Development of a
National Broadband Strategy
Quick Wins

Workshop

Gaborone, 9-10 April 2013

BOCRA

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Objectives of Quick Wins

To identify recommendations that:

➢ Can be put forward to BOCRA/MICT's consideration after Phase 1 and phase 3

➢ Can enable BOCRA and MICT to identify issues/sub-projects that can be included in their respective budgets for financial year 2013

These quick wins suggestions do not cover the whole spectrum of actions that will need to be taken by BTA and the Government for the implementation of the National Broadband Strategy. We voluntarily left out recommendations that should be backed-up by the analytical studies planned in phase 2 and 3

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ADSL Services

- ➤ Currently, BTC offers the following ADSL Services:
  - Bronze (512 kbps downlink / 128 kbps uplink),
  - Silver (1 Mbps downlink / 192 kbps uplink)
  - Gold (2 Mbps downlink / 256 kbps uplink)
- ➤ Data collected shows that BTC's ADSL can offer higher bit rates:
  - ADSL2+ (>10 Mbps peak rates), Re-ADSL (when strong attenuation), SDSL/SHDSL (professional services) already or easily available
  - **Recommendation 1: BTC could reorganize its offers and propose packages that do not put a ceiling on available bandwidth**
  - This may require that BTC do some analysis (e.g. measurements of the state of its copper network) but we think that BTC could easily handle this issue.
- ➤ Enable quality of service differentiation
  - Current structure of bandwidth services does not allow quality of service differentiation for ISPs.
  - **Modify structure of wholesale ADSL to allow quality of service**:
    - > Authorize multi virtual circuits on the same line (to differentiate voice and data)
    - > Structure the bandwidth offer with guaranteed capacities.

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Wholesale catalogue (reference offers)

➢ **Recommendation 2: BTC should publish a catalogue (standard offers) detailing its wholesale offers**

- Key technical and contractual details to be committed between BTC acting as a wholesaler and its PTO or ISP customer.

- Other PTOs should also publish such a catalogue for their respective wholesale services (e.g. infrastructure sharing).

➢ Typical issues to be addressed in Wholesale Catalogue:

- Description of service and availability (geographic, interfaces, etc.)

- Ordering and operational process description

- Service commitments (KPIs, SLAs)

- Prices

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Pricing Structure (1/2)

➢ National bandwidth prices:

- Compared to other countries BW's prices too sensitive to distance. Will impede broadband services in remote areas.

- **Recommendation 3: BOCRA should undertake cost studies to re-examine the relevance and impact of distance related pricing structure considering that current (and future) technologies are much less sensitive to distance and capacity compared to old technologies. Use the results of the study to adapt the structure of wholesale tariffs for national bandwidth**.

➢ Wholesale ADSL Price Structure:

- An access charge, paid directly by the customer to BTC,

- A bandwidth charge, paid by the ISP to BTC.

- Two drawbacks of the current arrangement:
    - > Complex for the customer who has to manage two different bills;
    - > Does not provide a fair playground for competition: BTC keeps a commercial link with the customer whereas the Internet service is provided by the ISP.

- **Recommendation 4: The ISP should pay both the access charge and the bandwidth charge to BTC (as it is done in other countries). The end user to deal with the ISP only.**

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Pricing Structure (2/2)

➢ **Have an access charge independent of the bandwidth:**

- Currently, tariffs of the access charge depend on the bandwidth, whereas the cost of the access line is not dependant on bandwidth.

- The only reason to maintain a difference in wholesale tariffs is that these tariffs are based on retail-minus pricing. $\Rightarrow$ Forces ISPs to align their prices with BTC's prices and constitutes an entry barrier to competition and innovation.

- The copper local loop is an essential facility and should be priced on a cost-oriented basis.

- **Recommendation 5: The access charge should be based on BTC's actual costs and should be independent of bandwidth**.

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BPC as a telecoms operator

- ➢ BPC

    - Owns 850 km of fibre optic cable - major urban areas and large villages.

    - Undertook a feasibility study to assess the viability of establishing an entity that would use the excess fibre optic cable network to provide telecommunications services.

    - Preferred model: PTO. Made an application to BTA and sought approval from Govt in this regard.

    - **We support and recommend that BPC's infrastructure be made available to other telecommunications operators because:**

        - > Major contribution to the available broadband infrastructure in Botswana.

        - > Many countries worldwide (e.g. South Africa, South Korea, Japan, France, Morocco) made use of fibre optic cable infrastructure constructed by their power utilities or railway operator.

        - > Stakeholders (ISPs and PTOs) complained about the cost of backhauling in BW.

- ➢ **Recommendations 6: BOCRA should grant BPC an appropriate licence.**

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Accelerate implementation of e-Gov

- ➢ Government has identified the need for major changes in technology, business processes and organisational structures.

- ➢ Most Ministries now have their own websites, providing some information. Key milestones are defined:
    - Creation of a government portal -2011-12
    - Download forms - 2013
    - Transactions 2014.

- ➢ The implementation plan is not fully defined yet, and interviewed stakeholders have expressed their concerns as regards what they perceive to be slow implementation of e-Government services so far.

- ➢ **Recommendation 8: The Government should communicate what services will be made available and by what dates and accelerate the implementation of the plan so as to create the demand for e-Government Services.**

- ➢ Operators and service providers will adjust to this new demand by extended the reach of their broadband network.

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Audit Nteletsa II and access centres

➢ Nteletsa II is acknowledged as being a successful experience.

➢ However, some gaps have been identified:

  ● The tendering process (e.g. ownership of infrastructure),

  ● The implementation (e.g. duplication of Kitsong centres with other access centre in the same village),

  ● Lack of trained personnel to manage the Kitsong centres and provide support to users,

  ● etc.

➢ Such access centres have proven to be an efficient way to provide access to broadband services and to provide training and support when they are run and operated by trained people.

➢ **Recommendation 9: An audit should be carried out of the Nteletsa II project**

  ● Include projects such as Sesigo or the implementation of Kitsong centres by Botswana Post.

  ● The outcome of such a study should provide useful lessons that could be taken on board during the rollout of broadband services.

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Develop an ICT training programme

➢ ICT capacity building among the population is a key requirement for a wider penetration of broadband usage.

- Particularly important for rural areas.

➢ **Recommendation 10: A user-centred training programme should be set up that would provide immediate results.**

- Use training to identify champions on the use of ICTs for development.

- Use this training to revitalise dormant Kitsong Centres.

- Use the training to identify potential sources of relevant content.

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Coordination for coherent action

➤ Lack of commercial power in villages or in specific centres to be equipped with ICT equipment (schools, libraries, border offices, etc.) has been identified as an obstacle for the development of broadband.

➤ **Recommendation 11: Setup a common team composed of officers from the Ministry of Transport and Communication (MTC) and from the Ministry of Minerals, Energy and Water Resources (MMEWR) to cooperate in deciding on the roll-out broadband infrastructure and the rural electrification programme.**

Question 1: Coordinated implementation of the National Broadband Strategy

To ensure a coordinated rollout of broadband infrastructure and services across all public and private sectors of the economy, there is a need for a Committee that will coordinate the various activities.

How should this Committee be constituted?

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Set-up the universal service fund

➤ Extending infrastructure requires obviously large investments.

➤ **Recommendation 12: Establish the Universal Service Fund per the recommendations from the 2006 study on the "Development of Universal Access and Service Policy for the Communications Sector in Botswana"**

- Establishment of the USF does not have to await the implementation of the BOCRA Act.

- The sooner the fund is established the sooner it can start accumulating funds and interest.

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BTC splitting – Define scope and roles

➢ The decision to split BTC has been taken.

➢ However, the scope and roles of each entity has not been fully defined (e.g. which infrastructure will remain with BTC and which will go with BoFiNet)

➢ Stakeholders expressed concern about lack of consultation and clarity as regards the final outcome and when that will occur.

➢ **Recommendation 13: Government should:**

- Finalize the definition of the scope of both BoFiNet and BTC Ltd,

- Clarify how they would act on the market (e.g. would the new BoFiNet act on the market as a competitive player or only as a service provider).

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Thank you for your attention

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