

**Determination issued by the Telecommunications  
Regulatory Authority to Nuetel Communications SPC pursuant to  
Article 65(f) of the Telecommunications Law  
regarding Nuetel's pricing of its Local Interconnection Charges**

Non-CONFIDENTIAL VERSION

**1 October 2018**

**LAD 1018 252**

**ARTICLE 65(F) DETERMINATION  
THE TELECOMMUNICATIONS REGULATORY AUTHORITY OF THE KINGDOM OF  
BAHRAIN**

Having regard to Legislative Decree No. 48 of 2002 Promulgating the Telecommunications Law of the Kingdom of Bahrain as amended by virtue of Decree No. 38 of 2017 (the "Law") and in particular to Articles 3(c)(17), 65 and 72 thereof;

Having regard to the Competition Guidelines (Ref: MCD/02/10/019) published by the Authority on the 18 February 2010;

Having regard to the complaint lodged by Bahrain Internet Exchange ("BIX") on 14 May 2018 (Ref: BIX/LI/0518/268), alleging infringements of Articles 65(a) and 65(b) of the Law by Nuetel Communications SPC ("Nuetel"), and asking the Authority to put an end to those infringements;

Having regard to all the relevant evidence filed by the licensed operators concerned;

Having given the licensed operators concerned the opportunity to make known their views on the submissions that have been filed:

1. The Authority has investigated whether Nuetel's pricing of local interconnection charges infringed Article 65 of the Law.
2. For the reasons set out in this Determination, including the relevant facts and legal matters, the Authority determines that Nuetel has infringed Article 65 of the Law.
3. The Authority directs Nuetel to immediately bring to an end the infringement referred to in the preceding paragraph and to refrain in future from repeating any act or conduct that constitutes an abuse of its position of dominance (including without limitation the imposition of excessively high prices and the refusal to supply).
4. For the infringement referred to in paragraph 2 above, a fine of BHD 33,846 is hereby imposed on Nuetel. The fine shall be paid in Bahrain Dinars within seven calendar days of the date of notification of this Determination (or such other date as may be agreed by the Authority) to the following account:

Bank Account Name: TELECOMMUNICATIONS REGULATORY AUTHORITY

IBAN: BH46BBKU00100000054341

Bank Name: Bank of Bahrain and Kuwait

5. This Determination is addressed to:

Name: Nuetel Communications S.P.C

CR No: 52367

Address: Flat 21, Building 2420, Amwaj

AND

Name: Bahrain Internet Exchange

CR No: 80990000

Address: Bahrain Financial Harbour, East Tower – Floor 35 Building 1398, Road 4626  
Manama 346

6. In the event that Nuetel fails to comply with this Determination, the Authority may take enforcement action pursuant to Article 35 of the Law.

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## DEFINITIONS & ACRONYMS

<b>Authority</b>	Telecommunications Regulatory Authority
<b>Amwaj</b>	Amwaj Islands, situated in the northeast of Bahrain
<b>BD</b>	Bahraini Dinars
<b>BIX</b>	Bahrain Internet Exchange
<b>CLS</b>	Cable Landing Station
<b>Complainant</b>	Bahrain Internet Exchange (BIX)
<b>ICE</b>	Integrated Capacity Environment
<b>IFL</b>	International Telecommunications Facilities Licence
<b>IPLC</b>	International Private Leased Circuit
<b>IPT</b>	Internet Protocol Transit
<b>ISP</b>	Internet Service Provider
<b>IX</b>	Internet Exchange
<b>Law</b>	Legislative Decree No. 48 of 2002 Promulgating the Telecommunications Law of the Kingdom of Bahrain as amended
<b>Licensed Operator</b>	a person who is licensed to operate a Telecommunications Network or to provide a telecommunications service under Article 25 of the Law
<b>MDP-C</b>	Main Distribution Point
<b>Nuetel</b>	Nuetel Communications SPC
<b>NFL</b>	National Fixed Service Licence
<b>Ossis</b>	Ossis Property Developers BSC(c)
<b>OLO</b>	Other Licensed Operator
<b>MMR</b>	Meet Me Room
<b>SQM</b>	Square Metre
<b>STM</b>	Synchronous Transport Module
<b>TGN</b>	Tata Gulf Network
<b>WDC</b>	Wholesale Data Connectivity

## 1. INTRODUCTION AND EXECUTIVE SUMMARY

1. This Determination relates to conduct by Nuetel in the provision of "local interconnection services" in the Kingdom of Bahrain and specifically within the geographical region of Amwaj.
2. The case results from a complaint. The complaint, which was submitted by BIX on the 16th May 2018 (dated 14th May 2018), alleges that Nuetel is "quoting fees which the Complainant considers to be exorbitant".
3. An enquiry into the allegations made by the complainant was launched in May 2018. Representatives of BIX attended a meeting at the Authority's offices on the 30th May 2018 and a further meeting on the 3rd June 2018 to clarify certain aspects of the complaint and to provide further information in relation to the allegations. An additional clarification meeting was held on the 7th June 2018. BIX provided further information as per the Authority's request on 3rd June 2018, 12th June 2018 and on 28th June 2018.
4. A notice under Article 65(e)(1) of the Law and paragraph 282 of the Competition Guidelines was sent to Nuetel on 27th May 2018<sup>1</sup>. In accordance with the Competition Guidelines, a non-confidential version of the complaint was sent to Nuetel and Nuetel was given the opportunity to submit written and oral representations.
5. On 12th June 2018 Nuetel submitted its response to the complaint. On 1st July 2018 representatives of Nuetel met with the Authority's officials to discuss the market and the allegations made. Following this, the Authority made a written request for information from Nuetel on 5th July 2018. Nuetel subsequently provided additional information on 15th July 2018.
6. Given the Authority's analysis presented in this Determination, the definition of the relevant markets, and through this Determination the finding of dominance and abuse of that dominance by Nuetel, the Authority concludes that Nuetel's acts constitute anti-competitive conduct that is prohibited by Article 65(a) of the Law.

## 2. THE FACTS

7. BIX is a licensed operator authorised to establish, operate, manage and maintain an IX in the Kingdom of Bahrain ("Bahrain"). BIX was set up as the nodal internet exchange for providing international connectivity and peering facilities. BIX's principal activities include providing to all ISPs licensed in Bahrain a connection mechanism in which internet

<sup>1</sup> Ref: LAD 0518 135.

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communications are aggregated, transmitted and distributed to ISPs. BIX is also involved in provisioning IPLCs and IPT.<sup>2</sup> BIX acts as the landing party partner for the TGN cable in Bahrain, which cable lands in Amwaj. The TGN cable is owned and operated by TATA Communications, a global communications service provider that owns and operates the world's largest subsea cable network<sup>3</sup>.

8. Nuetel holds a number of telecommunications licences including IFL and NFL. The landing station facilities within Amwaj are, to the Authority's knowledge, owned by Osis B.S.C. Closed ("Osis"). Osis owns 100% of the shares of Nuetel. According to a document signed by its Chairman dated 17th April 2011, Osis has authorised Nuetel to handle its internal and external telecommunications services. The Authority is in receipt of a copy of the transfer and lease agreement between Nuetel and Osis dated 1 January 2015. In essence Nuetel has been set up to manage, maintain and operate Osis' internal and external telecommunications services and facilities inside Amwaj.
9. BIX operates an international gateway Cable Landing Station ("CLS") within Amwaj on facilities leased from Nuetel as per its lease agreement dated 1st May 2011. The scope of the agreement covers the following elements with associated monthly charges:

BIX International Gateway

- a. BIX International Gateway Landing Point (MDP-C) – BD [REDACTED]
- b. [REDACTED]% Service Charge – BD [REDACTED]

MDP-C backspace

- a. 55 SQM BIX MDP-C backspace at Amwaj – BD [REDACTED]

Fibre and Duct Space

- c. Duct Space for International submarine cable to MDP-C – BD [REDACTED]
- d. [REDACTED] x Fibre pairs from MDP-C to ICE (Amwaj Main Gate) with redundancy – BD [REDACTED]

The equipment relating to the TGN cable and its related infrastructure within the CLS is however, owned by BIX. From the CLS, BIX leases [REDACTED] dark fibres to extend the TGN cable to the Amwaj Main Gate MMR where BIX (through its leased fibre and OLOs through their equipment at the MMR) can meet to reach the TGN Cable.

<sup>2</sup> See page 2 of BIX complaint dd. 16.5.18 (Ref: BIX/LI/0518/268).

<sup>3</sup> See <https://www.tatacommunications.com/press-release/tata-communications-launches-tgn-gulf-cable-system-connecting-india-oman-uae-qatar-bahrain-saudi-arabia-onward/>.

<sup>4</sup> According to Table A.2 in Appendix A, Nuetel offers [REDACTED] discount on these charges.



10. Where an operator (OLO) wishes to connect to the TGN cable, that operator would submit a service request form to BIX. Subsequently, BIX would request TATA Communications to provide a quote for provision of capacity over the sub-sea cable network (also referred to as the wet portion). Simultaneously BIX would request Nuetel to provide pricing for fiber pair connectivity from the Amwaj CLS to the Main Amwaj Gate MMR. Upon receipt of pricing from TATA Communications, BIX would add its service fees (Cross Connection) plus Nuetel's fibre pair connectivity charges (from Amwaj CLS to the Main Amwaj Gate MMR). BIX will handoff the connectivity to the operator in the Main Amwaj Gate MMR-BIX node.
11. In order for the OLOs to extend the connectivity services to their end-customers, either the OLOs or BIX must ask Nuetel for passive cross connection from the OLO node to the BIX node both located in the Main Amwaj Gate MMR.
12. According to BIX, as of mid-2015, Nuetel has sought to introduce new charges in the form of so-called local interconnection services, which charges are set on the basis of capacity. Nuetel refers to the product as a local interconnection service but practically it constitutes a passive cross connection. References in this Determination to 'local interconnection services' as described by Nuetel should therefore be read as 'passive cross connection'.
13. The matter of these new charges arose when one operator (namely [REDACTED]) requested IPLC services with the capacity of STM 16 from Bahrain to Japan through the TGN cable. Specifically and to facilitate this service request:
  - a. BIX requested a proposal from Nuetel on 6th July 2015.
  - b. BIX followed up through telephone conversations and sent a reminder email to Nuetel on 7th July 2015.
  - c. Nuetel replied with their proposal dated 7th July 2015 with the Note "Cross connection fee deployed rather on the interconnect ISP or BIX".
  - d. BIX replied to Nuetel on 7th July 2015 and requested it to remove the Note "Cross connection fee deployed rather on the interconnect ISP or BIX", stating that this would be impractical.
  - e. Nuetel emailed BIX on 7th July 2015, along with international practice for cross connect fees.
  - f. BIX sent a reminder to Nuetel on 8th July 2015 to remove the Note "Cross connection fee deployed rather on the interconnect ISP or BIX".

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- g. Nuetel replied on 9th July 2015 with the amended proposal without the inclusion of Note "Cross connection fee deployed rather on the interconnect ISP or BIX".
- h. BIX confirmed the latest proposal from Nuetel dated 7th July 2015 was received on 9th July 2015.
- i. BIX received a request and tested connectivity between CLS and Main Amwaj Gate MMR and provisioned the demarcation details to [REDACTED] for cross connect. BIX informed TATA by email dated 12th July 2015 and [REDACTED] by email dated 12th July 2015.
- j. BIX received an email from Nuetel dated 16th July 2015 – "With reference to our last meeting regarding the X Connect, we tried our best to look at our proposal but unfortunately we couldn't do anything. As discussed best offer will be [REDACTED] per month."
- k. BIX did not agree or sign up for the new local interconnection (i.e., passive interconnection) charges with Nuetel at any point in time. However, Nuetel is indirectly charging the operators who wish to connect with BIX in the Amwaj Gate MMR<sup>5</sup>.

### 3. LEGAL BACKGROUND

#### 3.1. General legal background

- 14. References to "Articles" (and to each "Article") in this document are a reference to Articles of the Law, unless otherwise specified elsewhere in the document.
- 15. All Licensees are deemed to be fully aware of all legal provisions that apply to them, including those in the Law and Licences. Licensees are also deemed to be familiar with any Position Papers or Guidelines issued by the Authority from time to time. In the current case, the Authority's Competition Guidelines<sup>6</sup>, and the description and discussion of refusal to supply and excessive pricing, are particularly relevant. The Competition Guidelines are further discussed in the following section.
- 16. Article 3(b) states that: "The Authority undertakes in carrying out its duties relating to Telecommunications services in the manner best calculated to:
  - 1. protect the interests of Subscribers and Users in respect of:

<sup>5</sup> According to the agreement submitted by Nuetel: Charges applied and agreed with [REDACTED] NRC: [REDACTED] & MRC: [REDACTED] whereas Charges applied and agreed with [REDACTED] incorporate NRC: [REDACTED] and MRC: [REDACTED]

<sup>6</sup> The Authority, "Competition Guidelines", 18 February 2010.

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- the tariffs charged for services.
  - availability and provision of service.
  - quality of services.
  - protection of personal particulars and privacy of services.
2. promote effective and fair competition among new and existing Licensed Operators..."
17. Article 3(c)(1) grants the Authority the power to make such orders and determinations as may be necessary for the implementation of the Law, including determinations in connection with, amongst other things, service tariffs and the promotion of competition.
  18. Article 3(c)(2) grants the Authority the power to monitor and investigate compliance with the provisions of the Law and any regulations, orders and determinations made under the Law, both on its own initiative and at the request of any person, and to make such orders and determinations as are necessary to ensure compliance in accordance with the Law.
  19. Article 3(c)(4) grants the Authority the power to monitor and enforce compliance with licence terms and conditions by licensees.
  20. Article 65(a) prohibits licensed operators from doing or omitting to do anything which has the effect of materially preventing, restricting or distorting competition in any commercial field concerning the telecommunications sector in the Kingdom of Bahrain, where such act or omission is done in the course of operating a telecommunications network, providing a telecommunications service or in connection with any such matter.
  21. Article 65(b)(1) defines the act or omission referred to in Article 65(a) to mean:  

"[an] abuse by the Licensed Operator, either independently or with others, of a Dominant Position in the market or in a substantial part of it which materially prevents or limits competition in an unfair manner."
  22. Article 65(d) stipulates that the Authority shall, when determining whether an act or omission (whether ongoing or temporary) constitutes anti-competitive conduct, have regard to the provisions of the Law and to the conditions of the licence of the relevant operator.
  23. Nuetel provides telecommunications services pursuant to various licences granted to it by the Authority, including an Individual International Telecommunications Service Licence ("ISL") and Individual National Fixed Service License ("NFL").

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24. Article 14 of the ISL and clause 23 of the NFL granted to Nuetel state: "Without derogating from section 65 of the Telecommunications Law, the licensee shall not, alone or together with others, engage in or continue or knowingly acquiesce in any anticompetitive practices and, in particular, the licensee shall:
- a) not engage in anti-competitive cross-subsidisation;
  - b) if dominant, not abuse its dominant position;
  - c) not enter into exclusive arrangements with third parties for the location of its facilities that are required to provide any of the licensed services;
  - d) not enter into any agreements, arrangements or undertakings with any person, including any supplier of services that compete with any of the licensed services, which have as their objective or cause the fixing of prices or other restraint on competition;
  - e) not use information obtained from competitors if the objective or effect of such use is anticompetitive;
  - f) make available to other licensed operators on a timely basis technical information about essential facilities and other commercially relevant information that is necessary for them to provide telecommunication service; and
  - g) not (whether in respect of the tariffs, charges or other terms applied or otherwise) show undue discrimination against particular persons or persons of any class or description as respects the provision of any licensed service".

### 3.2. Specific application of Article 65(e) - Notice

25. Article 65(e) requires that before issuing a determination under Article 65, the Authority shall notify the Licensed Operator of the following:
- a. that it is investigating a possible breach of Article 65 of the Law;
  - b. the reasons that made the Authority believe that a breach has occurred, including any facts or legal matters it considers relevant;
  - c. such further information as the Authority may require from the Licensed Operator to issue its determination;
  - d. where appropriate, the steps the Authority considers the Licensed Operator would have to take in order to remedy the alleged breach;
  - e. giving the Licensed Operator, and any other Person that the Authority considers appropriate to consult, such period as it considers reasonable within which to make written representations in response to the notice.

26. A notice under Article 65(e)(1) of the Law and paragraph 282 of the Competition Guidelines was sent to Nuetel on 27th May 2018 ("Notice"). In accordance with the Competition Guidelines, a non-confidential version of the complaint was sent to Nuetel.

### 3.3. Specific application of Article 65(f) - Determination

27. Following the Notice, Nuetel was given the opportunity to submit written and oral representations, which it did on 12th June, 1st July and 15th July 2018 respectively.
28. Having issued Nuetel with a Notice under Article 65(e), and having reviewed the submissions received on the Notice and the information received following the Notice, the Authority is issuing a determination in accordance with Article 65(f). According to Article 65(f):

*"The Authority shall then determine whether the act or omission is prohibited pursuant to the provisions of this Article, and shall notify the Licensed Operator and any other Person whom it considers it appropriate of the determination issued by it in this respect and the reasons for issuing such determination.*

*Such determination may include the following:*

- 1 directing the Licensed Operator to do or to refrain from doing such acts as are specified by the Authority in order to remedy, amend or prevent the breach of paragraph (a) of this Article.*
  - 2 imposing a fine on the Licensed Operator not exceeding 10% of the annual revenues of such operator."*
29. The following sections of this Determination provide the reasoning for the Authority's determination as to whether Nuetel's acts represent behaviour that is prohibited pursuant to the provisions of Article 65.

## 4. THEORY OF THE CASE

### 4.1. Theory of the case: Refusal to Supply and Excessive Pricing

30. The investigation has considered whether Nuetel has potentially abused its dominant position in the market for access to dark fibre and active wholesale data connectivity services provided over fixed networks within the Amwaj area by engaging in a constructive refusal to supply and excessive pricing.

### 4.2. Legislative Requirement

31. In order to demonstrate that a breach of Article 65(a) has occurred, a number of elements have to be satisfied, including the:

- a. identification of relevant markets (the market in which the Licensed Operator is dominant, and the affected market, which may be a different market);
- b. finding of a dominant position in a market;
- c. finding that the Licensed Operator has abused its dominant position; and
- d. finding that competition in a market has been materially prevented or limited as a result of such abuse.

Each of these requirements are considered below.

## 5. MARKET DEFINITION

32. In defining the relevant market subject to the complaint and then in assessing the presence of any providers with market power in that market, the Authority has had regard to its own Competition Guidelines,<sup>7</sup> international best practice and findings from previous market reviews it has conducted for similar, related products.<sup>8</sup>
33. The Competition Guidelines describe a clear process and framework for defining a relevant market. In particular, the Guidelines state that "In competition cases, the market definition centres on the product or service directly affected by the alleged anti-competitive conduct."<sup>9</sup>
34. The current investigation concerns an alleged abuse of a dominant position. That is, in the language of the Guidelines it is a "competition case". The Authority, therefore, takes as its starting point, the products that are the subject of the complaint made by BIX to the Authority. It then follows the hypothetical monopolist test (also known as the SSNIP test)<sup>10</sup> to determine whether this focal product forms a relevant economic market on its own, or is part of a wider economic market, as a result of possible demand-side and supply-side substitution from the focal product to other products, in the event that a hypothetical monopolist increased the price of the focal product from a competitive level. By applying this test the Authority considers both the product and geographic boundaries of the relevant market, in line with the provisions of Section 2.2 and 2.3 of the Competition Guidelines.

### 5.1. The focal product in this investigation

35. The complaint raised by BIX with the Authority concerns the provision of connectivity between the Cable Landing Station (CLS) for the TGN submarine cable on Amwaj and a

<sup>7</sup> "Competition Guidelines: Guidelines issued by the Telecommunications Regulatory Authority"; MCD/02/10/019

<sup>8</sup> In particular, the Authority has had due regard to its "Determination of Significant Market Power and Determination of Dominant Position in the Markets for Domestic Data Connectivity Services"; MCD/04/14/026.

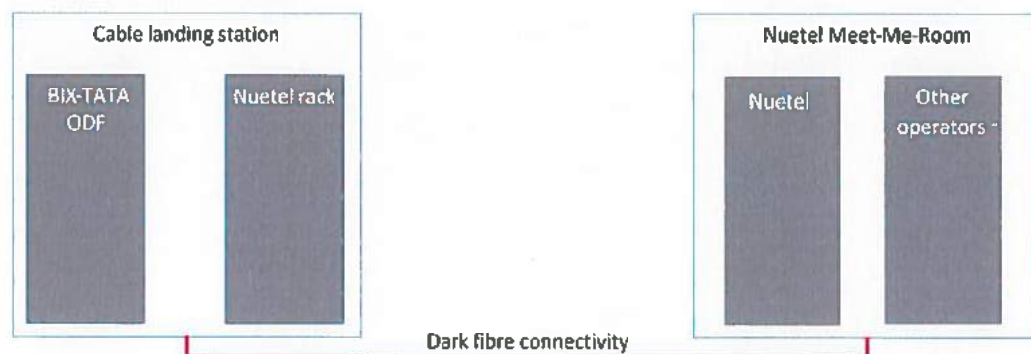
<sup>9</sup> Competition Guidelines, paragraph 31.

<sup>10</sup> Small but significant non-transitory increase in price.



Nuetel Meet Me Room (MMR) located elsewhere in Amwaj.<sup>11</sup> As such, and as illustrated below in Exhibit 1, this covers the connection between BIX equipment (or that of its customers) at the CLS and the MMR.

**Exhibit 1. The focal product**



*Source: TRA based on BIX, 2018*

36. BIX requires, and has previously received from Nuetel, a dark fibre between the TGN CLS and a Nuetel MMR. Using this dark fibre (a so-called passive service, because it is unlit and not provided with active transmission equipment), BIX is then able, in combination with using its customers' active equipment, to provide dedicated connectivity services to the CLS. The pricing and continued availability of this service is the subject of the BIX complaint.

In defining the relevant market, the Authority therefore needs to assess the extent of possible demand and supply-side substitutes for this focal product. The Authority's analysis of this is set out below.

<sup>11</sup> The Authority notes that the MMR is owned by Ossis BSC, the sole shareholder in Nuetel, with Nuetel then having the exclusive right to operate services at that facility. The same can be noted for other infrastructure and equipment on Amwaj which is also owned by Ossis BSC with exclusive rights of usage being granted to Nuetel. This has important implications for the market and dominance finding which are discussed later in this Determination.



**5.2. Identifying substitute products for the focal product and defining the relevant product market**

37. In identifying the relevant product market into which this service falls, the Authority assesses the extent to which other services may constitute an effective substitute for the dark fibre provided by Nuetel to BIX. In particular, the Authority needs to consider:

- a. Whether active data connectivity products could be effective substitutes for dark fibre access; and if so,
- b. Which types of active connectivity products could be effective substitutes for dark fibre access (e.g., whether leased lines and wholesale broadband / bitstream products could be effective substitutes).

38. Having considered the relevant product market, the Authority then goes on to examining the geographic scope of this market).

**5.3. Whether active connectivity products could be effective substitutes for dark fibre access**

39. Active connectivity products encompass all services where transmission equipment is used to manage the service provided over a link (e.g., where equipment is used to "light" a fibre such that data can be carried and managed over that link). As such, there are many different types of active service which can vary according to:

- a. Whether the connection offers guaranteed and dedicated capacity between two points in a network;
- b. The speed of the connection;
- c. Whether it offers symmetrical upload and download speeds; and possibly,
- d. The degree of security the connection offers.

40. In this section, the Authority considers whether active connectivity products could be effective substitutes for a dark fibre product. However, given the broad range of active services, it is possible that some, but not all, active products could be an effective substitute for dark fibre. Before examining possible substitution, therefore, the Authority firstly categorises active connectivity into a small number of different service groups, based on the characteristics of those services. For this, the Authority takes as its starting point, the service groupings it has applied in previous ex ante market reviews and in its 2015 Strategic Market Review. That is, the Authority distinguishes between the following service groups:

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- a. Wholesale domestic data connectivity services provided over fixed (wired) infrastructure (i.e., SDH-based and Ethernet-based wholesale services which provide guaranteed bandwidth to wholesale customers)<sup>12</sup>;
- b. Wholesale domestic data connectivity services provided over microwave (wireless) infrastructure;
- c. Wholesale broadband bitstream services provided over fixed infrastructure; and
- d. Wholesale broadband bitstream services provided over wireless (mobile) infrastructure<sup>13</sup>.

**5.4. Whether domestic data connectivity services provided over fixed (wired) infrastructure are an effective substitute for dark fibre**

- 41. Data connectivity services and dark fibre services are provided at different levels in the telecommunications value chain. Nevertheless, the Authority concludes that, if priced at competitive levels, an active service could still be a substitute for dark fibre. This is because end-users who take a dark fibre service are likely to want to use that service to replicate many of the features of an active data connectivity service.
- 42. That is, users of dark fibre will typically wish to provide very high speed, dedicated connectivity in order to convey voice or data between two points in a network. These characteristics have also been highlighted by the Authority previously, in its market review of domestic data connectivity services, as being characteristic of data connectivity services.<sup>14</sup>
- 43. As such, licensed operators can meet this demand either by purchasing a dark fibre service and lighting that fibre with their own transmission equipment, or connecting that fibre to the transmission equipment of an end-user / another operator, or by purchasing an active connectivity product which offers sufficient bandwidth.
- 44. Whether, therefore, a licensed operator is likely to switch, following a SSNIP in the price of dark fibre, to an active data connectivity service, will depend on the price differential between the services and the cost of switching. Given the limited availability of dark fibre services in the Kingdom, it is difficult for the Authority to observe whether such switching has taken place. However, the Authority notes that BIX, in its correspondence with the

<sup>12</sup> As defined in paragraph 195 of the Authority's 2014 Determination of Significant Market Power and Determination of Dominance in the Markets for Domestic Data Connectivity Services (Ref: MCD/04/14/026)

<sup>13</sup> The Authority notes that this grouping also reflects a common way of distinguishing telecommunications services which is, indeed, also used by licensees when marketing services to end-users. Furthermore, this grouping does not affect the Authority's final conclusions on market definition but is rather only an input into the analysis, to recognise the different characteristics of particular services.

<sup>14</sup> Ref: MCD/04/14/026, paragraphs 7 and 8.

Authority, stated that it would be prepared to take an active service, rather than a dark fibre service, if that active service was priced reasonably.<sup>15</sup>

45. Furthermore, in assessing potential substitution, the Authority has also considered the prospect of supply side substitution (i.e., the possibility of a provider of active connectivity switching to also offer dark fibre, in the event that a hypothetical monopolist increased the price of dark fibre). In this regard, the Authority considers that supply side substitution would be possible, if there were alternative network providers to Nuetel who could provide services to BIX (as those providers could then offer "spare" fibres as a dark fibre service). However, given Nuetel's position as having the only fibre network in Amwaj, the Authority does not consider that supply side substitution is relevant.
46. Despite this, however, and because of the likelihood of demand-side substitution, the Authority concludes that domestic data connectivity services provided over fixed networks do form part of the same market as the dark fibre product offered by Nuetel to BIX.
- 5.5. Whether domestic data connectivity services provided over microwave infrastructure are an effective substitute**
47. Having concluded that the relevant market in this case includes dark fibre and domestic data connectivity services provided over fixed networks, the Authority has also examined whether the market should be widened further to also include data connectivity services provided over microwave. In line with the principles of the SSNIP test, this requires the Authority to consider whether BIX (or other customers in the same position as BIX) could switch demand to a microwave-based service, if faced with an increase in the price of dark fibre or fixed line data connectivity services, such as those requested by BIX from Nuetel.
48. In order to assess this, the Authority has examined the characteristics of microwave services with a view to determining if they could offer the same level of functionality as a dark fibre service or an active data connectivity service provided over a fixed network. Having done this, the Authority believes that a number of factors are likely to limit the extent of demand-side substitution from dark fibre and fixed data connectivity to microwave services. These are as follows:
- a. Microwave links require dish antennae at each site to have clear line of sight, which is not always possible and can lead to a requirement for additional hops on any route (so increasing costs);

<sup>15</sup> Ref: BIX/LI/0618/278, paragraph 15 where BIX states that subject to certain conditions including lower prices it "...it would have no objection" "[s]hould Nuetel wish to supply BIX with Data Connectivity Services in a manner similar to Batelco's RO". Nuetel has submitted that BIX failed to enter into serious negotiations with Nuetel regarding an active service. Nuetel has not provided sufficient evidence to substantiate its claims, much less the price at which Nuetel was willing to provide the active service.

- b. Dish antennae must also be located at an appropriate height, which is not always possible / available;
  - c. Microwave links can be more vulnerable to security threats;
  - d. Spectrum congestion can create a barrier to widespread deployment of microwave links;
  - e. There can be natural constraints on the capacity of microwave links that do not occur with links provided over fibre networks (i.e., fibre networks do not face the same capacity constraints as microwave links); and
  - f. The performance of microwave links can be less reliable and stable than that of fixed wired links.
49. Given these differences between fixed and microwave links, the Authority noted in its 2014 review of domestic data connectivity markets, that there had been limited deployment of microwave links (especially outside of mobile operators using microwave to self-provide backhaul). Furthermore, as fibre networks are rolled out across Bahrain and demand for data grows, there are likely to be greater capacity constraints on microwave links, compared to fibre links.<sup>16</sup>
50. Taking into account the above, and the fact that the dark fibre service taken by BIX can be used as an input to BIX offering very high speed / capacity services, the Authority concludes that microwave services are unlikely to have formed a sufficient demand-side substitute to be considered part of the same market during the time of the dispute.
- 5.6. Whether wholesale fixed broadband (bitstream) services are an effective substitute**
51. Having concluded that the relevant market in this case includes dark fibre and domestic data connectivity services provided over fixed networks, the Authority has also examined whether the market should be widened further to also include wholesale broadband services provided over fixed infrastructure.
52. However, the Authority does not consider, over the period of the alleged anti-competitive behaviour, that fixed broadband services would have acted as effective demand-side substitutes for the dark fibre and fixed data connectivity services. This is because of the different characteristics of broadband services compared to dark fibre and fixed data connectivity: as set out in the Authority's 2014 market review of domestic data connectivity services (Ref: MCD/04/14/026), broadband services are provided over a shared backhaul network and so offered on a "best efforts" basis rather than as guaranteed bandwidth. The shared nature of broadband services can also reduce the quality of service compared to the guaranteed connection of a dark fibre or fixed active data connectivity service –

<sup>16</sup> Ref: MCD/04/14/026, paragraph 81.




resulting in higher latency, for example, while broadband services can also be less secure, due to data being carried over the open internet.<sup>17</sup>

53. Whilst the Authority acknowledges that, over time, with the emergence of fibre-based broadband services, licensees may be able to offer services with higher download speeds than has been the case up to now, and with potentially symmetric connections, the Authority does not believe that this will have created a constraint on Nuetel's ability to set prices for dark fibre or fixed data connectivity services above a competitive level, for the duration of the alleged abuse.

#### 5.7. Whether wholesale mobile broadband services are an effective substitute

54. It is also possible that mobile broadband services could form part of the relevant product market. However, the Authority considers that this would only be the case if it had found that wholesale fixed broadband services were part of the relevant market. This is because, when compared to data connectivity services provided over fixed networks, mobile broadband services share the same characteristics as fixed broadband services (i.e., they do not offer guaranteed bandwidth or capacity, for example). Furthermore, mobile broadband services are often considered to be less reliable than fixed, with actual download speeds depending on the number of concurrent users in any cell. As such, it is very unlikely that BIX, or another customer of dark fibre or active data connectivity products would take a mobile broadband (LTE) service as an effective substitute.

#### 5.8. Conclusion on the relevant product market

55. Given the above, the Authority concludes that the relevant product market with regards to the complaint raised by BIX covers dark fibre services and wholesale domestic data connectivity services provided over fixed networks. However, it excludes services provided over microwave networks as well as wholesale broadband services.

#### 5.9. Defining the relevant geographic market

56. The dark fibre service requested by BIX is for connectivity between two points on Amwaj – the TGN CLS and the MMR by Amwaj Gate. The Authority is aware that fixed telecommunications infrastructure on Amwaj is provided exclusively by Nuetel, rather than (as is the case in the rest of the Kingdom) by Batelco or other Licensees. As such, defining the relevant geographic market relevant to the BIX complaint is critical.
57. A narrow focus on demand-side substitution is likely to lead to the definition of a very narrow geographic market. This is because the demand for dark fibre and wholesale data

<sup>17</sup> For the avoidance of doubt, these limitations on broadband services apply to those offered over fixed (copper / fibre) and wireless networks.






connectivity services is location specific – a customer is unlikely to move in order to get connectivity and is unlikely, therefore, to regard a connection between two other sites as an adequate substitute.

58. Despite this, geographic markets are generally defined more broadly than for services provided to individual customers / between pairs of locations, to reflect a common pricing constraint that licensed operators typically face. To this end, the Authority's Competition Guidelines set out in Section 2.3 how the Authority will assess the geographic boundaries of a relevant market. These Guidelines set out that, in assessing whether a sub-national market should be defined, the Authority will examine:
- a. Whether service coverage is national;
  - b. Whether pricing is national;
  - c. The extent to which the identity of players with "significant market shares" differs between areas; and
  - d. The size / materiality of those areas where competitive conditions may differ.
59. In its 2014 market review of domestic data connectivity services, the Authority defined a single geographic market, being a national market with the exception of Amwaj. The Authority's primary reasoning for this was the fact that Batelco, as the determined dominant operator, did not have fixed infrastructure in place in those islands.
60. In this current proceeding, therefore, the Authority has considered the extent to which the services within the defined product market in Amwaj constitute a distinct geographic market from the provision of those same services in the rest of the Kingdom, taking into consideration the factors listed above. In so doing, the Authority has found as follows:
- a. Nuetel, through its sole owner, Osis BSC, is the only party able to deploy fixed infrastructure on Amwaj. That is, subsequent to a transfer and lease agreement between Nuetel and Osis dated 1 January 2015, Osis has granted an exclusive right to Nuetel to use the fibre assets previously deployed by Nuetel. The Authority further understands that no other licensee has been granted rights of way in Amwaj.
  - b. That given Nuetel's sole right to use the fibre assets in Amwaj and the inability of other service providers to procure rights of way, the market shares of providers in Amwaj, in the relevant market, will be very different to those in the rest of the Kingdom.

- c. Although the Amwaj area is relatively small, defining the relevant services within this area as a specific geographic market is proportionate, given the fact that other licensed operators must connect to the TGN cable and any end-users in Amwaj using the Nuetel network.

#### 5.10. Geographic market definition

61. Based on the above, the Authority concludes that the relevant geographic market for the product market defined above is the Amwaj area.

#### 5.11. Conclusion relevant market for this investigation

62. The Authority's analysis presented in this Determination has been based on the approach set out in the Authority's Competition Guidelines and the evidence available to the Authority to date. At the same time and as per the Competition Guidelines, the Authority has also, where appropriate, had regard to previous market definitions it has made in related ex ante market reviews. Based on these factors, the Authority concludes that the economic market relevant to the alleged anti-competitive behaviour is the market for access to dark fibre and active wholesale data connectivity services provided over fixed networks, within the Amwaj area.

### 6. DOMINANT POSITION

63. Having defined the relevant market, the Authority now turns to examine the competitive conditions in that market, with a view to identifying if any players hold a dominant position, either on their own or jointly with others, in that market.
64. In so doing, the Authority notes that the Law distinguishes between the concepts of Significant Market Power (SMP) and Dominance. However, Article 65 of the Law, which deals with the prohibition of anticompetitive conduct, focuses clearly on Licensed Operators holding a dominant position. That is, the Article states as follows:
  - a) *"A Licensed Operator shall not do or omit to do anything which has the effect of materially preventing, restricting or distorting competition in any commercial field concerning the Telecommunications sector in the Kingdom, where such act or omission is done in the course of operating a Telecommunications Network, providing a Telecommunications service or in connection with any such matter.*
  - b) *The act or omission referred to in the preceding paragraph mean the following:*
    1. *abuse by the Licensed Operator, either independently or with others, of a Dominant Position in the market or in a substantial part of it which*

*materially prevents or limits competition in an unfair manner. [Emphasis added]."*

65. Given the nature of the complaint by BIX, it is now therefore necessary to determine if Nuetel held, during the period of the alleged abuse, a dominant position in the market identified by the Authority as relevant to this complaint.
66. In examining whether Nuetel has held a dominant position, the Authority has had regard to both the definition of Dominant Position found within the Law ("the Licensee's position of economic power that enables it to prevent the existence and continuation of effective competition in the relevant market through the ability of the Licensee to act independently – to a material extent – of competitors, Subscribers and Users") and its Competition Guidelines, which guide the Authority in assessing dominance.
67. The ability to act independently, which is a special feature of dominance, is related to the level of competitive constraints facing the licensee in question. For dominance to exist, the licensee concerned must have substantial market power so as to have an appreciable influence on the conditions under which competition will develop. In order to determine if a licensee holds such a position, the Guidelines set out the three main factors the Authority will consider, namely:
  - a) The market shares of individual entities;
  - b) Other competitive constraints (namely constraints from existing competitors, constraints from potential competitors, barriers to entry and expansion in the relevant market and the degree of countervailing buyer power); and
  - c) Evidence of behaviour and performance.

#### 6.1. Market shares of entities in the relevant markets

68. While the Law sets out a market share threshold which can be applied in the assessment of SMP, no threshold is provided for the assessment of dominance. However, as stated in the Competition Guidelines, case law elsewhere (specifically in Europe) has established a presumption of dominance where an operator has a market share in excess of 50%.<sup>18</sup>
69. Given that Nuetel is the sole operator of fixed telecommunications infrastructure in the Amwaj area, it is likely to have a 100% share of the relevant market, as no other player is in a position to provide these services. This is evident from the Exclusive Fibre Right of Use Agreement between Nuetel and Ossis entered into on 1 January 2015.<sup>19</sup> As such, this clearly places Nuetel's market share above the internationally accepted threshold for

<sup>18</sup> Case law also shows that providers with a market share below 50% may also be found dominant, although there are relatively few examples of providers being found dominant with market shares below 40%.

<sup>19</sup> As set out in section 4 of the agreement



the presumption of dominance. Furthermore, the Authority notes that given the structure of the market in Amwaj, including the fact that other providers have not been able to deploy fibre, Nuetel's market position is likely to be sustained and it is very likely to have enjoyed this very high market share throughout the period of the alleged abuse, without there being the potential for other providers to enter the market during this period.

## 6.2. Other competitive constraints

70. A licensed operator with a very high market share over a given time period may not necessarily have enjoyed a dominant position over that period. This is because a dominant position describes the ability of a licensee to act independently, for example, by restricting output and raising prices above a competitive level. As such, a firm with a high market share may not have this ability, if other players would be able to either expand production in the market, enter the market for the first time or if important customers of the licensee were able to exert some countervailing buyer power on that licensee.
71. However, having considered the characteristics of the relevant market in this case, the Authority is satisfied that Nuetel did not, over the course of the alleged anti-competitive behaviour, face these constraints. This is because:
  - a. In the absence of Nuetel providing regulated wholesale access products, there are very high (effectively, absolute) barriers to any other licensee entering the relevant market and being able to offer either dark fibre or an active data connectivity products over the fixed network. This is due both to the economic characteristics of deploying fixed network infrastructure, but also specific restrictions on Amwaj which prevent other licensees gaining rights of way.
  - b. Given the absence of other actual competitors in the market, barriers to expansion within the market for players other than Nuetel are not relevant; and
  - c. BIX is unlikely to have been able to impose any countervailing buyer power on Nuetel. This is because BIX had no alternative suppliers of the data connectivity services it required and was also not able to deploy its own fibre network. As such, BIX would not have been able to place a competitive constraint on Nuetel's pricing as it would not have been able to switch its demand away from Nuetel.

## 6.3. Conclusion on dominance

72. The Authority's analysis presented in this Determination has been based on the approach set out in the Authority's Competition Guidelines and the evidence available to the Authority to date. Based on this, the Authority concludes that over the period of the alleged

abuse, Nuetel held a dominant position the market for access to dark fibre and active wholesale data connectivity services provided over fixed networks, within the Amwaj area.

73. For the avoidance of doubt, the Authority believes this would also be the case if the Authority had determined that the relevant market was narrower (i.e., just the market for dark fibre services) or had included the other services considered by the Authority in this Determination.

## 7. ABUSE OF A DOMINANT POSITION

74. The fact that an undertaking holds a dominant position is not in itself contrary to the Law. However, an undertaking enjoying a dominant position is under a special responsibility not to engage in conduct that may distort competition.
75. Article 65(b) of the Telecommunication Law defines abuse by the Licensed Operator, either independently or with others, of a Dominant Position in the market, or in a substantial part of it, as behaviour which materially prevents or limits competition in an unfair manner. In the current case, the Authority considers two forms of abuse based on the evidence that was brought before it. That is firstly, refusal to supply and secondly excessive pricing.

### 7.1. Refusal to supply

76. Section 5.7 of the Competition Guidelines set out the conduct that constitutes refusal to supply. In particular, "[t]his can involve limiting or restricting the ability of potential suppliers to use the network" of a dominant provider by "refus[ing] to grant direct access to certain network facilities or infrastructure and potential competitors have no credible alternative to using that network".
77. In addition to this so-called "absolute" refusal to supply, however, competition authorities, including the TRA in its Guidelines, also consider so-called "constructive refusal to supply" to be an abuse of a dominant position. This occurs where the dominant party allows access but under "terms and conditions [that are] unreasonable and amount to a "constructive refusal". This could take the form of setting the price above the competitive level, or reducing the quality of service."
78. Having reviewed the evidence so far put to it by the parties, the Authority believes that Nuetel's conduct has been exclusionary and so does constitute an abuse of a dominant position due to it engaging in refusal to supply. The Authority has reached this position on the following grounds:
- a. After providing the relevant services to BIX for a number of years by providing access to dark fibre at a price of BD ■■■ per month per fibre

pair for connecting the TGN CLS to other operator's equipment at the MMR, on July 7 2015 Nuetel issued an offer for a new connection from the CLS to the MMR at the same price, but on the condition that the cross connect at the MMR (the Authority understands that that cross connect refers to the connection between Nuetel's terminating equipment at the MMR and equipment at the MMR belonging to BIX's customers) was not included in that offer.<sup>20</sup> Following that, on the same date Nuetel offered to BIX the "Nuetel Cross-Connect Service Schedule Wholesale & Enterprise" with terms for the cross connect ranging between approximately BD [REDACTED] and BD [REDACTED] per month, subject to the capacity required.<sup>21</sup>

- b. Comparing the prices previously offered by Nuetel for its dark fibre service, including the cross connect, to the new prices proposed by Nuetel, shows that Nuetel was requiring an increase in the amount paid by BIX of [REDACTED] in order for it to access the same connectivity it previously had.<sup>22</sup> The Authority considers this was potentially exclusionary and constitutes a constructive refusal to supply, as the increase exceeds anything a purchaser and their customers could have reasonably expected. Even though Nuetel has since revised its offer to a lower price of BD [REDACTED] and has repeatedly argued that its price set out above was an offer subject to further negotiation, the Authority considers the magnitude of the difference between previous and new service charges as potentially exclusionary.
- c. Following Nuetel's price quote for the new services that BIX requested from Nuetel, Nuetel has also revised its offer to exclude services that it previously provided to BIX. That is, Nuetel's most recent offer for new services<sup>23</sup> comprises the provision of an active, capacity based service for the whole of the link between the TGN CLS and MMR, rather than the provision of a dark fibre service. Nuetel has sought to justify this proposal by stating it is no longer able to provide dark fibre services due to scarcity in the number of fibres it has available, that dark fibre is a scarce resource and provision of dark fibre is not typical within the industry in Bahrain. In order to assess this claim the Authority has reviewed information about the number of fibres

<sup>20</sup> Nuetel proposal, Ref: EM/929/July2015

<sup>21</sup> BD [REDACTED] applies to an STM64 which in the TRA's view is the closest comparator to the theoretically much higher capacity available on the end-to-end dark fibre previously provided to BIX.

<sup>22</sup> Calculated by comparing the previous price for the entire connection between the CLS and MMR of BD [REDACTED] per fibre pair per month against a new price for that connection of BD [REDACTED] per fibre pair between the CLS and Nuetel's equipment at the MMR, plus BD [REDACTED] for the cross connection at the MMR. <sup>23</sup> BIX letter, 28 June 2018, Attachment 2

available in Nuetel's network.<sup>23</sup> That information showed that the number of fibres available to Nuetel ranges between ■ and ■ on different segments of Nuetel's network, while there also remain an unspecified number of fibres reserved for redundancy. The Authority considers that there is, therefore, very likely to be sufficient capacity available for providing further dark fibres. This also reflects the fact that the information provided by Nuetel suggests it has a significant number of "Planned/Reserved" fibres that it has not yet used, in addition to those that are considered spare, as well as the fact that a dark fibre from TGN CLS to the MMR can be provided over several routes. As regards Nuetel's submission that provision of dark fibre is not typical within the industry in Bahrain, the Authority understands that circa 250km of fibre are rented between other licensed operators. In conclusion, the Authority considers Nuetel's refusal to supply additional fibres to BIX as potentially exclusionary.

- d. The Authority also understands that Nuetel has threatened to terminate existing dark fibre services that BIX has taken from Nuetel since 2015. Such behaviour, if not reflecting fair and reasonable contractual provisions, could be exclusionary for an operator who has a dominant position in the defined market.<sup>24</sup> Given the availability of spare fibres in Nuetel's network, the Authority considers that the termination of the services would constitute unfair behaviour.

## 7.2. Excessive pricing

79. Section 5.1 of the Competition Guidelines sets out the conduct that constitutes excessive pricing and specifically refers to:

*"The ability to charge excessively high prices [which] could arise as a result of a dominant position in a market. In this context, "excessively high" means substantially higher than would be expected in a competitive environment. There are generally two forms of excessive pricing:*

- *'exploitative' abuse refers to the case where a dominant firm directly exploits its dominance by charging high prices to its customers for example; and*
- *'exclusionary' abuse relates to setting high prices in one market for example in order to strengthen or maintain a dominant position in another market.*

*An "exploitative" excessive price may refer to excessive pricing at the retail level and hence consumers facing unreasonably high prices. An "exclusionary" excessive*

<sup>23</sup> Nuetel letter, 15 July 2018, Appendix 7

<sup>24</sup> Nuetel letter, 15 July 2018, Section 6



*price might refer to excessive pricing at the wholesale level, potentially resulting in a form of market foreclosure (through raising a rival's costs)"*

80. In line with the approach set out in the Competition Guidelines for assessing whether excessive pricing has taken place, the Authority has assessed Nuetel's proposed prices against appropriate benchmarks and relevant costs.<sup>25</sup>
81. Comparing the prices proposed by Nuetel to a number of benchmarks (namely for active data connectivity services provided over submarine cables and regulated charges for wholesale services provided by Batelco), the Authority notes that even without making any adjustments to account for differences in products, Nuetel's proposed prices significantly exceed those of the benchmarks.<sup>26</sup>
82. In justifying its proposed prices, Nuetel has sought, among other points, to rely on:
  - (i) the fact that Batelco's pricing for wholesale local access ("WLA") (as set out in the relevant Reference Offer) was higher than Nuetel's proposed prices. Nuetel appears to consider this as evidence that Nuetel's pricing was not excessive. The Authority does not consider that Batelco's regulated WLA pricing can properly be used as a like-for-like comparison with Nuetel's service given the differences between Batelco's regulated WLA services and those which were actually being offered by Nuetel at the time;
  - (ii) the fact that wholesale data connectivity ("WDC") pricing was not available at the time of Nuetel setting its prices for the local interconnection service (i.e., passive interconnection). The Authority however, does not take the view that WDC pricing should be used as a like-for-like comparison. The Authority rather considers that the comparison between Nuetel's pricing and WDC prices demonstrates the fact that Nuetel's prices were excessive because, despite WDC prices being lower than those Nuetel proposed, the Authority would expect the costs of the WDC service to be higher than those Nuetel incurs for its local interconnection service. A competitive price should mirror these differences in costs;
  - (iii) the differences between national and international services as the Authority's comparison against international submarine cable pricing is not appropriate. The Authority does not take the view that international submarine cable services represent a like-for-like comparison with national passive interconnection services.

<sup>25</sup> The Guidelines also suggest that the Authority will review profitability indicators for the firm under investigation for alleged excessive pricing. However, the Authority has not done this in this case. This is because the revenues generated from this service are likely to be small in comparison to all other services Nuetel offers on Amwaj.

<sup>26</sup> Some adjustments, such as accounting for differences in length of the services may be required for a like for like comparison.

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However, similar to the case with WDC, Nuetel's pricing for a national interconnection service within the relevant area in Amwaj, reflecting underlying costs, should be lower than that for international submarine cables provided over significantly longer international distance, which was not the case.

Furthermore, Nuetel's proposed prices are almost always higher than the benchmarks considered and especially so for very high capacity services (i.e., those most comparable to the capabilities a dark fibre connection can provide to its users). This is shown below in Exhibit 2.

**Exhibit 2. Price comparison between Nuetel price offers and equivalent services**

[  Redacted table ]

*Source: TRA analysis based on operators data, BIX complaint, Batelco RO*

83. Indeed, this difference in prices is likely to be even greater, when taking into account the likely difference in average link lengths between the services offered by Nuetel and Batelco. For example, the average distance on mainland Bahrain (applicable for Batelco's WDC prices) is much greater than average distances on Amwaj. Distances of submarine links for which the Authority has pricing information available are also much greater than those on Amwaj. In other words, if accounting for distance, the prices on a per km basis on Amwaj would even further exceed those for the benchmarks considered. Notwithstanding that Nuetel's pricing is based on capacity rather than distance, the average distance of links is considered to be a key driver of costs, and therefore as noted above, pricing for national passive interconnection services within the relevant area in Amwaj can be expected to be lower than that for international submarine cables provided over significantly longer international distances. However, when considering Nuetel's pricing this was not the case.

84. Nuetel also indicated in its correspondence that the prices originally charged to BIX were "notional", i.e., suggesting that the original BD [REDACTED] per month charge for the end to end dark fibre was not commercially viable on a long term basis.<sup>27</sup> The Authority has therefore requested cost information from Nuetel to assess whether any of the charges proposed by Nuetel were reasonable when compared against its underlying costs. However, in Nuetel's correspondence, it notes that it did not consider it necessary to submit information on costs<sup>28</sup>, and Nuetel has since failed to provide cost-related information sufficiently broken down so as to identify those costs associated with provision of the passive interconnection service. Given this, the Authority has reviewed other cost information at its disposal, especially in relation to trench and duct cost in the rest of the Kingdom and has found that, subject to assumptions on the number of fibres in a trench and the cost of its rollout, Nuetel's costs are very likely to be significantly lower than the charges it tried to impose on BIX in 2015 and afterwards. In reaching this view, the Authority used information it has available that suggests the cost of rolling out 7km of duct, trench and fibre amounts to approximately BD 360,000. This would suggest a cost of below BD [REDACTED] per fibre pair per month, even if less than 20 fibres are assumed to be deployed.<sup>29</sup>
85. Finally, the Authority has also examined available international evidence on dark fibre pricing and compared that to Nuetel's revised offer. Specifically, a 2016 Ofcom decision to impose a dark fibre remedy on BT (later repealed)<sup>30</sup> led to the introduction of the service at a price of £2,660 per fibre km per year (approximately BD110 per fibre per month. This suggests that a dark fibre price similar to the BD [REDACTED] per fibre pair Nuetel previously charged is not unreasonable and that the price of the active connectivity product proposed by Nuetel is excessive.
86. The Authority therefore concludes that the charges Nuetel is aiming to impose on BIX are exploitative in their nature and possibly exclusionary. The Authority notes that Nuetel's comments in relation to its charges being similar to regulated charges in 2015 in other parts of Bahrain appear to be misguided, since they do not consider differences between the offers in Amwaj and the rest of the Kingdom. Among other factors, the Authority specifically points out as already mentioned in relation to the benchmarks considered above, that average distance of links, which is a key driver of costs, is likely to be much shorter on Amwaj than the rest of the Kingdom. The conduct also demonstrates that the refusal to supply the service to BIX was effective in forcing customers to take up services with Nuetel. Further, the Authority does not accept Nuetel's contention that the fact there

<sup>27</sup> Nuetel letter, 15 July 2018, Section 6

<sup>28</sup> Nuetel letter, 15 July 2018, Section 17

<sup>29</sup> Assuming asset lives of 40 and 15 years for trench/duct and fibre respectively and using a number of different assumptions for the WACC, above the regulated WACC set for Batelco (to reflect the additional risks a smaller operator such as Nuetel may face).

<sup>30</sup> The repeal of this decision was not linked to the proposed pricing of the dark fibre service.

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*[Signature]*



are ongoing services provided by Nuetel to BIX or that other customers (such as [REDACTED]) pay higher prices for similar services (albeit for services with a different speed) indicates that Nuetel's pricing is not excessive. As highlighted above, there are no alternative providers of passive interconnection services in Amwaj to Nuetel. In order to be able to service its customers BIX must purchase the passive interconnection services from Nuetel.

### **7.3. Competition has been materially prevent or limited**

87. In the Authority's view, Nuetel's conduct shows that competition was seriously affected in an unfair manner by removing an important form of choice for licensed operators seeking to provide access to data connectivity on Amwaj to the detriment of end-users.

## **8. THE AUTHORITY'S ACTION**

### **8.1. The Authority's Determination**

88. The Authority's analysis presented in this Determination has been based on the approach set out in the Authority's Competition Guidelines and the evidence available to the Authority to date. Based on this, the Authority concludes that over the period of the alleged abuse, Nuetel has abused its dominant position in the market for access to dark fibre and active wholesale data connectivity services provided over fixed networks, within the Amwaj area, by engaging in constructive refusal to supply and excessive pricing. The Authority also concludes that this conduct has seriously reduced competition in an unfair manner on Amwaj.
89. Such abuse by Nuetel of its dominant position constitutes anti-competitive conduct under Article 65(a) of the Law ("Anti-Competitive Conduct"). The alleged scarcity of dark fibre as a resource by Nuetel cannot be determinative as to whether Nuetel should be ordered to provide as a remedy, passive interconnection services, where Nuetel's behavior is determined to be anti-competitive. The below directions however, indicate that where Nuetel is able to prove to the Authority's reasonable satisfaction that it does not have any technical capability to provide the necessary point-to-point dark fibre service, Nuetel should instead, provide to BIX, an active capacity based data connectivity product. Nuetel would need to seek prior approval of the tariff for such active capacity based data connectivity product as outlined in paragraph 91(f) of this Determination.

### **8.2. Directions**

90. Article 65(f) of the Law provides that the Authority may give the Licensed Operator such directions as it considers appropriate to remedy, amend or prevent the breach of Article 65(a).

91. The Authority gives Nuetel the following directions:

- a. Nuetel must bring the ongoing aspect of the anti-competitive conduct to an end immediately and not later than a week from the date of publication of this Determination;
- b. Nuetel must refrain from repeating the Anti-Competitive Conduct;
- c. Without prejudice to the generality of paragraphs (a) and (b) of these directions Nuetel must provide, to BIX, current and new point to point dark fibre service between the TGN CLS and BIX's or another licensed operator's equipment at the MMR on Amwaj at a price of BD 400 per month per fibre pair, without imposing any physical or commercial restrictions on BIX which would limit its ability to make use of the dark fibre for its own use or use by one of its customers;
- d. The obligation to provide such point-to-point dark fibre service applies unless Nuetel can prove to the Authority that it has no technical capability to do so;
- e. In the event that Nuetel has no technical capability to provide such point-to-point dark fibre service and has proven that to the Authority's satisfaction, Nuetel must instead, provide to BIX, an active capacity based data connectivity product; and
- f. The tariff of that active capacity based product must be submitted to the Authority for approval and must reflect prices that would arise in a competitive market and so should be comparable with (regulated) prices for equivalent services offered elsewhere in Bahrain while reflecting any specific conditions on Amwaj. Neither the requirement for Nuetel to submit for approval the tariff it proposes to charge for the active capacity based service nor the process for granting that approval shall delay the provision of the service to the access seeker such that access must be granted pending approval by the Authority of the applicable charges.

92. The Authority may, by written notice given to Nuetel, vary, supersede or withdraw these directions if by reason of change of circumstances, it considers they are no longer appropriate.

93. Nuetel must promptly provide to the Authority such information as the Authority may from time to time require for the purpose of ascertaining whether these directions are being or

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will be complied with or for the purpose of ascertaining whether they should be varied, superseded or withdrawn.

94. For the purposes of these directions, definitions have the same meaning as in the telecommunications Law or this Determination unless a contrary intention appears.

### 8.3. Financial Penalty

95. Under Article 65(f)(1) the Authority's determination may include imposing a fine on Nuetel not exceeding 10% of the annual revenues of the operator. The revenue figure for establishing the upper limit of any fine imposed under Article 65 will be the sum of the combined annual revenues generated by the activities covered by all Licences held by the infringing Licensed Operator. This figure should generally correspond to the base revenue figure(s) used by the Authority to determine the applicable annual fees payable under each Individual Licence held by the Licenced Operator.<sup>31</sup>
96. The Authority's Guidelines for the Setting of the Amount of a Fine for Violations of Articles 35 and/or 65 of the Law ("Fining Guidelines") describe the methodology that will ordinarily be followed by the Authority to determine the quantum of a fine.
97. The Authority's application of the Fining Guidelines is, in accordance with Article 3(a) of the Law, intended to promote transparent and non-discriminatory practice in setting the amount of fines.

### 8.4. The Authority's penalty calculation

98. Table 8.1 below sets out a summary of the Authority's fine calculation. The remainder of this section explains the reasoning underpinning the penalty calculations. These calculations follow the six "step" methodology outlined in the Fining Guidelines.

**Table 8.1: Summary of the Authority's penalty calculations in respect of Nuetel**

Step	Description	Adjustment
	Relevant Annual Revenue	██████
1	Starting point	30%
	Penalty after Step 1	██████
2	Adjustment for aggravating and mitigating factors	+20%
	Penalty after Step 2	██████

<sup>31</sup> Fining Guidelines, paragraph 6.

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3	Adjustment for deterrence	+20%
	<b>Penalty after Step 3</b>	
4	Adjustment for proportionality	Nil
	<b>Penalty after Step 4</b>	
5	Adjustment to ensure statutory cap is not exceeded	N/A
6	Adjustment for financial hardship	N/A
	<b>Penalty payable</b>	<b>BHD 33,846</b>

### **Step 1 - starting point**

99. The baseline figure for determining the amount of the fine will be assessed on the basis of the perceived seriousness or severity of the prohibited acts and is applied to Licensed Operator's relevant turnover.
100. When considering the seriousness or severity of the Anti-Competitive Conduct, the Authority will consider a number of factors, including the nature of the Anti-Competitive Conduct; the size, structure and characteristics of the relevant market, the economic impact on the market and the duration of the conduct.
101. In cases where it is difficult to reasonably estimate the quantum of harm caused by the Anti-Competitive Conduct the Authority may express the baseline figure in monetary terms as a percentage of the annual revenue accrued by the Licensed Operator in the relevant product market(s) and relevant geographic market(s) affected by the infringement during the financial year preceding the date when the infringement is known or thought to have ended (the "Relevant Annual Revenue")<sup>32</sup>.
102. As set out in section 5 of this Determination, the Authority finds that the relevant product and geographic market affected by the Anti-Competitive Conduct is the market for access to dark fibre and active wholesale data connectivity services provided over fixed networks, within the Amwaj area. Accordingly based on the financial data provided to the Authority, it has used an amount of BHD [REDACTED], being Nuetel's domestic leased line revenue as shown in the Revenue Declaration Form for the financial year 2017 as Nuetel's Relevant Annual Revenue.
103. The starting point (expressed as a percentage rate applied to the relevant turnover) depends in particular upon the nature of the infringement: the more serious and widespread the infringement, the higher the starting point is likely to be.

<sup>32</sup> Fining Guidelines, paragraph 25.

104. The Authority will apply a rate of up to 30% to an undertaking's Relevant Annual Revenue in order to reflect adequately the seriousness of the particular Anti-Competitive Conduct and, in so doing, to deter the infringing undertaking and other undertakings generally from engaging in that particular practice or type of practice in the future. A starting point towards the upper end of the range will be used for the most serious infringements of competition law, including the most serious abuses of a dominant position.<sup>33</sup>

***Application in this case***

105. The Authority has applied a starting point of 30% of Relevant Annual Revenue based on the seriousness of the Infringements.
106. In determining the starting point, the Authority has assessed the seriousness of the Anti-Competitive Conduct. The following factors indicate that these conduct are serious:
- a. the charges Nuetel aimed to impose on BIX are exploitative in their nature
  - b. Nuetel was aware that BIX had no feasible alternative to using Nuetel's local interconnection service and constructively refused to grant direct access to network facilities and infrastructure
  - c. The conduct likely limited access of the Bahrain market to the TGN cable.
107. The Authority therefore calculates, using 30% of the Relevant Annual Revenue set out above that at the end of step 1, Nuetel's penalty is BHD [REDACTED].

***Step 2 - adjustment for aggravating and mitigating factors***

108. The Authority may, at step 2, increase a penalty where there are aggravating factors, or decrease it where there are mitigating factors. A non-exhaustive list of aggravating and mitigating factors is set out in the Penalty Guidance.<sup>34</sup>

***Aggravating factors***

109. The Authority considers that following should be taken into account as aggravating factors at step 2:
- The charges Nuetel sought to impose indicates intentional rather than negligent behaviour.

<sup>33</sup> Fining Guidelines, paragraph 25.

<sup>34</sup> Fining Guidelines, paragraphs 29 and 30.

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- There is evidence of involvement/knowledge of Nuetel's senior management (specifically Nuetel's Chief Executive Officer).
- The timeframe over which Nuetel has imposed the excessive charges.

The Authority considers that an increase of 20% for the aggravating factor is appropriate and proportionate in the circumstances of the Anti-Competitive Conduct.

#### **Mitigating factors**

110. The Authority finds that there are no relevant mitigating factors to be taken into account at step 2.
111. The Authority may decrease the penalty at step 2 for co-operation which enables the enforcement process to be concluded more effectively or speedily.
112. In accordance with the Competition Guidelines, a non-confidential version of BIX's complaint was sent to Nuetel and Nuetel was given the opportunity to submit written and oral representations, which it did in June and July 2018 respectively.
113. On the 12th June 2018 Nuetel submitted its response to the complaint. In July 2018 representatives of Nuetel met with the Authority's officials to discuss the market and the allegations made. Nuetel subsequently provided additional information. The Authority considers that it would not be appropriate to provide any reduction for cooperation as simply respecting Authority time limits is a necessary, but not sufficient, criterion to merit any reduction. In addition it is noted that Nuetel initially refused to submit any cost-related information, and has since failed to provide cost-related information sufficiently broken down so as to identify those costs associated with provision of the passive interconnection service. Nuetel has also referred to the fact that it continues to provide services to BIX despite the contract between the parties having expired. The Authority understands that BIX continues to pay the charges in question for the provision of these services. Therefore the fact that Nuetel continues to provide services to BIX is not sufficient to mitigate the offending conduct.

#### **Adjustments at Step 2**

114. The Authority considers that an uplift of 20% is appropriate at step 2 taking into account the aggravating factors that have been identified and the lack of mitigating factors.
115. The Authority therefore calculates that at the end of step 2 Nuetel's penalty is BHD [REDACTED].

### **Step 3 - Adjustment for deterrence**

116. The Authority may adjust any penalty at step 3 for specific deterrence (that is, to ensure that the penalty imposed on the infringing Licensed Operator will deter it from engaging in the Anti-Competitive Conduct in the future) or general deterrence (that is, to deter other Licensed Operators from engaging in the Anti-Competitive Conduct).

#### **Application in this case**

117. The Authority considers that an uplift of 20% is appropriate at step 3 taking into account the importance of deterrence when determining the amount of a financial penalty. The Authority considers that this figure adequately reflects the seriousness of the particular Anti-Competitive Conduct and, in so doing, will deter the infringing undertaking and other undertakings generally from engaging in this particular practice or type of practice in the future.

118. The Authority therefore calculates that at the end of step 3 Nuetel's penalty is BHD [REDACTED].

### **Step 4 – Proportionality Review**

119. The Authority may adjust any penalty at step 4 for proportionality, having regard to appropriate indicators of the size and financial position of the relevant Licensed Operator, as well as any other relevant circumstances of the case, to ensure that the resulting fine is not disproportionate or excessive.

#### **Application in this case**

120. The Authority considers that the payment by Nuetel of a fine of BHD [REDACTED] is proportionate, considering all the circumstances of this case.

121. The Authority does not propose any adjustments at this step, so the penalty figure reached at the end of step 3 remains the same as at the end of step 4.

### **Step 5 – downward adjustment to prevent maximum penalty from being exceeded**

122. The final amount of the penalty calculated according to the method set out above may not in any event exceed 10% of annual revenue cap under Article 65(f)(2) of the Law. The relevant business year for these purposes will be the one preceding the date on which the decision of the Authority is taken or, if figures are not available for that business year, the one immediately preceding it.

123. Based on the annual revenue in Nuetel's latest accounts for the financial year ended [REDACTED], no adjustment is required at this step, so the penalty figure reached at the end of step 3 remains the same as at the end of step 5.

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#### ***Application in this case***

124. Nuetel's penalty after step 5 would be BHD 33,846 which amounts to less than 10% of Nuetel's annual revenues from its licences under the Law for the 2017 financial year. This is the maximum penalty under Article 65.

#### ***Step 6 – Financial Hardship***

125. In exceptional circumstances, the Authority may, upon request, take account of an infringing Licensed Operator's inability to pay the full amount of the fine imposed on it pursuant to a finding of Anti-Competitive Conduct. Any such reduction will only be granted on the basis of objective evidence that the imposition of the fine in question would irreversibly jeopardise the economic viability of the infringing Licensed Operator.<sup>35</sup> Nuetel has submitted that the Authority should have regard to the overall expenses associated with the operation of a telecom company such as Nuetel, which reaches over BD 1 million per annum, and that payment of the penalty may lead to "catastrophic financial consequences". However, operating expenses alone cannot be considered by the Authority as sufficient reason for a reduction to the proposed penalty. Nuetel has failed to provide sufficient evidence to demonstrate the degree of financial hardship required. Notwithstanding this, the Authority is prepared to discuss with Nuetel arrangements for phased payment rather than requiring a single payment in full.

#### ***Conclusion on penalty***

126. In light of the above, the Authority considers a penalty of BHD 33,846 to be appropriate in the circumstances of this case.
127. The penalty will become due to the Authority within 7 calendar days from date of notification of this Determination (or such other date as may be agreed by the Authority) and must be paid to the Authority by close of banking business on that date.

<sup>35</sup> Fining Guidelines, paragraph 37.