

Reference Access Order
Charges for Bitstream and Wholesale DSL

Order No. 1 2009

An Order issued by the Telecommunications Regulatory Authority (“TRA”) on the

Reference Access Offer of the Bahrain Telecommunications Company B.S.C.

24 May 2009



هيئة تنظيم الاتصالات
Telecommunications Regulatory Authority

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ORDER

1. For the reasons set out below and having considered relevant facts and information, the Telecommunications Regulatory Authority (TRA) hereby orders that the following charges, terms and conditions shall apply, from the date of this order, with respect to Bitstream and Wholesale DSL services provided under the Reference Access Offer of the Bahrain Telecommunications Company B.S.C (Batelco).
2. TRA orders Batelco to make available through its Reference Access Offer the services identified below on the terms and conditions, speeds and prices outlined. TRA also orders Batelco to make available to other licensed operators at their reasonable request any broadband connection speed that the Batelco network is capable of delivering.

Bitstream Prices

Download Speed	Customer type	Contention Ratio	Previous Charge	Proposed Charge by Batelco (4 Dec 2008)	Ordered Charges
256 Kbit/s	Residential	10:1	BD 8.21	BD 28.16	BD 3.789
512 Kbit/s	Residential	10:1	BD 9.54	BD 28.43	BD 4.076
640 Kbit/s	Residential	10:1	/	/	BD 4.219
1024 Kbit/s	Residential	10:1	BD 12.20	BD 28.96	BD 4.648
2048 Kbit/s	Residential	10:1	BD 17.52	BD 30.01	BD 5.793
4096 Kbit/s	Residential	10:1	/	/	BD 8.084
8192 Kbit/s	Residential	10:1	/	/	BD 12.665
10240Kbit/s	Residential	10:1	/	/	BD 14.956

Download Speed	Customer type	Contention Ratio	Previous Charge	Proposed Charge by Batelco (4 Dec 2008)	Ordered Charges
256 Kbit/s	Business	8:1	BD 8.21	BD 27.82	BD 3.861
512 Kbit/s	Business	8:1	BD 9.54	BD 28.32	BD 4.219

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640 Kbit/s	Business	8:1			BD 4.398
1024 Kbit/s	Business	8:1	BD 12.20	BD 29.31	BD 4.934
2048 Kbit/s	Business	8:1	BD 17.52	BD 31.29	BD 6.366
4096 Kbit/s	Business	8:1			BD 9.229
8192 Kbit/s	Business	8:1			BD 14.956
10240Kbit/s	Business	8:1			BD 17.819

Wholesale DSL

Download Speed	Customer type	Contention Ratio	Threshold Capacity (GB)	Previous Charge	Proposed Charge by Batelco (4 Dec 2008)	Ordered Charges
256 Kbit/s	Residential	15:1	2	BD 7.000	BD 21.09	BD 7.000
512 Kbit/s	Residential	15:1	8	BD 16.000	BD 24.49	BD 14.084
640 Kbit/s	Residential	15:1	5			BD 11.634
1024 Kbit/s	Residential	15:1	15	BD 20.000	BD 30.18	BD 20.405
2048 Kbit/s	Residential	15:1	20	BD 26.000	BD 39.70	BD 25.410
4096 Kbit/s	Residential	15:1	25			BD 31.180
8192 Kbit/s	Residential	15:1	40			BD 46.960
10240Kbit/s	Residential	15:1	50			BD 56.971

Download Speed	Customer type	Contention Ratio	Threshold Capacity (GB)	Previous Charge	Proposed Charge (4 Dec 2008)	Ordered Charges
256 Kbit/s (single user)	Business Volume	15:1	2.5	BD 15.000	BD 22.98	BD 9.230
256 Kbit/s	Business Volume	8:1	5.0	BD 27.000	BD 29.250	BD 11.510

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512 Kbit/s	Business Volume	8:1	10	BD 29.000	BD 35.820	BD 16.110
640 Kbit/s	Business Volume	8:1				
1024 Kbit/s	Business Volume	8:1	15	BD 33.000	BD 50.560	BD 21.070
2048 Kbit/s	Business Volume	8:1	20	BD 41.000	BD 39.220	BD 26.75
4096 Kbit/s	Business Volume	8:1				
8192 Kbit/s	Business Volume	8:1				
10240Kbit/s	Business Volume	8:1				

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Download Speed	Customer type	Contention Ratio	Previous Charge	Proposed Charge (4 Dec 2008)	Ordered Charges
256 Kbit/s	Business Flat	8:1	BD 33.000	BD 34.340	BD 14.230
512 Kbit/s	Business flat	8:1	BD 45.000	BD 36.930	BD 29.270
640 Kbit/s	Business Flat	8:1			
1024 Kbit/s	Business Flat	8:1	BD 62.000	BD 57.910	BD 41.100
2048 Kbit/s	Business Flat	8:1	BD 75.000	BD 76.730	BD 74.770
4096 Kbit/s	Business Flat	8:1			
8192 Kbit/s	Business Flat	8:1			
10240Kbit/s	Business Flat	8:1			

3. Batelco is requested in accordance with Article 53 of the Telecommunications Law to provide within 30 days of the issuance of this Order to provide to TRA detailed process flows and costs for retail broadband (ADSL) port connections and Bitstream port connections. The purpose of which is to ascertain the correct cost based Bitstream port connection charge.
4. Over threshold use charges shall be set at BD 0.848 per GB.

Ordered amendments to terms and conditions to Bitstream and Wholesale DSL Service Descriptions

5. The following amendments are ordered to be made to Batelco's terms and conditions of its Bitstream and Wholesale DSL Service Descriptions:
 - a) TRA considers that the minimum aggregate number of requests included in the Bitstream Service Description (Article 3.1) is unfair, unreasonable and discriminatory. TRA therefore orders the removal of the minimum monthly requirement.
 - b) Fully automated provisioning processes should be implemented and fully functioning no later than 6 weeks from the effective date of this Order. The Bitstream and Wholesale DSL Service Descriptions should subsequently be updated to include the associated text and diagrams describing the provisioning process once approved by TRA .

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6. TRA reserves its right to continue reviewing any other aspects of the submission relating to Bitstream and Wholesale DSL and to issue further orders as appropriate.

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Annex to Order No. 1 - Reference Access Order

Reference Access Order Reasoning

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Introduction

1. Article 3.3 of the Access Regulation issued on 30 April 2005 (“Regulation”) provides that a telecommunications network operator with dominance in relevant markets must make available a Reference Access Offer. In January 2006 TRA determined that Bahrain Telecommunications Company B.S.C. (“Batelco”) is dominant in wholesale markets and consequently obliged Batelco to produce and submit for approval in accordance with the Access Regulation a Reference Access Offer (RAO).¹ On 26 March 2009, TRA issued a Draft Dominance Determination in wholesale broadband markets which proposes that Batelco is dominant in the two relevant wholesale markets defined.² On that day TRA also issued a Draft Study on the Regulation of Wholesale Broadband Markets which supports the introduction of an Unbundled Local Loop (LLU). It is proposed that Bitstream shall remain in place and Wholesale DSL shall, as a regulated product, be phased out subject to appropriate safeguards.³
2. TRA received from Batelco on 4 December 2008 the Reference Access Offer for review and approval. Having reviewed the submission with respect to Bitstream and Wholesale DSL and further to a number of meetings and exchanges of correspondence between TRA and Batelco, TRA is of the opinion that the proposed charges for Bitstream and Wholesale DSL as well as certain terms and conditions within the Bitstream Service, are not fair, reasonable and non-discriminatory as submitted. TRA has therefore decided to exercise its powers under section 57 of the Telecommunications Law and Articles 5 and 6 of the Access Regulation to issue an Order concerning the Reference Access Offer for Bitstream and Wholesale DSL.
3. In conducting this review TRA has predominantly been concerned with the price elements of the charges associated with Bitstream and Wholesale DSL and certain non-price terms that have been brought to the attention of TRA by Other Licensed Operators as being alleged to be unfair, unreasonable and discriminatory. Although this Order is specific to these products’ charges and certain terms and conditions TRA reserves its right to continue reviewing any other aspects of the submission relating to Bitstream and Wholesale DSL. For the avoidance of doubt these are at present still under review. Should the need arise TRA may resort to issuing further Orders in accordance with the appropriate provisions of the Telecommunications Law and Access Regulation to ensure that the necessary and appropriate additional amendments are made. Therefore, with the exception of the terms and conditions amended by this Order, the existing terms and conditions of the current Reference Offer remain in force until changes to those terms and conditions are otherwise approved or ordered by TRA.
4. TRA has therefore decided to exercise its powers as described below to issue Batelco with a Draft Order concerning the Reference Access Offer with respect to Bitstream and Wholesale DSL. The following sections give a detailed explanation of the TRA’s concerns and why TRA does not consider the Reference Access Offer to be fair and reasonable.

¹ TRA, Dominance in Wholesale Markets by Batelco, Determination, 26 January 2006.

² TRA, Dominance in Wholesale Broadband Markets, Draft Determination, 26 March 2009.

³ TRA, Study on the Regulation of Wholesale Broadband Markets, Draft, 26 March 2009.

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Batelco has been allowed the prescribed period of one month to respond to the Draft Order. TRA also addressed in the following sections the points raised by Batelco in its response.

5. The effective date for the final charges shall be May 24 2009.

Legal Basis

6. Batelco provides services pursuant to section 80 of the Telecommunications Law and TRA granted various licenses to Batelco on 21 June 2003, which were re-issued with corrections required to ensure the licenses complied with the provisions of section 80 of the Telecommunications Law, on 14 June 2005, including a national fixed services license;
7. Section 3(c)(1) of the Telecommunications Law grants TRA the power to make such regulations, orders and determinations as may be necessary for the implementation of the Telecommunications Law, including determinations in connection with, amongst other things, interconnection, access to the network and its facilities, services tariffs, access to real property and promotion of competition;
8. Pursuant to its powers under section 57(e) of the Telecommunications Law, which provides, amongst other things, that TRA may publish regulations in connection with access, including regulations regarding a reference access offer similar to a reference interconnection offer, TRA published the Access Regulation⁴;
9. Pursuant to the requirement set out at Article 2.1 of the Access Regulation, TRA found Batelco dominant in certain wholesale markets, as set out in the Dominance Determination issued on 26 January 2006⁵;
10. Having been found to be in a dominant position, as set out in the Dominance Determination, Batelco was required by Articles 3.3 and 4 of the Access Regulation to make available a reference access offer;
11. Batelco submitted its Reference Access Offer to TRA for approval, in accordance with section 57 (b) of the Telecommunications Law and Article 5.1 of the Access Regulations on 4 December 2008;
12. During the course of discussions relating the approval of TPR 178 Residential High speed Broadband retail prices Batelco has submitted further information relating to cost and usage to better enable TRA to understand the basis for those retail tariffs;
13. Other than as detailed in this Order, TRA has used costs as set out in the 2007 Fully Allocated Cost ("FAC") and Long Run Average Incremental Cost ("LRAIC") Regulatory Accounts for tariffs determined in this Order by TRA;
14. Pursuant to section 57(b) Telecommunications Law and Article 5.3 of the Access Regulation, which provides that where TRA determines that any of the terms and conditions or tariffs contained in a Reference Access Offer submitted to it are not fair, reasonable and non-discriminatory, it will issue an order specifying the terms and conditions that it does not approve. According to Article 5.3 of the Access Regulation, TRA

⁴ TRA Access Regulation, A Regulation issued by the Telecommunications Regulatory Authority, 20 April 2005

⁵ As per footnote 1 above.

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shall state the terms and conditions that shall apply in a notice stating in writing the order to be issued, TRA issues this Order;

15. In deciding whether tariffs are fair and reasonable, TRA is required to decide whether it considers or determines that any tariffs or terms are unreasonable, unfair or discriminatory. When doing so, TRA must:
 - a. pursuant to its obligations under section 3(a) of the Telecommunications Law, act reasonably and in a non-discriminatory manner and fully explain its consideration or determination that any tariffs or terms are unreasonable, unfair or discriminatory in order to comply with its obligation under the same provision to exercise its powers in a transparent manner; and
 - b. pursuant to its obligations under section 3(b) of the Telecommunications Law, ensure that in considering or determining that any terms or tariffs are unreasonable, unfair or discriminatory, its consideration or determination is best calculated to:
 - i. protect the interests of subscribers or users as set out in section 3(b)1 of the Telecommunications Law; and
 - ii. promote effective and fair competition as set out in section 3(b)2 of the Telecommunications Law;
16. TRA considers that in carrying out its duties and exercising its powers under the Telecommunications Law and the Access Regulation, its consideration or determination that any tariffs or terms are unreasonable, unfair or discriminatory as set out in this Order:
 - a. are made in a reasonable and in a non-discriminatory manner in compliance with section 3(a) of the Telecommunications Law, as demonstrated by the reasoning and explanations included in this Order;
 - b. are fully explained and reasoned in this Order in compliance with the requirements for transparency set out in section 3(a) of the Telecommunications Law;
 - c. are made in the knowledge or with the understanding that tariffs or terms that it considers or determines are unreasonable, unfair or discriminatory would prejudice the interests of subscribers or users in that:
 - i. tariffs that it considers or determines are unreasonable, unfair and/or discriminatory would, if approved by TRA, lead to subscribers or users being charged higher tariffs than TRA is satisfied would be fair or reasonable for the relevant service;
 - ii. tariffs or terms that it considers or determines are unreasonable, unfair or discriminatory would, if approved by TRA, result in a low or no take up of access services by Licensed Operators, with the result that:
 1. there would be a reduced availability and provision of alternative services to Batelco's own retail services, prejudicing subscribers' or users' interests in there being wide availability and provision of alternative services;
 2. there would be less competition to Batelco in the provision of retail services to subscribers or users, or, where other Licensed Operators accepted terms and tariffs that were unreasonable, unfair or discriminatory, Batelco would be in a position to compete with such Licensed Operators unfairly; and
 3. prices to end customers would not get close to costs; and

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TRA draft order position – commercial deals

17. TRA considers that the fact that tariffs and terms included in the Reference Offer:
- a. may have been accepted by other Licensed Operators prior to any approval of the Reference Offer by TRA; or
 - b. may provide an ability for other Licensed Operators to make a margin on the basis of tariffs included in the Reference Offer and retail tariffs offered by Batelco to subscribers or users for the relevant equivalent retail services;

is not conclusive evidence that such tariffs and terms are fair, reasonable and non-discriminatory, given that the dynamics of a market in which such tariffs and terms are offered by a dominant services provider in the relevant market or markets mean that such Licensed Operators may accept terms and tariffs that are unfair, unreasonable and /or non-discriminatory for valid commercial reasons, even though such acceptance may impact those Licensed Operators' ability to provide effective competition in the longer term;

Batelco response to the draft Order (para.14.a), 15b) 59 - 62)

18. Batelco asserts that commercial deals and the evidence provided through the five signed letters contained in Annex A to the Batelco response to the draft Order demonstrate that commercial deals can drive more competitive conditions in the market. Furthermore Batelco state that the proposed retail minus tariffs are "inherently more fair and reasonable than the current rates" (para 60)

TRA analysis and conclusion

19. Both the Access Regulation and Law require wholesale tariffs to be fair and reasonable, Articles 57 and 58 are explicit in the requirement for cost based tariffs. "Fair and reasonable" would represent the rates which would be charged in a competitive market and therefore in line with cost. Furthermore, the costs associated with the provision of both Bitstream and Wholesale DSL were known to, or could have been derived by Batelco and therefore there was no requirement for a retail minus approach even on a temporary basis.
20. Notwithstanding the above, the price proposition prepared by Batelco in its Annex A letters (retail minus 30% for Wholesale DSL and retail minus 40% for Bitstream) to other licensed operators was incomplete. The proposals made by Batelco in those letters are not indicative of cost, and while they may for immediate purposes appear to be attractive to OLOs, may not in the longer term serve to promote a truly competitive market where operators compete based upon costs.
21. No provision of the Telecommunications Law or the Access Regulation requires TRA to take into account any purported access deficit in the determination of tariffs for access services included in the Reference Offer;
22. TRA has decided to issue this Order to determine those tariffs and charges of the Reference Offer which it considers are not fair, reasonable and/or non-discriminatory.
23. Failure to comply with this Order may be considered a material breach of the Access Regulation and the Telecommunication Law. As such, as required by article 5.3 of the

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Access Regulation Batelco is formally warned that its licences may be revoked under section 35 of the Telecommunications Law if the Licensee fails to comply with this Order.

Details of ordered charges

24. The starting premise for tariffs to be considered fair and reasonable is that they are based on relevant costs including the regulated rate of return on capital employed
25. In accessing whether charges are fair and reasonable and non-discriminatory TRA also considers the relative relationship between equivalent wholesale and retail services prices. To this end TRA has consistently applied the same competition based analytical framework to analyse wholesale and retail tariffs in order to ensure that there is consistency in the charges applicable at various levels. This framework looks at whether retail services can be replicated by other licensed operators which rely on regulated wholesale products and remain profitable, thereby ensuring that tariffs are compatible with the development of sustainable competition. The objective of introducing wholesale products which give access to bottlenecks controlled by dominant operators is to enable competitors which do not control such bottlenecks to compete at the downstream level. This is a core premise of the wholesale regulation of dominant operators.
26. It is clear from the TPR 178 submission that Batelco, despite its dominant status at the wholesale level and SMP status at the retail level, have given no consideration to the above. For residential services significant margin squeezes would exist for 256kBit/s and 512kBit/s products using both Bitstream and Wholesale DSL as inputs, with current Reference Offer wholesale prices being greater than prevailing retail prices. Furthermore on 31 December 2008 (TPR 178) Batelco submitted a proposal to implement lower prices and higher speed residential broadband services at the retail level. Based on the 4 December wholesale prices proposal the extent of the margin squeeze would increase and apply to all speeds currently available.
27. TRA has received from Batelco two proposals for higher speed retail broadband services (TPR 153 and TPR 178). TRA has, with the exception of the residential 640Kbit/s proposed residential retail tariff, approved these charges. Consequently, in order to ensure that operators can replicate Batelco's retail offers based on wholesale products and to ensure that Batelco is not foreclosing competition in the retail broadband market nor discriminating in favour of its retail division at the expense of OLOs, TRA requires Batelco to provide, at a minimum, the same speeds within the wholesale offering.

TRA draft order position

28. By virtue of the two TPR submissions made by Batelco the higher speeds of up to 10MB are capable of being provisioned today. Given the NGN investment made by Batelco its network has the capability to offer speeds in excess of 20Mbit/s depending on the quality and length of copper. This capability is available to the retail division of Batelco and therefore to ensure non-discrimination should be made available, on fair and reasonable terms, to Other Licensed Operators at their request.

Batelco response to the draft Order (para. 57 - 58)

29. Batelco express concern regarding the: inclusion of speeds potentially above those stated in TPR 178; potential for discrimination against Batelco's retail division by enforcing a requirement to provide a service or speed which is not offered at the retail level; that no evidence had been presented that the Batelco NGN could support speeds in excess of 20Mbits/s; and that the proposal was not related to the Reference Access Offer.

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TRA analysis and conclusion

30. The review of the Reference Offer submission whilst informed by the Batelco TPR 178 submission is not constrained by that submission.
31. From presentations made by Batelco and its suppliers to TRA during 2008 the equipment installed within the Batelco network (ADSL2+ capable) is technically capable of offering speeds in excess of 20Mbps/s. However as stated in the draft Order this is dependent upon the quality and length of the copper local loop.
32. Higher speed services supported by the Batelco network are available to Batelco retail at their request, in the same way as Article 11 of the Batelco Supply Terms (New Services) should also make such service speeds available to other licensed operators upon their reasonable request. Therefore TRA conclude that Article 11 of the Batelco supply terms are also not constrained by the limitation of the prevailing Batelco retail offering.
33. Batelco has also submitted to TRA a proposal to implement higher speed Bitstream and Wholesale DSL services based on a retail minus approach to costing. TRA considers this approach to not be fair and reasonable because it does not reflect the cost of service provision. TRA has therefore assessed the proposed charges for Bitstream and Wholesale DSL as not being fair, reasonable and non-discriminatory. Proposed charges could lead to the foreclosure of the market to those operators which are reliant upon the wholesale inputs provided by Batelco under the obligations of its Reference Access Offer.

TRA review of Batelco's Bitstream Reference Offer Submission:

34. The table below is an extract of Batelco's 2008 submission.

BITSTREAM COSTING EXERCISE - 4th DEC 2008								
	Bus -2MB	Bus -1MB	Bus -512	Bus -256	Res -2MB	Res -1MB	Res -512	Res -256
Network Cost Access Cost less : Retail Rental Access Port (DSLAMs & MSAN Cost) Core Trans IP Link (Router) Fibre Cable Total Network Cost	Confidential data							
Wholesale Costs OR05b Residential & Inet Helpdesk - Business (881177) Ot OR06 Order Mgt, Delivery & Assurance - Order Management WS01 Wholesale & Carrier Relations - Access Product Mgn WS03 Finance Support Services - Reg & WS Support Access WS04 Legal & Regulatory Affairs - Access Support WS05 Fixed Billing - IAA Access WS02 Wholesale Financial - Access Totals AD contribution Total cost (Network + Wholesale)								

35. In what follows, TRA assesses whether, for each of the line items identified by Batelco in its submission, the costs proposed are fair, reasonable and non-discriminatory. Where they are not, TRA makes necessary changes.

Access costs

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36. It should be noted from the above extract of the Reference Access Offer submission that Batelco has included two access contributions: (a) the first is the cost of copper less the current retail line rental for business and residential customers as appropriate; and (b) the second is a charge labelled "AD Contribution" which is based on a revenue loss model.
37. In assessing whether it is fair and reasonable to include a contribution for copper TRA has resorted to the technical provisioning of the service and the costs Batelco has submitted in support of equivalent retail services tariff proposals (TPR 153 and TPR 178). Bitstream, as with any copper broadband access service, makes use of the higher frequency channels whilst voice telephony makes use of the lower frequency channels. Traditionally the cost of copper has been attributed to the provision of basic telephony services and therefore broadband services are seen as incremental to basic voice telephony services. In the course of proposing amendments to the broadband retail tariffs, Batelco make use of a cost stack which begins at the DSLAM/MSAN level and includes no contribution to the cost of copper. Therefore any inclusion of the cost of copper to wholesale services is discriminatory and places other licensed operators at a commercial and competitive disadvantage when compared to the retail division of Batelco.
38. In assessing the appropriateness of the AD contribution TRA restates its position that it does not recognise a systemic access deficit within Batelco's network. In the Strategic and Retail Market Review, published by TRA on 3 June 2008⁶, TRA stated that a rebalancing plan would be developed, indicatively timetabled for introduction during 2009. Furthermore there are at present no regulatory impediments preventing Batelco from rebalancing its retail charges. Again, as with the contribution to copper described above Batelco makes no such reference in the cost stacks associated with the equivalent retail services and therefore any such inclusion within the Bitstream service costs would be discriminatory and lead to an unfair competitive disadvantage. For these reasons TRA rejects the inclusion of any access deficit contribution.

Batelco response to Draft Order (para 15a)

39. Within its response Batelco asserts that consideration should be given to other factors including any access deficit and the extent to which tariffs have been rebalanced should be taken into account in assessing tariffs to be fair and reasonable

TRA Response

40. With respect to consideration to be given to other factors TRA has continually maintained a consistent approach towards the purported access deficit claimed by Batelco. In TRA's view numerous services, including basic voice and data service, broadband access and leased lines, are delivered over the access network infrastructure and therefore the recovery of all costs associated with the copper access network should not be expected from the line rental charge alone.
41. TRA consider such a contribution to the cost of copper at a wholesale level to be discriminatory if not applied also at the retail level. This would put OLOs at a competitive disadvantage. Where access deficit contributions have been introduced on a temporary basis, a key concern of regulators has been to ensure that these are competitively

⁶ Strategic and Retail Market Review 3 June 2008 Regulatory Measure 2 states: ".....A multi-year price control / rebalancing plan will also be developed to allow prices to move closer to the underlying cost of providing services such that entry decisions are no longer distorted....."

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neutral, i.e. the incumbent and new entrants pay the same amount per unit of specified services as otherwise it creates competitive distortions.

42. Furthermore there are no legal impediments which prevent Batelco from developing a plan to rebalance its charges. In line with the Second National Telecommunications Plan, TRA considers that rebalancing is a superior policy to address the issue of unbalanced rates compared to the introduction of an access deficit contribution scheme.
43. Batelco chooses to take out of context the inclusion of a contribution to copper in the 2008 Reference Offer. This was included as an integral part of a holistic approach on price and not as a recognition of an access deficit per se. The removal of this cost has not been “without explanation” as purported by Batelco and was the subject of discussion within relation to the approval of TPR 178.
44. TRA explained during the review of TPR 178 discussions that in assessing the TPR at the tariff levels requested by Batelco all of the existing low speed broadband access services failed a margin squeeze test. That is to say that another Licensed Operator would not be able to profitably replicate the Batelco retail service using the wholesale inputs made available by Batelco under the reference offers.
45. In the discussion between TRA and Batelco the relative revenue/cost recovery achieved through the inclusion of an access copper contribution has been assessed for the 12 months ending December 2008 as a total of BD [redacted] i.e. less than BD [redacted] per month. Furthermore from a competition neutrality perspective any inclusion of a copper contribution surcharge should also be reflected in the costs associated with the relevant Batelco retail services. TRA presented options to Batelco either to reset the retail tariffs above the competitive level or to remove the copper contribution. The response from Batelco was to consider the removal of the copper contribution only providing the Interconnect Specific Charge was increased to a level above the current [redacted] fils per minute and set for a number of years.
46. The ISC was initially set by TRA Interconnection Order⁷ as [redacted] fils per minute. The basis of the calculation was un-attributable costs, such as corporate management overheads, certain aspects of wholesale carrier relationship management, and certain software and hardware systems which cannot be attributed to particular assets required to supply the individual services) for the previous year divided by the sum of minutes (both retail and wholesale) to and from the Batelco fixed network for the current year. Details of the un-attributable costs supplied by TRA by Batelco can be found in Annex 1.
47. On March 11th 2009 Batelco provided by e-mail to TRA an excel spreadsheet (20090311 ISC Comparison File.xlsx) containing details of un-attributable costs for each of the years 2004 up to and including 2007 based on the relevant regulatory accounts. This data has been used to establish the numerator. The denominator has been set by maintaining the minute types established in the Interconnection Order. Details of the calculation can be found in Annex 1.
48. As can be seen from Annex 1 the over recovery not including the traffic in 2008 amounted to BD [redacted] and implied that the ISC should have been set at an average of [redacted] fils per minute over the period. Including an estimate for the 2008 traffic, based on trend analysis and extrapolation, the over recovery is reduced to BD [redacted] and an implied ISC of [redacted] fils per minute.

⁷ Order No. 3 of 2006 Reference Interconnection Offer Order – 6 August 2006

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49. Batelco has contested that the ISC should be calculated using the interconnection minutes only, however TRA considers that, as Ofcom found in relation to the BT equivalent charge (PPP) this would create a competitive advantage⁸ for Batelco retail and therefore maintains the position as stated in the Reference Interconnection Order.
50. With respect to rebalancing Batelco is of the misconception that it is the responsibility of TRA to propose a rebalancing plan. Whilst it is agreed that TRA can exercise the power to set a rebalancing plan (Telecommunications Law Articles 3 c(14) and 58) TRA remains of the view that the establishment of retail tariffs should remain the prerogative of the operator and not be unnecessarily subject to regulatory intervention. Batelco is also aware of the steps TRA is taking towards rebalancing as a result of the Strategic and Retail Market Review (Published June 2008).
51. TRA has re-iterated on numerous occasions during the last 12 months that Batelco should prepare a rebalancing plan. TRA is aware that Batelco has given this some thought and meetings have occurred between TRA and Batelco to discuss this issue. However Batelco have refused to formally share its plans.

Core transmission

52. The approach taken by Batelco is based on a top down weighted average distribution model which apportions transmission bandwidth costs in accordance with the customers at each connection speed. TRA considers that this approach does not accurately reflect the appropriate cost of bandwidth at given contention ratios. Given the top down nature of this approach it is not capable of providing core transmission costs for speeds not currently provided. Based upon this TRA has determined that Batelco's proposed tariffs do not accurately reflect costs and as such TRA has recalculated the appropriate charges based on the headline download speed of the connection and the stated contention ratio. Using the information submitted by Batelco in the top down weighted average distribution model, assuming a capacity equivalent to a 1Mb channel, an un-contended clear 1 Mb channel would cost BD [redacted] per month. Therefore in order to calculate the appropriate cost for core transmission TRA has assumed the required capacity per subscriber is equal to the headline download speed in Kbit/s divided by 1024 to give a 1Mb equivalent. The product of this is divided by the contention ratio and multiplied by the un-contended cost per 1Mb. The effect of the calculation method adjustments is to marginally increase the cost of core transmission. The core transmission cost for a 2048Kbit/s broadband residential connection at a 10:1 contention ratio increases from BD [redacted] to BD [redacted].

Batelco response to Draft Order (para. 26 – 30)

53. In its response to the draft Order Batelco assert that the role of TRA is to conduct assessment of charges and not to use a Draft Order to establish charges. Batelco also state that TRA has provided no visibility of the calculation used, and further explain the basis of the Batelco calculation.

TRA analysis and conclusion

54. TRA disagrees with Batelco's assertion that the role of TRA is merely to assess tariffs as "fair and reasonable." The Access Regulation clearly states in Article 5 the powers of TRA

⁸ Ofcom statement 30 July 2004 – Review of BT's product management, policy and planning (ppp) charge,

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to issue orders where it considers after review that the terms, condition and tariffs are not fair, reasonable and non-discriminatory. Furthermore Article 57(e) of the Telecommunications Law, when read in conjunction with Articles 57(b) and 58 of the Telecommunications Law, and Articles 5 and 6 of the Access Regulation clearly show that tariffs for access products must be fair, reasonable and non-discriminatory and based upon forward looking costs, and specifically for access tariffs, forward looking incremental costs. Having reviewed the December 2008 submission TRA has concluded that the proposed charges are discriminatory and not fair and reasonable. Following further review through correspondence and meeting TRA has in accordance with the requirements of the Telecommunications Law and Access Regulation issued the draft Order.

55. With respect to the restatement of Core transmission, TRA within the draft Order has stated the calculation approach clearly and re-iterates here that the approach taken by TRA recalculates the cost of un-contended transmission on the basis of a unit of capacity (1 Mbit). This cost is then reapplied to the relevant speeds for both Bitstream and Wholesale DSL after having applied the appropriate contention ratio.
56. This then provides the basis for inclusion of core transmission costs for the higher speed connections. Annex 2 contains details of the calculation.
57. TRA remain of the view that the method of calculation used by TRA more accurately reflects the cost of transmission and allows for a more transparent and flexible approach to costing this element in the future irrespective of the headline download speed or contention ratio applied.

IPLink (Router) and Fibre

58. IPLink (Router) and Fibre are the charges associated with providing the physical backhaul link to the other licensed operator. TRA notes that Batelco has used a 3 years and 15 years life for these assets respectively. TRA consider these assets lives to be shorter than would be reasonably expected. Such assets would normally have asset lives of 5 years and in excess of 20 years respectively⁹. TRA has adjusted these assets lives accordingly. The impact of the change is to reduce the IP Link (router) charges from BD [•] to BD [•] and for fibre the cost is reduced from BD [•] to BD [•].

Batelco response to draft Order (para. 31)

59. Batelco express concern that the asset lives have been amended from 3 and 15 years to 5 and 20 years respectively based on a recent report completed for the Irish Regulatory Authority (ComReg).

TRA analysis and conclusion

60. As Batelco have stated, there has been a trend by incumbents to shorten asset lives in their regulatory accounts. The impact of which has been to increase the depreciation charges and therefore ultimately the charges which other licensed operators and consumers must pay for services which use those assets. In many cases as is the case with Batelco this coincides with the deployment of NGN assets.

⁹ RGL Forensics final report for Comreg review of Eircom's regulatory asset lives Feb 2009

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61. The report commissioned by ComReg from RGL Forensics provides an analysis of the various asset lives used in the statutory and regulatory accounts of Eircom. The findings of the report are in many cases directly commutable to other countries.
62. With respect to the appropriate asset life of fibre the report found the useful life for fibre to be 20 years. This was supported by manufacturer asset life claim evidence as well as contractual evidence where by specific fibre based networks had 20+ year terms. Furthermore from a technology perspective there is no evidence to suggest that fibre will become obsolete in the foreseeable future and therefore the probability of impairment of these assets is low.
63. Whilst TRA notes that Batelco has a minimum 25 year Indefeasible Right to Use (IRU) contract for international capacity with FLAG providing access to the Falcon subsea fibre system which does not contemplate technology refresh at the physical level during this period, it is not uncommon for such capacity to be offered for terms of 25 Years.
64. TRA can foresee no reason to suggest that fibre in Bahrain has a shorter economic life than 20 years, and again notes that such a view is widely held internationally.
65. With respect to IP Routers the report addresses the issue of technology refresh and points to the history of the last 20 years in which the protocols have evolved from x25 networking to today's Ethernet and IP networks. The report set the usable life of IP routers at 6 years, which is also in line with EirCom's own view of the usable asset life. Furthermore both in Sweden and Denmark a 5 year asset life has been applied to these asset types. Since both Bitstream and Wholesale DSL are provisioned using the latest next generation network technologies of MSAN and carrier grade edge and core routers TRA see no justification for a 3 year usable life, though TRA has taken a slightly more conservative view than the ComReg report and set the life at 5 years

Wholesale costs

66. TRA identified in previous Reference Access Offer Orders those charges it considers fair and reasonable with respect to wholesale costs. Batelco has, yet again, chosen to include cost categories which have in previous orders been disallowed as not fair and reasonable because their inclusion would lead to duplication between the listed activities and those activities covered under the related relationship and help desk fees.
67. TRA considers it is neither fair nor reasonable to include further charges over and above the relationship fee and helpdesk charges for Bitstream. For the avoidance of doubt TRA has not, as part of this Order, assessed the appropriate level for these fees, this assessment will be covered in a subsequent review.

Batelco response to draft Order (para 32 – 42)

68. Batelco raise concern and allege that TRA has not taken into consideration the alternative proposal by Batelco to reduce port charges and increase the Interconnect Specific Charge (ISC) from 25 fil per minute to 30 fil per minute.
69. Batelco also raise concern and allege that TRA has not taken into consideration the constituent elements of the non-network costs on the basis of preventing duplication.

TRA analysis and conclusion

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70. With respect to the proposals by Batelco to subsume certain costs into the ISC, TRA has already addressed the issue of ISC and over recovery in paragraphs 43 to 49 above therefore any increases in ISC would only exacerbate the level of over recovery.
71. With respect to the constituent non-network costs TRA established in the RO approval process during 2008 what was considered to be fair and reasonable. TRA has maintained this position.
72. TRA has also stated in paragraph 4 of the Order that TRA will continue to review other aspects of the Batelco submission not included within the Order (including those relating to Bitstream and Wholesale DSL) and issue further Orders as appropriate.
73. TRA will assess the Maintaining Relationship Fee and iNet help desk fees during this continued review process

Final charges for Bitstream

74. The following charges are therefore ordered for the following speeds for the Bitstream service.

Residential Bitstream								
Network Costs	256 KBit/s	512 KBit/s	640 KBit/s	1024 KBit/s	2048 KBit/s	4096 KBit/s	8192 KBit/s	10240 KBit/s
Access Port (DSLAMs & MSAN Cost)	Confidential Data							
Core Trans								
IP Link (Router)								
Fibre Cable								
Total Cost	3.861	4.076	4.219	4.648	5.793	8.084	12.665	14.956

Business Bitstream								
Network Costs	256 KBit/s	512 KBit/s	640 KBit/s	1024 KBit/s	2048 KBit/s	4096 KBit/s	8192 KBit/s	10240 KBit/s
Access Port (DSLAMs & MSAN Cost)	Confidential Data							
Core Trans								
IP Link (Router)								
Fibre Cable								
Total Cost	3.861	4.219	4.398	4.934	6.366	9.229	14.956	17.819

Wholesale DSL

75. The charges proposed by Batelco for residential Wholesale DSL services have increased significantly. In conducting an assessment of whether these are fair, reasonable and non-discriminatory it can be seen that, even without adding the additional cost of retailing that an OLO must bear to sell the product, for the 256Kbit service the proposed wholesale tariff exceeds Batelco's own retail price for the same speed by BD [redacted] per month. At the 512Kbit/s speed the proposed wholesale tariff is roughly equal to Batelco's own retail price for the same speed and therefore once the associated Batelco retailing costs have been added there is a margin squeeze. At present these two speeds account for almost [redacted]% of

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the market. TRA therefore considers that the proposed prices would have a material impact on the ability of OLOs which rely on Batelco wholesale service to effectively compete and would therefore contribute to a foreclosure of the market.

Costing Elements - Per Package	Residential			
	2mb	1mb	512k	256k
Network Costs	Confidential data			
DSLAMs & MSANs				
Transmission (ATM & MPLS)				
INET Platform				
International uplinks				
Totals				
Wholesale costsTotals				
Total Package cost	39.70	30.18	24.49	21.09
Usage level – GB	20	15	8	2

76. As in previous orders (Reference Access Order 23 May 2007, Draft Reference Offer Order 30 April 2008) TRA has determined that the composition of the Wholesale DSL product is essentially the same as Bitstream though the IPLink (router) and fibre are replaced by the iNet platform and international uplinks. TRA has therefore used the same approach to costing Wholesale DSL as has been outlined above for Bitstream. However the contention ratio applied to Residential Wholesale DSL is 15:1 and not the 10:1 used in the equivalent Bitstream service. The effect of this adjustment is to slightly reduce the cost of core transmission for residential broadband wholesale DSL connections
77. In order to calculate the appropriate fair and reasonable cost of access to the iNet platform and international uplinks based on the calculation submitted by Batelco in its Reference Access Offer submission relating to Wholesale DSL, TRA replaced mid year 2007 subscribers with end year 2007 subscribers. The analysis of this data reduces the cost per GB from a proposed BD [•] to BD [•].
78. The approach taken to calculate fair and reasonable charges for iNet and international uplinks is different depending on whether or not a capacity threshold is applied as is the case in all Residential and the Business Volume tariffs. The method used is in each case briefly described below.
- a. **Threshold based tariffs**, TRA has assumed the total capacity of the threshold is consumed; and
 - b. **Unlimited based tariffs**, TRA has assumed the average monthly capacity consumed at each speed. The average monthly capacity levels consumed have been calculated using data supplied by Batelco in relation to the period October 2008 to January 2009.

Wholesale costs

79. Based on the information provided by Batelco TRA has assessed as fair and reasonable the wholesale cost charge highlighted in orange in the following table, all other charges have been discounted on the basis that they represent duplication of costs, activities for

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which the costs are recovered elsewhere or are inappropriately allocated since these activities are carried out by OLOs: This was first identified in Order No. 1 2007 Reference Access Offer Order, ref LAU/0507/061 23 May 2007. TRA has applied the same charge to both business and residential services.

	Annual cost	Cost per subscriber per month
OR05b Residential & Inet Helpdesk - Business (881177) Ot	Confidential Data	
OR06 Order Mgt, Delivery & Assurance - Order Management		
OR27 Billing (others)		
OR28 Operations & Helpdesk - Bill printing & dispatch (
WS01 Wholesale & Carrier Relations - Access Product Mgn		
WS03 Finance Support Services - Reg & WS Support Access		
WS04 Legal & Regulatory Affairs - Access Support		
WS05 Fixed Billing - IAA Access		
Totals		

Batelco response to the draft Order (para. 43 – 46)

80. Batelco's concerns here relate to the approach adopted by TRA in establishing the fair and reasonable charges for non-network costs, and the discounting of certain cost elements proposed by Batelco without reasons.
81. Batelco also question why option B, the increase of ISC, has not been addressed.

TRA analysis and conclusion

82. In the course of the RO discussions during 2008 which resulted in the approval of the final charges in May 2008 TRA and Batelco conducted extensive review of the cost models for Bitstream and Wholesale DSL. The Draft Order (Ref MCD/0408/040 of 30 April 2008) paragraphs 85 and 86 discuss the composition of the non-network costs and discounts certain charges based on an inappropriate allocation to the service due to these activities are either carried by the OLO and as a consequence are therefore not necessary to be carried out by Batelco, or are covered within other charges such as the Order Processing Fee. After having taken into account the fact that there have been no significant changes since 2008 relating to activities OR06, OR28, WS01, WS02 and WS03, TRA maintains its position that these should not be included within the wholesale DSL non network costs
83. The consideration of Option B, an increase in the ISC, has already been addressed at paragraph 68 above.

Final ordered residential Wholesale DSL charges.

84. It should be noted that the 256Kbit/s charge remain set at BD 7.00 as ordered and explained by TRA 23 May 2007. Reference Access Offer Final Order page 60. (Ref: LAU/0507/061).
85. The following charges are therefore ordered for the following speeds for the Wholesale DSL service.

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Network Costs	512 KBit/s	640 KBit/s	1024 KBit/s	2048 KBit/s	4096 KBit/s	8192 KBit/s	10240 KBit/s
Capacity thresholds (GB)	8.00	5.00	15.00	20.00	25.00	40.00	50.00
Access Port (DSLAMs & MSAN Cost)	Confidential data						
Core Trans							
iNet Platform + BRAS							
International Uplinks							
Additional WS activity costs							
Total Cost	14.084	11.634	20.405	25.410	31.180	46.960	56.971

Final Ordered Business Wholesale DSL charges

Business Wholesale DSL – Volume					
Network Costs	256 KBit/s	256 KBit/s	512 KBit/s	1024 KBit/s	2048 KBit/s
Capacity Threshold (GB)	2.50	5.00	10.00	15.00	20.00
Access Port (DSLAMs & MSAN Cost)	Confidential Data				
Core Trans					
iNet Platform + BRAS					
International Uplinks					
Additional WS activity costs					
Total Cost	9.23	11.51	16.11	21.07	26.75

Business Wholesale DSL – Flat				
Network Costs	256 KBit/s	512 KBit/s	1024 KBit/s	2048 KBit/s
Average Capacity used gig	Confidential Data			
Access Port (DSLAMs & MSAN Cost)				
Core Trans				
iNet Platform + BRAS				
International Uplinks				
Additional WS activity costs				
Total Cost	14.23	29.27	41.10	74.77

Other charges and conditions considered

Connection charges

TRA's position stated in draft Order

86. At present Batelco has a port connection charge BD10 to connect a retail customer however a charge of BD20 is levied on Wholesale customers. This is discriminatory and

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creates a competitive advantage to the retail division of Batelco. To maintain competitive parity, TRA sets the port connection charge at BD 10.

Batelco response to draft Order (para 47 – 50)

87. Batelco maintain that the two process relating to connection of a Bitstream service and that of a retail DSL service are fundamentally different and that additional activities are required to facilitate a Bitstream connection, i.e. a “swap”.
88. Batelco also questions the legality of the equivalence approach.

TRA Reponse

89. TRA has conducted a review of the materials supplied by Batelco during 2006 and 2007 with respect to the justification of the port connection charge at BD20. At page 35 of the 12 July 2006 final order (ref LAU/0706/095). TRA state the fact the BD20 port connection charge has no supporting documentation. On January 8 2007 Batelco submitted as part of its submission a spreadsheet (20070108 Annex G Bitstream Costs.XLS) in which the constituent activities of the port connection charge where listed. The table entitled “Detailed Justification for port connection activities” listed the following activities: Customer service processing order; Programming in AWS system; Configuration in Aggregation Node; and Confirming Activation port. However Batelco provides no breakdown of the cost of each of these activities but rather a single aggregate charge of BD20. The ensuing order issued May 23 2007 made no reference to analysis of the charge, though the charge remains unchanged. The same table is also included in December 2007 submission but is absent from the December 2008 submission.
90. For these reasons TRA does not consider that the supporting information contained in previous submissions nor the explanation provided in the Batelco response to the draft Order provides justification for the level of charges.
91. For the avoidance of doubt TRA considers that to ensure competitive neutrality the charge should, in principle, not exceed the retail equivalent charge. Therefore the port connection charge shall be subject to further analysis and Batelco are requested to submit full process flows and costing information relating to the port connection activity for both retail and wholesale customers.

Minimum Aggregate number of request

92. Within the Bitstream service description article 3.1 establishes a minimum aggregate number of requests that an OLO must place with Batelco for each month of the first three years of the contract. Having reviewed the history of the take-up of broadband services it is apparent that this is an unreasonable request, for instance during the period October 2008 to January 2009 on average Batelco connected 83 new broadband subscribers per month (this figure combines both retail and wholesale connection). Furthermore this is not a requirement placed upon the retail division of Batelco. TRA considers this to be not fair or reasonable and to be discriminatory. TRA therefore orders the minimum monthly requirement to be removed.

Batelco response to the draft Order (para 51 – 54)

93. Batelco raises concerns that TRA has used incorrectly interpreted data and based its analysis on net new customers rather than gross new customers per month. The analysis

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would therefore demonstrate that Batelco retail exceeds the minimum monthly obligations for wholesale Bitstream customers.

94. Batelco also provides some rationale to support the original July 12 2006 order in which the current thresholds were established, citing extracts of a letter from Batelco to TRA dated July 10 2006 in which Batelco states the minimum threshold levels but does not provide justification for the levels other than reference to Malaysia.
95. In addition Batelco raises the questions of risk associated with providing services to other licensed operators and the recovery of investment.

TRA response

96. The use of monthly new subscriber growth was illustrative and the amended data does not cause TRA to consider the discriminatory practise any less seriously.
97. As a general rule TRA considers it both unreasonable and discriminatory for an incumbent operator to impose a one sided service level agreement. The minimum order is effectively a service commitment (subject to penalty) being made by the access seeker with no guarantee of service provision or compensation for lack of timely service provision by the access provider.
98. [•]
99. The concerns of TRA with respect to the minimum order requirement for the first 3 years of a Bitstream contract remain valid despite the representation presented by Batelco. Having conducted further review of the history of this charge and its coming into being, it is clear that there is little if any rationale or cost justification to support the numbers. As Batelco state the concept is taken directly from Malaysia. Though the commitment levels are lower than those presented in Malaysia during 2006 there is no supporting rationale or justification underpinning the numbers.
100. The justification for the inclusion of the minimum commitment presented by Batelco in its response to the draft Order is clearly centred on investment recovery and the relative risk associated with the provision of services to its own retail division when compared with the provision of service to an alternative service provider. However Batelco does not elaborate on these issues or quantify the perceived risk.
101. It is unclear to TRA how placing a minimum order requirement for 3 years on each and every licensed operator taking the Bitstream service is justified from an investment recovery perspective. The costs associated with establishing the Bitstream service, approximately [•] were divided amongst the possible number of interested parties in the service, in this case [•] resulting in an approximate charge of BD50,000 per licensee. Through Batelco's efforts to solicit interest from other licensed operators in support of a retail minus approach to wholesale pricing it is clear that should the pricing of wholesale broadband access services, such as Bitstream and Wholesale DSL, be more attractive than at present there would be a greater uptake of these services by more operators, thereby improving the position with respect to investment recovery. The service at present has monthly recurring charges which recover the operational and capital investment plus a regulated return on capital of 12.2%. The cost of processing a Bitstream contract is also covered.
102. In looking at risk management vis-à-vis retail and wholesale customers Batelco has in place a bank guarantee mechanism to protect against default and thereby mitigate this risk.

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103. Consequently TRA maintains its position in considering the requirements of article 3.1 of the current Bitstream service description to be a unfair, unreasonable and discriminatory

Automated provisioning.

104. From the discussions and correspondence exchanged between TRA and Batelco it is understood that automated provisioning is used for retail services and is already available for Wholesale DSL. Batelco stated at a meeting with TRA on 25 February 2009 that the equivalent provisioning system for Bitstream would take approximately 6 weeks to develop. In order to prevent a competitive advantage resulting from different approaches to service provisioning Batelco is required to have developed and implemented automated provisioning systems within 6 weeks from the effective date of this Order. The Bitstream and Wholesale DSL Service Descriptions should subsequently be updated to include the associated text and diagrams describing the provisioning process once approved by TRA.

Batelco response to the Draft Order (para not numbered in Batelco response)

105. Batelco express concern that it should be able to exercise discretion with respect to whether the provisioning process should be automated or manual and that the draft Order implies that the automated system would take 6 weeks from February 25th 2009.

TRA response

106. The draft Order paragraph 46 merely states that at a meeting on February 25th 2009 Batelco stated that it would take 6 weeks to develop a fully automated provisioning system.
107. As TRA has stated in order to remove potential provisioning problems and to ensure competitive neutrality with the provision of similar retail services TRA require the provisioning processes to be fully automated.

Over-threshold charges

TRA draft order position

108. Wholesale DSL packages which have a capacity threshold are also subject to an over threshold usage charge. The method calculation of over the threshold usage charges is based on that supplied by Batelco in its reference Offer submission. In assessing whether BD [] is fair and reasonable TRA has replaced the mid year 2007 usage data with end year 2007 usage data as this more accurately reflects the consumption pattern of the end users given that the number of broadband subscribers has increased by approximately 100% during this period of time. Based on this more forward looking assessment TRA calculated the charge to be BD 0.848 per GB.

Batelco response to the draft Order (para. 55 – 56)

109. Batelco express concern that the use of year end usage data in place of mid year data is not fair and reasonable.

TRA response

110. The calculation method used by Batelco is based on the total cost of the iNet platform and International uplinks, divided by 12 to give a monthly average cost. This is then divided by the “gross average monthly use” of capacity.

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111. In previous reference offer submissions Batelco has submitted the total cost of the iNet platform + international uplinks as well as the total capacity consumed throughout the year. The cost per MB is therefore the result of the division of these two numbers. The approach taken by Batelco whilst a deviation from previous costing principles also provides no supporting evidence to validate the average capacity used.
112. The growth in broadband subscribers occurred predominantly in the latter half of 2008 and therefore the approach taken by Batelco would have over stated the actual utilisation. The approach taken by TRA more accurately reflects the levels of utilisation given the monthly subscriber growth being weighted to the second half of the year.
113. TRA therefore considers this approach to be more appropriate.

Other issues raised by Batelco

Procedural issues (para 1 – 10)

114. Batelco list in its response seven concerns over the procedural correctness of the draft Order. Each of these are discussed below:
 - a. the linking of two separate processes, retail tariff proposal (TPR) approval with the Reference Access Offer assessment process. Batelco asserts that since there are items included within the draft Order which are not contained within TPR178 the two processes are not aligned and that TRA has reserved the right to review further the terms and conditions associated with Bitstream and Wholesale DSL;
 - b. in developing the theme of issues contained within the Draft Order which are not relevant to the TPR Batelco identifies 5 examples which in the opinion of Batelco are unjust and unfair. The examples cited were: removal of the Bitstream minimum order obligations; requirements to produce process diagrams; requirements to introduce fully functioning automated processes; provision of services at other speeds on the reasonable request of another licensed operator; and a reduction in other bitstream charges such as the port connection fee. Batelco assert that these additional requirements will delay the introduction of high speed services under TPR 178;
 - c. failure to take into account information relating to non-price terms for Bitstream submitted by Batelco in response to section 53 request by TRA
 - d. the tariff approval is conditional upon the draft order and not the final order
 - e. the departure by TRA from the agreed synchronised approach for the assessment of the Reference Access and Reference Interconnection Offers.
 - f. removal of confidentiality from the draft order.

TRA analysis and conclusions

115. With respect to the alignment of the two processes, the Telecommunications Law and the licenses granted to Batelco not only place certain obligations on both Batelco and TRA, but also entrust TRA with certain responsibilities. In assessing tariff proposal requests submitted by Batelco for approval TRA is not only required to take into account appropriate and relevant costs of the services but also the compliance with license provisions, regulations on tariff control and other applicable laws (Batelco National Fixed Service License (NFL) Article 12.4b.) Furthermore Article 13.1 of the NFL goes on to

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state that "Access shall be provided in a manner that is non-discriminatory In approving TPR 153 TRA included similar conditions to ensure that the appropriate wholesale access inputs were made available at appropriate cost based tariffs to wholesale customers. TRA has therefore remained consistent in its approach. TRA has therefore used the powers available to it under the law to fulfil its duties and ensure Batelco comply with its legal requirements.

116. The linking of the approval of higher speed broadband prices for consumers and the ordering of cost based wholesale access products and services to allow the other licensed operators to compete in the broadband access market is therefore a consequence of the approach adopted by Batelco. Batelco has a legal obligation to ensure that its actions regarding interconnection and access are non-discriminatory. Failure to provide relevant wholesale inputs at a minimum with speeds equivalent to those offered at the retail level clearly results in an unfair competitive advantage created through exerting control over a bottleneck.
117. TRA does not agree with the assertion made by Batelco that the Order needs to fully align with TPR 178. At present Batelco provide broadband access services to both consumer and business users at speeds of up to 2MBit/s. It also provides wholesale inputs in the form of Bitstream and Wholesale DSL which allow other licensed operators the ability to replicate those services offered by Batelco at the retail level. The view of TRA is that the TPR and Reference Offer approval processes are disassociated, although they clearly are complementary and should be used to achieve the TRA's duties under the Telecommunications Law. TRA has conducted the review of Bitstream and Wholesale DSL as part of the ongoing Reference Offer review and therefore legitimately has included review of elements of these wholesale services not related to the retail tariff approval of TPR 178.
118. Whilst TRA was satisfied at a retail pricing level (with the exception of the proposed 640Kbit/s service) that TPR 178 was above cost it was not entirely satisfied that the tariffs proposed were compatible with the development of competition based access products. That is to say using the available wholesale inputs other licensed operators would be able to replicate the retail service offering and remain profitable for the proposed higher speeds but not at the 2Mbits/s and below speeds.
119. The two processes of tariff approval and assessment of non-discrimination cannot be disassociated. To do so would allow Batelco the opportunity to gain an unfair competitive advantage by discriminating between retail and wholesale activities as described above.
120. All relevant issues raised by Batelco in point B above have been addressed earlier in this document.
121. TRA has in consideration of the Batelco response to the draft Order reviewed and taken account of the section 53 Bitstream order response as appropriate. However this did not warrant change to the initial draft Order position of TRA.
122. The linking of the tariff approval to the "draft" RAO Order rather than the final RAO Order will be redressed by TRA re-issuing the approval letter for TPR 178.
123. With respect to the synchronisation of the Reference Offer review, Batelco's assertion that the requirement of TRA to enforce non-discrimination caused unnecessary delay in the launch of higher speed, lower priced services is in the opinion of TRA misplaced. The TRA approval of TPR 153 which related Broadband access services for business users

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included the requirement for Batelco to offer wholesale broadband access inputs at the same speeds as the retail. Therefore prior to the submission of TPR 178 Batelco was aware of the requirements TRA would place upon the approval of the TPR and chose to ignore such obligation, thereby adding unnecessary and avoidable steps to the processes which have resulted in the delay. (TRA had during the review of TPR 153 required Batelco to provide similar wholesale inputs with respect to business broadband services).

124. In order to expedite the launch of higher speed services and enhance the level of competition TRA has taken this formal, legalistic approach of issuing a Reference Access Offer Order ("RAO Order"). This has also required TRA to adjust the approach with respect to the assessment of the reference offer submissions TRA has issued guidance with respect to confidentiality and TRA reserves the right to publish documents and information in accordance with these guidelines.

Batelco response to draft Order - Fair and Reasonable access price (para 11) -

125. Batelco considers that the approach taken by TRA is selective and therefore does not adequately take into account the duties of TRA under Section 3(b) of the Telecommunications Law.
126. Batelco interpret Article 6 of the Access Regulation and Article 57 of the Telecommunications Law as bestowing upon Batelco a right to negotiate in order to establish a fair and reasonable price without the need for TRA to issue an Access Order.

TRA analysis and conclusion

127. TRA takes extremely seriously its obligations and duties as established in the Telecommunications Law. Sections 3b) of the Law indeed requires TRA to protect the interests of Subscribers and end users with respect to the Tariffs charged, the availability and provision of services, the quality of those services and the protection of personal particulars and privacy of services.
128. In taking these obligations into consideration TRA has consistently applied an approach stated in the Strategic and Retail markets Review, whereby potential retail market inadequacies are primarily addressed through wholesale remedies.
129. It is clear from TPR 178 that the proposed tariffs for higher speed services are significantly above cost and international benchmarks and could as a consequence be considered to be excessive. Margins for the [•]MBit/s residential service are in excess of [•]%, (having accounted for a 12.2% return on capital employed within the costs). Furthermore when compared with international benchmarks it is clear that the proposed higher speed service tariffs remain substantially higher than either the European average or indeed the region.
130. However, rather than control the retail price points of Batelco, which TRA has the right under Article 3(c)(14) of the Telecommunications Law, TRA has maintained the view that retail prices will be adjusted to the competitive level through the development of sustainable competition which in this case is supported by the availability of wholesale relevant inputs charged at the fair and reasonable prices.
131. TRA consider that the exercising of powers to establish retail tariffs should be seen as a last resort used where competition has failed and the interests of the consumer can only be protected through direct regulatory intervention at the retail pricing level. Consequently in the first instance the interest of the consumer is best served through the development of sustainable competition which provides choice, ensures quality and availability.

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132. TRA disagree with the interpretation of Batelco and considers that it has acted with the scope of the Law and Access Regulation. Whilst both the Law and the Access Regulation are clear in that they allow for TRA to request further information to be able to assess whether a specific tariff is fair, reasonable and non-discriminatory, this in no way either ascribes to Batelco any rights or to TRA any obligations to negotiate the outcome of the reference offer review. This option remains entirely at the discretion of TRA to be exercised as considered necessary.

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Annex 1 – Interconnect specific charges (ISC)

Un-attributable costs as provided by Batelco

Confidential data

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Batelco Traffic and derived ISC values

2004

2005

2006

2007

Confidential Data

Key to table:

- Cells in Green indicate the traffic types identified in the Reference Interconnection Order relating to the initial calculation by TRA of the ISC
- Cells in Yellow with a value of 1 identify traffic taken into account in calculating the ISC
- Cells in orange are where traffic has been re-distributed based on the previous years distribution

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Annex 2 – Core transmission costs

