Telecommunications Regulatory Authority of Bahrain

Consultation Paper

A public consultation document issued by the Telecommunications Regulatory Authority of the Kingdom of Bahrain (the "Authority") on a draft Order on the Reference Offer of the Separated Entity (the "Draft RO Order") and related draft amended Reference Offer (the "Draft Amended Reference Offer").

28 March 2019

LAD 0913 082

The address for responses to this document is:

The Acting General Director

Telecommunications Regulatory Authority

PO Box 10353

Manama

Kingdom of Bahrain

Alternatively, e-mail responses may be sent to fsnbn@tra.org.bh.

The deadline for responses is 16.00 on 25 April 2019.

Purpose: To seek stakeholders' views on the Draft RO Order and related Draft Amended Reference Order.

1 **INSTRUCTIONS FOR SUBMITTING A RESPONSE**

1.1 The Authority invites comments on this consultation document from all interested parties. Comments should be submitted no later than 16.00 on 25 April 2019. In light of the fact that this constitutes a second round of consultation, and given the tight deadlines, requests for extensions to the return date for responses to this consultation document cannot be entertained. An industry workshop will be held during the
consultation process which would allow interested parties to raise any questions or points of clarification with the Authority ahead of the submission date.

1.2 Responses should be sent to the Authority preferably by email (either Word or PDF format) or by fax or post to the attention of:

The Acting General Director

fsnbn@tra.org.bh

Telecommunications Regulatory Authority

PO Box 10353

Manama

Kingdom of Bahrain

Fax number: 17532125

1.3 Responses should include:

- the name of the responding entity;
- the name of the principal contact person:
- full contact details (physical address, telephone number, fax number and email address);
- in the case of responses from individual consumers, name and contact details; and
- a brief statement explaining the interest of the responding entity.

1.4 The Authority seeks comments from stakeholders in the telecommunications industry, the business community and the general public on the Draft RO Order and Draft Amended Reference Offer (Annex 1).
1.5 All comments should be supported as much as possible by detailed explanation, 
including, where relevant, references to the specific provisions of the 
Telecommunications Law\(^1\) (the “Law”) or Licenses that the respondent is relying upon.

1.6 Further, the Authority invites respondents to provide comments in response to each of 
the questions listed for reference at Annex 2.

1.7 In the interests of transparency, the Authority intends to make all submissions received 
available to the public, subject to the confidentiality of the information received. The 
Authority will evaluate a request for confidentiality in line with the relevant legal 
provisions\(^2\) and the Authority’s published guidance on the treatment of confidential and 
non-confidential information\(^3\).

1.8 Respondents are required to mark clearly any information included in their submission 
that is considered confidential. Where such confidential information is included, 
respondents are required to provide both a confidential and a non-confidential version 
of their submission (in soft copies and not scanned copies). If part or all of the 
submission is marked confidential, reasons should be provided. The Authority may 
publish or refrain from publishing any document or submission at its sole discretion.

2 STATUS OF THIS CONSULTATION DOCUMENT

2.1 This consultation document is issued pursuant to the Position Paper on “How TRA 
Consults” issued by the Authority on 17 October 2017\(^4\).

2.2 Interested parties should not take any actions in reliance on the information or 
proposals contained in this document. Any views set out in this document should be 
considered as indicative and will be subject to further consideration following the receipt 
of comments from interested parties.

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\(^1\) The Telecommunications Law of the Kingdom of Bahrain, promulgated by Legislative Decree No. 48 of 2002, as amended by 
virtue of Decree No. 38 of 2017.

\(^2\) Including Article 23 of the Law.


2.3 This consultation document does not represent a decision of the Authority. The issues discussed in this document remain open to consideration and should not be construed as indicating that the Authority has formed any final opinion or decision.

2.4 Once the Authority has received and considered responses to this consultation document, the Authority will proceed with finalising the relevant documents subject to this consultation. If appropriate, the Authority will prepare and publish a consultation report which summarises and responds to the comments received.

3 BACKGROUND TO THE ISSUANCE OF THE DRAFT RO ORDER

3.1 The Government’s Fourth National Telecommunications Plan (“NTP4”) calls for the development of a single national broadband infrastructure network (the “NBN”), encompassing the infrastructure required to enable fixed telecommunications networks in Bahrain.

3.2 This NBN should be capable of delivering ultrafast broadband products to consumers and businesses across the Kingdom. The NBN will be operated and deployed by the Separated Entity (“SE”).

3.3 The SE will be formed by the separation of the incumbent telecommunications operator, Batelco, into two distinct legal entities: the SE and the rest of Batelco. The SE will comprise the appropriate components of Batelco’s current wholesale and infrastructure business units, with the other entity comprising the remaining parts of Batelco’s business, including its retail division (referred to as Batelco Retail or BRE).

3.4 Article 3(e) of the Law requires the Authority to “act in a manner that is consistent with the objectives of” NTP4 provided that this does not derogate from the Authority’s independence as provided for under the Law.

3.5 According to section 4.9 of the proposed Fixed Telecommunications Infrastructure Network License (the “Draft SE License”) to be issued to the SE, the SE will be required, at the request of the Authority and/or every twenty-four (24) months

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5 The Authority issued the following two consultations regarding the draft SE License: (i) LAD/1218/344 dated 13 December 2018 (First Consultation); and (ii) LAD/0219/055 on the Draft Amended SE License dated 28 February 2019 (Second Consultation).
(whichever is the shorter) to submit a draft reference offer (the "Reference Offer") for the Authority's approval.

3.6 The Authority has previously consulted upon the process for the separation of Batelco\(^6\) in its consultations on the Monitoring Guidelines, the Separation Guidelines and the Special Temporary Measure.

3.7 On 20 December 2018 the Authority issued a public consultation document on the SE’s draft Reference Offer ("RO Consultation").\(^7\) The RO Consultation set out the Authority's views on the principles relevant to its review of the draft Reference Offer and invited comments on the following issues:

- the Authority's proposed future review process for the Reference Offer;
- the scope of the proposed product set;
- the Authority's proposal not to require the SE to include passive access products in the Reference Offer at this time;
- the proposed price terms;
- the proposed non-price terms;
- the Authority's proposed treatment of OLO assets; and
- a number of initial concerns identified by the Authority in relation to the specific issues for the WBS and DS products in the draft Reference Offer.

3.8 The Authority received submissions to the RO Consultation from BRE, Etisalcom, Infonas, the SE, VIVA and Zain.

3.9 Following a review of the responses to the RO Consultation, the Authority has decided to propose certain changes and refinements to the draft Reference Offer by means of the Draft RO Order and to issue a second round of consultation in respect of these changes and refinements (as well as the terms of the Draft RO Order itself). The

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proposed revised terms for the Draft Amended Reference Offer are included at Annex 1.

3.10 The Authority’s position on the points raised in the responses to the RO Consultation is set out in detail in the Consultation Report at Annex 3 to this consultation paper. The Authority does not, therefore, repeat these submissions in full here but, rather, provides a summary of the key points of relevance to each section.

3.11 Additionally, the Authority is aware that, in order to reflect the principles in NTP4 and the new industry structure resulting from the legal separation of Batelco, amendments will need to be made to the current wholesale reference offer of Batelco\(^8\) to reflect the fact that the rest of Batelco (including the retail business unit(s) of Batelco) will cease to provide certain wholesale products and services which now form part of the Reference Offer. Such amendments will be the subject of a separate approval process.

4 PURPOSE OF THIS CONSULTATION PAPER

4.1 This consultation paper is concerned with the Draft RO Order that the Authority intends to issue in relation to the SE. The Draft RO Order sets out the proposed terms that the SE will be required to reflect in the final version of its Reference Offer.

4.2 The Draft RO Order takes into account the responses provided during the RO Consultation as well as the Authority’s further thinking on the subject.

4.3 The Authority invites stakeholders to comment on the suitability of all aspects of the Draft RO Order and the proposed terms for the final version of the Reference Offer, as set out in the Draft Amended Reference Offer.

4.4 For completeness, the Authority has included in Annex 2, consultation questions inviting comments on the Draft RO Order and the proposed product scope and price and non-price terms for the final version of the Reference Offer, set out in the Draft Amended Reference Offer.

5 OVERVIEW OF THE REFERENCE OFFER APPROVAL PROCESS

5.1 The SE’s Reference Offer is a key regulatory instrument that will contribute to achieving the objectives of NTP4. It sets out the terms and conditions (both price and non-price) on which the SE will make available its products and services, such that licensed downstream providers (including both Batelco Retail and OLOs9) can offer next generation telecommunications services to end users in the Kingdom. Indeed, given the SE’s integral role in the Kingdom’s telecommunications sector, it is vital that such terms and conditions are fit-for-purpose. The Reference Offer is subject to the Authority’s approval.

5.2 The process for approval of the Reference Offer is as follows:

5.2.1 Step 1: The SE submits a draft Reference Offer to the Authority, which the Authority reviews.

The draft Reference Offer was submitted to the Authority on 13 December 2018 and, as noted above, was published for consultation on 20 December 2018. The deadline for responses to the consultation was 24 January 2019.

5.2.2 Step 2: If the Authority approves the draft Reference Offer as submitted, the Authority issues an approval letter.

In this case, and having consulted with stakeholders, the Authority does not consider that the draft Reference Offer submitted is fit for approval in its current format. Rather, the Authority considers that the product set and price and non-price terms of the draft Reference Offer require amendment before the Reference Offer can be approved.

5.2.3 Step 3: If the Authority does not approve the draft Reference Offer as submitted, the Authority issues for consultation a draft Reference Offer Order setting out the proposed terms that the

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9 In this document, the term “OLO” refers to licensed operators that are not part of the Batelco group of companies.
SE will be required to reflect in the final version of its Reference Offer.

That is the purpose of this consultation. Following the Authority's review of the responses to this consultation on the Draft RO Order, the Authority proposes to issue the final Reference Offer Order, specifying the terms that must be reflected in the final version of the Reference Offer along with the process and timeline for resubmission of a revised draft Reference Offer by the SE for the Authority's approval. If the Authority approves the revised draft Reference Offer as resubmitted by the SE, the Authority will issue an approval letter.

5.2.4 Step 4(a): Once the Reference Offer has been approved, the SE must publish within fourteen (14) days on its website the version of the Reference Offer approved by the Authority; or

5.2.5 Step 4(b): In the event that the SE does not resubmit a revised Reference Offer or the resubmitted draft Reference Offer does not fully reflect the terms of the final Reference Offer Order, the Authority will publish a declaration that it considers the version annexed to the final Reference Offer Order to be decisive and binding on the SE. Licensed Operators will be entitled to rely on the terms of the final Reference Offer which is annexed to the final Reference Offer Order and published by the Authority on its website, when seeking the supply of services from the SE.

5.3 Should the SE not comply with the terms of the Reference Offer Order, then the Authority shall take the necessary enforcement steps to implement the terms of the Reference Offer Order as provided under the Law and the SE License.

6 OVERVIEW OF THE PROPOSED AMENDMENTS TO THE REFERENCE OFFER

6.1 The Authority has proposed revisions to the existing product set included in the draft Reference Offer, as well as revisions to the price and non-price terms.
6.2 In relation to the product set, the Authority has proposed to rationalise a number of services, and to require the SE to provide a number of additional services. Based on the Authority’s review of submissions received and further analysis, the Authority proposes to require the SE to also include, in its Reference Offer, a new optical wavelength based active service (OWS or Lambda service) to further address demands for backhaul. The Authority also opines on and proposes a number of options related to the introduction of a fronthaul access service (FAS). Backhaul is the link between an MNO’s wireless radio sites and its core network. Fronthaul is the link between a mobile baseband unit and a remote radio head, and therefore is relevant only for MNOs. The Authority understands that OWS and FAS would only be required by MNOs. The proposed Service Descriptions for each of these services have been drafted accordingly.

6.3 In relation to the price terms, the Authority has proposed reductions to price terms for all services that were included in the draft Reference Offer.

6.4 In relation to the non-price terms, the Authority has proposed a number of additional measures to guard against discrimination and incentivise the SE’s performance. Examples include:

6.4.1 removal of certain legacy requirements and restrictions concerning mass market bitstream (WBS) such as linking the supply of WBS to a pre-existing standard telephone service or "useable line" and other provisions that would have the effect of locking-in customers to the SE;

6.4.2 specific timeframes for the SE to provide services on a full EOI basis and which have been set on a service-by-service basis along with interim milestones in relation to the SE’s systems to support EOI;

6.4.3 improved Service Levels and Service Penalties in conjunction with the removal of the cap on damages that can be claimed by Licensed Operators;

6.4.4 use of an online portal to order and track progress of orders as a means of promoting equivalence between Licensed
Operators, by facilitating access to the same information about fibre deployment and service availability to all Licensed Operators at the same time;

6.4.5 a requirement on the SE to ensure that Licensed Operators can choose alternative CPEs for WDC, MBS and DS Services from multiple vendors;

6.4.6 introduction of higher capacity aggregation links (such as the introduction of a 100Gbit/s link for WDC, MBS and DS) on a per service basis;

6.4.7 introduction of a monitoring tool for WDC, MBS and DS that will enable Licensed Operators to have enhanced transparency over performance and quality of service;

6.4.8 increased protections to ensure that the SE does not prefer BRE over OLOs as regards quality of service levels;

6.4.9 removal of minimum service period(s) for mass market bitstream (WBS) with more common timeframes for minimum service periods for other services to balance the needs of the SE to plan its investments and Licensed Operators’ needs to avoid unreasonably long commitment periods;

6.4.10 conversely the Authority considers it would be reasonable to stipulate minimum service periods in return for the proposed waiver of non-recurring charges for MBS and DS;

6.4.11 an improved forecasting framework. In order to allow the SE to plan its network investment accurately, the Authority proposes to require, through the Reference Offer, that in certain cases (such as OWS and FAS) the provision of forecasts will be binding, and that Service Level Penalties would be applicable if those forecasts are not met; and

6.4.12 establishment of an industry forum to enable Licensed Operators to discuss, among other items, their product and
technical requirements with the SE, and to develop a Joint Working Manual that would address detailed technical and operational matters relating to the SE’s supply of the Services under the Reference Offer.

6.5 The proposed revisions are discussed in more detail in the following sections.

7 SCOPE OF THE PRODUCT SET AND NON-PRICE TERMS

Introduction

7.1 The service descriptions for the products that the SE proposed including in the Reference Offer were set out at Annex 1 of the SE’s draft Reference Offer. The relevant products were:

a) Bitstream service
b) Bitstream plus service
c) LLCO service
d) WSDSL service
e) WLA service
f) WDC service
g) DS service
h) WBS service
i) MBS service

The Views of the Consultation Respondents

7.2 The main comments from respondents were as follows:

7.2.1 BRE, VIVA and Zain commented that the service descriptions could be simplified and a number of services could be merged into one service description.
7.2.2 Zain, Etisalcom and Infonas commented that WSDSL should not be offered by the SE as it is in essence a retail product. Therefore, it should not be included in the Reference Offer.

7.2.3 Zain, VIVA and Etisalcom commented that international connectivity services should be included. Infonas however indicated that Cable Landing Stations should be considered as part of the International network, and therefore, should not be under the SE Reference Offer. Although there were diverging views between respondents as to whether international connectivity services should form part of the Draft Amended Reference Offer, it was generally accepted by OLOs that as far as the SE and rest of Batelco is concerned, the holder of the international telecommunications facilities license (IFL) should not be the same entity as the holder of the international telecommunications services license (ISL). The Authority does not take a determinative view at this time on the position of international connectivity. The Authority is proposing to conduct a market review of the entire supply chain for international connectivity later this year. The Authority therefore considers it prudent not to take any action at this stage with regard to the Draft Amended Reference Offer that might pre-judge the outcome of such review.

7.2.4 VIVA and Infonas commented that duct access should be included.

7.2.5 VIVA, Zain, Etisalcom and Infonas commented that the SE should be required to provide passive access products, including dark fibre.

7.2.6 Zain commented that a further backhaul solution for mobile operators should be included.

7.2.7 Infonas commented that the Reference Offer should include SDH and OTN services, services up to 100Gbps and
additional services such as dark fibre and/or duct access to enable Infonas to address specific customer requirements for 100Gbps services as well as services that do not use equipment from non-approved vendors.

The Proposed Product Set

7.3 Rationalisation of product set under the Draft Amended Reference Offer

7.3.1 The initial product set was a result of the draft Reference Offer submitted by the SE. By considering the feedback from stakeholders and benchmarking with wholesale products available to telecommunications service providers in other jurisdictions (i.e., the UK and Ireland as well as other small geographic jurisdictions) the product set has been amended.

7.3.2 In light of the comments received in response to the RO Consultation, the Authority is proposing to rationalise and where possible simplify the product set.

7.3.3 For example, the Authority has proposed merging:

a) WBS, Bitstream and Bitstream Plus into one WBS service based on a technology and market (residential or non-residential) agnostic approach; and

b) WLA and WDC into WDC. The WDC service description now also contains SDH services.

7.4 MBS and DS are currently still addressed separately. This is because the Authority considers, based on the submissions received, that these services have different quality and performance requirements. Whilst OLOs have commented on the requirement to produce a single mobile backhaul service, the Authority has insufficient evidence as to what would be the quality parameters and technical specifications of the single service that would meet the requirements of the OLOs. However, the Authority is continuing to review whether there could be merit in rationalising these services and/or simplifying them by, for example, offering a single active backhaul product but with two different quality of service parameters. Stakeholders are therefore invited to
provide specific comments on whether MBS and DS should be merged or simplified such that there would only be one product at this time, and if so, the proposed price and non-price terms of the new 'merged' or 'simplified' service.

**Treatment of Legacy Products / Services**

7.5 The Authority agrees that WSDSL should not be offered by the SE, but should continue to be offered by BRE.

7.6 The Authority understands that LLCO is available only for legacy customers and will not be made available to new customers. As such the Authority does not consider it is necessary to have a specific service description for LLCO as part of the Draft Amended Reference Offer and indeed notes that such a service description had already been removed from Batelco’s RO currently in force. The SE must continue to provide existing LLCO services that are being provided to legacy customers in line with the terms of the relevant customer agreements.

**Inclusion of New Products / Services Into the Draft Amended Reference Offer**

7.7 The Authority has compared the products and services in the draft Reference Offer with those services available in other similar jurisdictions, as well as the specific requirements of the Kingdom of Bahrain and the OLOs.

7.8 Based on this, as well as the Authority's review of submissions received and further technical analysis, the Authority has also proposed the inclusion of two (2) additional services into the Draft Amended Reference Offer. These services have been proposed to address specific needs and a gap in the SE product portfolio and are designed to meet specific operational and commercial requirements that have been communicated to the Authority by OLOs. The relevant products are:

7.8.1 **Optical Wavelength Access Service (OWS)**

a) The Authority received comments from MNO stakeholders that they required greater capacity services on dedicated fibre with enhanced quality of service levels and ability to manage the service, so as to meet MNOs' backhaul requirements. As noted above, backhaul is the link between an MNO's wireless
radio sites and its core network. The Authority has therefore proposed OWS in response to these comments. As the service is wavelength based, it has a greater available capacity than other active services. As a result, the Authority considers that OWS is likely to be suitable to address the current and foreseeable backhaul needs of MNOs, including development of MNO networks to deliver next generation mobile services (including 5G services); and

7.8.2 Fronthaul Access Service (FAS) for MNOs

a) The Authority received comments from MNO stakeholders that they require a dark fibre service to meet their requirements for fronthaul. As noted above, fronthaul is the link between a mobile baseband unit and a remote radio head. The Authority has therefore proposed FAS in response to these comments. The Authority considers that this service is necessary in order to allow MNOs to develop the architecture of their networks to provide next generation mobile services. In particular, the Authority understands that dark fibre is necessary for fronthaul because of high bandwidth and low latency requirements, as well as it being impractical to host active equipment at micro-sites. The Authority is considering options as to how the FAS could be provided, i.e. either via the SE’s suite of regulated products or through OLOs self-supplying the service.

b) The proposed terms on which this FAS could be offered by the SE are included in the relevant FAS Service Description. MNOs could therefore request the SE to provide the FAS in line with the terms of the relevant Service Description set out in Schedule 6.6 (Fronthaul Access Service (FAS) Service Description) of the Draft
Amended Reference Offer. The Charges (in the form of monthly recurring charges to cover any ongoing operating and maintenance costs and a non-recurring charge to cover upfront capital expenditure, in the event that the FAS is provided by the SE) for the FAS would be agreed on a bespoke case-by-case basis. This is because the Authority understands that the costs of individual FAS links could differ significantly, for example according to the terrain over which links are built and whether links can utilise existing infrastructure. Therefore, the Authority believes it is reasonable, in this instance, for the monthly recurring charges for FAS to be bespoke, subject to a requirement that all such charges are cost based and non-discriminatory. The Authority will also consider approaches to monitor the SE’s adherence to these principles.

c) The Authority is also considering whether MNOs should be permitted to self-provide (i.e., deploy) dark fibre at the MNO’s own cost, using a contractor from a list of SE-approved contractors. In this case, such service would not fall within the Reference Offer but would need to be considered on an exceptions-basis and the Authority’s prior approval sought. The MNO could be required to transfer ownership of the dark fibre to the SE, at a stipulated point in time, and at no cost to the SE.

d) As the MNO would be required to incur the upfront expenditure in deploying these fronthaul links, the Authority considers that it would not be appropriate for the SE to also charge MNOs for either the upfront installation of these links or monthly (annual) recurring rental charges covering the capital costs of the MNOs’ investment. This is because any such charges would
result in the MNOs incurring the costs of this investment twice.

e) The MNOs therefore might, only be required to meet ongoing maintenance costs relating to the dark fibre in question, in the event that the ownership of the dark fibre in question is transferred to the SE which in turn implies that the responsibility for maintenance rests with the SE.

f) The Authority invites stakeholder comments on the proposed FAS Service Description and the Authority’s proposal to enable MNOs to self-provide dark fibre for fronthaul purposes. Under this mechanism, the Authority is particularly interested in MNOs’ views on proposed mechanisms and timeframes for transfer of the fibre access links to the SE, whether this should also include transfer of the related duct, and whether the responsibility for maintaining and repairing the fibre access links should rest with the SE (and if so, the cost and charging implications for this position) and/or remain with the MNO that deployed the relevant dark fibre access link.

7.9 In addition, in response to comments regarding compliant equipment, the Authority has proposed wording in the MBS, WDC and DS Service Descriptions to ensure that the SE cannot mandate a single vendor-specific solution, which for specific reasons (including foreign state national security requirements) cannot be approved by the end customer, but that Licensed Operators will be able to choose CPEs from a range of multiple approved vendors (i.e., a multi-vendor solution).

7.10 The Draft RO Order provides that the Authority may require the SE to supply particular customers with bespoke services on an exceptional basis, in order to meet the needs of specific policy requirements. The supply of such services shall be subject to prior approval from the Minister.
Fitness for Purpose of Revised Product Set Under the Draft Amended Reference Offer

7.11 The Authority has considered carefully the comments received in response to the RO Consultation that the SE should be required to offer a dark fibre product for backhaul. However, based on operators’ responses and its own further consideration of this issue, the Authority understands that FAS and OWS should be sufficient to address operators’ needs for the foreseeable future, including in relation to next generation mobile services. Accordingly, the Authority has not proposed the inclusion of a dark fibre product for backhaul at this stage.

7.12 However, as noted in the RO Consultation, the Authority proposes to conduct a review of the Reference Offer within the first eighteen (18) months of its publication. As part of the Authority’s review, the Authority will consider, among other matters, whether the SE should be required to make dark fibre available for backhaul. In so doing the Authority would take into account the technical requirements of Licensed Operators, based on recognised industry standards, the state of provision of the SE’s active service portfolio and any comparative active products. The Authority would also be in a position to develop pricing terms for such a service (if required), taking into account the performance of the SE and the take up of its existing product set. At the same time, the Authority will consider more generally whether the product set has proved sufficient and, if not, whether there is a need for additional products and services or other remedial measures to be introduced.

International Connectivity

7.13 The Authority has reviewed the comments provided by stakeholders concerning international connectivity and specifically which entity within the Batelco group should hold the relevant IFL. The Authority considers that, at least at this point in time, the overwhelming preference of OLOs is that the IFL should remain with BRE, rather than the SE. The Authority is proposing to commence a market review of the entire supply chain for international connectivity later this year. The Authority considers it prudent not to take any action at this stage that might pre-judge the outcome of such review. However, the Authority wishes to clarify that, unless determined otherwise, access to International Cable Landing Stations and the cross-connect within the Cable Landing
Station will have to be provided by the SE as the entity operating the fixed public telecommunications network.

**Timeframes and Processes to Deliver ‘Full’ EOI**

7.14 In the RO Consultation, the Authority noted it was aware that it was likely to take the Separated Entity up to two (2) years to be able to provide all NBN wholesale services on a true EOI basis, but that the SE was required to start working immediately towards full EOI and to achieve this by the end of Quarter 1, 2021. Until such time, the Authority proposed that the SE would provide the wholesale products and services on an equivalence of outputs ("EEO") basis.

7.15 The Authority invited views on this proposed approach to EOI, as well as the non-price terms of the Reference Offer more generally, including appropriate service levels.

**The Views of the Consultation Respondents**

7.16 The main comments from respondents were as follows:

a) BRE considered that the two (2) year period for achieving EOI should be a minimum period.

b) SE commented that an unduly tight timetable could be counter-productive, in light of the difficulties it considered were involved in this transition.

c) VIVA and Zain considered that EOI should be delivered sooner than two (2) years. Zain argued that as a minimum, equivalent processes should be provided by the SE for ordering, fault management and access to infrastructure information from the outset.

d) BRE considered that the non-price terms should be simplified.

e) VIVA and Zain did not consider that the non-price terms were fit for purpose, nor met the reasonable requirements of operators.
f) VIVA, Zain, Etisalcom and Infonas all raised concerns regarding the proposed KPIs, SLAs and Service Credits available to Operators, as well as the monitoring tools for each product. Each of the Operators requested that the current proposals be improved, and that the penalties available against the SE for non-compliance should be strengthened. Zain requested punitive penalties.

g) A number of respondents had specific comments on the envisaged mechanism for providing forecasts to the SE. BRE (Batelco) for example, proposed that the frequency of non-binding forecasts should be extended from one (1) month to six (6) months. VIVA proposed removing entirely the linkage between forecasting and payment of Service Credits.

7.17 Section 5.4 of the Draft Amended SE License requires the SE to deliver the Licensed Services on an EOI basis, unless otherwise determined by the Authority. Section 5.4 also provides that, during the initial two (2) year period and absent providing certain services on an EOI basis, the SE will in any event be required to provide the Licensed Services on an EOO basis.

7.18 However, the Authority also recognises that there will be benefits in prioritising the implementation of EOI on a service basis as well as potentially on an individual process basis. Therefore, in relation to each service the Authority proposes to take a stepped approach to ensuring EOI is achieved, which would include the following steps:
The Authority considers that the successful implementation of EOI by the SE will require the completion of a review of the systems and processes that the SE has in place to meet EOI milestones.

The Authority recognises that the move to EOI for each service is an integral element to the SE achieving the objectives of NTP4. As such, the Authority has included in the Draft RO Order provisions that would allow the Authority the right to appoint an independent auditor, to conduct an audit of the SE’s systems and processes and produce an audit report within six (6) months from the date of the Reference Offer Order. The costs of the auditor would be borne by the SE.

The Authority has proposed, on an individual service-by-service basis in the Draft RO Order, the following timeframes for full EOI that would apply from the date of the completion of the requisite systems audit:

- **7.21.1** WBS: within nine (9) months;
- **7.21.2** WDC: within twelve (12) months;
- **7.21.3** MBS and DS: within eighteen (18) months;
- **7.21.4** OWS and FAS: within two (2) years.
7.22 In deciding the relevant timeframe for achieving EOI for each service, the Authority has adopted the following approach to prioritisation: (i) mass market consumer focused products; followed by (ii) connectivity products and services that meet the reasonable requirements of the operator / enterprise market; and finally (iii) those products and services that are specifically operator focused.

7.23 Any request by the SE to amend the above timeframes must be supported by evidence and will require the Authority’s prior written approval. The Authority may consult on any request for an amendment to the above timeframe, if the Authority deems this appropriate.

7.24 In addition to the above, the Authority proposes that the SE be required to focus on a number of measures to support EOI across all of the products and services by implementing the following measures, as from the date of the final Reference Offer Order:

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<thead>
<tr>
<th>Process activity</th>
<th>Timeframe</th>
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<tbody>
<tr>
<td>Portal for the automated handover of Service Requests, including updates and completion notifications</td>
<td>6 months</td>
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<tr>
<td>Portal for the automated handover of Fault reports, including updates and Fault clear notifications</td>
<td>6 months</td>
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<tr>
<td>Access to engineering appointment books</td>
<td>6 months</td>
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<td>Access to address matching process / system</td>
<td>6 months</td>
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<tr>
<td>Access to digital network availability information (by address / customer)</td>
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7.25 Stakeholders will also be aware that the Authority has proposed in the second public consultation on the draft SE License (LAD/0219/055) published on 28 February 2019 and specifically in section 4.11 and 4.12 of the Draft Amended SE License, timeframes for the logical and physical separation of the SE’s Management Information Systems, Business Support Systems and Operational Support Systems.

7.26 The Authority considers it is important for the SE to ensure that the same online portal is available to all parties who wish to take services from the SE. The Authority has proposed in section 5.4 of the Draft Amended SE License that a single common interface for Licensed Operators (i.e., such that OLOs and BRE would have access to the same system) to order and track the progress of orders should be made available from day one.

7.27 As noted above in paragraph 7.27, the Authority has incorporated in the Draft RO Order specific interim milestones in relation to the SE’s systems to support EOI. These milestones should not be seen as exhaustive and there will be flexibility to amend the timelines where necessary.

7.28 In addition the Authority has proposed making provision in the Draft RO Order for the Authority to be able to mandate that the SE builds new systems (or purchases a new solution), rather than remediating existing systems if it considers such necessary following a review of the SE’s existing systems. This is because building or procuring a new system may result in the SE achieving EOI in a shorter timeframe and at a lower cost than upgrading existing systems. Whilst the Authority makes no prejudgment as to the necessity of mandating such a step at this time, the Authority believes that the reservation of such a power under the Draft RO Order is a prudent and appropriate step.

Technical and Operational Matters

7.29 As regards the other non-price terms:

7.29.1 Service Levels

a) The Authority notes that a new Service Levels Schedule has been introduced into the draft Reference Offer. The Service Levels in this Schedule will apply to all Licensed
Operators, meaning that the same Service Levels apply to OLOs and to BRE.

b) The Authority has also proposed a series of KPIs relating to the Service Levels described non-exhaustively in Schedule 7 - Service Levels of the Draft Amended Reference Offer. The Authority does not propose, at this time, that failure to achieve these KPIs by the SE would result in any penalties, as a remedy to penalise the SE for poor levels of service is already available under the Service Levels / Service Credits regime. As such, the Authority does not believe that additional penalties for failure to meet KPIs would be productive at the early stages of the SE’s development. However, the KPI model is useful to start collating data on the SE’s performance and then, in due course, the Authority can consider further how best to enforce the KPIs and whether a financial penalty regime would be appropriate.

7.30 The proposed Service Level timelines and Penalties have been constructed based on four inputs:

7.30.1 the starting point of the draft Reference Offer proposed by the SE;

7.30.2 comments received from stakeholders to the proposed draft Reference Offer;

7.30.3 consideration of potential industry benchmarks and international experience; and

7.30.4 consideration of appropriate measures for the Kingdom of Bahrain.

7.31 An initial assessment of the proposed draft Reference Offer Service Levels and Penalties led to an opinion that whilst there were Service Levels and Penalties in place these were not sufficient to incentivise the SE to deliver an appropriate level
of service to OLOs. This opinion was supported by the feedback received from other stakeholders. An example of where the penalties were not supportive of the Service Level framework was in the fact that they were capped to a maximum limit.

7.32 By taking into account comments received from stakeholders as well as considering other jurisdictions where separation had occurred (i.e., UK and Ireland as well as other jurisdictions) a number of improvements were proposed.

7.33 It is important to consider Service Levels and Penalties that are appropriate to the current 'maturity' of the market in the Kingdom of Bahrain. When analysed against Ireland and the UK where there has been a relatively competitive retail market based on a regulated wholesale market it was not considered appropriate to apply Service Levels and Penalties aligned to these jurisdictions, where the level of competition at the retail level is thought to be more pronounced.

7.34 In the UK and specifically as regards the UK regulator's (Ofcom's) Business Connectivity Market Review (BCMR) Consultation Document, Ofcom was consulting on changes which included BT no longer being required to: (a) obtain consent from the telecoms provider to set a Contractual Delivery Date (CDD) of greater than fifty-seven (57) days; (b) pay compensation at one hundred percent (100%) of one (1) month’s line rental per day up to sixty (60) days per orders not delivered by the CDD or the Customer Requirements Date (whichever is later); and (c) pay compensation at fifteen percent (15%) of one (1) month's line rental per hour up to two hundred (200) hours for faults not repaired within five (5) hours.

7.35 The setting of Service Level Penalties should be an incentive and not punitive. Until there is a baseline of performance set against which performance targets and Penalties can be adjusted, then the Authority considers it would not be appropriate to set Service Levels at a level not achievable by the SE. The UK market structure had been in place for a period of time before this situation was being consulted upon.

7.36 Under the Authority's review, Service Levels were proposed to ensure that more measures were applied to the key processes of provision and maintenance as well as an increase in Penalties whilst in addition removing the Penalty cap. This should provide an increased incentive to the SE to deliver services to the OLOs. Some stakeholders who replied to the RO Consultation requested an increase in process
steps where Service Levels and Penalties would be applied. In the early stages of the development of these Services, where new processes are being developed and where the EOI framework is not implemented, it could be considered that a detailed Service Level and Penalty framework would create a considerable burden on the SE and could distract from the key objective of the ‘on time’ delivery and repair of Services. Therefore at this point in time, a limited set of key Service Levels and associated Penalties has been applied with the aim of incentivising the SE to deliver an appropriate service to the OLOs.

7.37 In addition, consideration was given to the implementation of KPIs. Similar jurisdictions have a sophisticated KPI framework (e.g., Ireland). The use of continual monitoring of KPIs as well as a developed Service Level framework allows for improvement plans to be developed and implemented by either the SE, or if necessary, the Authority. An initial proposal for KPI is included in the Amended Draft Reference Offer and is subject to consultation.

**Industry Forum**

7.38 The development and implementation of successful wholesale products and services is reliant on detailed design of processes and procedures as well as a clearly defined technical manual. The operations and maintenance manual sets out how the SE (the Access Provider) and Licensed Operators (the Access Seekers) will work together in detailed and defined processes with specific regards to the interfaces in the processes between the parties.

7.39 These details are commonly set out in a document, which under Batelco’s existing wholesale reference offer, is referred to as the Joint Working Manual. Good practice is for these processes, interfaces and technical requirements to be developed with co-operation between the SE and all Licensed Operators in an industry forum (“Industry Forum”). It is the Industry Forum where these discussions take place and the Forum is responsible for the agreement of the processes and technical specifications.

7.40 The Authority has therefore proposed a mandatory requirement in the Draft RO Order for the SE to establish an Industry Forum that will enable, among other items, Licensed Operators to discuss their needs and requirements, including technical
requirements with the SE at regular intervals. The Authority would be entitled to appoint the Chairperson of the Industry Forum and the SE would be required to comply with the reasonable instructions of the Chairperson in accordance with the Chairperson's pre-determined role and responsibilities. The Authority wishes to make it clear that the Chairperson's role is not to replace or overrule SE’s management but to facilitate the fair consideration of OLO reasonable requirements.

7.41 For the Industry Forum to be effective, the Authority proposed that the below terms of reference should apply:

7.41.1 **Scope**: the scope of the Industry Forum would be limited to technical and procedural matters regarding regulated wholesale access products and services (i.e. technical configurations and wholesale processes). However, the Industry Forum should not provide a platform to discuss issues that may arise for a specific wholesale Connection (e.g. fault impacting a given Bitstream Connection at a specific customer location). In other words, only the general terms (technical or procedural terms) applicable to regulated products and services should be discussed during meetings of the Industry Forum, not specific situations.

7.41.2 **Governance and participation**: the Authority would be authorized to appoint the Chairperson for the Industry Forum and own the agenda of Industry Forum meetings. The SE and all interested Licensed Operators should be able to participate in the Industry Forum meetings. Where relevant and appropriate, the Chairperson may propose to restrict the participation to an Industry Forum meeting to a limited number of Licensed Operators and/or participants per Operator.

7.41.3 **Periodicity and location**: the Industry Forum will meet on a regular basis and the Authority anticipates that meetings would be at least monthly. The Authority proposes that
Industry Forum meetings will be held at the Authority's premises.

7.41.4 **Documentation:** minutes of Industry Forum meetings will be taken by the Chairperson. In addition to forwarding meeting minutes to Industry Forum participants, the Chairperson will forward minutes to the Authority. The Authority reserves the right to publish such minutes on its website, if deemed appropriate.

7.41.5 The Authority anticipates that the first Industry Forum meeting would cover the following agenda items:

a) Presentation of the Industry Forum's terms of reference; and;

b) Discussions regarding SE's implementation of the price and non-price terms included in the final Reference Offer Order, and development of the Joint Working Manual.

7.42 The Authority invites specific stakeholder comments on the proposed composition of the Industry Forum, its functions, obligations and remit, as well as proposed processes for operational matters (including frequency of meetings) and any proposed measures concerning transparency and/or reporting.

**Forecasting**

7.43 The Draft Amended Reference Offer has the following five quarter forecasting process documented in the Forecasting Schedule at Schedule 5 of the Draft Amended Reference Offer. The Authority would welcome feedback on the proposed forecasting process and, in particular, whether forecasts should be binding on Licensed Operators and (if so) whether inaccurate forecasting should be penalised by way of financial (or other) penalty.
7.44 The Authority is considering issues relating to the availability of Service Credits and the general approach to penalties where the SE fails to meet its obligations. In particular, the Authority is considering comments regarding the availability of damages and/or consequential losses, in addition to remedies under the Reference Offer. It needs to be ensured that any such regime is in accordance with the laws of Bahrain. The Authority welcomes the views of stakeholders in relation to the proposals set out in the Draft RO Order in this regard.

7.45 The Authority has amended the Schedules to the Draft Amended Reference Offer to take into account issues raised in relation to a number of matters including: (i) the ordering of new services; (ii) consistency across the Supply Terms, the Service specific schedules and the Service Level Schedule (iii) the SE’s ability to unilaterally suspend / terminate services; (iv) the approach to billing disputes, the general distinction between billing and other disputes and mechanisms for dispute resolution; (v) removing references to Interconnection (as this will not be relevant to the SE); and (vi) aligning definitions with the Draft Amended SE License and other relevant documents.
7.46 The SE submitted a version of the Supply Terms that were included in the RO Consultation, which made minimal changes to the existing Supply Terms included in Batelco Wholesale’s current RO. The RO Consultation did not include specific questions concerning the Supply Terms submitted, but did ask stakeholders to comment on whether they considered that the non-price terms set out in the Schedules to the draft RO, including supply terms and definitions, are fit for purpose and meet the reasonable requirements of Licensed Operators.

7.47 The SE did not submit a Schedule relating to Main Body Terms. The Authority has therefore had regard to the existing Main Body Terms included in Batelco Wholesale’s current RO and suggested amendments to those Main Body Terms.

7.48 Having now conducted its own review of the Supply Terms submitted, and of the Main Body Terms on Batelco Wholesale’s website regarding its current RO, the Authority considers that a number of changes may be required to these documents to ensure they are updated, fit for purpose and reflect the new industry structure of the SE. These changes are discussed in further detail below.

**Main Body Terms**

7.49 Changes have been proposed to reflect the underlying legal basis to remove references to Article 57 of the Law, as well as to reflect the relevant provisions in the Law and section 4.9 of the draft Amended SE License. References to "Regulated" Services have been removed as such term is superfluous. This is because the SE’s Services under the Reference Offer will all be regulated.

7.50 The structure of the document has been simplified and updated to reflect the position in the Schedules of the Draft Amended Reference Offer. Where possible and where the subject matter is dealt with in a Schedule of the Reference Offer, detailed provisions have been deleted from the text of the Main Body Terms. This is intended to aid readability of the document and mitigate the risk of inadvertent inconsistencies between the Main Body Terms and the relevant Schedule.

7.51 The provisions on amendment and variation indicate that the SE shall not be entitled to amend or vary any of the terms of the Reference Offer without the Authority’s prior written approval.
Supply Terms

7.52 The structure of the document has been simplified and updated to reflect the position in the Schedules of the Draft Amended Reference Offer. Where possible and where the subject matter is dealt with in a Schedule of the Reference Offer, detailed provisions have been deleted from the text of the Supply Terms. This is intended to aid readability of the document and mitigate the risk of inadvertent inconsistencies between the Supply Terms and the relevant Schedule.

7.53 Amendments have been made to remove references throughout the document to provision of "Interconnection". The SE will not be providing interconnection services under the Reference Offer.

7.54 Amendments have been made to reflect provisions in the draft Amended SE License concerning independence of the SE from BRE and the rest of the Batelco Group. For example, clarifications have been made to the provisions on confidentiality to prevent SE from sharing information provided by Licensed Operators with BRE.

7.55 Definitions concerning Force Majeure have been aligned with the proposed definition of this term under the draft Amended SE License.

7.56 Amendments have been made to a number of clauses to better align them with the provisions in the relevant Service Descriptions and Schedules, such as forecasting provisions, billing provisions, new service requests and Quality of Service requirements.

7.57 The Authority is proposing amendments to clause 8 regarding the parties' responsibility for Equipment deployed by the SE within the Licensed Operator's premises. The draft Supply Terms submitted by the SE indicated that where the SE's Equipment is no longer needed the Licensed Operator would be required to remove the Equipment and return it to the SE. In addition, the Licensed Operator would be liable for any damage caused to the Equipment while in its possession. The Authority is proposing that rather than liability resting with the Licensed Operator, the SE should be responsible for removing its own Equipment.

7.58 The Authority is considering and reviewing generally the proposed apportionment of liability under the Supply Terms between the SE and Licensed Operators.
7.59 The Authority is particularly interested in stakeholder views concerning the current apportionment of liability between SE and Licensed Operators. This includes also the requirement on Licensed Operators to provide Security to the SE and/or put in place (and maintain) stipulated levels of public liability and property insurance (as set out in clause 19 and clause 16 respectively of the Supply Terms).

7.60 The Authority has reviewed the circumstances in which the SE may suspend and/or terminate all or part of the Services and has made a number of proposed amendments to these clauses to better align them with the revised Service Descriptions in the Draft Amended Reference Offer. The Authority has sought to remove instances where the right to suspend/terminate Services is solely at the discretion of the SE, and instead ensure that any such rights are based on objective quantifiable criteria.

7.61 The Authority invites comments from stakeholders concerning the proposed amendments to suspension and/or termination. This includes for example, what rights SE should have to suspend or terminate (a) specific Services; (b) all of the Services (including possibly other unrelated services to the specific Service Description in question); and the appropriate circumstances for this.

7.62 The Authority has suggested removing the provisions in clause 22 (previously clause 24 of the Supply Terms submitted as part of the Draft RO) regarding the treatment of Billing Disputes (as distinct from disputes of a general nature) as billing matters are proposed to be dealt with in Schedule 4 of the Draft Amended Reference Offer.

**Joint working manual**

7.63 The Authority notes that a Joint Working Manual has not yet been produced by the SE and so is not included in this consultation. However, the Authority has included a specific requirement in the Draft RO Order for the SE to submit a Joint Working Manual for the Authority's approval, which must provide technical and operational information in relation to the SE's supply of the services under the Reference Offer. The Authority envisages that the SE will produce this Manual within the framework of the Industry Forum and in consultation with Licensed Operators, shortly after launch. The Draft RO Order proposes that the Joint Working Manual should be submitted to the Authority within three (3) months from the date of publication of the Reference Offer. It is also expected that there will be additional documentation, such as the relevant fault
management process, template order forms, which may need to be developed under the auspices of the Industry Forum.

8 PRICE TERMS

Introduction

8.1 The SE submitted its Draft RO on December 13, 2018. Schedule 3 of the Draft RO ("Price Schedule") included the prices proposed by the SE. On December 20, 2018, the Authority published the RO Consultation on its website.

8.2 Alongside the Draft RO, the SE\textsuperscript{10} also submitted an interim business case for its business, showing a forecast of its costs and revenues (and hence returns) over the period up to and including 2023. The Authority had also previously received a draft of the business case which the SE had presented to it in November 2018. Therefore, alongside the business case, the SE also submitted its response to a number of questions the Authority had previously raised and a letter setting out its views on the implications of its business case for the Draft RO price schedule.

8.3 In reviewing the proposed price schedule, the Authority has, therefore, continued to review the SE business case. This is because understanding the SE business case is critical to understanding whether the tariff set proposed by the SE is appropriate and consistent with the principles set out by the Authority in the consultation and in particular, with ensuring the financial viability of the SE. To this end, the Authority issued a set of further clarification questions to the SE on January 08, 2019, and discussed these with the SE during a meeting on January 16, 2019. The SE then submitted, to the Authority on January 24, 2019, its written response to the RO Consultation. It then also submitted, on February 13, its written responses to the Authority’s questions of January 08, 2019, alongside new information and views from the SE concerning the business case model.

8.4 Alongside these submissions from the SE, the Authority notes that BRE, VIVA, Zain, Etisalcom and Infonas have also submitted responses to the Authority’s RO Consultation, setting out views, and in some cases, alternative evidence on the

\textsuperscript{10} Please note that references to the "SE" should be read to refer to the relevant entities within Batelco that will form the intended SE, as context requires.
appropriate price levels for the services listed in the Draft RO. These Licensees also presented their views to the Authority, including on pricing matters, during a series of meetings held over the weeks of January 6 and January 13, 2019.

8.5 In the remainder of this section, the Authority summarises the views of the RO Consultation respondents on the price terms proposed by the SE. It then describes the principles it has applied when determining the price terms for the Draft RO Order product set and sets out the role of the SE’s business model in the Authority’s review. Finally, the Authority sets out its consideration of the appropriate price terms for each product.

The Views of the Parties

8.6 In the relevant sections in its consultation report on the Draft RO Consultation, the Authority has described in detail the points raised by respondents. It does not, therefore, repeat these comments here but rather, provides only a summary of the key points made by the respondents, as further context for the remainder of this section.

8.7 With the exception of BRE and the SE, the Authority notes that the respondents raised a number of concerns with regard to the price terms proposed by the SE, with there being general agreement among the other respondents (i.e. excluding BRE and the SE) that the proposed price terms are excessive and do not reflect the principles outlined by the Authority in the RO Consultation.

8.8 Specifically, Zain argues that the prices for SE services used as a direct input into retail businesses should be set at cost, in order to avoid excessive prices having a direct and deleterious impact on retail consumers. It includes mobile backhaul services (and international cross connect services, were they to be provided by the SE) in this category. It then argues that products that are closer to resale, such as WDC and bitstream services, should be offered with a "return margin".

8.9 It is not fully clear to the Authority what Zain meant by reference to a "return margin". However, it was subsequently confirmed by Zain, during its interaction with the Authority, that this did indeed mean setting prices to ensure that downstream providers have sufficient margin. Again, verbally during the workshops with the Authority, Zain set out its belief that prices for mobile backhaul circuits should be reduced by 30% from
the DS prices included in the Draft RO, while Zain also submitted a proposal to the Authority for the pricing of the OWS.

8.10 VIVA provided benchmark information in its response to the proposed SE pricing terms, again to illustrate its view that the price terms proposed by the SE are not in line with the principles applied by the Authority or international benchmarks. For example, according to VIVA’s benchmarks, the SE’s proposed price for the 100Mbps residential bitstream service, is between four (4) and ten (10) times greater than charges set elsewhere. Similarly, it argues that the price proposed by the SE for its 1Gbps DS is between two (2) and four (4) times greater than elsewhere, with significant differences also in the proposed pricing of the 10Gbps DS. Finally, VIVA also provides a comparison of the proposed prices for the WLA / WDC services to the total costs of ownership of microwave P2P links, showing that the cost of the wireline services will be significantly above that of microwave links. To move forward, VIVA therefore proposes that the Authority must undertake its own international benchmarking study in order to determine the appropriate level of charges. This is because, according to VIVA, the Law requires the access charges to be based on either forward looking incremental costs or the results of a benchmark study.\textsuperscript{11}

8.11 Etisalcom stated that it believes the prices proposed by the SE are out of line (i.e., above) those seen internationally. To illustrate its point, it provides a comparison of retail fibre broadband prices elsewhere in the GCC (excluding Kuwait) with the proposed bitstream prices put forward by the SE. Based on this comparison, Etisalcom recommends that the SE’s bitstream prices should be reduced.

8.12 Finally, Infonas noted that the proposed prices are similar to those in Batelco’s existing RO which, it believes, “contradicts the main goal of NBN”.

8.13 In contrast, the BRE stated that it believes the prices proposed by the SE in the Draft RO reflect the principles set out by the Authority in its consultation.

8.14 In its response, the SE did not comment directly on the prices it has proposed. Rather, it referred to uncertainties in the business case for the SE and its continuing

\textsuperscript{11} The Authority has responded to this point in the Consultation Report and does not repeat this response here.
commitment to, "move [this] forward" and, over time to, "have a better view on pricing in the RO".

8.15 In separate correspondence, however, specifically its letters of December 13, 2018, and February 13, 2019, the SE set out that, while it accepted that the business case models shows the SE is financially viable, it did not believe that the business case model shows scope for price reductions compared to the price terms set out in the Draft RO, given the range of uncertainties it considers are not captured fully by the business case model.

**Principles Applied In the Review**

8.16 Given the responses to the RO Consultation and as set out in the Consultation Report attached at Annex 3, the Authority continues to believe that the four principles it set out (and which are based on the principles set out in Figure 5 of the Authority’s Report on the New Telecommunications Economic Regulatory Framework for the Kingdom of Bahrain) are the most appropriate principles to apply when determining the price terms for RO services\(^\text{12}\).

8.17 These principles are that the RO should:

(a) Support the delivery of the NBN;

(b) Promote efficiency in the supply of telecommunications products and services in the telecommunications market in Bahrain;

(c) Promote service-based competition in the telecommunications market that is fair, effective and sustainable; and

(d) Promote efficient investment and hence support the development of a sustainable, future-proof network.

8.18 In practice, however, the Authority considers that with regards to the RO price terms these principles mean that the SE must be able, when operating reasonably efficiently, to earn a reasonable return, taking into account its cost of capital, as a separate legal entity. This is because this is necessary to support the delivery of the NBN, promote

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\(^{12}\) Ref MCD/02/18/005.
efficient investment and hence support the development of a sustainable, future-proof network and to promote efficiency in the supply of telecommunications products and services.

8.19 At the same time, the SE’s prices must support fair, effective and sustainable, downstream competition. This means that the prices for the SE’s product set must enable downstream operators other than the BRE, to match and profitably compete against, prevailing retail prices today, thus, in turn, stimulating demand for the SE’s services and again, ensuring efficiency in the supply of telecommunications products and services to end-customers. Furthermore, such prices should also support investment at all levels of the value chain, including, for example, in promoting efficient investment in high speed mobile networks, so ensuring the efficient and effective delivery of those services also.

8.20 The Authority is satisfied that these core principles: ensuring that the SE has the opportunity to earn a reasonable rate of return and that prices must support fair, effective and sustainable competition, are both widely accepted in the context of economic regulation where multiple players compete to provide services over a single infrastructure and where one downstream player has common ownership with the network provider. Indeed, such principles should apply regardless of any model of separation that may be applied by a regulatory authority.\(^{13}\)

8.21 The Authority is also aware, however, that these principles can provide a wide range for potentially appropriate SE price terms. This is because a price based purely on ensuring that other downstream providers are able to compete with the BRE could in some circumstances still leave the SE with a very significant return above the cost of capital, while prices set to reduce that return closer to the cost of capital could create very significant margins in retail markets and lead to intense, but potentially unsustainable, levels of competition, particularly if there is uncertainty over future trends in wholesale prices.

\(^{13}\) A possible exception to this could be full structural separation, whereby the network business no longer has any ownership stake in a downstream business, meaning in this case a regulator does not need to consider the possibility of margin squeeze. However, during the process of such separation, a regulator may still wish to ensure that wholesale prices are set in a manner which is consistent with prevailing retail prices.
8.22 Furthermore, the Authority also recognises that the introduction of the RO is one of the first steps in the creation of a new regulatory regime for the telecommunication sector in the Kingdom, involving the legal separation of Batelco into two separate companies. It is in the interests of all stakeholders, including most importantly, consumers, that the SE is successful: that is, it is able to meet the fibre roll out targets set out in NTP4 (and any further future targets which may be imposed) and provide a product set which meets the reasonable demands of OLOs and enables Bahrain’s telecommunications sector to be at the forefront of the Kingdom’s economic development. Crucially, this depends on the long term financial sustainability of the SE.

8.23 Currently, the Authority recognises there are a number of uncertainties in the business case model which it does not believe are adequately reflected in the cost of capital on which that business case model has been derived. For example, these relate to both the long term demand for the SE’s services (which will be driven by consumer demand for fibre services and the roll out of 5G) and the costs the SE will incur to complete the “operational” aspects of separation and ensure all services are provided on an EOI basis.

8.24 Therefore, the Authority considers it is appropriate and in line with the principles it has set out in the RO Consultation and above, to allow the SE the possibility to earn a return above cost of capital in the short term. That is, it does not propose to set any of the RO prices at cost oriented levels. This reflects the uncertainties described above and the asymmetric risks to the market of the SE failing (i.e., that the failure of the SE would cause very great harm to all parties, while the SE succeeding while earning a return, in the short term, above its cost of capital, would cause more limited harm). This also reflects the Authority’s desire not to undermine the stability of the SE business case by requiring more significant price reductions now which could subsequently have to be reversed, if the SE’s business case model proves to be more challenging than that currently assumed in its business case model. Indeed, the Authority believes it is important, for all parties to be able to plan investments effectively, that prices follow a steady trend – reducing prices now, only to have to increase prices at the time of the next RO review (in no more than eighteen (18) months’ time) would not provide the stability that all parties require and would ultimately damage investment prospects in the sector.
8.25 Given these principles, the Authority realises that, from the point of view of economic principle or benchmarks, there is no "a priori" correct amount of profit headroom (i.e., excess profit) to allow the SE over the period in which the RO is in force. Rather, the Authority is required to make a judgement, taking into account all the available evidence presented by the parties, including the extent of possible uncertainties in the SE business case model.

8.26 The RO product set and the role of the SE business case model in determining appropriate price terms

8.27 The Authority has set out its view in the Draft RO Order on the product set that shall be included in the RO. This covers both the simplification of the product set proposed by the SE (covering those products which were previously either part of the Batelco RO or launched by Batelco under the STM) and the inclusion of new products. In determining appropriate price terms the Authority has, where possible, made use of the SE business case model. However, that business case model does not consider the possible impact of the RO also including those new products which the Authority requires the SE to now offer.

8.28 Therefore, for products which the Authority proposes should be added now to the RO, the Authority has conducted other analyses to determine appropriate price terms. This is because these products are not covered by the business case model and it would not be straightforward to amend the model to incorporate these. However, in all cases the Authority has also had regard to how the introduction of the new products, at the price levels proposed, could affect the business case model and the viability of the SE.

9 REVIEW OF THE SE’S REFERENCE OFFER

The Authority intends to conduct a review of the SE’s Reference Offer within eighteen (18) months of the effective date of the published Reference Offer Order.

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