



## Digital Television Migration: costs

Barbados, May 2012  
Cristian Gomez  
Radiocommunication Bureau



### Economic aspects



- **Broadcasting chain is unique at every level.**
  - Its concept, architecture and deployment differs to such an extent that it is extremely unlikely to spot “twin” arrangements.
  - Every component of the broadcasting chain may have its own specific design, specifications and cost.
- **There are no identical**
  - TV production centres, contribution/ distribution networks, and multiplexes/transmission networks.
- **Price information has been always of confidential nature**
  - and contracts are signed based on tedious negotiations. Discounts could be granted for large scale delivery, established long-term business relations, etc.

## Economic aspects



- **Information on**
  - business models, cost and funding, evaluation of risk factors, analysis of cost/benefit issues,
  - might be provided by actual case studies yet to be carried out by the BDT while assisting ITU members in the transition to digital terrestrial broadcasting.
- **Availability of such country case studies**
  - may be very useful in order to assess the cost incurred and analyze the cost benefits versus risks.
- **Difficult to provide answer to the cost implication issues.**

3

## Digital Switchover cost impact



- **Digital switchover will affect almost all households**
  - and entail compulsory costs for consumers.
  - It also entails costs for non-domestic users of television services.
- **This may include the cost of upgrading**
  - community TV reception antenna systems that are used in blocks of flats, hotels and in residential care and nursing homes.
- **For the broadcasters and multiplex operators**
  - there are capital investment costs incurred for deployment of the digital network
  - any associated costs for implementing digital switchover as stipulated in their broadcasting licenses.
- **Commercial services broadcasters will also have to develop strategies**
  - to deal with the negative impact on their revenues by the extended choice and access to multi-programme services.

4




International  
Telecommunication  
Union  
*Committed to connecting the world*

## ASO key costs categories

1. Migrating viewers [++++]
2. Transmitter network changes [+]
3. Re-farming & compensations [++]
4. Simulcasting (if applicable) [+++]
5. ASO Management [+]
6. Certification & labeling [+]
7. Resolving interference [+]

26.05.2011 5 5



International  
Telecommunication  
Union  
*Committed to connecting the world*

## Cost for consumers 1

- **When digital switchover takes place**
  - All households that wish to continue to receive television services and who have not yet switched to digital television **will need to obtain at least a STB.**
  - Currently STBs to receive DTTV services are available between 20-70 USD.
  - However, in addition to the cost of STB/receivers, consumers who opt for DTTV may also face other costs.
- **Households with second or additional sets will need to obtain equipment to adapt all television sets**
  - If they do not opt for an integrated digital television (with an in-built digital tuner) the costs will include a STB.
  - Costs may also include supplementary cables for VCRs and new indoor aerials;
- **Households with video-recorders may require purchase of additional SCART cables.**

6

## Cost for consumers 2



- **Households who opt for DTTV (for first or subsequent sets)**
  - may have to upgrade aerials for digital switchover.
- **The costs of a new outdoor aerial**
  - can vary depending on what needs to be done and regional variations
  - the range may be from 150 to 600 USD.
- **Households in blocks of flats**
  - may be required to pay additional service charges to meet the costs of upgrading the system for digital reception.
- **In the period up to and after the start of switch-over**
  - the price of DTTV equipment is assumed to fall due to the large scale sales as the country begins to implement plans for digital switchover
  - the increased demand for digital television also may open the way for cheaper access to basic services on satellite and cable.

7

## Non-domestic users cost



- **A large number of businesses**
  - make use of television broadcasting via analogue networks.
  - in order to continue receiving television services after the switchover, reception equipment and relevant systems will need to be upgraded.
  - in some cases, equipment will need to be replaced ahead of its normal replacement cycle.
- **Community TV antenna systems**
  - replace the need for individual aerials which may be less effective due to the location and position of the building.
  - The costs of updating communal TV systems for digital television services will vary depending on
    - the type of building, its location and
    - whether the landlord and residents opt to upgrade the system for DTTV only or
    - whether they wish to invest in a new system that is capable of providing satellite or cable delivery.
  - For systems being in good condition the cost varies between 1200 – 2000 USD per system.

8

## **Cost for Public Service Broadcasters**



### ➤ **The process of achieving digital switchover will have a number of implications for public service broadcasters:**

- they will need to contract (as multiplex operators or indirectly via other multiplex operators) the transmission network companies
  - to deploy and configure the DTTV network and
  - to increase DTTV coverage with multiplexes carrying public service channels so that the coverage matches existing analogue coverage;
- digital take up may strongly affect their future advertising revenue.

9

## **Cost/benefit analysis**



### ➤ **Cost/benefit analysis is to be carried out**


- separately for each (developing) country taking into account its
  - infrastructural, economic, social, demographical, technological and other aspects and on the basis of relevant databases.

### ➤ **Furthermore some common approaches**

- may be used and applied,
  - which could be of interest to the cost/benefit analysis specialists from the national administrations and relevant stake-holders.

10

## Business Models & Public Financing



International  
Telecommunication  
Union  
*Committed to connecting the world*


- **Key financing principle:**
  - PBS: Government
  - Commercial Broadcasters: market
- **Three PBS models:**
  - Government PSB + defined services + fully public funded (UK-BBC)
  - Government PSB + defined services + public funding & ads (NL-NOS)
  - Commercial broadcaster + PSB obligation (+spectrum rights) + partial public funding (FR-TF1, S-TV2, UK-ITV)

PBS Funding Sources
• General Taxes & TV license fees
• Levies to licensed operators
• Public Tenders, Auctions
• Third parties (ITU, NGOs)
• Public Private Partnerships

- Financing of STBs
- Financing FTA stipulations
- Financing Simulcasting
- Revision of TV license fees

11
11

## Who pays the cost



International  
Telecommunication  
Union  
*Committed to connecting the world*

- **Government**
  - **USA**
    - DB Advertisement/Promotion(2007-2009) : 27 mil\$
    - Assist for DtoA Convert(2007-2009) : 2.15 bil \$
    - Assist Public Service Broadcaster (2006-2009): 1.26 bil\$
  - **UK : 2007 plan**
    - DB Advertisement/Promotion(for 7 years) : 200 mil pound
    - Subsidizing vulnerable people(2007~) : 600 mil pound
    - Assist BBC ( after 2005~ ) : 500 mil pound
  - **France : 2008 plan**
    - DB Advertisement/Promotion(2008-2010) : 350 mil Euro
    - Subsidizing vulnerable people(2009-2012) : 100-120 mil Euro
- **Public Service Broadcasters**
- **House Holders/Non-domestic Users**

12

Thank you...

[www.itu.int](http://www.itu.int)

