

## Local Loop Unbundling in the Kingdom of Bahrain

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**Purpose:** An update of the Telecommunications Regulatory Authority of Bahrain's current position on the potential introduction of unbundled local loops in the Kingdom of Bahrain



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## STATEMENT ON LOCAL LOOP UNBUNDLING IN BAHRAIN

### Background

In August 2007 the Telecommunications Regulatory Authority of Bahrain (TRA) asked UK consultancy firm – Indepen - to assess the case for local loop unbundling (ULL) in Bahrain.

The terms of Reference for this study were to investigate:

1. Whether ULLs are required in Bahrain as part of the TRA's duty to further the long-term interests of users and the long-term development of competition particularly in the broadband market?
2. If required, what form of ULL Batelco should be offered to meet these goals? And
3. If required, what charges and technical specifications are appropriate?

At this stage TRA has undertaken 'Phase 1' of the study which related to an assessment of the different options for regulating broadband markets in Bahrain. This included both an evaluation of the case for requiring ULLs and an assessment of the different forms of ULLs which were possible. Particularly can ULL:

1. Sit alongside current offerings in the wholesale market to provide an appropriate suite of wholesale services;
2. Be a natural progression to these current offerings which are constrained at speeds up to 2Mbps and which may be hindering development of a competitive internet market for broadband services in Bahrain;
3. Allow OLOs to offer a variety of differentiated services at different speeds.

The Consultants held discussion with the main operators, service providers and representatives of the business community, as well as visited representative sites within Batelco's network.

During this phase of the study an analysis of the broadband market was undertaken along with reviews of responses to a previous ULL public consultation issued by TRA in June 2004 (available at [http://www.tra.org.bh/en/pdf/ULL\\_Cons\\_en.pdf](http://www.tra.org.bh/en/pdf/ULL_Cons_en.pdf)) and examinations of all existing relevant documents in relation to the wholesale market in Bahrain.

TRA has now received the Report of this first Phase of the study. This Statement outlines TRA's current thinking on the need to introduce ULL in Bahrain in light of the Consultants Phase 1 Report.

### Introduction

TRA is fully aware of the benefits that a competitive broadband market can bring to Bahrain. In 2006 TRA approved the incumbent operators - Batelco's- Reference Access Offer (RAO) which included both Wholesale Digital Subscribers Loop (a white-label Asymmetrical DSL (ADSL) product) and Bitstream access as a means of promoting access competition into the broadband market in Bahrain. Infrastructure competition is also developing through meshed WiFi networks, satellite broadband and more recently fixed wireless when one of the two National Fixed Wireless Services Licensees – Zain- began operating their service.

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However, despite this increased activity, TRA's recent Strategic and Retail Market Review found that Batelco's market share was still greater than 90 percent in the retail broadband market. Further, benchmarking studies, undertaken or reviewed by TRA have shown that penetration rates for broadband services in Bahrain are low and by all standards retail prices are still high.

### **Findings of the ULL Study**

The principal findings of the Study are listed below. TRA does not, at this stage, intend to release the 1<sup>st</sup> Phase Report in full as it contains confidential information delivered to the Consultants at the time of their interviews with main operators, service providers and representatives of the business community. However this Statement does draw on the key findings.

#### **I The importance of broadband to the Bahrain economy**

If the Government is to succeed in turning Bahrain into a service based economy which is competitive on world markets, then it needs to develop a competitive telecommunications industry which delivers high-speed broadband services at economically efficient prices.

Bahrain is competitive with other Middle Eastern states in terms of broadband take-up. But its performance is not satisfactory if judged in a global context. Speeds and take up are low, and prices, especially for higher speed business broadband are above what would be expected in a competitive market.

#### **II The current state of the broadband market of Bahrain**

Two retail broadband markets exist in Bahrain – one for broadband Internet access and another for leased lines services. Analysis suggests that Batelco is currently dominant in both of these markets.

#### **III Problems with existing remedies**

At least in the short term, cross-platform (or infrastructure) competition is unlikely, on its own, to result in a fully competitive broadband market.

The current Bitstream product needs improving if it is to be 'fit for purpose'. In particular:

- Contention ratios are unnecessarily low when compared with other countries and, consequently, prices for the higher speed services are unnecessarily high;
- There are no service level agreements;
- Contractual terms, such as the establishment fee and minimum orders, deter entry for no obvious good reason; and
- The speed cap of 2 Mbit/s is unnecessary, especially given that Batelco's next-generation network can now offer speeds of up to 8 Mbit/s.

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### **IV The case for a local loop unbundling obligation**

Local loop unbundling has three main advantages over current wholesale offerings as an access obligation on Batelco:

1. It allows the access seeker to choose the broadband technology used and allows the access seeker to differentiate its retail offerings;
2. It gives the access seeker greater control over their costs and hence reduce their dependence on the access provider; and
3. It has a good track record internationally for aiding the development of competition in broadband markets.

Set against these advantages, local loop unbundling may face some problems in the Bahraini market. In particular:

- There may be additional fixed costs in introducing local loop unbundling which could be significant in a country as small as Bahrain;
- The end-user costs of switching service providers may be higher with local loop unbundling than with Bitstream; and
- The footprint of ULL is unlikely to cover the whole of Bahrain due to economic feasibility and potential concentration of demand.

### **V Options for local loop bundling**

In considering whether there is a requirement for local loop unbundling the following points need to be taken into account:

It is very unlikely that local loop bundling will be commercially viable at all of Batelco's MDF sites. Based on experience in the EU, the fixed costs of co-location and backhaul could make it difficult for local loop unbundlers to justify co-location at sites with less than 10,000 lines.

There is likely to be little demand for shared loops, but strong demand for full local loop and unbundling could emerge as a way of serving the corporate leased lines market.

The MDF sites where local loop unbundling is likely to be viable are the same as those which serve the bulk of corporate sites.

Remote co-location of the access seekers equipment (required to provision broadband services over copper loops) is substantially more expensive than alternative forms of collocation.

There is some evidence that there is adequate space within the larger MDF sites, and especially the sites where MDFs and switches are located together, for co-location of the access seekers' equipment in Batelco's equipment rooms.

Co-mingling the access seeker's equipment with that of Batelco is significantly cheaper than caged co-location and has worked well where it has been introduced in Europe.

However, co-mingling raises some (not insurmountable) security concerns over access to Batelco's equipment rooms in which both Batelco and access seekers equipment is located. Although, these concerns have been successfully addressed in other countries, they will need to be addressed in Bahrain.

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Experience elsewhere suggests that it will take at least six to eight months to fully implement local loop unbundling following any decision to require it.

### Conclusions

TRA has at present decided to adopt a 'wait and see approach' relating to the possible implementation of ULL. In taking this approach TRA will take into account not only the findings of the Report but also:

- The final recommendations of the Strategic Retail and Market Review due in March 2008; and
- The outcome of the upcoming Reference Offer assessment cycle where Batelco will submit Service Descriptions including Terms and Conditions and wholesale tariffs for all access products.

In relation to the Reference Offer assessment cycle due to begin in December 2007, TRA considered that the Report was timely in that one of its principal conclusions was the need for Batelco to produce an improved Bitstream access product as a high priority. The Report concluded that the benefits of imposing this requirement far outweigh the costs.

Table 1, below, outlines the possible modifications outlined in the Report to improve the Bitstream access product. TRA intends to assess each of these possible modifications when it receives Batelco's revised Bitstream access service in December 2007.

**Figure 1 Proposed modification to current Batelco Bitstream product**

Possible modification to Batelco's Bitstream product	Potential benefits
Remove the minimum order of 192 services per month	Reduces barrier to use of Bitstream product by access seekers
Remove establishment fee of BD50,000 but allow Batelco to recover Bitstream product development costs on a per service basis from all access seekers including Batelco Retail	Reduces barrier to use of Bitstream product by access seekers
Add SDSL as well as ADSL options	Enables access seekers to compete in the leased lines market
Change the default contention ratios from current values to industry norms of 1:50 and 1:20	Lowers cost base price of Bitstream
Allow access seekers to choose between contention ratio options	Enables access seekers to differentiate their offerings to end users

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<b>Possible modification to Batelco's Bitstream product</b>	<b>Potential benefits</b>
Introduce SLAs for access seekers and align penalties for over ordering with the costs incurred by Batelco	Balances rights and obligations between access providers and access seekers
Where possible use a forward looking, rather than historic cost, approach to estimating the costs of core transmission	Ensures that price are more reflect of 'today's' cost base
Remove the speed cap of 2 Mbit/s which is unnecessary, especially given that Batelco's next-generation network can now offer speeds of up to 8 Mbit/s.	Higher speed offering will allow consumers experience the benefits of higher speeds which will likely stimulate increased demand.