to refuse as per Section 69(3)) of the ICT Act (DDR paragraph 66-67).

456. Does not accept Flow's basis for refusal of access by C3 [CLS is not designed or configured, and does not have the capacity, to accommodate C3's 2RU of equipment] (DDR paragraphs 100 & 102).

457. Flow has rejected the alternative of renting space on adjacent land, and has decided its InSpan Backhaul is the better solution for C3 (DDR paragraph 104).

Flow Position

458. C3 has not actually requested access to the CLS, and Flow inferred that the C3 request for duct access adjacent to the CLS could lead to a request to co-locate (Flow DDR Response page 22).

459. On 17 July 2017, Flow explained that the CLS layout is not designed or configured to accommodate third parties; Flow explained this again at the 26 July 2017 meeting and suggested alternatives of either InSpan Backhaul or C3 building on-site, subject to approval (Flow DDR Response page 23).

460. On 28 September 2017, Flow again repeated the explanation why the CLS is not available, again offered InSpan Backhaul, said space for C3 building on-site is not available as all available space was needed for Flow's future expansion.

461. There was no follow-up by C3 until the 13 May 2019 meeting, where Flow again offered C3 the possibility of building on-site (Flow DDR Response pages 23-24).

462. C3 did not respond to that offer before filing DDR. The Office should decline this DDR and instruct C3 to negotiate directly with Flow (Flow DDR Response page 24).

Relevant Law

463. When considering Issue 3A the Office was guided by Sections 2, 65(1), 65(2), 65(3) and 69(3) of the ICT Act and Regulations 4(1), 4(3), 5, 6(a), 6(j)(i), 6(j)(iii), 8(1) to (7), and 8(8) of the Regulations. These are reproduced in full in Schedule 1 attached to this Determination.

Analysis

Applicable Rules

464. Infrastructure sharing obligations apply to cable landing stations as per the definition of "tangibles" in the ICT Act, as well as Flow's ICT Licence.

465. Neither C3 nor Flow has disputed these infrastructure sharing obligations.

466. Therefore, it follows that Flow has limited lawful reasons to refuse access to the CLS, per Section 69(3) of the ICT Act and Regulation 4(3) of the Regulations.

Was there a Request?

467. It is unclear when C3 first "*requested*" access to the CLS – the request of 23 June 2017 does not mention the CLS [Flow DDR Response Item #1]. The first explicit reference to the CLS by C3 appears to be a 05 July 2017 request for duct access near the CLS and a query regarding C3 wanting to "*connect inside the Landing Station*" [DDR Item #3, Flow DDR Response Item #2].

468. Note that this lack of clarity is one of the disadvantages of C3 not following the process for requests as set out in Regulations 8(2) & (3) of the Regulations.

469. In any event, Flow interprets the 23 June 2017 request as a request for co-location in the CLS. On 17 Jul 2017, Flow denies C3 access to CLS because the "*layout of the Landing Station is currently not designed nor configured to accommodate third party access*" [DDR Item #4, Flow DDR Response Item #3].

470. Note that the C3 request was not acknowledged by Flow within three days per Regulation 8(5) of the Regulations. However, the C3 request appears to have been denied by Flow in writing within 20 days of Flow receiving a 'complete request' as per Regulation 8(8) of the Regulations, if 05 July 2017 is considered to be the date of request and just beyond the 20 days if 23 June 2016 is the relevant date.

471. It is not obvious that Flow's 17 Jul 2017 response represents "*detailed written reasons*" (emphasis added) as required by Regulation 8(8) of the Regulations.

472. However, given that C3 did not submit a formal "*Request*" to Flow in compliance with Regulations 8(2) and 8(3) of the Regulations, it is not clear that Flow was in fact bound to the terms of the Regulations other than compliance with timeframes as per Regulation 5 of the Regulations.

473. Therefore, while unhelpful, this lack of detailed written reasons from Flow for its denial of the access requested by C3 is likely not a breach of the Regulations.

History of discussions

474. Flow's position regarding C3's access to the CLS building has been consistent; however, its position regarding C3's access to land adjacent to the CLS has varied.

475. C3 did not accept the Flow 17 July 2017 claims regarding the CLS, by email on same date [C3 DDR Item #5, Flow DDR Response Item #4].

476. According to Flow's minutes of a 27 Jul 2017 meeting between the parties [Flow DDR Response Item #23], issues of design of the CLS building and limited space were discussed. Flow presented alternatives of providing C3 with its InSpan Backhaul or leasing space to C3 for C3 to construct its own 20'x20' building.

477. In a follow-up letter on 28 September 2017 [DDR Item #7, Flow DDR Response Item #24] Flow repeats its reasons for denial that the CLS building is “not configured,” and has “no space”). This Flow letter also notes that C3 rejected the InSpan option, and rejected the option of Flow leasing land to C3 adjacent to the CLS "*as the land is reserved for any future expansion*". However, this rejection of the possibility of C3 leasing land due to "future expansion" was without Flow indicating any details of the future expansion plans.

478. Based on the record, and consistent with Flow’s submission (Flow DDR Response page 23), access to the CLS does not appear to be raised again as an issue between the parties until the C3 Notice of Grievance on 07 May 2019 [C3 DDR Item #37].

479. When the Office asks questions on its own initiative on 04 Apr 2019 [document #123] regarding Flow’s 28 Sep 2017 letter [Flow DDR Response Item #24], Flow writes to the Office on 05 April 2019 asking inter alia whether a dispute had been filed (presumably in an effort to understand why the Office was asking questions) [document #124].

480. In any event, Flow responded to the Office on 03 May 2019, stating that there was limited space available in the CLS, that the CLS building was not configured or designed for co-location (cage and meet-me-area), that a separate building would cost more than $100,00.00, and also mentioned that its InSpan Backhaul has benefits [document #128].

481. The 13 May 2019 Flow Response to C3's Notice of Grievance [Flow DDR Response Item #28] repeats Flow's claims that the CLS is not configured or designed to accommodate C3's request, there is insufficient space for a C3 co-location cage or meet-me room, again offers the Flow InSpan Backhaul, but contains no mention of a land lease.

482. Notably, the explanation given to C3 in the Flow Response to C3's Notice of Grievance is now more specific, referring to lack of space for a cage or a room instead of simply "limited space." In fairness, though, the meeting notes of 27 Jul 2017 might have omitted that detail in the process of summarising the meeting.

483. At a without prejudice meeting on 13 May 2019, according to C3’s minutes [DDR Item #38], Flow repeats its position from its Response to C3's Notice of Grievance; Flow also suggests the possibility of allowing C3 to have its own building on the CLS site if built to Category 5 Hurricane Building Codes, contained air-conditioning, and adhered to Flow's site security protocols.

Office Investigations

484. In order to better understand Flow’s position on access by C3 to the CLS, the Office inspected the CLS and included a number of questions in the 03 February 2021 RFIs.

485. By letter dated 22 July 2019, the Office advised Flow that it required a site visit to the CLS in order to seek “a better understanding and confirmation of the various reasons as set out in the letter of 03 May 2019, as to why co-location is not available at the Maya 1 Cable Landing Station.” [document #166].

486. The Office visited the CLS on 07 August 2019 and followed up with RFIs on 14 August 2019 [document #183], to which Flow responded on 20 and 22 August 2019 [documents #184, 186].

487. Based on the information provided by Flow to the Office, the CLS building is divided into three areas of unequal sizes: the area used by the Maya-1 Consortium for the Maya-1 equipment, the area used by Flow for its own network equipment, and the area used for equipment which supports the entire building (e.g. air-conditioning and electrical). Note that in a 13 May 2019 without-prejudice meeting, C3's record of the meeting describes Flow describing the building as follows: "*The landing station is comprised of three rooms, one relates to Maya, the second for Flow's transmission and the third for Flow's wireless network*." [DDR Item #38].

488. The Office provided its draft Site Visit Report for Flow's comments on 31 October 2019 [document #207]. The Site Visit Report noted that [redacted].

489. In Flow's 08 November 2019 comments [document #209] on the Office's draft Site Visit Report [document #207], [redacted].

490. In its 03 February 2021 RFI #28, the Office asked Flow to provide details of its or the Maya-1 Consortium's expansion plans, and to explain what prevented Flow from providing co-location and what could be done to overcome this (including cost).

491. Flow indicated in its response that it needed to reserve space [redacted] However, based on the response, it appears only [redacted] is being actively considered. Such a replacement would require Flow to use additional unoccupied space, at least in the short term, to ensure a seamless transition.

492. In the 03 February 2021 RFI #29, the Office also asked Flow to comment on a number of "p*ossible solutions*" [redacted] Flow itemized the elements of the building that would need to be changed in order to accommodate co-location, and noted that for one of these other rooms, [redacted] would also be required.

Reasons to refuse

493. There are limited reasons in law to refuse access to infrastructure, including a CLS.

494. Section 69(3) of the ICT Act states:

(3) A licensee shall not deny another licensee access to its infrastructure or infrastructure arrangements except —

(a) where there is insufficient capacity taking into account reasonably anticipated requirements;

(b) there are reasons of safety or security; or

(c) there are technical and engineering matters which would make such access difficult or impossible.

495. Regulation 4(3) of the Regulations states:

(3) A responder shall not refuse to provide infrastructure sharing services, except where –

(a) there is insufficient capacity, taking into account it reasonably anticipated requirements; or

(b) such provision would create a technical or engineering difficulty that could not be reasonably addressed

496. In other words, a lack of capacity, security or safety reasons, or technical and engineering matters are the only lawful reason for refusal.

Lack of Capacity

497. Lack of space would be a legitimate reason to refuse access to the CLS per Section 69(3)(a) of the ICT Act and Regulation 4(3)(a) of the Regulations. However, this assumes Flow's need for the remaining space is based on "*reasonably anticipated requirements.*"

498. It also assumes Flow is not imposing conditions for access (such as a cage and meet-me-room) that are unreasonable and require more space than necessary to accommodate the request.

499. Office staff concluded following its 07 August 2019 visit to the CLS that [redacted]

500. Flow disputed this, noting [redacted].

501. However, the only concrete example Flow provided for needing the unused space was for [redacted] [Flow response to the 03 February 2021 RFI #28a]. The [redacted] is located in the Maya-1 equipment room. To the extent that the need for space for capacity expansion and new SLTEs is also a "*reasonably anticipated requirement*," per Section 69(3)(a) of the ICT Act and Regulation 4(3)(b) of the Regulations, it is important to note that these also would be located in the Maya-1 equipment room.

502. Flow did not provide specific evidence regarding the need for the unused space in the other rooms in the building, particularly [redacted]. Indeed, Flow only stated that those spaces were not feasible because [redacted].

503. Noting that Office staff found that [redacted] could easily be addressed by installing a dedicated co-location rack in either of these two rooms.

504. Flow did not argue that it needed the space in the remaining rooms [redacted]. Using space in one of these other rooms would require a certain amount of renovation, though, and therefore incur higher costs.

505. However, Flow likely overstates the amount of work that would be required. Given the type of equipment that C3 would be installing, for example, it is unlikely Flow would need to install DC power runs or divert cooling ducts.

506. It is also unlikely that separate co-location "cages" would be required for the application mentioned by C3. C3 notes the need to collocate a "*2RU switch*" [DDR paragraphs 21 and 103]. A locked cabinet would be sufficient, and the Office understands that these can be procured to accommodate up to four separate securely lockable bays.

Safety or Security

507. Section 69(3)(b) of the ICT Act permits a licensee to refuse access to infrastructure where "*there are reasons of safety or security*".

508. The record does not show any safety or security concerns that, in the absence of reasonable measures, would prevent access outright by C3.

509. Flow has submitted that separate co-location cages and a full-time security guard would be required.

510. These would not be reasonable measures in the circumstances. Separate secure spaces in a single cabinet would be sufficient to secure one co-locator's equipment from other co-locators, and placing that co-location cabinet in a room other than the Maya-1 equipment room would be sufficient to protect the critical national infrastructure in that room.

511. Further, a full-time security guard is not necessary when, as indicated by C3, access would be required at most two times per month for up to three hours each time [C3 response to the 03 February 2021 RFI #28]. Escorted access by Flow security personnel with a suitable SLA for response time at C3's expense, should be sufficient.

Technical and engineering matters

512. Section 69(3) of the ICT Act refers to "technical and engineering matters which would make such access difficult or impossible", while Regulation 4(3)(b) of the Regulations refers to "a technical or engineering difficulty that could not be reasonably addressed." Either way, Flow's 17 July 2017 response to C3 did not detail the matters which prevent access or whether there are ways of reasonably addressing them.

513. Configuration and design of the CLS building could be a legitimate reason for refusing access to the CLS as a *technical or engineering matter* per Section 69(3(c) of the ICT Act or *difficulty* as per Regulation 4(3)(b) of the Regulations.

514. In its 08 November 2019 comments on the Office's draft Site Visit Report [document #209], Flow noted [redacted].

515. Flow reiterated this position in its response to the 03 February 2021 RFI #28.

516. In the 03 February 2021 RFI #28(c), the Office requested a "detailed description [of] what precisely in the configuration or design of the Maya-1 Cable Landing Station building prevents colocation inside by third parties and what would need to be done, including estimated cost, to overcome that."

517. Flow responded with a high-level description of the CLS and an explanation that it would not be "*safe or practical to partition off or cage a distinct area of the Maya 1 room for a single or multi cabinet user*." Flow also noted that "*escorted and supervised access would be required*", and the colocation customer would "*require a secure location in a lockable cabinet, that is independent of any other equipment*."

518. Flow did not explain what could be done to modify the building to overcome these challenges or provide any cost information. Nor did Flow address any other rooms of the building other than the Maya-1 equipment room, despite being invited to address in detail the "*Maya 1 Cable Landing Station building*", not just the Maya-1 equipment room.

519. The Office's Maya-1 Site Visit Report previously noted that [redacted]

520. Flow did not refute those specific findings by Office staff in its 8 November 2019 letter [document #209], other than [redacted]. When invited by the 03 February 2021 RFI #28 to explain what would need to change in the building's configuration, Flow's answer was limited to the Maya-1 equipment room.

521. Given the low impact that a 2RU switch would have on the other systems in the CLS building (e.g. power load, A/C requirements), it is unlikely that Flow would need to make significant, if any, modifications to those systems in order to accommodate C3's needs.

522. While Flow has stated or suggested that co-location requires separate "cages" for the co-locator's equipment, Flow has not explained why co-location can only be provided using such cages. As discussed above, a separate locked cabinet in a room other than the Maya-1 equipment room with escorted and supervised access would be sufficient to protect all parties.

523. Therefore, there is no technical or engineering matter that would make access to the CLS so difficult or impossible that it could not reasonably be addressed, other than perhaps

within the Maya-1 equipment room itself, which is not the only room available for use for co-location of C3's equipment in the CLS.

Conclusion

524. Outside of the Maya-1 equipment room itself, there is no space limitation, safety or security concern, or technical or engineering matter which would have prevented Flow from accommodating C3's request. Any such concerns or matters could reasonably be addressed through escorted and supervised access under a suitable SLA to a separate locked colocation cabinet.

525. Flow did not, therefore, have a lawful reason under Section 69(3) of the ICT Act or Regulation 4(3) of the Regulations to refuse C3 access to the CLS.

Conclusions

526. None of the reasons listed in the ICT Act or the Regulations for refusing to provide infrastructure sharing services apply to the CLS building, other than to the Maya-1 equipment room itself. Flow, therefore, contravened the ICT Act and the Regulations by refusing access to C3 for C3's equipment to connect to capacity on the Maya-1 cable system.

527. In particular, space for co-location equipment, namely a dedicated co-location rack, is available in the [redacted] rooms, and space is available within the CLS building and within the ducts between the CLS building and the manhole in Seaview Road, to connect C3's network in Seaview Road to C3's capacity on the Maya-1 cable system.

Issue 3B Has Flow provided a lawful reason to refuse access to land within the CLS site for a separate building?

C3 Position

528. Essentially the same as for previous issue 3A (access to the CLS building) and,

529. Given delay to date, C3 can no longer entertain the option of renting space. C3 has no confidence that Flow would provide an offer on fair and reasonable terms, and is concerned that Flow would use a request for access to land at the CLS site as an opportunity to further delay C3 from gaining access to the CLS.

530. The only remedy sought by C3 is access to space in the CLS building.

Flow Position

531. Essentially the same as for previous issue 3A (access to the CLS building) and,

532. Flow's last offer was to allow C3 to build its own building on the CLS property, C3 should be required by the Office to negotiate in good faith with Flow (Flow DDR Response page 24).

Relevant Law

533. When considering Issue 3B the Office was guided by Sections 2, 65(1), 65(2), 65(3) and 69(3) of the ICT Act and Regulations 4(1), 4(3), 5, 6(a), 6(j)(i), 6(j)(iii), 8(1) to (7), and 8(8) of the Regulations. These are reproduced in full in Schedule 1 attached to this Determination.

Analysis

Applicable Rules

534. Infrastructure sharing obligations apply to cable landing stations and the associated lands per definition of "tangibles" in the ICT Act, as well as the Flow ICT Licence.

535. Neither C3 nor Flow have disputed this.

536. It follows Flow has limited lawful reasons to refuse access to the CLS site, as per Section 69(3) of the ICT Act and Regulation 4(3) of the Regulations.

History of Discussions

537. C3 raised possibility of leasing land for building a separate facility on the CLS site in a 5 July 2017 letter to Flow [DDR Item #3, Flow DDR Response Item #2].

538. Flow initially responded to C3 on 28 September 2017 stating that all such land is needed for future expansion [Flow DDR Response Item #24].

539. At a 13 May 2019 "without prejudice" meeting between the parties, Flow suggested it might be a possibility, with "*strict security protocols*" and a "*minimum build price … around USD500K*" [DDR Item #38].

540. In other words, the parties have had some discussion around the matter but most of their focus has been on colocation within the CLS building itself.

541. In the 03 February 2021 RFI, the Office asked the parties to provide further details on their positions regarding C3 gaining access to land at the CLS site.

Reasons to refuse

542. There are limited reasons in law to refuse access to infrastructure, including the land used for a CLS as per Section 69(3) of the ICT Act and Regulation 4(3) of the Regulations.

543. In other words, lack of capacity, security or safety reasons, or technical and engineering matters.

Capacity

544. The Office Site Visit Report does not comment on [redacted] [document #207].

545. Flow confirmed there is sufficient space within the site [Flow response to the 03 February 2021 RFI #30].

546. It is unclear exactly how much space would be needed to erect a separate building.

547. There is little evidence on the record of significant discussion by the parties regarding the amount of space available, amount needed, acceptable construction standards and amongst other things.

548. The parties had discussed a 20'x20' building on 27 July 2017 [Flow Response – Item #23].

549. Flow provided an example of a [redacted] building [Flow response to the 03 February 2021 RFI #30] and showed possible location for this on the CLS site.

550. C3 cited the need for space for "*one rack and … back up power battery and a small generator*" [C3 response to 2021 RFI #30].

551. The capacity of the building cited by Flow would far exceed C3's stated space requirements.

552. Therefore, there is space is available on the CLS site for a building large enough to accommodate C3's stated requirements.

Safety or Security

553. The record does not show any safety or security concerns that, in the absence of reasonable measures, would prevent access outright by C3.

554. Flow provided "Cable Landing Station Security Procedures" which "rely upon a Security Guard and the separation of a formal colocation facility that was planned during construction of the facility" but did not specify where these procedures are used [Flow response to 2021 RFI #30c].

555. The reference to a "*colocation area*" and a "*cage*" suggests they apply to access to in-building colocation and not to access to a separate building. These procedures, therefore, do not directly answer the Office's RFI, and are likely more stringent than would be necessary for access to a separate building on the CLS site.

556. In any event, the development of appropriate and effective procedures for access to the site by C3 should be feasible, as these should be similar to those developed by Flow and other ICT licensees for mobile tower and site sharing in other locations across the jurisdiction.

557. As is the case with access to the CLS building, the presence of a full-time security guard would not be required. The parties would develop a suitable SLA for response time for escorted access by Flow security personnel.

558. Therefore, there are no reasons of safety or security to justify refusing access to the Maya-1 CLS site for colocation purposes.

Technical and engineering matters

559. Flow described a building that could be located on the site. This suggests that there are no "*technical or engineering matters which would make such access difficult or impossible*" as per Section 69(3)(c) of the ICT Act. or as per Regulation 4(3)(c) of the Regulations which refers to "*a technical or engineering difficulty that could not be reasonably addressed*".

560. While the suggested building would likely be feasible from a technical or engineering point of view, it is not clear that it would be "reasonable" in the circumstances, when taking C3's requirements into consideration.

561. Flow cited an estimated cost of US$500,000 to build [DDR Item #38], and confirmed this in its response to the 03 February 2021 RFI #30.

562. However, the actual cost could be higher, as Flow notes its estimate excludes [redacted] [Flow response to the 03 February 2021 RFI #30].

563. The "*technical or engineering difficulty*" involved in enabling C3's access to the CLS site for one rack and associated power equipment would not be "*reasonably addressed*" by a building costing well in excess of US$500,000.

Conclusion

564. At this time, it does not appear that there are any grounds under Section 69(3) of the ICT Act or Regulation 4(3) of the Regulations allowing Flow to refuse C3 access to land at the CLS site: as per Section 69(3) of the ICT Act and Regulation 4(3) of the Regulations, there is no lack of space, as per Section 69(3) of the ICT Act any issues of security and safety can be addressed and per Section 69(3) of the ICT Act and Regulation 4(3) of the Regulations there is no technical or engineering difficulty which could not be addressed.

565. However, the technical solution of a separate building is not reasonable, given its cost and given that it would provide far more space than what C3 reasonably needs, and given the availability of space within the CLS building itself.

Conclusions

566. None of the reasons listed in the ICT Act or the Regulations for refusing to provide infrastructure sharing services apply to the CLS site. However, Flow is not currently refusing access to the CLS site, so is not in contravention of the ICT Act or the Regulations.

567. Notwithstanding this, the building proposed by Flow is not a reasonable solution in light of the high cost and the fact that it exceeds C3's reasonable needs.

Issue 3C Is Flow's alternative to access to the CLS building (InSpan Backhaul Service) appropriate?

C3 Position

568. Use of the Flow InSpan Backhaul Service would mean housing C3's sensitive electronics equipment underground, risk of damage is higher (DDR paragraphs 99 & 105)

Flow Position

569. At the 26 July 2017 meeting between the parties, Flow offered C3 the InSpan Backhaul Service as alternative to co-location (Flow DDR Response page 23).

Relevant Law

570. When considering Issue 3C the Office was guided by Sections 9(4), 65(5), 65(6), 68(1) and 68(3) of the ICT Act and Regulations 6(c), 6(d), 6(f), 6(g), 6(h), 9, and 10 of the Regulations. These are reproduced in full in Schedule 1 attached to this Determination.

Analysis

Background

571. Flow offered C3 the InSpan Backhaul as an alternative to co-location at the CLS at the 26 July 2017 meeting with C3 [Flow DDR Response Item #23]. Described as "*our Inspan Backhaul Service where fibre is installed up to the manhole. We would then take capacity from the Maya 1 Landing Station and meet customer by the manhole*."

572. Flow again offered the InSpan Backhaul Service to C3 in its 28 September 2017 letter [Flow DDR Response Item #24]. Described as a connection between Maya-1 and a manhole outside the station: "*our Inspan Backhaul Service where we would take the required capacity from Maya-1 Cable Landing Station and meet C3 by the manhole outside the Station*."

573. In Flow's 13 May 2019 response to the C3 Notice of Grievance [Flow DDR Response Item #28] and during the without prejudice meeting held on the same date [DDR Item #38]: "*An InSpan connection would provide C3 passive access to capacity, no space or power costs, no dependence on access or availability of security personnel, and an ability to implement its own diversity plans to/from the Station* …."

574. During the 03 September 2020 call with C3, Flow offered an "in-span solution," among other things discussed. [document #250].

575. A diagram describing the proposed service was sent by email on 18 September 2020 [document #262]. That email noted among other things: "*You had noted that you wanted the ability to pick up your own capacity to avoid local loop charges. You had noted that wanted the ability to buy from other operators on the MAYA system. The infrastructure we*

are building for you is affording you these abilities. As described in our earlier presentation, we will provide the Outside Plant facing panel, run the inner duct and fiber within our facility, within the on premise ducts and on out to the FLOW Zero Manhole where you will be able to splice to."

576. To better understand the InSpan Backhaul proposal, the Office issued the 03 February 2021 RFI #31.

577. Flow responded with info regarding interfaces, the applicable contract, pricing, and a statement regarding compliance with the Regulations. These are addressed below.

Interfaces

578. Flow noted in particular: "maximum distance the optical ports can support: This is a passive connection. SR – 2km, LR – 40km optics can be purchased to equip the cable system interfaces and C3's router equipment, depending on where C3 locate their terminating equipment."

579. The 40km distance suggests that the fibre from the CLS could run to terminate at almost any possible C3 location from High Rock to George Town (assuming suitable utility poles or duct space is available to carry the fibre).

580. C3 states that the InSpan Backhaul Service would require it to place its switch in a manhole (see minutes of without-prejudice meeting [DDR Item # 38] and DRR paragraph 105). Based on the description of the service from Flow, this is not at all the case. C3 could bring its fibre to the "manhole zero" outside the CLS, leaving enough coiled there for Flow to carry it into the CLS and terminate on the OSP patch panel there, whilst placing the C3 switch in some secure location within the 40km maximum distance the optical interfaces would support.

The Contract

581. Flow produced a number of contract documents. These appear to be standard commercial contract documents applied by Flow affiliates across the region [Flow response to the 03 February 2021 RFI #31].

582. The contract does not require the local loop to be provided by Flow (see definition of "Domestic Services Interface Point" in the MSA: "*Customer terminal equipment (if any) collocated at the applicable Terminal Station*").

583. The Colocation Schedule to the MSA, however, is limited to the provision of international capacity by Flow, and the contract documents assume the wet capacity is provided by Flow. See clause 2.1 in the Master Colocation Schedule: "… *as part of an international solution connected with the purchase of international capacity services* …" This appears therefore to be a commercial offer.

584. This does not appear, therefore, to be quite the same service as described in communications between C3 and Flow in 2017, 2019 and 2020. In particular, it would not support Flow's September 2020 statement "*You had noted that wanted the ability to buy*

from other operators on the MAYA system. The infrastructure we are building for you is affording you these abilities."

585. That said, the technical arrangements would likely be mostly the same, whether the international capacity brought into the CLS is provided by Flow or by a third party. The contract documents could therefore presumably be modified to reflect the InSpan Backhaul Service that appears to have been previously discussed with C3, namely a connection between international capacity brought into the CLS (whether provided by Flow or by a third party) and C3's domestic fibre facilities brought to "manhole zero".

Pricing

586. Flow states on 13 May 2019 that the InSpan Backhaul Service is the "*most prudent and economical course of action*" [Flow DDR Response Item #28] and is more economical than a C3 on-site building [DDR Item #38].

587. Flow provided prices for various elements of the proposed service separately, i.e. [redacted]. [Flow response to the 03 February 2021 RFI #31].

588. Only the last two elements would be relevant to an InSpan Backhaul Service provided to C3 in Cayman.

589. As noted, this appears to be a commercial offer. Infrastructure sharing is a regulated service. If InSpan Backhaul Service is being presented as a commercial offer, C3 can accept it or not at its discretion, but C3 is still entitled to request and receive infrastructure sharing services at the CLS (subject to the terms of the ICT Act and the Regulations). If InSpan Backhaul Service is being presented as an alternative to co-location (i.e. infrastructure sharing) at the CLS on the grounds that co-location is not feasible, then the offer must comply with the Regulations. This would be consistent with the policy embedded in Regulation 21 of the Regulations.

590. It is not clear how a Monthly Recurring Cost of US$[redacted] could be "cost-oriented" for the purposes of the Regulations, when what is being provided is [redacted] (see diagram in document #262). It is unlikely that significant new equipment or ducts would have to be built within or outside the CLS to meet C3 in the road for the purposes of providing this InSpan Backhaul Service (noting that the Office's Maya-1 Site Visit Report stated that [redacted] One would expect, therefore, that most incremental capital costs to be covered by the Non-Recurring Costs of US$[redacted]. Further, the InSpan Backhaul Service appears to be a passive service and therefore would not be generating significant on-going costs.

591. Therefore, there appears to be limited justification for a high Monthly Recurring Cost.

Compliance with the Regulations

592. In its 03 February 2021 RFI #31, the Office asked Flow to provide "*evidence that the rates comply with the principles of the INI Regs*," citing in particular cost-orientation (regulation 6(h), reasonableness (regulation 6(c)), transparency (regulation 6(d)) and sufficient unbundling (regulation 6(f)).

593. In response, Flow asserted that "*the information presented above is transparent and sufficiently unbundled and comparable to prices for similar connectivity services offered in other competitive markets*."

594. Flow did not provide any evidence or documentation in support of that assertion.

595. Nor did Flow assert, let alone address how, the prices complied with the regulatory principles of cost-orientation and reasonableness.

596. Given that Flow is a sophisticated entity with access to in-house experts across the region, if not elsewhere, the omission is significant.

597. As noted above, the proposed prices do not appear to be cost-oriented or reasonable, in light of the service being provided.

Conclusion

598. Contrary to C3's assertion, the InSpan Backhaul Service would not require any of C3's sensitive electronic equipment to be placed in a manhole.

599. From a technological point of view, the InSpan Backhaul Service could be a reasonable alternative to co-location at the CLS and provide passive access to capacity on the Maya-1 cable system that C3 might acquire either from Flow or third party providers.

600. However, Flow provided no evidence that the prices it proposed satisfy the principles set out in the Regulations.

601. Therefore, unless and until Flow can supply prices that satisfy the requirements of the Regulations, in particular, cost-oriented and reasonable, the InSpan Backhaul Service is not an appropriate substitute for co-location at the CLS to allow C3 to access capacity being provided over the Maya-1 submarine cable. This, however, does not stop C3 from accepting Flow's offer of the InSpan Backhaul Service on a commercial basis, despite that service not being in compliance with the Regulations.

Conclusions

602. From a technological point of view, the In-span Backhaul service proposed by Flow could be an appropriate alternative to co-location in the Maya-1 CLS and, contrary to C3's concerns, would not require C3 to place sensitive electronic equipment in a manhole.

603. There is no evidence on the record that the proposed prices satisfy the requirements in the ICT Act and the Regulations for reasonableness and cost-orientation. The In-Span

Backhaul service as currently proposed is, therefore, not an appropriate alternative to co-location within the Maya-1 CLS.

604. The Office notes that C3 may choose to pursue a commercial agreement for services such as the In Span Backhaul service proposed by Flow but is not required to do so. On 1 March 2022, Flow advised that C3 and Flow had entered into an agreement for in span backhaul facilities to support access to 10G services on Maya-1 and CJFS.

Issue 4 Does Flow have a lawful basis to refuse C3's alternative solution where duct access is not feasible (fibre cables from Maya-1 to Health City)?

C3 Position

605. Flow did not acknowledge C3's 10 July 2018-10 proposal to install two cables (w/out sub-duct, one to be gifted to Flow) on Maya-1 to Health City portion of Shamrock Road duct route as a solution to lack of space for C3's sub-duct [DDR Item #14] (DDR paragraph 106).

606. C3 again surfaced this issue in its 07 May 2019 Notice of Grievance [DDR Item #37] to Flow and, at the 13 May 2019 without-prejudice meeting with Flow [DDR Item #38], in return Flow offered C3 a leased circuit on new fibre [DDR paragraph 107].

607. C3 wants duct access, believes space will be available when Flow removes the redundant cables, believes Flow has no incentive to do so expeditiously (DDR paragraph 108).

Flow Position

608. C3 acknowledges there is insufficient space (Flow DDR Response page 24).

609. Flow did, in fact, respond to the C3 offer, and explained why the C3 proposal was not workable, proposed a leased circuit as an alternative. C3 is aware, as per the 03 November 2017 letter [Flow DDR Response Item 11]: that all duct access requires the use of sub-duct. This is necessary to ensure the integrity and security of Flow facilities [Flow DDR Response page 25].

610. Notwithstanding this, C3 installed its own cables in the ducts in question, Flow demanded they be removed, and C3 complied. This indicates modus operandi of not negotiating in good faith and reaching a commercial solution (Flow DDR Response pages 25-26).

Relevant Law

611. When considering Issue 4 the Office was guided by Section 65(1) of the ICT Act and Regulations 4(1), 5, 6(a), 6(b), 6(j)(i), 8(1), and 21(2) of the Regulations. These are reproduced in full in Schedule 1 attached to this Determination

Analysis

History

612. C3 first proposes on 10 July 2018 [DDR Item #14] the use of two 288ct fibre cables on the Seaview Road segment of the Shamrock Road duct route (between Maya-1 and Heath City) as a solution to the lack of space for sub-duct.

613. There was no apparent response by Flow and no apparent follow-up by C3 until the issue is included in the 7 May 2019 C3 Notice of Grievance to Flow [DDR Item #37].

614. The Flow response to the C3 Notice of Grievance notes it cannot grant access due to lack of space (as Flow advised in 22 January 2018 quote [DDR Item #10, Flow DDR Response Item #14]), the limited space available is earmarked for Flow network expansion. Flow proposed a domestic leased circuit as an alternative.

615. Note, Flow is correct that it did respond to the proposal, but C3 is also correct that Flow did not respond at the time and did not respond until the C3 Notice of Grievance to Flow.

616. The matter was discussed at the 13 May 2019 without-prejudice meeting between the parties [DDR Item #38] – Flow noted that the limited space in the duct is earmarked for a Flow network expansion project; Flow now has fibre at Health City, and proposes a leased circuit to C3.

617. Note that there is a “Possible Remedy: Paul explained that there were 4 sub-ducts in the conduit. One was dedicated to power and a second to transmission for the Maya cable. One was left empty for emergency reasons if the power or transmission failed and Maya went down. The fourth is used by Flow and is 70% full. We did not discuss if this would be freed up if the redundant copper was removed. Flow’s position [sic] is either C3 pay for access from Flow at a reasonable rate or build its own poles or conduit.” [DDR Item #38, page 3].

618. Note that, notwithstanding these discussions, C3 appears to have installed its sub-duct in the Flow ducts between Maya-1 and Health City prior to 12 June 2019 [see document #142], which C3 subsequently removed upon Flow's request [document #143].

Statutory provisions

619. As noted above, there are limited reasons in law to refuse access to infrastructure:

> Section 69(3) of the ICT Act
> Regulation 4(3) of the Regulations

620. In other words, a lack of capacity, security or safety reasons, or technical and engineering matters.

621. Regulation 21 mentioned by C3 as a basis for requiring Flow to accept C3's proposal is not on its face applicable as Regulation 21(2) of the Regulations refers to an "*interconnection facility*", in other words, the regulation applies when space is not available for interconnection requests as opposed to infrastructure sharing requests.

622. Flow refused to provide access to ducts because of lack of capacity (as per Section 69(3)(a) of the ICT Act and Regulation 4(3)(b) of the Regulations).

623. Infrastructure sharing agreements are to be negotiated in the first instance (as per Regulation 6(b) of the Regulations). This does not mean negotiations must always be successful or that one party must agree to what the other party wants. This is why there is a process to bring disputes to the Office; where there exists an infrastructure sharing dispute between licensees, the Office is the final arbiter.

Basis for refusal

624. In response to the 03 February 2021 RFI #33, Flow provided information to the Office in confidence on the level of utilization of the ducts between Heath City Cayman Islands and the CLS, and on what the ducts were being used for.

625. Having reviewed the information, it appears to the Office that there is in fact no available capacity for additional facilities in the ducts along much of that route.

626. While there may appear to be some space, it is in fact part of Flow's "*reasonably anticipated requirements*" per Section 69(3)(a) of the ICT Act and Regulation 4(3)(a) of the Regulations and not available for infrastructure sharing purposes.

Alternative Solutions

627. Both parties made reasonable efforts to find a solution to this lack of capacity, C3 by proposing the use of fibre optics cables without sub-duct and Flow by proposing a leased circuit.

628. In response to the 03 February 2021 RFI #32, Flow explained:

> *"The use of the sub-duct is a standard industry practice in order to securely sub-divide a duct system. Sub-ducting provides a clean, continuous path for optical fibre cabling and a well-defined, secure and safe delineation between different sets of cables in a common conduit. Sub-ducting helps to reduce the chance of damaging existing cables when pulling in additional cables, as it provides separation and protection for optical cabling, thus preventing co-mingling."*

629. This is a reasonable approach – a sub-duct may use more space in the duct than a bare cable, but it minimizes potential damage to the facilities of all users of the duct once installed. C3's proposed solution to the issue of lack of capacity would have created technical issues (e.g. cable co-mingling) which could justify a refusal under Section 69(3)(c) of the ICT Act and Regulation 4(3)(b) of the Regulations.

Conclusion

630. A lack of capacity is a sufficient reason to refuse to provide access to infrastructure.

631. Both parties made reasonable efforts to find a solution to this problem, but ultimately the negotiations were unsuccessful.

632. An ICT licensee should not be mandated to accept, where there is a lack of capacity, either a solution that could create technical issues or a commercial solution that would not provide the same level of service.

633. In any event, it appears that this issue is moot as C3 has built its own duct infrastructure along the Health City to Maya-1 segment of the Shamrock Road duct route where there is congestion in Flow's ducts.

Conclusions

634. Flow is justified in refusing C3 access to the segment of the Shamrock Road duct route between Maya-1 and Health City on the grounds of lack of capacity.

635. The parties were unable to negotiate a mutually-acceptable alternative solution and Flow was justified in refusing the "2-fibre-cable" alternative proposed by C3 on technical grounds.

636. In any event the issue is moot as alternative duct facilities have since been built.

Issue 5 Do Flow's prices for duct surveys comply with the Regulations?

C3 Position

637. C3 requested breakdown from Flow on 28 December 2018 [DDR Item #21, Flow response to the 03 February 2021 RFI #5] of costs supporting estimates for surveys on three routes (Shamrock Road, North Side and East End, central George Town) (DDR paragraphs 109-110).

638. On 22 January 2019 Flow gave C3 assurances that all estimates were in good faith, reasonable, transparent, cost-oriented, but did not provide supporting information [DDR Item #24, Flow DDR Response Item #27]. Further clarification was requested by C3 on 05 February 2019 [DDR Item #25, Flow response to the 03 February 2021 RFI #5] but Flow only responded in their 12 March 2019 letter [DDR Item 32, Flow DDR Response Item 17] regarding the Shamrock Road duct route duct clearance work, not the survey estimates (DDR par. 111).

639. C3 does not consider the Flow pricing based on the number of manholes and the number of hours per manhole (as discussed at the without-prejudice meeting on 13 May 2019) is cost-orientated (DDR paragraph 113).

Flow Position

640. Flow's 22 January 2019 letter to C3 explained the basis for the survey charges and functions [DDR Item #24, Flow DDR Response Item #27] (Response pages 27-28).

641. Flow gives details (in confidence) of cost estimates for various surveys (in brief, [redacted]. (Response pages 28-29).

Relevant Law

642. When considering Issue 5 the Office was guided by Sections 9(4), 65(5), 65(6), and 68(3) of the ICT Act and Regulations 6(c), 6(d), 6(f), 6(g), 6(h), 9 and 10 of the Regulations. These are reproduced in full in Schedule 1 attached to this Determination.

Analysis

643. This is effectively the same set of issues and questions as in Issue 1B (cost of Shamrock Road route duct clearance and make-ready) except that there are no third party charges are involved.

644. In its responses to the 03 February 2021 RFIs #35 to #37, Flow refers the Office to its answers to the 03 February 2021 RFIs #7 and #8.

645. The conclusions drawn regarding cost-orientation and reasonableness in the context of Issue 1B, with respect to Flow's internal costs, would also apply here.

646. The cost of a [redacted]

647. The significant difference in this issue, is that the loading factor is [redacted], not [redacted].

648. As in the case of Issue 1B, the Office does not consider the cost of a [redacted] to be unreasonable, additionally, the base rate is applied equally to retail and wholesale customers.

649. Therefore costs are at first glance transparent, unbundled and non-discriminatory as required in Section 68(3) of the ICT Act.

650. There is insufficient information available to assess whether the base rates are cost-oriented for the purposes of the Regulations. Note that they are retail rates and therefore likely not calculated taking the requirements of the Regulations into account.

651. However, note the [redacted] loading factor. Flow suggests in its responses to the 03 February 2021 RFI #7(a) and #8(c) that the [redacted] loading factor was applied in error and that it should have been [redacted].

652. [redacted]

653. In its response to the 03 February 2021 RFI #38(b), Flow states "*C3 was invoiced by Flow for estimated hours, and the actual hours incurred matched estimated hours*." This may be the case but seems unlikely. It is therefore not clear whether C3 overpaid or underpaid for the surveys.

Conclusions

654. The base charges for the services used to develop the price for the duct survey work on various duct routes appear to be non-discriminatory. There is no evidence that they are not reasonable.

655. The loading factor applied to Flow's Special Service charges when applied to duct survey work performed for C3 was not cost-oriented and was inconsistent with the Regulations. Application of the mark-up calculated in Schedule 3 attached to this Determination, based on the FLLRIC cost model, i.e. a mark-up of [redacted], would be consistent with the Regulations.

11. Determinations on Remedies

656. Section 9(4) of the ICT Act authorises the Office to "regulate the rate, prices, terms and conditions of any ICT service or ICT network that is required to be licensed where the Office is of the opinion that it is in the interests of the public to do so" and section 69(2)(b) of the ICT Act authorises the Office, "in order to promote an efficient, economic and harmonised utilisation of infrastructure," to "inquire into and require modification of any agreement or arrangements entered into between a licensee and a another person or licensee which has the effect of limiting either the efficient and harmonised utilisation of infrastructure or the promotion of competition in the provision of ICT services or ICT networks."

657. Based on the conclusions set out in the preceding sections of this Determination, the Office considers that certain provisions in the WSDA are having the effect of limiting the efficient and harmonized utilization of infrastructure. In order to promote the efficient, economic and harmonized utilization of ICT infrastructure in the Cayman Islands, the Office considers that those provisions of the WSDA must be modified.

658. The Office further considers that it is in the public interest that certain rates, prices, terms and conditions of Flow's sub-duct access service should be regulated, in order to promote and maintain an efficient, economic and harmonised utilisation of ICT infrastructure.

659. Additionally, section 11 of the Dispute Regulations provides that the Office may, in determining disputes, have regard among other things for the objectives and functions of the Authority, and all matters affecting the merits, and fair settlement of the dispute.

660. Accordingly, the Office, having reached the conclusions set out above regarding the issues at dispute in this dispute determination process, and keeping in mind, in particular, the Office's functions as set out in Section 6(1)(b) of the URC Act to promote appropriate effective and fair competition and in Section 9(3)(h) of the ICT Act to promote and maintain an efficient, economic and harmonised utilisation of ICT infrastructure, the Office directs:

Issue 1 - Duct Clearance and Make-Ready work along Shamrock Road:

Issue 1A & Issue 1C - The Office determines that Flow shall:

a. Within 75 days of this Determination advise C3 when Flow will resume works on the contracted Duct Clearance and Make-Ready works.

b. Resume the works referenced in (a) above no later than 105 days after publication of this Determination, unless otherwise agreed in writing with C3. Such agreement shall be submitted to the Office within 7 days of it being established.

c. Provide the Office and C3 within 75 days of the date of this Determination, a project plan including start date as to when works will resume.

d. Provide bi-weekly updates to both the Office and C3 as to the progress of works through to completion Duct Clearance and Make-Ready works.

Issue 1B - The Office determines that within 75 days of publication of this Determination, Flow is to amend the mark-up on the base charges for Duct Clearance and Make-Ready works to [redacted] and initiate good faith negotiations with C3 on how any monies owed to C3 shall be applied to the C3 account. Within 7 days of arriving at a negotiated agreement, both Flow and C3 are to confirm to the Office how any monies owed are to be applied to C3's account.

Issue 2 - Sub-duct size installed by C3 along the Shamrock Road Duct Route:

Issue 2A - The Office determines that within 75 days of publication of this Determination, the parties are to:

a. negotiate and execute an amendment to Clause 1.1 of the WSDA to the Definition of "Customer Sub-duct" to address whether a reference in the WSDA to a measurement of a sub-duct is referring to the Inside Diameter or Outside Diameter of the 'Customer Sub-Duct'.

b. negotiate and execute an amendment to the WSDA to change the monthly recurring charge for access for use of a 1-inch sub-duct along the Shamrock Road Duct route to the prices as set out in Schedule 3 attached here.

c. negotiate and execute amendments to the WSDA to include in the WSDA any other agreements made by the parties for changes to the WSDA, including the Shamrock Road, Walkers House and West Bay Road duct routes.

d. Within 7 days of the negotiated agreements in a, b, and c above, provide the Office with details of the new agreement/clause.

Issue 2A and Issue 2C - The Office determines that, within 50 days of publication of this Determination, C3 shall notify to Flow in writing and copy to the Office whether C3 proposes to:

a. Remove the 1.5-inch sub-duct C3 has installed in Flow ducts along the Shamrock Road Duct Route where Flow has not given C3 permission to install 1.5-inch sub-duct and replace it with a 1-inch sub-duct. If C3 proposes to remove the 1.5-inch sub-duct this is to be completed in a similar time frame as was required for C3 to install the sub-duct, however no later than 90 days from C3 notifying Flow of its decision to remove the 1.5-inch sub-duct.

Or

b. Agrees to compensate Flow for C3's use of the 1.5-inch duct where Flow has determined there is space available, at the amended prices for the 1.5-inch sub-duct of twice the price for a 1-inch sub-duct once the prices for the 1-inch sub-duct have been amended as per Schedule 3 attached herewith.

c. Within 7 days of C3's notification to Flow, provide the Office with details of C3's decision.

Issue 2B - The Office determines that C3's use of a sub-duct other than a 1-inch sub-duct was not a material breach of the WSDA.

Issue 2C - The Office determines that within 50 days of publication of this Determination, Flow is to amend the monthly recurring charge for access to its ducts along the Shamrock Road Duct route for the use of 1-inch and 2-inch sub-duct as set out in Schedule 3 attached herewith. Within 7 days of the amendment, notify the Office that such amendment to the monthly recurring charge has been applied.

Issue 2D - The Office determines that Flow is not required to compensate C3 for the unused 1.5-inch sub-duct and fibre cable.

Issue 3 Access to the CLS

Issue 3A - The Office determines that within 75 days of publication of this Determination, Flow is to initiate good faith negotiations with C3 for the provision of space to accommodate C3's 2 Rack Units of equipment within the CLS, outside of the Maya-1 Equipment Room. Within 7 days of the negotiated agreement, Flow shall submit to the Office a copy of the new agreement.

Issue 3B - no determination required

Issue 3C – No determination required. C3 is not required to accept, but may if it wishes, the In-Span Backhaul solution proposed by Flow. The Office understands that C3 has entered into such a commercial arrangement with Flow.

Issue 4 - The Office determines that Flow is not required to accept the alternate solution of 2 fibre cables as proposed by C3.

Issue 5 - The Office determines that Flow shall:

a. Within 50 days of publication of this Determination, amend the mark-up on the base charges for the Survey works to [redacted].

b. Within 50 days of publication of this Determination, initiate good faith negotiations with C3 on how any monies owed to C3 based on the adjustments to the survey costs as set out in paragraph a above shall be applied to the C3 account. These negotiations shall be concluded within 60 days of the publication of this Determination.

c. Within 7 days of arriving at a negotiated agreement, both Flow and C3 are to confirm to the Office how any monies owed are to be applied to C3's account.

12. Determination on Costs

661. As set out in the Dispute Determination Procedure 2021 (9 March Advisory Guideline) sent out to both parties on 10 March 2021 [Doc 309 and Doc 310], the Office will make decisions in relation to costs for this matter. The Office will advise the parties of its intentions within 15 days of publication of this Determination and seek their comments at that time.

Schedule 1

Legal Framework

In making its determination of the DDR, the Office was guided by its statutory remit, in particular as set out in the URC Act, the ICT Act, the Regulations and the Dispute Regulations.

The following provisions are of particular relevance:

[…]
ICT Act Section 2.

2. In this Law —

[…]
“infrastructure sharing” means the provision to licensees of access to tangibles used in connection with a public ICT network or intangibles facilitating the utilization of a public ICT network; and, for the purposes of this definition —
(a) “tangibles” includes lines, cables or wires (whether fibre optic or other), equipment, apparatus, towers, masts, tunnels, ducts, risers, holes, pits, poles, landing stations, huts, lands, buildings or facilities; and
(b) “intangibles” includes agreements, arrangements, licences, franchises, rights of way, easements and other such interests;

ICT Act Section 9.

[…]
(4) The Office may regulate the rate, prices, terms and conditions of any ICT service or ICT network that is required to be licensed where the Office is of the opinion that it is in the interests of the public to do so.

ICT Act Section 65.

(1) Subject to this section, a licensee that operates a public ICT network shall not refuse, obstruct or in any way impede another licensee in the making of any interconnection with its ICT network or the sharing of any infrastructure and shall, in accordance with this section, ensure that the interconnection or infrastructure sharing provided is made at technically feasible physical points.

(2) A licensee who wishes to make any interconnection or share infrastructure shall make the request for interconnection or infrastructure sharing with another licensee in writing.

(3) A licensee to whom a request is made in accordance with this section shall, in writing, respond to the request within a period of one month from the date the request is made to him and, subject to subsection (5), provide the interconnection or infrastructure sharing service in a reasonable time.

(4) A request by a licensee to make any interconnection or infrastructure sharing with another licensee shall be refused only on reasonable grounds, and such refusal shall be in writing.

(5) Any interconnection or infrastructure sharing provided by a licensee under this section shall be provided at reasonable rates, terms and conditions which are not less favourable than those provided to —

(a) any non-affiliated supplier;
(b) any subsidiary or affiliate of the licensee; or
(c) any other part of the licensee's own business.

(6) Without prejudice to subsection (5), the Authority shall prescribe the cost and pricing standards and other guidelines on which the reasonableness of the rates, terms and conditions of the interconnections or infrastructure sharing will be determined.

ICT Act Section 66.

(1) Interconnection or infrastructure sharing agreements between licensees shall be in writing, and copies of each agreement shall be submitted to the Office within seven days of that agreement having been signed.

ICT Act Section 68.

(1) The cost of making any interconnection or infrastructure sharing to the ICT network of another licensee shall be borne by the licensee requesting the interconnection.

[…]
(3) The cost referred to in subsection (1) shall be based on cost-oriented rates that are reasonable and arrived at in a transparent manner having regard to economic feasibility, and shall be sufficiently unbundled such that the licensee requesting the interconnection or infrastructure sharing service does not have to pay for network components that are not required for the interconnection or infrastructure sharing service to be provided.

ICT Act Section 69.

[…]
(2)

(b) inquire into and require modifications of any agreement or arrangements entered into between a licensee and a another person or licensee which has the effect of limiting either the efficient and harmonised utilisation of infrastructure or the promotion of competition in the provision of ICT services or ICT networks

[…]
(3) A licensee shall not deny another licensee access to its infrastructure or infrastructure arrangements except —

(a) where there is insufficient capacity taking into account reasonably anticipated requirements;
(b) there are reasons of safety or security; or
(c) there are technical and engineering matters which would make such access difficult or impossible.

ICTA (Interconnection and Infrastructure Sharing) Regulations, 2003

Regulation 4.

(1) In accordance with the provisions of section 44 of the Law, a licensee shall not refuse, obstruct or in any way impede another licensee in the making of any interconnection or infrastructure sharing arrangement.
[…]
(3) A responder shall not refuse to provide infrastructure sharing services, except where-

(a) there is insufficient capacity, taking into account its reasonably anticipated requirements; or
(b) such provision would create a technical or engineering difficulty that could not be reasonably addressed.

Regulation 5.

Interconnection and infrastructure sharing arrangements shall be concluded as quickly as possible and in any event, no later than the time limits set out in these regulations, unless otherwise agreed between the parties.

Regulation 6.

The following general principles and guidelines shall apply to the provision of interconnection and infrastructure sharing services-

(a) each licensee has an obligation to treat requests, to negotiate interconnection and infrastructure sharing agreements and to provide interconnection and infrastructure sharing services in good faith;

(b) consistent with sections 44 to 46 of the Law[4], licensees shall, in the first instance, attempt to reach agreement on interconnection and infrastructure sharing by negotiation; where there is a dispute, the parties may refer the matter to the Authority for resolution in accordance with the Dispute Resolution Regulations

(c) interconnection and infrastructure sharing services shall be provided by the responder to the requestor at reasonable rates, on terms and conditions which are no less favourable than those provided by the responder to itself, any non-affiliated licensee or any subsidiary or affiliate of the responder and shall be of no less favourable quality than that provided by the responder to itself, any non-affiliated licensee or any subsidiary or affiliate of the responder;

(d) interconnection and infrastructure sharing rates shall be determined in a transparent manner;

[…];

[4] These provisions are now set out in sections 65 to 67 of the ICT Act

(f) costs and tariffs shall be sufficiently unbundled so that the requestor shall be obliged to pay the responder only for the network elements or infrastructure sharing services that it requires;

(g) costs shall be borne either by the requestor or the responder or both based on whether their respective requests and compliance with those requests cause those costs to be incurred; and in accordance with an interconnection or infrastructure sharing agreement between the two parties;

(h) interconnection and infrastructure sharing rates shall be cost-oriented and shall be set to allow the responder to recover a reasonable rate of return on its capital appropriately employed, all attributable operating expenditures, depreciation and a proportionate contribution towards the responder's fixed and common costs;

[…]
(j) interconnection and infrastructure sharing services shall be provided in a manner that –

(i) maximises the use of public ICT networks and infrastructure;

[…]
(iii) enables the development of competition in the provision of public ICT networks and public ICT services in a timely and economic manner

(k) interconnection and infrastructure sharing services shall be provided by the responder to the requestor at any technically feasible point on terms and conditions that are just, reasonable and non-discriminatory and in accordance with an interconnection or infrastructure sharing agreement between the two parties;

Regulation 8.

(1) Licensees shall have a right and, when requested by other licensees, an obligation to negotiate interconnection and infrastructure sharing services in order to ensure the provision and interoperability of services throughout the Islands.

(2) A request for a quotation to provide interconnection or infrastructure sharing services shall contain at least the following information-

(a) the reference number of the requestor's ICT licence;
(b) a technical description of the requested services;
(c) locations;
(d) dates required; and
(e) projected quantities to be ordered with a period of 3 years forecast.

(3) A requestor shall be responsible for the reasonable costs incurred by the responder in processing the request, and shall include with the request a non-refundable deposit of $2000 or such other amount as specified from time to time by the Authority.

(4) Requests may be cancelled at any time by the requestor.

(5) The responder shall acknowledge receipt of each request no later than 3 days following receipt of the request; and the responder shall provide the Authority, with a copy of the original request and the acknowledgement receipt.

(6) The responder shall consider and analyse each request and advise the requestor within 14 days of the acknowledgement of receipt of the request, or such other time period as agreed between the parties of-

(a) the need for any further information for purposes of having a sufficiently complete and accurate request; or

(b) that the request is sufficiently complete and accurate to provide a quotation.

(7) The responder shall provide a quotation as quickly as possible and in any event no later than 30 days, or within such other time period as agreed between the parties, after receipt of a complete and accurate request.

(8) Where the responder denies a request, the responder shall provide detailed written reasons for such denial to the requestor within 20 days of the receipt of a complete and accurate request.

[…]
(11) For the purposes of paragraph (10), the following actions or practices violate the obligation to act in good faith-

[…]
(d) obstructing or delaying negotiations, the provision of services according to a final interconnection or infrastructure agreement, or the resolution of pre-contract disputes; and
[…]
Regulation 9.

The rates offered by the responder to the requestor shall clearly identify all charges for interconnection or infrastructure sharing.

Regulation 10.

(1) A responder's charges for interconnection or infrastructure sharing shall be-

(a) determined in a transparent manner, subject to any confidentiality claims under the Confidentiality Regulations to which the Authority may agree;

(b) non-discriminatory in order to ensure that a responder applies equivalent conditions in equivalent circumstances in providing equivalent services, as the responder provides for itself, any non-affiliated licensee or any subsidiary or affiliate of the responder;

(c) reciprocal for the same service in order that the responder and requestor pay the same rate for providing each other the same services, except for any applicable contribution towards an access deficit that may be approved by the Authority;

(d) preferably such that non-recurring costs shall be recovered through non-recurring charges and recurring costs shall be recovered through recurring charges;

(e) such that charges that do not vary with usage shall be recovered through flat charges and costs that vary with usage shall be recovered through usage-sensitive charges; and

(f) based on a forward-looking long-run incremental cost methodology once it is established by the Authority following a public consultative process.

[…]
Regulation 11.

In determining a dispute, the Authority shall act expeditiously, and in doing so may have regard to-

(a) the subject matter of the dispute;
(b) the need to inquire into and investigate the dispute;
(c) the objectives and fuctions of the Authority; and
(d) all matters affecting the merits, and fair settlement of the dispute.

[…]
Regulation 21.

[…]
(2) The Authority, in considering an issue under this regulations, may direct the responder to show cause why it should not, as an alternative, be required to transport the requestor's signal from an external interconnection facility to the responder's central office with zero mileage charges.

[…]
Regulation 24.

The responder shall promptly provide services in accordance with final interconnection or infrastructure sharing agreements

Schedule 2

Detailed Timelines Correspondence between the Parties.

Timeline of Shamrock Road Route Survey (PQ DCK 17-07-2017)

Step	Date	Timing	Doc. #
C3 request	2017-Jun-23[5]		25
Flow acknowledges	2017-Jun-23	same day as request	26
Flow note survey required	2017-Jul-03	10 days after acknowledgment	27
C3 agrees to pay for survey	2017-Jul-04	1 day after advice re need for survey	28
C3 change to scope	2017-Jul-05	1 day after agreeing to pay for survey	29
Quote for survey	2017-Jul-17	24 days after request, 12 days after change to scope	30
C3 accepts quote	2017-Jul-17	same day	32
Survey started	on or before 2017-Jul-26	9 days (or fewer) after acceptance of quote	33
Status meeting	2017-Jul-27	10 days after acceptance of quote, 1 day after advised survey started	38
C3 advises Flow survey reached Maya-1	2017-Sep-19	64 days after acceptance of quote	42
Flow advises C3 survey completed	2017-Sep-27	2 months after start, 72 days after acceptance of quote	45

[5] C3's letter is dated June 22, the email forwarding it is dated June 23.

Timeline of Duct Clearance/Sub-Duct Installation (PQ DCK 01-11-2017)[6]

Step	Date	Timing	Doc. #
Request to clear	2017-Sep-29[7]		48
Flow acknowledges	2017-Oct-04	5 days after request	49
C3 follow-up	2017-Oct-19	20 days after request	50
Flow acknowledges	2017-Nov-03	15 days after follow-up, 35 days after request	56
Quote for clearance/ installation	2017-Nov-03	idem	56
C3 questions re quote	2017-Nov-07	4 days after quote	58
Flow acknowledges	2017-Nov-10	3 days after questions	59
Flow answers re quote	2017-Nov-16	6 days after acknowledgment, 9 days after questions	61
C3 further questions	2017-Nov-17	1 day after answers	62
Flow answers	2017-Nov-21	4 days after further questions	63
C3 request for revised quote	2018-Jan-03	43 days after answers to further questions[8]	65
Revised quote and order form	2018-Jan-22	19 days after request for revised quote	69
C3 signs order form	2018-Feb-15	24 days after receipt of quote / order form	70
Flow signs order form	2018-Feb-22	7 days after C3 signs, 31 days after issuing revised quote	70
Invoice for duct clearance	2018-Feb-23	1 day after signing order form	71
C3 pays deposit	2018-Mar-05	10 days after invoice	72
C3 requests progress update	2018-Jul-26	143 days after paying invoice	77
Flow acknowledges	2018-Jul-27	1 day after update request	78
C3 follows up on July 26 progress update request	2018-Aug-09	14 days after update request	81
Flow to update on Aug 14	2018-Aug-13	4 days after C3 follow up	82
C3 request for update on clearing of ducts	2018-Sep-07	43 days after July update request, 24 days after promised date for answer	89
Flow advises started last week	2018-Sep-07	same day	90
C3 thanks	2018-Sep-07	same day	91

[6] Note that this table focuses on the work of duct clearance and make-ready. It excludes correspondence between the parties during this period relating to the prices for this work.

[7] C3's letter is dated September 28, the email forwarding it is dated September 29.

[8] Note that the email requesting the revised quote mentions a meeting held the previous week.

Step	Date	Timing	Doc. #
C3 follows up on July 26 progress update request	2018-Oct-05	71 days after July update request, 52 days after promised date for answer, but 27 days after Flow's Sept update	93
Flow advises work in progress, escalated to MD	2018-Dec-10	137 days after July update request, 66 days since last follow-up	98
C3 request for update, info on clearance activities	2018-Dec-18	8 days after Flow's Dec update	99
C3 request, *inter alia*, for completion date	2019-Feb-05	49 days after last update request, 57 days since last Flow communication	107
Flow acknowledges Feb 5 letter	2019-Feb-18	13 days after last C3 update request	108
Flow advises internal discussions re make-ready exercise	2019-Feb-26	26 days after last C3 update request	116
C3 follow-up, request for dates and timelines	2019-Feb-26	idem	117
Flow advises all work ceased due to breach	2019-Mar-12	14 days since last Flow communication, 35 days after last C3 update request, 228 days after July 2018 update request	119

1. Details of the twelve months or so leading to the filing of the DDR are the least clear. With few exceptions, the parties have not been able to say with precision when Flow began the duct clearance and make-ready work, when C3 began to install its sub-duct in Flow's ducts, when Flow discovered C3 had used an (apparently)[9] unexpected size of sub-duct, or when Flow ceased the duct clearance and make-ready work as a result.
   Events between 5 March 2018 and 12 March 2019

2. According to Flow, it began the duct clearance and make-ready work some time "*after receiving payment from C3*" on 5 March 2018 [Flow response to 2021 RFI #4]. Flow did not provide a specific start date.

3. Flow states that the work was partly completed by 4 September 2018. Flow explains that "partly completed" as meaning two of the tasks ("*raising certain manholes*" and "*clearing the ducting*") being done but two others ("*installing one* [new] *manhole*" and "*moving and securing Flow's facilities*") remaining to be done [Flow response to 2021 RFI #4].

4. However, it is likely that Flow completed the last two tasks in relation to at least some segments of the Shamrock Road duct route before 4 September 2018 because C3 states that it began the installation of sub-duct on 15 May 2018, after being notified by phone by Flow that it could begin work on a segment [C3 response to 2021 RFI 11b]. It is unlikely that Flow would have notified C3 it could start work before Flow completed the remaining two tasks, especially the task of "*moving and securing Flow's facilities*," in relation to those segments of the route.

5. Note that, in September 2018, Flow reported to C3 their "*understanding*" that the work was started "*last week*" and that "*we should have commenced pulling through the sub-duct*" [C3 response to 2021 RFI #5 – Item #1]. This statement also suggests that the second two tasks had been completed in relation to at least some portions of the Shamrock Road duct route. However, it is difficult to reconcile Flow's comment about pulling through sub-duct with Flow's agreement in late 2017 that C3 would install the sub-duct. It is also difficult to reconcile the comment about when work was started with C3's apparent ability to install sub-duct as early as mid-May 2018.

6. C3 states it installed sub-duct over the 30 to 45 days following 15 May 2018, in other words, ending sometime between mid-June and early-July [C3 response to 2021 RFI 11a]. C3 did not state precisely when it stopped installing sub-duct, and did not give any information by segment of the Shamrock Road duct route.

7. C3 requested updates on the Shamrock Road duct route clearance activities in July, August, September, October, December 2018 and February 2019. Somewhat unhelpfully, C3 did not refer to any previous sub-duct installation activities in those update requests, or to any previous communications from Flow (including Flow's September and December 2018 updates [documents #90 and #98, respectively]).

8. Flow appears to have become aware of C3's use of sub-duct that was not 1" in size when it surveyed duct availability for another licensee. It is not clear when that other survey took place, but it was certainly substantially completed by 4 September 2018 [Flow Response – Item 21].

9. Flow states that, after this, it conducted an "*audit of C3's installed sub-duct*" along the Shamrock Road duct route [Flow response to 2021 RFI 4]. Flow did not provide the specific start or end date of the audit or any results of the audit (apart from an internal email dated 7 June 2019 [Flow response to 2021 RFI 17], i.e. produced after C3's 13 May 2019 Notice of Grievance and after Flow's 24 May 2019 letter to other licensees advising that "*Flow will initiate an audit and clearance of the company's ducting throughout the Cayman Islands, commending Monday, 3 June 2019*" [C3 DDR – Item 40]). Flow explains in its response to the Office's 2021 RFI that "*communications on the audit process are not available, as the Flow personnel that conducted this audit are no longer with Flow*" [Flow response to 2021 RFI 17]. Flow does not explain why the only audit results that it provided in response to the Office's RFI post-date key events such as the 12 March 2019 letter advising C3 that Flow was of the view that C3 breached the WSDA or C3's 13 May 2019

Notice of Grievance. While "*communications on the audit process*" (emphasis added) might no longer be available due to the departure of certain staff, Flow does not explain why the audit results might not have been shared more widely than among "*the Flow personnel that conducted this audit*" even though the Flow Country Manager took the decision to notify C3 of breach of the WSDA on 12 March 2019 [Flow response to 2021 RFI 14c], the Office considers that the Country Manager could have expected at the time such an action to result in termination of contract and/or litigation and that he would have most likely taken in consultation with the Legal department.

10. Flow states that "*it notified C3 of the breach by telephone*" on 6 December 2018 [Flow Response page 12, Flow response to 2021 RFI #16a]. Flow did not make a record or minute of this call [Flow response to 2021 RFI #15]. The 6 December 2018 C3 email to Flow that appears to have been triggered by the call from Flow refers to a "*discrepancy with the size innerduct order by us vs the size agreed*," not to a "*breach*" [Flow Response – Item 16]. What precisely Flow communicated to C3 during that call is, therefore, not clear.

11. Flow was not able to confirm precisely when it ceased duct clearance and make-ready work on the Shamrock Road duct route but "*believes*" that it was between 4 September and 6 December 2018 [Flow response to 2021 RFI #16b]. Note that, per the timeline in the table above, C3 requested progress updates in July, August, September, October, and December of 2018 and in February 2019, and that Flow responded by email on 7 September 2018 that work had begun "*last week*" [C3 response to 2021 RFI 5 (Item #1)] and on 10 December 2018 that "*sub-duct installation between Spotts Dock to High Rock Shamrock Road … is currently being worked on*" [C3 DDR Item #20(b)].

12. Flow states that "the full scope of the problem was known and the cause of the problem had been established" sometime between 6 December 2018 and 12 March 2019 and as a result took a decision "to formally notify C3 of the breach by letter and request that the breach be rectified" [Flow response to 2021 RFI #14c]. It appears, therefore, that Flow's investigation of C3's use of larger sub-duct, if not the "audit" referred to above, was still on-going on 6 December 2018, that is, the last date when Flow states it would have ceased duct clearance and make-ready work on the Shamrock Road duct route.

13. It is, however, clear that Flow had ceased all work by 12 March 2019, claiming C3 was in material breach of the WSDA.

14. In any event, efforts by the parties after the 12 March 2019 letter to resolve the issues were unsuccessful.

Schedule 3

C3/Flow DDR RFI - 09 August 2021 [Doc # 334]

RFI # 11

1. In response to **Question a)**, Flow considers that a [redacted] mark-up for overhead expenses should be added to the current expense factor of [redacted] in [redacted] of the [redacted] spreadsheet.

2. The Office agrees that adding together an opex expense mark-up and an overhead expense mark-up is the correct approach to determine the expense factor to be applied in [redacted] of the 'Sub-duct costing methodology' spreadsheet. This approach is equivalent to how the total operating costs for the cost category [redacted] are calculated in [redacted] in the FLLRIC model.

3. However, after further review of the FLLRIC model, the Office notes that the duct unit costs shown in [redacted] in the FLLRIC model are fully allocated to the cost category [redacted]# and not to the cost category [redacted]. This, therefore, requires determining the expense factor for duct costs based on ratio of opex and overhead expense over [redacted] for the cost category [redacted] to ensure the expense factors used match the cost categories.

4. Accordingly, based on the information provided and the approach applied in the FLLRIC model, the correct opex expense mark-up should be [redacted] (calculated as [redacted]) while the correct overhead expense mark-up should be [redacted] (calculated as [redacted]).

DRAFT DETERMINATION REGARDING RFI # 11 question A):

5. Flow is required to amend the expense factor value in [redacted] to [redacted].

6. In response to the Draft Determination, Flow has amended the expense factor value in [redacted] of the '*Sub-duct Costing Methodology v3 - CONFIDENTIAL*' spreadsheet to [redacted].

FINAL DETERMINATION REGARDING RFI# 11 question A):

7. The expense factor value in [redacted] of the '*Sub-duct Costing Methodology*' spreadsheet is [redacted].

8. In response to **Question b)**, Flow further stated that:

> *"The costing provided in the "Sub-ducting Costing Methodology" was not meant to represent the cost for third-party charges for duct access make-ready work. The costing, as stated clearly in our response to the derivation of the cost basis for Flow's standard monthly reoccurring price for* [redacted] *on a 1-year contract for 1-inch sub- duct.*
> *The FLLRIC model provides a somewhat reasonable basis for costing network facilities that is why its outputs were used to calculate the cost-based fee for a sub-duct. The FLLRIC model is wholly inappropriate for calculating a one-off, specific piece of work such as duct access make-ready work. There is nothing relevant in the FLLRIC model for that type of work or service."*

9. Flow, therefore, appears to argue that the mark-up for one-off (non-recurring) charges should be different from the mark-up for recurring charges which are determined based on the FLLRIC model.

10. The Office notes the decision made by the New Zealand Commerce Commission to calculate overhead for non-recurring charges based on the same mark-up approach as used for recurring charges:[10, 11]

> *"TERA has derived an appropriate Chorus overhead for [non-recurring charges] in the (recurring charges) opex model, which breaks down overall overhead costs based on the revenues, ie, the same mark-up approach as used for recurring charges. We agree with the approach taken by TERA." [emphasis added]*

11. This suggests that the mark-up approach to allocating overhead expenses for non-recurring charges relating to duct access make-ready work should normally be the same as the mark-up approach applied by Flow to allocating overhead expenses for recurring charges based on the FLLRIC model.

12. The Office notes that Flow's calculation of a [redacted] mark-up for overhead expenses is described in Flow's response to RFI#7, dated 12th March 2021. In a table presented in response to RFI#7, Flow calculates what it refers to as a [redacted]. Flow notes that in the years "*leading up to the works referred to this proceeding (2013/14 to 2017), the average (i.e., the*

[10] See paragraph 608 in https://comcom.govt.nz/__data/assets/pdf_file/0024/60693/Further-draft-pricing-review-determination-for-Chorus-unbundled-copper-local-loop-service-2-July-2015.PDF

[11] See pages 16-17 in TERA Consultants, *TSLRIC price review determination for the UCLL and UBA services non-recurring charges Methodology document*, available at https://comcom.govt.nz/__data/assets/pdf_file/0025/87730/TERA-Non-recurring-charges-methodology-document-Dec-2015.PDF

average of the italicized figures) is [redacted], with a low of [redacted] in 2017 and a high of [redacted]".

13. The Office further notes another comment from Flow in its response to RFI#7, dated 12th March 2021:

> *"The primary indirect costs are typically overhead costs. The absolute level of overhead costs as well as their share of total costs vary from year-to-year."*

14. The Office notes that Flow did not explain how and why it decided to apply [redacted] mark-up for overhead expenses based on the calculation of what Flow refers to be a [redacted].

15. The Office also notes that the approach to determining the mark-up for overhead expenses as applied by Flow is not consistent with the mark-up approach applied in the FLLRIC model, which:

    a) identifies all overhead expenses – see the driver named [redacted]
    b) separates common overheads from other overhead expenses – see [redacted]
    c) allocates common overheads between network and retail business activities – see [redacted]
    d) applies an efficiency adjustment of [redacted] for fixed and overhead opex – see [redacted]
    e) allocates all relevant overhead expenses as a percentage of the [redacted] of the relevant network elements – see [redacted]
    f) provides the allocated overhead expense per relevant cost category, such as:
        i. [redacted] –
        ii. [redacted] – see [redacted]

16. The Office notes that steps c to f above cannot be applied for non-recurring charges, such as the charges for duct access make-ready work. This is because the approach adopted in steps 3 to 6 is designed specifically for recurring charges using the allocation approach based on [redacted].

17. However, the Office considers that applying steps 1 to 2 may provide an appropriate allocation of common overheads for the purposes of determining the relevant mark-up for overheads in relation to make-ready costs.

18. The Office notes that the mark-up for make-ready costs can be therefore calculated as the share of [redacted], as calculated in [redacted] in total operating expenses, as calculated in [redacted]. The relevant values derived from the FLLRIC model are therefore:

- [redacted]
- [redacted]

19. The appropriate mark-up for make-ready costs can therefore be derived using the following formula:

    Mark-up for make-ready costs = Common Overheads / (Operating Expenses – Common Overheads)

20. Based on the data inputs from the FLLRIC model, the appropriate mark-up for make-ready costs is calculated from the [redacted], as:

    Mark-up for make-ready costs = [redacted]

DRAFT DETERMINATION REGARDING RFI # 11 question B):

21. Flow is required to apply a mark-up of ##15.6%## on make-ready costs.

22. In response to the Draft Determination, Flow disagreed with the Office's recommendation that the percentage of common overheads over total operational expenses represented an appropriate proxy for the mark-up for make ready work. In particular, Flow maintained that the reference the Office had made to a decision by the New Zealand Commerce Commission to calculate overhead for non-recurring charges based on the same mark-up approach as used for recurring charges, was not relevant, and therefore Flow "*rejects its use by the Office in supporting its Draft Determination*".

23. Flow also asserted that the "*Office's choice to pick out common overheads from total operational expenditure from the FLLRIC model without recognition that this service did not exist at the time of the FLLRIC model's creation is therefore arbitrary*". Flow further proposed to apply a midpoint between Flow's approach, which uses common overhead and opex from its recent company accounts, and that proposed by the Office based on FLLRIC data. This proposal produced a revised mark-up for make-ready costs of [redacted], i.e., [redacted].

24. The Office notes that Flow's response that the mark-up approach recommended by the Office based on the percentage of common overheads over total operational expense from the FLLRIC model is arbitrary because the duct access service did not exist at the time the FLLRIC model was created, is inconsistent with Flow's decision to adopt the costing methodology and cost inputs from the FLLRIC model for other cost components in the [redacted] spreadsheet, such as the use of the expense factor value of [redacted] for duct costs based on ratio of opex and overhead expense.

FINAL DETERMINATION REGARDING RFI# 11 question B):

25. Flow is required to apply a mark-up of [redacted] on make-ready costs.

26. In response to **Question c)**, Flow attached a Word document named [redacted] and provided the following response:

> *"Please find attached confidential invoice from our contractor, ABC Trenching, with a current price for the installation of a JRC-12 manhole, the same type of manhole at issue in this dispute. This price is nearly [redacted] higher than the price estimated for FLLRIC modelling in 2014."*

27. The Office notes that the Word document [redacted] is dated 17 April 2021 and it appears to be an estimate for the various civil works specified in the document rather than an invoice, as Flow stated in its response.

28. In response to **Question d)**, Flow referred to its response provided to question c).

29. The Office notes that the price estimated for FLLRIC modelling in 2014 for [redacted], as detailed in [redacted] in the FLLRIC model, is composed of the following cost components:

    - [redacted]
    - Additional cost to account for spares of [redacted] - added to the above equipment purchase price
    - Import duty of 22% - applied to the equipment purchase price and spares
    - Installation labour costs of [redacted] - based on the information provided in [redacted]

30. The Office also notes that the total price estimated for FLLRIC modelling in 2014 in [redacted].

31. The Office further notes that there is no detailed breakdown in the Word document [redacted] of the price estimated in this document [redacted]. It is, therefore, difficult to make an appropriate comparison of the price for the installation of a [redacted], as quoted in the 2021 Word document [redacted], against the price estimated for FLLRIC modelling in 2014 in [redacted].

32. This means that Flow's statement "*This price is nearly* [redacted] *higher than the price estimated for FLLRIC modelling in 2014"* cannot be verified.

DRAFT DETERMINATION REGARDING RFI # 11 questions C) AND D):

33. Flow is required to provide detailed breakdown of the costs for the installation of a [redacted] (equipment purchase price, cost of spares, import duty and installation labour, all stated separately).

34. Flow is required to provide evidence that the price for the installation of a [redacted], as quoted in Word document named [redacted], is effectively the price that Flow has paid for the services provided by ABC Trenching company.

35. In absence of the information requested above demonstrating that a different cost input is appropriate, Flow is required to apply the cost input of [redacted] for the installation of a [redacted], as estimated for FLLRIC modelling in 2014.

36. In response to the Draft Determination, Flow submitted that it is a rare occurrence that a network operator will procure materials and services in the manner that is fully consistent with the unit costs of a hypothetical cost model.

37. Flow also submitted that it conducted a further search for more back up evidence, and it was able to find an invoice for a 2017 JRC-12 Manhole deployed in asphalt, which was presented as confidential attachment [redacted]. Flow claimed that this particular purchase involved a deployment without the cover, which Flow argued is currently deployed at a cost of around CI$800. Flow further claimed that the cost in 2017 of a JRC-12 Manhole was significantly above CI$[redacted] plus a share of the mobilization found in the invoice at [redacted].

38. Flow therefore applied the average of the proposed figures in cells [redacted] and [redacted] in the [redacted] spreadsheet, as follows:

- [redacted]
- [redacted]

39. In response to the Draft Determination, C3 noted the reference by Flow in its reply to costs per unit of between CI$800 and CI$2,100, plus mobilisation costs. C3 submitted, for comparison, a recent invoice paid by C3 in respect of manhole construction, showing a cost per unit of CI$750.00. C3 argued that it appears therefore that the costs claimed by Flow are significantly exaggerated.

40. The Office notes the following:

a) for revised [redacted] in cell [redacted] in the [redacted] spreadsheet, Flow has proposed to apply the average of the following two values taken from the FLLRIC model:

- [redacted] – corresponding to the costs related to [redacted] in cell [redacted] in tab [redacted], and
- [redacted] – corresponding to the costs related to [redacted] or [redacted] in cells [redacted] or [redacted] in tab [redacted].

b) For revised [redacted] in cell [redacted] in the [redacted] spreadsheet, Flow has proposed to apply the average of the following two values taken from the FLLRIC model:

- [redacted] – corresponding to the costs related to [redacted] in cell [redacted] in tab [redacted], and
- [redacted] – corresponding to the costs related to [redacted] in cell [redacted] in tab [redacted].

41. The Office considers that Flow has inappropriately applied the costs related to [redacted] or [redacted] and [redacted] to calculate the costs related to [redacted] and [redacted] respectively in cells [redacted] and [redacted] in the [redacted] spreadsheet.

42. Furthermore, Flow's submission of an invoice related to the purchase of one item in 2017 that is labelled as [redacted] does not provide an explanation as to whether that single item is directly related to the provision of duct access services to C3 nor whether the item refers to the costs of [redacted] and/or [redacted] (or [redacted]).

43. Therefore, there is no sufficient evidence that the costs related to the purchase of this single item by Flow in 2017 represent a relevant benchmark for [redacted] for [redacted] for the purposes of determining the cost-oriented price for duct access service provided by Flow to C3.

44. With respect to the response received from C3, the invoice attached to C3's submission refers to the quantity of four (4) items described as 'Man hole Industrial Park'. There is no sufficient evidence that the costs stated in the invoice for the purchase of these four items by C3 represent a relevant benchmark for [redacted] for 'Manholes' for the purposes of determining the cost-oriented price for duct access service provided by Flow to C3.

FINAL DETERMINATION REGARDING RFI# 11 question C) and D):

45. Flow is required to apply [redacted] of [redacted] (as taken from cell [redacted] in tab [redacted] of the FLLRIC model) in cells [redacted] and [redacted] in the [redacted] spreadsheet.

RFI # 30

46. In response to **Question a)**, Flow attached a copy of the confidential contract from ABC Trenching and a corresponding confidential price sheet from ABC Trenching from 2004, and it further stated the following:

> *"We clarify the charges specified in this 2004 price sheet from ABC Trenching do not apply today. Flow has requested a current price sheet from ABC Trenching and are told it is forthcoming. We apologize for this delay and as soon as an updated price sheet is provided, it will in turn be provided to the Office, as requested."*

DRAFT DETERMINATION REGARDING RFI # 30 question A):

47. Flow is required to continue applying all the relevant cost inputs from the FLLRIC model, until such time as new evidence relating to the relevant cost inputs have been presented by Flow and approved by the Office.

48. There was no submission in response to the Draft Determination regarding RFI# 30 question A).

FINAL DETERMINATION REGARDING RFI# 30 question A):

49. Flow is required to continue applying all the relevant cost inputs from the FLLRIC model, until such time as new evidence relating to the relevant cost inputs have been presented by Flow and approved by the Office.

50. In response to **Question b)**, dated 2 September 2021, Flow stated that:

> *"The provision of a sub-duct facility must include an allocation of trenching, duct, manhole and the jointing or junction box cost. In the FLLRIC model trenching costs are included in the duct. Manholes frame and covers appear to be separate from the jointing box itself. In the illustrative diagram below, items "8" and "1" correspond to the manhole and frame, respectively. The other elements correspond to the jointing box itself.*
> *In the [redacted] are for jointing boxes. The manhole costs (frame and cover) appear to have been neglected in the methodology and, if so, should be added."*

51. In an amended response to **Question b)**, dated 10 September 2021, Flow stated the following:

> *"The provision of a sub-duct facility must include an allocation of trenching, duct, manhole and the jointing or junction box cost. In the FLLRIC model trenching costs are included in the duct. Manhole frame and covers appear separate from the jointing box itself in the FLLRIC model. In the illustrative diagram below, a manhole is illustrated. The jointing box is installed within the manhole and includes the splice tray. Installation would include the actually splicing of fiber going into the system.*
>
> *In the [redacted] are for jointing boxes. The manhole costs (frame and cover) appear to have been neglected in the methodology and, if so, should be added."*

52. The Office agrees with Flow's decision to include manhole costs in the [redacted] spreadsheet.

53. However, the Office notes that the cost inputs used by Flow in [redacted] spreadsheet are inconsistent with the value provided in [redacted] in the FLLRIC model, relating to the manhole cost item [redacted].

54. The Office further notes that the jointing box may not be required under a wholesale sub-duct access agreement, and if that is the case, the costs related to the jointing box in [redacted] spreadsheet would need to be deleted.

RECOMMENDATION REGARDING RFI # 30 question B):

55. Flow is required to add manhole costs of [redacted] and apply the sub-duct costing calculations equivalent to those applied in [redacted]).

56. Flow is also required to set the values in [redacted] spreadsheet to zero, unless Flow demonstrates to OfReg's satisfaction that the jointing box is required under a wholesale sub-duct access agreement.

57. In response to the Draft Determination, Flow claimed that it was unable to determine if the specific piece of equipment (i.e., the Frame cover carriage way No. 3) is still part of the Flow network as it was purchased 9 years ago. Flow argued that given that the asset is relatively long-lived, Flow has no reason to doubt that it is still installed. Flow further argued that as manholes, vaults and jointing boxes are all part of the duct infrastructure, if it is still installed, then that particular piece of equipment is part of Flow duct infrastructure.

58. Flow has therefore added the following two values from the FLLRIC model as relevant cost inputs in cells [redacted] and [redacted] in the [redacted] spreadsheet:

- [redacted] = [redacted]
- [redacted] = [redacted].

59. The Office notes the following:

- the cost input in cell [redacted] corresponds to the costs related to [redacted] or [redacted] in cells [redacted] or [redacted] in tab [redacted] in the FLLRIC model
- the cost input in cell [redacted] corresponds to the costs related to [redacted] in cell [redacted] in tab [redacted] in the FLLRIC model.

60. The Office further notes that despite Flow's submission that the equipment in question is part of Flow duct infrastructure, Flow has allocated all [redacted] to [redacted] in cells [redacted] and [redacted] in the [redacted] spreadsheet. The Office considers that this approach is inconsistent with the treatment of all other equipment that is part of Flow duct infrastructure in the [redacted] spreadsheet, namely [redacted], and [redacted].

FINAL DETERMINATION REGARDING RFI# 30 question B):

61. Flow is required to apply the following formulas in cells [redacted] and [redacted] in the [redacted] spreadsheet:

- [redacted] = [redacted]
- [redacted] = [redacted]

62. In response to **Question c)**, Flow stated that:

> *"The ducts at issue are part of 2- and 4-bore duct systems, so 5/6-bore and 7-bore system costs are not relevant. With respect to the duct network quantities, we ask Ofreg to clarify how it believes the [redacted] may be relevant for this calculation."*

63. The Office notes that the values for [redacted] spreadsheet are taken from the cost inputs for [redacted]' only. However, the information provided in tab [redacted] in the FLLRIC model also includes the relevant cost inputs for [redacted].

64. In addition, the information provided in [redacted] in the FLLRIC model contain the total quantity of ducts in km for both [redacted], respectively [redacted] and [redacted].

65. The Office believes the [redacted] spreadsheet could be improved by adding separate cost inputs for both [redacted]. However, requiring any such changes in the [redacted] spreadsheet would further delay issuing the determination in relation to sub-duct prices, and it is not clear whether the revised cost modelling would provide cost-oriented prices that are materially different to those cost-oriented prices that result from using only the cost inputs for [redacted], as currently applied by Flow.

DRAFT DETERMINATION REGARDING RFI # 30 question C):

66. No further action required.

67. There was no submission in response to the Draft Determination regarding RFI# 30 question C).

FINAL DETERMINATION REGARDING RFI# 30 question C):

68. No further action is required.

RFI # 36

69. In response to **Question a)**, Flow stated:

> *"The WACC figure of [redacted] was obtained from the [redacted] of the FLLRIC model. It is also the figure that was confirmed for use in ICT Decision 2008-2, paragraph 213."*

70. In response to **Question b)**, dated 10 September 2021, Flow attached a spreadsheet named [redacted], and it stated the following:

> *"Please see attached a revised confidential and redacted WACC estimate using the methodology applied in ICT Decision 2008-2."*

71. The Office notes that the [redacted] value in [redacted]. This value is inconsistent with the [redacted].

72. The value in [redacted] is calculated as the value [redacted]. The value in [redacted] and is taken from [redacted], which comes from Prof. Damodaran's table representing the estimate for [redacted] for the Cayman Islands. The value in [redacted], and it refers to [redacted]. This value is hard coded and provided without any supporting explanation as to how Flow obtained the value of [redacted].

73. The Office notes that the value Flow takes as [redacted] should, in fact, refer to [redacted] and not [redacted]. The value in [redacted] refers to [redacted], which is effectively what Flow refers to as [redacted].

74. The Office further notes that even though there is no reference to [redacted] in Prof. Damodaran's table presented by Flow in [redacted], the estimate for [redacted] can be simply obtained by dividing the value in [redacted] by the value in [redacted].

75. The estimate for [redacted] in [redacted], obtained by multiplying the value in [redacted] by the above derived estimate for [redacted], therefore, is equal to the value estimated by

Prof. Damodaran's for [redacted] for the Cayman Islands in [redacted].[12]

76. The Office further notes that the value for [redacted] is inconsistent with the gearing value observed for [redacted]. The gearing value for [redacted], which is calculated as [redacted]. This gearing value is consistent with the equity beta of [redacted] calculated in [redacted].

77. The Office therefore concludes that the following WACC parameters need to be amended in [redacted]:

- Estimate for [redacted]
- Estimate for [redacted]
- Estimate for [redacted]
- Estimate for [redacted]

78. Correcting for these four values in [redacted], produces the nominal WACC of [redacted].

DRAFT DETERMINATION REGARDING RFI # 36 question B):

79. Flow is required to amend the [redacted] spreadsheet, to reflect the correct estimates for [redacted] as shown in the attached file named [redacted].

80. In response to the Draft Determination, Flow has amended the WACC value in column [redacted] in the [redacted] spreadsheet, in accordance with the value calculated in the [redacted] spreadsheet.

FINAL DETERMINATION REGARDING RFI# 36 question B):

81. No further action is required.

[12] This calculation is shown in cell F37 in tab '*ERPs by country*' in Prof. Damodaran's spreadsheet available at https://people.stern.nyu.edu/adamodar/pc/datasets/ctryprem.xls.
The estimate for '*Relative Equity Market Volatility*' in this spreadsheet is provided in cell B4 in tab '*Relative Equity Volatility*'.

RFI # 39

82. In response to this RFI, Flow stated the following:

> *"We agree that there is an error here and have revised accordingly."*

RECOMMENDATION REGARDING RFI # 39:

83. No further action required.

84. There was no submission in response to the Draft Determination regarding RFI# 39.

FINAL DETERMINATION REGARDING RFI# 39:

85. No further action is required.

RFI # 47

86. In response to **Question a)**, Flow stated that:

> *"In para 43) OfReg takes issue with the fact that by applying an "adjustment factor" of [redacted], the values of the capex per kilometer increases by [redacted]. OfReg is correct to bring attention to the calculation, but the problem is not with the [redacted]"*

87. Flow further refers to a draft model consultation recently published by OUR in Jamaica, as an example of calculation of subduct costs, and then argues that such calculation:

> *"[…] involves two inputs: the number of subducts accommodated by the duct and the percentage of the duct used. These two inputs are effectively combined as a "usage factor" =1/(subduct per duct x percentage of duct used). By way of illustration, in the simple case if a single duct system contains two sub-ducts and both are in use then the usage factor is 1/(2*100%)=1/200%=50%. That is 50% of the cost of the duct is attributable to each sub-duct. If, however, only 1 of the 2 sub-ducts is used, then the single sub-duct in use must bear the recovery of the entire duct. In terms of a usage factor, this would appear as =1/(2*50%)=100%.*
> *In the current case, there are potentially, four 1" sub-ducts in each of duct. However, this is not a single duct system but a two-bore system. Therefore, the usage factor should be 1/(2*4*40%)=31.25%. In its present form, the formula omits the "2" representing the second duct. The attributable capex is twice what it ought to be. In our revision of the formula, the correction is made."*

88. The Office notes that Flow's justification for using the "adjustment factor" of [redacted] in the formulae in [redacted] spreadsheet is likely to result in over-recovery of the duct costs.

89. The example provided by Flow regarding a two-bore system capable of accommodating four 1" sub-ducts in each duct, implies that the maximum number of sub-ducts that can be used is eight. However, the adjustment factor of [redacted], as applied in Flow's formula, allows for a maximum of three 1" sub-ducts to be used in the two-bore system, whereby each 1" sub-duct would contribute at [redacted] of the duct capex. This means that any additional 1" sub-duct used in this two-bore system would result in over-recovery of the duct capex. For example, using four 1" sub-ducts in the two-bore system would generate a total revenue from sub-duct rental charges equivalent to [redacted] of the duct capex [redacted]). Alternatively, using two 2" sub-ducts in the two-bore system would also generate a total revenue that is equivalent to [redacted] of the duct capex [redacted]).

90. The Office therefore considers that the adjustment factor of [redacted] must be simply removed from the formulae in [redacted] spreadsheet, in order to calculate the appropriate rental cost per sub-duct in a two-bore system, based on the maximum number of sub-ducts per duct (four 1" sub-ducts or two 2" sub-ducts per duct).

91. The Office also notes that the formulae in [redacted] spreadsheet have not been amended to account for two-bore system.

92. The table below shows the outputs of the [redacted] spreadsheet after making the following changes:

- Remove the reference to [redacted] in the formulae in [redacted]
- Apply correct cost input for manhole costs in [redacted]
- Apply the amended WACC value of [redacted]
- Apply the correct expense factor of [redacted]
- Set the values in [redacted] to zero, in accordance with Recommendation regarding RFI # 30 Question b)

[redacted]

93. With respect to Flow's reference to the draft model consultation recently published by the Office of Utilities Regulation ('**OUR**') in Jamaica, OfReg notes that this draft model (Draft Fixed Infrastructure Sharing Model) produces, among other things, the unit costs for '*Subduct Rental – Urban*' and '*Subduct Rental – Inter-urban*'. [13] The unit costs estimated by the OUR are shown below.

Table 1: Draft unit costs obtained for infrastructure sharing rental services included in the Fixed Infrastructure Sharing Model

Rental services	Units	2018	2019	2020	2021	2022	2023	2024	2025
Duct Rental - Urban	'000 JMD/Km/year	310.7	318.2	325.8	334.2	342.9	351.7	360.9	370.5
Duct Rental – Inter-urban	'000 JMD/Km/year	239.6	245.4	251.3	257.8	264.6	271.4	278.5	286.0
Subduct Rental - Urban	'000 JMD/Km/year	147.1	150.8	154.6	158.8	163.2	167.7	172.3	177.2
Subduct Rental – Inter-urban	'000 JMD/Km/year	123.4	126.5	129.8	133.3	137.1	140.9	144.9	149.1
Pole Rental	'000 JMD/Pole/year	3.7	3.9	4.1	4.4	4.7	5.0	5.3	5.6
Dark Fibre Rental - Urban	'000 JMD/Km/year	5.6	5.5	5.4	5.3	5.3	5.2	5.1	5.1
Dark Fibre Rental – Inter-urban	'000 JMD/Km/year	11.5	11.3	11.2	11.0	10.9	10.7	10.6	10.5
Collocation in SCLS[1]	'000 JMD/m2/year	111.9	120.0	128.8	139.2	150.7	162.7	176.0	190.6

[Source: Draft Fixed Infrastructure Sharing Model]

94. The unit costs for subduct rental per kilometre/year for year 2018 range between 123,400 JMD and 177,200 JMD. This means the unit costs for subduct rental are estimated between **CI$680** and **CI$815** per kilometre per year.

[13] See Table 1 on page 21 at https://our.org.jm/wp-content/uploads/2021/04/assessment_of_fixed_infrastructure_sharing_costs_-_draft_model_-_consult.pdf

95. The Office notes that the unit costs for subduct rental from the [redacted] spreadsheet, submitted by Flow on 10 September 2021, are [redacted] per kilometre per year (for a 1-inch subduct).

96. The Office further notes that the unit costs for subduct rental from the amended version of the [redacted] spreadsheet, presented in a file named [redacted] are [redacted] per kilometre per year (for a 1-inch subduct).

97. Assuming the subduct rental prices recently proposed by OUR represent a relevant benchmark for cost-oriented prices, it seems reasonable to accept the sub-duct monthly rental prices derived from the file named [redacted] to be cost-oriented because the cost oriented prices determined using the [redacted] spreadsheet for the Cayman Islands are of the same order of magnitude as the prices determined by the OUR for the Jamaican market and there is no reason to believe duct costs in Cayman are in a different order of magnitude than duct costs in Jamaica.

98. In response to **Question b)**, Flow stated that:

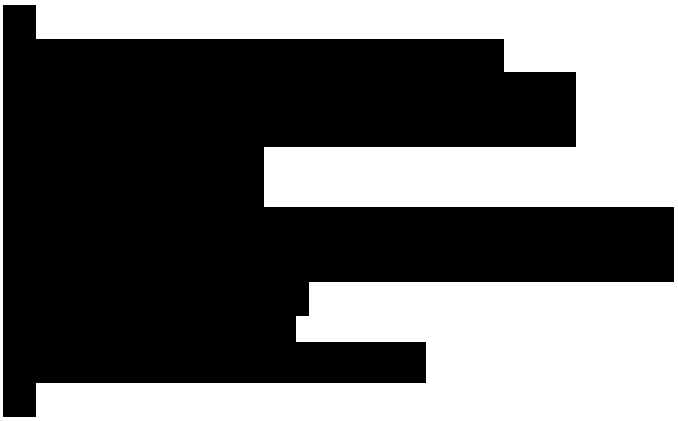
> *"In para 45) OfReg suggests that the manhole capex is inflated by the inappropriate application of by a factor of [redacted]. OfReg is incorrect. We believe that the misunderstanding may originate from the title of the [redacted]. The unit capex for manholes and jointing boxes are not in per kilometer terms, but rather in terms of manholes and boxes. Because manholes and boxes are placed every 0.62 kilometer on average (not every kilometer) to get a per kilometer costs for manholes and jointing boxes one must account the shorter distance between manholes/jointing boxes.*
>
> *For example, if there were one manholes/jointing boxes each half kilometer the adjustment factor would be [redacted] x manhole/jointing box capex per kilometer.*
>
> *To clarify, in the revised methodology we have revised the title of the relevant [redacted] now reads [redacted], [redacted] now reads [redacted] and [redacted] now reads [redacted]."*

DRAFT DETERMINATION REGARDING RFI # 47:

99. Flow is required to implement the changes in the [redacted] spreadsheet, in accordance with an amended version presented in the file named:

[redacted]

100. For the sake of clarity, the following formulae or values would need to be applied:



101. In response to the Draft Determination, Flow submitted that it does not agree with the Office's statements on this issue and is of the strong view that the pricing should not only be a function of the relative size of the C3 sub-duct, but also how much of the duct is used. Flow also argued that the Office is forcing Flow to accept a price that does not reflect the full cost of providing the facility.

102. Flow also submitted that the unit capex for the 2-bore duct deployed in a carriageway was CI$[redacted] per kilometer in 2017. Flow argued that if only one 1" subduct is deployed, then the cost borne by that subduct is the entire CI$[redacted], and If two 1" subducts are deployed, the cost per subduct would be half of the total, i.e., CI$[redacted], and so on.

103. Flow then submitted that the Office's proposal is that Flow is to recover only CI$[redacted] from C3, as if the entire duct system was fully utilized. Flow argued that this is unfair, unreasonable and contravenes the Regulations.

104. Flow submitted that it agrees that an over-recovery of costs is not appropriate. However, Flow argued that the pricing proposed would only result in over-recovery if the prices remain unchanged were more sub-ducts to be deployed in the duct, i.e., if the price of the sub-duct does not reflect an increase in utilization.

105. Flow also submitted that it understands that the use of [redacted] is not intuitive as it reflected a utilization that varies across the 2-bore system over the relevant route. To simplify and make the calculation more intuitive, Flow proposed the following:

a) the model reflect that at the moment C3 is the only service provider in the second bore, so it must recover half of the two bore cost and other elements (manholes and jointing box) associated with that system, and
b) should additional sub-ducts be deployed, the price of the sub-duct for C3 would be reviewed.

106. Accordingly, Flow amended the formulas in the [redacted] spreadsheet, as follows:

107. The Office considers that Flow's revised proposal to charge C3 for one 1" subduct a duct access price that corresponds to one half of the [redacted] of an entire 2-bore duct is likely to be in breach of Regulation 10 of the Infrastructure Sharing Regulations, which requires a responder's charges for interconnection or infrastructure sharing to be "*non-discriminatory in order to ensure that a responder applies equivalent conditions in equivalent circumstances in providing equivalent services, as the responder provides for itself*."

108. For example, if Flow provided to itself two 1" subducts in a 2-bore duct, Flow would incur an internal charge that is equivalent to CI$[redacted] per kilometer per one 1" subduct (assuming the total cost of a 2-bore duct at CI$[redacted] per kilometer, as estimated in 2017). On the other hand, C3 would incur a charge that is equivalent to CI$[redacted] per kilometer per one 1" subduct.

109. In such case, pricing conditions that Flow would apply to C3 for accessing a service that is equivalent to the service Flow provides to itself (i.e., access to one 1" subduct), would be discriminatory.

FINAL DETERMINATION REGARDING RFI# 47:

110. In order to comply with Regulation 10 of the Infrastructure Sharing Regulations, Flow is required to implement the following changes in column [redacted] in the [redacted] spreadsheet":

[redacted]

RFI # 53

111. In response to this RFI, Flow attached an Excel spreadsheet named [redacted] and provided the following comment:

> *"See the attached InSpan costing model."*

112. The Office notes that there is no accompanying explanation of the cost methodology that Flow applies in the [redacted] spreadsheet.

DRAFT DETERMINATION REGARDING RFI # 53:

113. Before the Office could accept the prices in the [redacted] spreadsheet as being cost-oriented, reasonable, and otherwise consistent with the applicable principles in the Act and Regulations, Flow would need to provide detailed clarifications on the approach adopted and the assumptions applied in calculating both recurring (monthly) and non-recurring costs in the [redacted] spreadsheet. This includes the assumptions and justifications about the unit costs and other parameters used in [redacted].

114. In response to the Draft Determination, Flow did not provide any clarifications on the approach adopted and the assumptions applied in calculating both recurring (monthly) and non-recurring costs in the [redacted] spreadsheet.

FINAL DETERMINATION REGARDING RFI# 53:

115. There is no sufficient justification to determine whether the proposed pricing structure for the InSpan Service at Maya 1 CLS, as derived based on the [redacted] spreadsheet, is cost-oriented.