Response to consultation – Draft Order issued by the Telecommunications Regulatory Authority on the Reference Offer of the Bahrain Telecommunications Company B.S.C, 15 December 2015 (ref: MCD/12/15/092)

<table>
<thead>
<tr>
<th>RESPONDENT</th>
<th>Zain Bahrain BSC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expert, Regulatory &amp; Interconnection</td>
<td>Mohamed Yusuf</td>
</tr>
<tr>
<td>Building No. 662, Road No. 2811, Al- Seef District, Block 428</td>
<td></td>
</tr>
<tr>
<td>P.O. Box 266, Kingdom of Bahrain</td>
<td></td>
</tr>
<tr>
<td>Telephone: 3603 1515</td>
<td></td>
</tr>
<tr>
<td>Mobile: 3603 0515</td>
<td></td>
</tr>
<tr>
<td>Email address: <a href="mailto:mohamed.yusuf@bh.zain.com">mohamed.yusuf@bh.zain.com</a></td>
<td></td>
</tr>
</tbody>
</table>

Public Version

18/02/2016

RI/1602/026
Q1. Please provide any comments you may have in relation to the Authority’s premise of fair, reasonable and non-discriminatory terms, conditions and tariffs for regulated RO products and services.

Comment (SUBMISSION STAGE):
Zain agrees with the Authority that access tariffs to be fair and reasonable if such tariffs are based on relevant, efficiently incurred economic costs calculated on a forward-looking incremental basis, including the regulated rate of return on capital employed.

While Zain is in agreement with method the Authority utilized using costing information provided in Batelco’s 2012, 2013 and 2014 regulatory accounts, benchmark information, in combination with information provided by Bottom-Up (‘BU’) costing model, however with the lack of transparency on Batelco's costing elements of either network technologies, Zain is not in a position to comment if the network element costs are realistic and reflecting the industry available prices. Therefore, Zain request the Authority to provide assurances that aforementioned concerns has been addressed in the RO tariffs review.

With regards to Paragraph 29 of the consultation, Zain is fine with proposed approach of looking at whether retail services can be replicated by OLOs which rely on wholesale regulated products and remain profitable, thereby ensuring that tariffs are compatible with the development of sustainable and effective competition, nevertheless Zain view that such relation based should not be based in Per Se margins achieved. Rather it should be looked at from cost plus perspective. In other words, for example if Batelco’s cost at upstream is at A and it is offering at downstream at B = A * (1+80%), then offering a wholesale product to OLO’s at C = A * (1+60%) forbids the OLO’s to enjoy from higher margins that Batelco enjoys, assuming that OLO could sell the same service at equal or less retail price (OLO’s are constrained by Batelco’s retail offering). This is in order to ensure a sustainable and effective competition.

Q2. Do you agree with the Authority’s proposed general amendments to be made to Batelco’s RO? Please explain your position. If you disagree, please propose an alternative.

Comment (SUBMISSION STAGE):
Zain agrees with the Authority's proposed general amendments to be made to Batelco’s RO. The proposed amendments are in-par with transparency objective the Authority ensuring following this draft RO order. In the current RO, Zain is suffering from the ambiguity of changes took place in Batelco’s RO without a proper register of these changes and which service is regulated and which is not. Thus, the proposed amendments will neutralize this ambiguity.

Q3. Do you agree with the Authority’s proposal to mandate the introduction of Service Levels for the Wholesale Data Connection and the Bitstream products and services? Please explain and justify your position.

Comment (SUBMISSION STAGE):
Zain strongly agree with Authority’s proposal to mandate the introduction of Service Levels for the Wholesale Data Connection and the Bitstream products and services. As advised in the consultation, the lack of Service Levels was always a concern and we believe it is a prerequisite to have a fair playing ground and effective competition in the relevant downstream retail markets.

Absent the Service Levels, Zain could not have a reliable solution that can be cascaded to the retail customers (enterprise), nor a dependable connectivity for its own use. Therefore, Zain view that the introduction of Service Levels for the Wholesale Data Connection and the Bitstream products and services is a must.
Q4. Do you agree with the Authority’s proposed definition and description of the service request process? Please explain and justify your position.

Comment (SUBMISSION STAGE):

The history with Batelco is full of cases of improper and poor communications and commitment when it comes to Service Request and Service Delivery. In many cases Zain has faced tangible delays of acknowledging requests, providing feedback, arranging with other units within Batelco … etc. Leading to unpleasant experience of using Batelco as service provider. Nevertheless it is a mandated choice, as Batelco being the only Licensee with regulated services purpose of providing these products at an equal and fair competition levels.

Zain generally agree with the proposed definition and description of the service request process. However, Zain is of the view that:

i- The lack of Penalties for Service Request Acknowledgment makes this measure pointless and weaken the entire Service Level. The Authority are under the assumption that escalating the case of not receiving a Service Request Acknowledgment to the appointed Batelco’s wholesale account manager, should quicken the process and ensure that placed Service Request is acknowledged. However, this is far from true based on past experience with Batelco. Especially that there is no Service Level time imposed on the account manager to send the Service Request Acknowledgment. (i.e. Zain could escalate it on day 1 to the account manager, but the Service Request Acknowledgment is received only on day 2). In other words, nothing urge and bind the wholesale account manager or Batelco to respond back, because there is no measure that forbids them from abusing this space of time.

ii- Service Request Confirmation is associated with receiving Service Request Acknowledgment. Therefore, further to point (i) above, the whole Service Level of subsequent processes will be delayed for this dependency, which we highlighted lack a measure like a penalty for the wholesale account manager or Batelco to abide with starting point timer of the entire Service Level. (i.e. if Batelco decided to ignore a Service order by not sending a Service Request Acknowledgment, the timer for Actual Time/Maximum Time for Service Request Confirmation will not be triggered)

Furthermore, Zain agree with Authority that The exhaustive list of potential reasons for which Batelco may reject a Service Request should be documented in the relevant RO schedule. This is also to assure that Batelco do not abuse the process in rejecting Service Requests for frivolous reasons.

Q5. Do you agree with the Authority’s proposed definition and description of the service delivery process? Do you agree with the proposed provisions that the Authority considers should apply in case an OLO cancels a Service Request during the delivery process? Please explain and justify your position.
SUBMISSION STAGE: Zain Bahrain BSC

Comment (SUMBISSION STAGE):

As advised earlier, the history with Batelco is full of cases of improper and poor communications and commitment when it comes to Service Request and Service Delivery. Zain is still facing huge delays with place Service orders. With the current ongoing process, it is profoundly difficult and inconsistent to arrange for the service delivery and have useful feedback that can be cascaded to Zain’s enterprise customer. The ambiguity about RFT and RFS makes Zain in challenging situation to convince the enterprise customer that he is getting a reliable service from Zain. Which is severely affecting Zain’s image in this retail segment.

Therefore, Zain strongly agree with Authority’s proposed definition and description of the service delivery process and the proposed provisions that the Authority considers should apply in case an OLO cancels a Service Request during the delivery process.

Zain would like to highlight further, that below issues usually being faced by Zain at this stage of Service Delivery:

i- Batelco requests overtime charges for Service Delivery that take place outside their working hours. In which for most of enterprise customers and OLO’s considered off-peak hours and preferred to avoid any service interruption. Furthermore, those charges are sometimes irrational and not proportionate to the work load and time required. (e.g. BD 30 per hour, per individual). Thus, Zain strongly recommends that overtime charges should only be charged over weekends and official public holiday’s at fair calculated manpower (technician) charge per hour.

ii- In addition to Paragraph 188 and to the best of our knowledge, effective competition the markets for provision of data connection services is currently being impaired by the asymmetry of information that exists because of the fact that the technical engineers that deliver the Services are reporting to Batelco’s enterprise arm and one internal system is used and is accessible by both wholesale and enterprise team. Both of those situation may cause a leak to the sales lead for Batelco’s enterprise team. (i.e. Zain could place a Service Request, and that information could be leaked to Batelco’s enterprise team either via the technical engineers or the internal process flow systems). Therefore, Zain hereby call for total separation for those two circumstances to assure confidentiality.

iii- One of the repetitive feedback’s Zain receives when an enterprise service is sold to a customer using Batelco’s RO services, is that why Batelco’s engineer is present at the service delivery location. Enterprise customer do not apprehend the concept of regulated access serviced. This undermine the image of Zain or any OLO in their capability in providing a full fledge service, especially if that customer is churning from Batelco. After seeing that Batelco’s engineer is the one who is delivering the service, he perceive that after all Batelco is the service provider even if partially. The perception again halts the degree of which other OLO’s could penetrate this important segment (those who prefers premium access as interpreted in the public consultation “Retail markets for access to call services including domestic calls from a fixed location”). Therefore, Zain recommend that the service installation team at Batelco that will deliver any wholesale service for OLO should not be dressed in any manner that shows them a representatives of Batelco (logos and colors should be neutral).

Q6. Do you agree with the Authority’s proposed definition and description of the fault management process? Please explain your position.
SUBMISSION STAGE: Zain Bahrain BSC

Comment (SUBMISSION STAGE):

Zain generally agree with the Authority's proposed definition and description of the fault management process. Nevertheless below remarks should be taken into consideration:

i- While Response Time service level is not paired with Fault Acknowledgment Time, the issue of Response Time trigger is addresses. However, there is still concern raised when similarly to the scenario of Service Request Acknowledgment, that Fault Acknowledgment Time is not penalized in case of breaching the Maximum Fault Acknowledgment Time. Batelco technical center could arbitrary refuse to proceed with troubleshooting a fault because of lack a trouble ticket that was not communicated to Zain. (Zain did not receive the Fault Acknowledgment Time and therefore there is no trouble ticker reference). Therefore, Zain is strongly of the view that Penalties for Fault Acknowledgment Time implemented at 1 SC per each hour elapse following the Maximum Fault Acknowledgment Time.

ii- With regards to Paragraph 112 (c), having a predefined regular updates will strengthen Zain's ability to cascade this service level with confidence to its customer or to its other internal units. Therefore, Zain recommends that the frequent update should be every hour.

iii- With regards to Paragraph 112 (g), Zain is of the view that the "reasonable NRC" that Batelco is allowed to charge the OLO in case of a fault falling within the scope of the OLO’s responsibility and reasonable control (or within the scope of the end user’s responsibility and reasonable control), is a very subjective and vague statement. Zain is of the view that either (i) Batelco should provide evidence on costs incurred in investigating/troubleshooting or (ii) set a predefined value cost/cap for this scenario, such as 5%-10% of the initial Service NRC.

iv- Batelco should provide the Root Cause Analysis (RCA) to OLO maximum within 48hrs following service restoration. This is industry level practice, and a requirement to be transparent with the end user.

Q7. Do you agree with the Authority’s proposed process for the payment of Service Level Penalties? Do you agree that the corresponding rebate(s) shall not be claimed by OLOs but directly reflected by Batelco in the next invoice(s)? Please explain and justify your position.

Comment (SUBMISSION STAGE):

Zain agree with the Authority’s proposed process for the payment of Service Level Penalties and that the corresponding rebate(s) shall not be claimed by OLOs but directly reflected by Batelco in the next invoice(s). With current proposed Service Levels times, the calculation of penalty/rebates is easy and objective. Moreover, it overcomes the current complexity of calculating the Service Availability Zain is facing when applying for a rebate

(i) difficulties of interpreting when the defaulting did took place; and

(ii) hassle of tracing which rebate was done, for which defaulting and in which invoice it was done.

Q8. Do you have any comments on the Service Level definitions proposed by the Authority? Please explain and justify your position.

Comment (SUBMISSION STAGE):

Zain does not have any comments on the Service Level definitions proposed by the Authority.
Q9. Do you agree with the Authority’s proposed creation of a Forum on Batelco’s RO? Please explain and justify your position. According to you, what should be the terms of reference of such forum to ensure its effectiveness?

Comment (SUBMISSION STAGE):
Zain agree with the Authority’s proposed creation of a Forum on Batelco’s RO. In order to ensure that such forum to be effective a level of empowerment should be granted, therefore Zain is of the view that:

i- The FRO has the responsibility to monitor, report and advise upon Batelco’s compliance; and whether Batelco had delivered the required milestones set out in the Order;

ii- The FRO investigates and reports on breaches that arise from Batelco’s self-reporting, OLO complaints or the Authority’s own work. It provides advice to Batelco both to remedy breaches and to avoid them in the first place. It investigates complaints and other requests from OLO, and monitors product Key Performance Indicators (KPIs) and behaviours within Batelco;

iii- FRO should have ready access to Batelco systems and information so as to carry out investigations and monitoring activities;

iv- FRO shall be responsible for monitoring and reviewing the product roadmaps and volume forecasts; and

v- In circumstances where there is demand for product enhancement from Batelco, FRO shall create a situation which requires prioritisation by Batelco of its capital expenditure.

Q10. Do you agree with the Authority’s proposed approach aiming at limiting the payment of one-off charges for the deployment of a fibre access? Please explain and justify your position.

Comment (SUBMISSION STAGE):
Zain is in agreement with the Authority’s proposed approach aiming at limiting the payment of the one-off charges for the deployment of a fibre access. [X]

i- Zain agree with Authority that the current unit cost of fibre access, which is included in the cost stacks of fibre-based data connection products, is sufficient to cover the investment costs of deploying fibre access for any such reasonable deployment project in Bahrain and therefore, OLO should not be charged for pulling a new fibre cable for a location thru NRC. Furthermore, Zain agree with principles of cases where access deployment costs may also be recovered through NRCs. Nevertheless, Zain has different proposal of cases (1) and (3) of Figure 14. Zain is of the view that the basis should not be the number of floors or business size. Rather, it should be based on whether the termination point is (i) accessible to deliver future service for different tenants or (ii) accessible only by single end-user/radio site. Batelco shall be able in the first scenario to recover the cost through the MRC of wholesale and retail access products offered at that location, whereas in the latter Batelco should, in addition to the MRC, also be allowed to recover such costs or a portion thereof through the NRC. The NRC should be capped at BD 1,000 and payment by the OLO should be made against an itemised invoice (broken down by time and material elements), and where relevant, a map detailing the work performed.

Q11. Do you agree with the Authority’s proposal to order Batelco to build a centralised database on fibre access and fibre usage in Bahrain? Do you agree that until such time as a database is made available, Batelco should introduce a 2-working-day presale process? Please explain and justify your position.
SUBMISSION STAGE: Zain Bahrain BSC

Comment (SUMBISSION STAGE):
Zain should not be the victim of Batelco lacking a fibre data base. This as matter of fact raise an industry level concern of how Zain could trust Batelco in any fibre based wholesale product (including WLA and WDC) in absence of such critical technical information required at bare minimum for service restoration. [✗]

Furthermore, the Authority has limited the dark fiber option to a point to point fiber which the concern of junction fiber availability arises and efficiency of its utilization. Zain view is that in the case that a point to point dark fiber product is technically not feasible, then the alternative would be a dark fiber in the access to the closest service node were the operator should be allowed to procure a single pair of fiber on the junction to link all the service nodes. The proposed alternative is a similar setup as the LLU and in terms of fiber requirement is exactly the same as the proposed Wholesale Data Connection ("WDC") product, where a single access fibre pair is required in the access to the service node.

Zain is of the view that the only alternative that is comparable to the current Duct Access product is a dark fiber product. The Authority has in April 2014 as part of the “Determination of Significant Market Power and Determination of Dominance Position in the Markets for Domestic Data Connectivity Services” and in the Strategic Market Review ("SMR"), identified dark fiber as a remedy for this market.

Q12. Do you have any comments in relation to the speeds for which the WDC should be made available?

Comment (SUMBISSION STAGE):
Zain does not have any comments in relation to the speeds for which the WDC should be made available.

Q13. Do you have any comments in relation to the proposed technical characteristics for the WLA and WDC Aggregation Links?

Comment (SUMBISSION STAGE):
With regards to the capacity of both WLA and WDC Aggregation Links, Zain is of the view to have the flexibility of including both options, 1Gbps and 10Gbps in the RO. Limiting the default on either will lead to inefficient setup and cost. Since the availability of such cards in different network elements is dependent on the topology setup.

Q14. Would you be interested by the introduction of a synchronisation feature for the WLA? Please explain and justify you position.

Comment (SUMBISSION STAGE):
Zain requirement is that Batelco’s network elements should be totally transparent between Zain’s equipment and the CPE at customer’s premises / Zain equipment at the second location. In the WLA, Zain has to provide WLAN range for Batelco to configure from their end, and at any service activation, a specific WLAN is provided by Zain in the order form for Batelco to activate.

Nevertheless, in future, different technologies and requirement may develop and synchronisation feature become a requirement and therefore required as part of the RO. Therefore, such topic could be on FRO agenda.

On same note, for certain circuits' requirements, Zain sometimes wants to activate two (2) VLANs on the same physical link. While this is technically totally viable, Zain face difficulties and rejection from Batelco. In which we are pushed to place new Service Request for new circuit. Therefore, Zain believes that part of the RO is to allow multiple WLAN provision on a single leased link.
### Q15. Do you agree that Batelco should offer as an option the full end-to-end physical and logical protection of a WLA or WDC Connection for an additional 30% mark-up on top of the applicable MRC? Please explain and justify your position.

**Comment (SUBMISSION STAGE):**
Zain agrees that Batelco should offer as an option the full end-to-end physical and logical protection of a WLA or WDC Connection for an additional 30% mark-up on top of the applicable MRC. Nevertheless, Batelco should include the mark-up percentage for each of the six (6) protection scenarios details in Figure 16. Where the 6th scenario represents the highest level of protection, a full end-to-end physical and logical protection at an additional 30% mark-up on top of the applicable MRC.

### Q16. Do you agree that Batelco should allow the use of a second ingress ports on a CPE provided for a WLA/WDC Connection or a WLA/WDC Aggregation Link? Please explain and justify your position.

**Comment (SUBMISSION STAGE):**
Zain agrees that Batelco should allow the use of a second ingress ports on a CPE provided for a WLA/WDC Connection or a WLA/WDC Aggregation Link. In many cases Zain do internal redundancy setup within the building, and having a second or more customer facing ports will certainly support this internal redundancy setup. The CPE usually comes with space for extra ports and/or cards, therefore Batelco should not charge the OLO for utilising features on the same installed CPE.

### Q17. Do you agree that Batelco should provide a minimum set of information on CPEs used for WLA and WDC Aggregation Links and Connections? Please explain and justify your position.

**Comment (SUBMISSION STAGE):**
Zain agrees that Batelco should provide a minimum set of information on CPEs used for WLA and WDC Aggregation Links and Connections, in addition to any features supported by the supplied CPE. Such information will shed clarity on integration process including the interfaces required, preloaded configurations and supporting features. By this, Zain can prepare ahead of time any setup required in its or in the end-user premises and save service delivery time (such as AC/DC power requirements, routing configuration, cabling … etc). Also, it assist Zain’s to forecast and purchase relevant cards, interfaces or peripherals required.

For avoidance of doubt, for all service requests, Zain’s requirement is that the CPE should support below interfaces at minimum on customer facing ports:

- Ethernet–Copper on both 1Gbps and 10Gbps cards
- fibre (Multi-Mode, Single-Mode) on both 1Gbps and 10Gbps cards

### Q18. Do you agree that Batelco should continue to be subject to additional QoS reporting obligations for WLA and WDC? Please explain and justify your position.
SUBMISSION STAGE: Zain Bahrain BSC

Comment (SUMBISSION STAGE):

Zain agrees that Batelco should continue to be subject to additional QoS reporting obligations for WLA and WDC. The new reporting obligations information give better understanding Batelco's quality of service performance on provided regulated services, and hence regulatory interfere pursuant to Article 3 of the Telecommunications Law in case of severe deterioration in quality of service levels, or in case of noticeable anomaly.

Q19. Do you agree that Batelco should implement a test based on ITU-T Y.1564 test methodology and systematically provide a copy of test results to the OLO? Please explain and justify your position.
Submit Stage: Zain Bahrain BSC

Comment (SUBMISSION STAGE):

Zain agrees that Batelco should implement a test based on ITU-T Y.1564 test methodology and systematically provide a copy of test results to the OLO. Zain believes what makes this standard unique is that it allows for complete validation of Ethernet SLA in one test. ITU-T Y.1564’s focus is threefold:

First, the methodology serves as a validation tool, ensuring that the network complies with the SLA by ensuring that a service meets its key performance indicators (KPI) at different rates, within the committed range.

Second, the methodology ensures that all services carried by the network meet their KPI objectives at their maximum committed rate, validating that under maximum load the network devices and paths are able to service all the traffic as designed.

Third, service testing can be performed for a medium to long test period, confirming that network elements can properly carry all services while under a significant load extended over a significant period of time (sometimes referred to as a soaking test).

Prior to Y.1564 the most widely used testing tool to assess performance of Ethernet-based services was IETF RFC 2544 which was created to evaluate the performance characteristics of network devices in a lab. But since it includes throughput, burstability, frame loss and latency with the lack of other standards it became commonly used in real networks and is being used in Ethernet networks globally. It does not however include all required measurements such as packet jitter, QoS measurement and multiple concurrent service levels.

Contrary to other methodologies, Y.1564 supports current service providers offering which typically consist of multi-services. Y.1564 allows them to simultaneously test all services and measure if they qualify to the committed SLA attributes. On top of that it also validate the different QoS mechanisms provisioned in the network to prioritize the different service types – allowing service providers faster deployment (as the need for repeated tests is eliminated) and easier service and network troubleshooting.

Y.1564 allows for very high flexibility in simulating testing scenarios to be very close to the real active network traffic. It defines test streams (or “flows”) with service attributes aligned the Metro Ethernet Forum (MEF) 10.2 definitions. These Test Flows can be classified using various mechanisms such as 802.1q VLAN, 802.1ad, DSCP and class of service (CoS) profiles.

Q20. Do you agree that OLOs should have access to Batelco’s BNV system? Should OLO’s customers (i.e. end-users) also have access to such system? Please explain and justify your position.
## Comment (SUMMISSION STAGE):
Zain agrees that OLOs should have access to Batelco's BNV system and that OLO's customers (i.e. end-users) also have access to such system. This is a perquisite in any MPLS or DIA circuits sold the enterprise customers, which are keen to monitor the transmission performance (latency, availability, utilization ... etc) and match it to the contracted SLA’s.

Nevertheless, Zain is of the view that part of the Validation Process required following RFT, is to have the circuit tested against BNV system. In other words, the link should be provisioned and shown on the BNV system at the RFT date.

### Q21. Do you agree that penalties should be paid on a per fault basis for failure to meet a maximum restoration time rather than based on percentage of service availability? Explain and justify your position,

**Comment (SUMMISSION STAGE):**
This is to confirm that Zain regularly reporting faults adversely affecting the availability of WLA, LLCO and the backhaul leased circuits, and that Batelco has not paid any service rebates to date.

Zain agrees that penalties should be paid on a per fault basis for failure to meet a maximum restoration time rather than based on percentage of service availability. This proxy is easier and more realistic in calculating the penalty for Batelco failure in meeting the maximum restoration time. From a reporting standpoint, number of faults per link also show the pattern and reliability of circuit and could give indication of potential terminal issue with the circuit because of the recurring faults.

### Q22. Do you agree with the Authority's proposed introduction of a 'Premium Support' service for an additional 20% premium on top of the applicable MRC? Please explain and justify your position.

**Comment (SUMMISSION STAGE):**
Zain agrees with the Authority's proposed introduction of a 'Premium Support' service for an additional parentage premium on top of the applicable MRC. Different priorities of service support is a fact and market practice even in retail level, therefore Zain in agreement that two levels of support to be provided in Batelco's RO. Nevertheless, the draft order did not detailed how the 20% was calculated. In Zain's view this percentage is high and therefore request further clarification on how the percentage was derived.

### Q23. Do you agree with the Authority’s proposed Service Level Terms and Penalties for the WLA and WDC products and services. Please explain and justify your position.

**Comment (SUMMISSION STAGE):**
Zain generally agrees with the Authority’s proposed Service Level Terms and Penalties for the WLA and WDC products and services. Except for the 6 hours set as a Maximum Restoration Time under Standard Support. This is because most of businesses in Bahrain have 8 working hours and with 6 hours service level means that there is higher probability that working day will end and the service is not restored, should they face interruption on the circuit.

This is apparent In the example listed in Figure 17, BT/Openreach, Orange and Belgacom have restoration time less than 6 hours. And therefore Zain request to be in-par with those example and have 4 hours as the Maximum Restoration Time under Standard Support.
<table>
<thead>
<tr>
<th>Q24. <strong>Do you agree with the Authority’s proposed modifications of the Bitstream service description? Please explain and justify your position.</strong></th>
</tr>
</thead>
</table>
| **Comment (SUBMISSION STAGE):**  
Zain agrees with the Authority’s proposed modifications of the Bitstream service description. The amendments suggested by the Authority are important to remove obsolete terminologies and instead detail the recent relevant technical terms, in order to avoid any confusion. Especially the fact the Bitstream is being delivered over GPON access.  
However since the consultation document does not have a review for Bitstream available speeds, Zain herewith will state its view that higher speeds of wholesale Bitstream service should be available in the RO. Currently the maximum available is 16Mbps which is no longer catering the higher broadband speeds demanded by the customers. And since Batelco is able to provide such speeds for its retail customers, then there is no technical barrier in offering the higher speeds for wholesale. Zain is of the view that higher speeds of wholesale Bitstream service will be attractive for OLO’s to utilise in their retail offerings and help OLO’s to approach enterprise customers with better service portfolio. |

<table>
<thead>
<tr>
<th>Q25. <strong>Do you agree with the Authority’s proposed Service Level Terms and Penalties for the business Bitstream product and services. Please explain and justify your position.</strong></th>
</tr>
</thead>
</table>
| **Comment (SUBMISSION STAGE):**  
Zain agrees with the Authority’s proposed Service Level Terms and Penalties for the business Bitstream product and services. In particular the fact that Internet access and other connectivity services are becoming more and more important for the day-to-day business activities. 24 hours is not an acceptable service restoration time comparing to the leased connectivity services. There is no enterprise customer that would accept to have 24 as maximum time to restore service, it is totally perceived as not reliable service. Leaving such big room will give Batelco the chances to priorities job orders so that they attend their Business customer outages before OLO’s leased service. Furthermore, we are questioning why there is such a large difference between the restoration time of retail and wholesale services. Therefore, Zain is of the view that Maximum Restoration time should be identical to WDC and WLA.  
On the other hand, similar to Zain’s answer to Q4 above, there is a concerns of lacking Penalty for failure to comply with Service Request Acknowledgment. |

<table>
<thead>
<tr>
<th>Q26. <strong>Do you agree with the Authority’s proposal to freeze the charges applicable to the business Bitstream and business WDSL? Please explain and justify your position.</strong></th>
</tr>
</thead>
</table>
| **Comment (SUBMISSION STAGE):**  
Zain agrees with Authority’s proposal to freeze the charges applicable to the business Bitstream and business WDSL since the regulated MRC were extensively reviewed by the Authority in 2014.  
Nevertheless, Zain urge the Authority to calculate the MRC of requested additional higher speeds with principal of fair, reasonable, non-discriminatory and forward looking. In addition to monitor the anticipated uptake of active Business Bitstream services, and intervene when required. |

<table>
<thead>
<tr>
<th>Q27. <strong>Do you agree with the Authority’s proposal to freeze the charges applicable to the ISI and CSI link services? Please explain and justify your position.</strong></th>
</tr>
</thead>
</table>
| **Comment (SUBMISSION STAGE):**  
Zain agrees with the Authority’s proposal to freeze the charges applicable to the ISI and CSI link services. |
<table>
<thead>
<tr>
<th><strong>Q28.</strong></th>
<th>Do you have any comments in relation to the Authority’s review of the other wholesale services (emergency call access, DQ assistance, inter-operator transit, and CPS services)? Please explain and justify your position.</th>
</tr>
</thead>
</table>

**Comment (SUBMISSION STAGE):**

Given that no costing details were shared in the consultation document, Zain is not in position to evaluate any figures and therefore Zain does not have any comments in relation to the Authority’s review of the other wholesale services (emergency call access, DQ assistance, inter-operator transit, and CPS services).

<table>
<thead>
<tr>
<th><strong>Q29.</strong></th>
<th>Do you have any comments in relation to the Authority’s decision to review the duct access product as part of a separate proceeding? Please explain and justify your position.</th>
</tr>
</thead>
</table>
Comment (SUMBIISSION STAGE):

Backhaul is being driven by the rising popularity of connected devices including smartphones, tablets and laptops; as well as by mobile apps and cloud computing. Thus, while Zain is expanding its Radio Access Network (RAN) footprint, the backhaul should not limit the RAN and should have sufficient end-to-end performance to meet the desired user quality of experience (“QoE”) everywhere.

Therefore, fiber-based networks can easily support the rapid growth in bandwidth demands and are cost-efficient comparing to other backhaul solutions. However, the prolonging issue of fibre in Bahrain is hindering Zain’s ability to grow in the competition, enhancing the QoE and keep up with consumers’ requirements.

The duct rental service is a regulated product that meant to ease operators operation and give them equal grounds to compete. Duct rental product was set as a remedy for many defined markets, summarized in the latest Strategic Market Review (“SMR”), namely:

- Wholesale market for supply of domestic data connectivity services in Bahrain (except Amwaj)
- Wholesale broadband access market (for business broadband)
- Wholesale physical infrastructure access market (for business broadband)

Zain has already submitted its applications to Batelco to utilize this regulated service to cover its main base-stations sites for backhauling purposes, reaching international submarines’ landing stations and enterprise buildings to compete with other Licensees in innovative services and markets.

Zain has been informed since mid-2015 that the Authority is undergoing a process of evaluating and assessing Batelco’s infrastructure as part of the introduction of the National Broadband Network in the Kingdom. With the current delays in processing and proceeding with duct rental requests pending Authority’s review, Zain notice that the asymmetry of competition level is widening rapidly, inclined mainly towards Batelco, which is currently the only operator that can leverage on the fibre infrastructure to cater for its backhaul, international and enterprise requirement, which materially prevents or limits competition in an unfair manner.

Zain as an IMTL holder have the right to get access to the duct infrastructure in accordance with the Telecommunications Law in Bahrain; and Authority’s instructions in the Letter are not in compliance with the Telecommunications Law and deprives Zain from its legal rights. This constitute a breach of many legal instruments such as:

- Article 57 of the Telecommunications Law (Interconnection and Access),
- Article 13 of Batelco’s Individual License for National Fixed Services (Provision of Access); and
- Batelco’s Reference Offer

Zain is of the view that this is not a reasonable approach, to suspend a regulated service that serve the requirements of Licensed Operator till a study is completed, anticipating the future of fibre requirements in the Kingdom. The SMR already mentioned that the duct access product has, in the absence of self-provision of own fibre infrastructure, become a wholesale product with significant demand by a number of operators. Ideally, the legal framework for similar cases is to work on a substitute product/solution in parallel while the current regulated service is in place; in order not to adversely affect the operations of the licensed operators or the consumers.
**SUBMISSION STAGE: Zain Bahrain BSC**

The process undertaken by the Authority as per its letter (Ref. MCD/12/15/098) is not defined in time frames and level of quantitative details required, and potentially will require significant time and efforts. With such ambiguity about the time frame of which we can utilize the fibre network in Bahrain, comes great constraints on Zain’s service deliveries to the end users. Therefore, we highly recommend that the Authority revisits its instructions and allow Zain the right to access ducts in accordance with the Law.

Prima facie given the cost structure of the new Wholesale Data Connection product, Zain is of the view that the proposed solution is not a feasible substitute nor a viable replacement for the duct access service. Thus, depriving Zain at the moment from a legitimate and cost reasonable product that solve its operational requirements is a punitive action against Zain.

Q30. Do you have any other additional comments with regard Batelco’s RO? Please explain and justify your position.
Comment (SUMBISSION STAGE):

1- While the duct access product is still under review, the draft Order did not show any Service Levels for important wholesale regulated service. Zain therefore is of the despite the various results of the undergoing assessment, Service Levels for duct access product must be included in Batelco’s RO. Furthermore, that the Service Levels are similar to the proposed WLA and WDS, unless Batelco proves that tangible differences exists.

2- Zain is of the view that market dynamics for IPLC and connecting international landing stations has dramatically changed since the Dominance Determination for Wholesale International Services in 2013, by which the Authority concluded that Batelco is not dominant in the wholesale market for the supply of international capacity from locations within Bahrain.

Clause 3 of the Determination mandates the availability of duct access product to conclude that Batelco is not in dominant positon. Thus, the suspension of duct access products contradicts the prerequisite.

3. For as long as Batelco provides access to Batelco's ducts (and associated facilities required to utilise ducts for the purposes of providing international capacity), domestic wholesale leased lines, and the IFC service on fair, reasonable, and non-discriminatory terms, and for the reasons set out in the Annex to this Determination, the Authority has identified and determines that:
   a. Batelco is not dominant in the wholesale market for the supply of international capacity from locations within Bahrain;
   b. Batelco is not dominant in the wholesale market for the conveyance and termination of international outbound calls; and

Currently Zain is not able to reach any international landing stations for any sub-marine cable system. Which exert a great risk on Zain’s network redundancy. Obliging Zain to acquire international connectivity from its competitor rather than be independent. Batelco is the only operator with the luxury of access to all international landing station, and with absence of duct rental products they certainly holds dominance positon and therefore must be regulated.

Similarly, the lack of ability to access international landing stations for any sub-marine cable system for own peering with service providers, makes Batelco is the only provider of IPLC, and therefore in dominance position. Inherently Zain is of the view that Batelco should offer regulated IPLC products in the RO.

3- The draft RO did not include any Service Levels for Request New Services placed in accordance Schedule 2 of Batelco's RO. Zain is for the view to apply Service Request provisions of WDC and WLA for Request New Services.