



# Why DSO in Africa (really) Matters and How to Handle it?

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- **A no-brainer for better or for worse?**
  1. A Massive One Time Opportunity
  2. Attached to Considerable Challenges
  3. An Agenda To Mitigate Opportunity Cost of the Status Quo
  
- **Undertaking DSO process in Cameroon**
  1. Step 1 – A Practical Guide
  2. Step 2 – A Pilot Project
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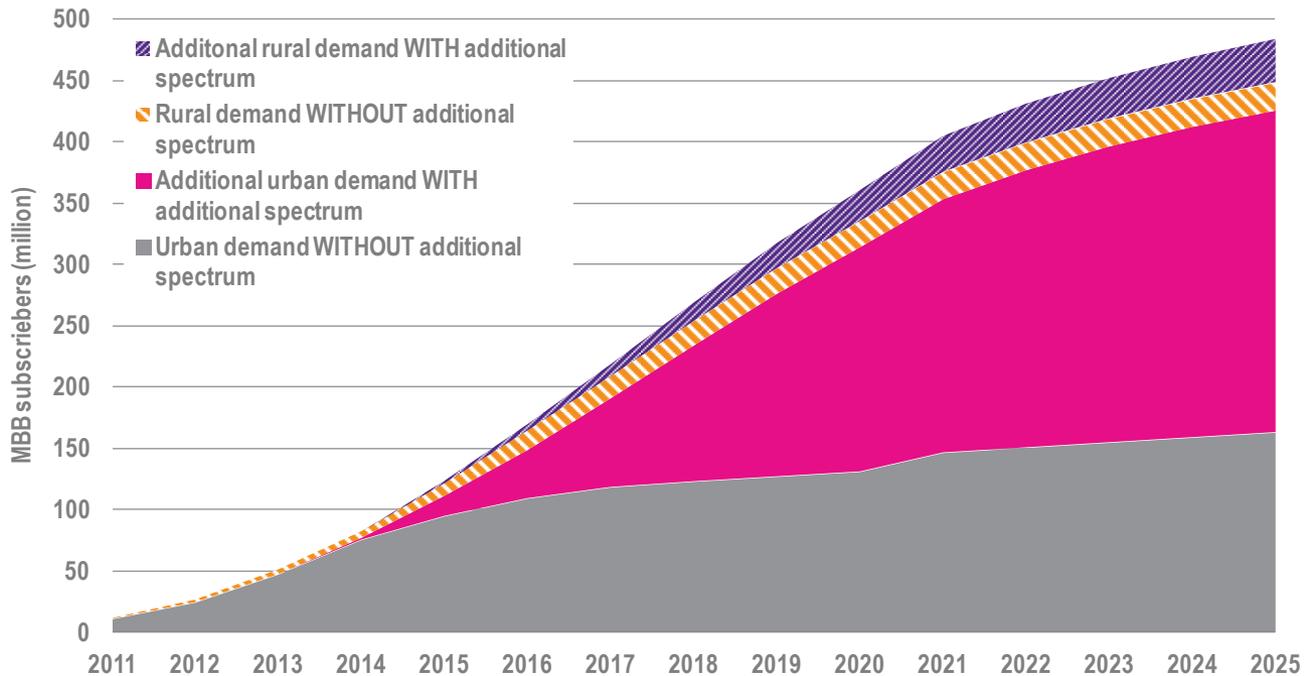
# A no-brainer for better or for worse?

## 1. A Massive One Time Opportunity

- a. Better use of broadcasting as knowledge infrastructure
- b. More and Faster Broadband Internet
- c. DSO, Broadband and Economic Growth

## 1. A Massive One Time Opportunity

The impact of spectrum release on MBB take-up in sub-Saharan Africa

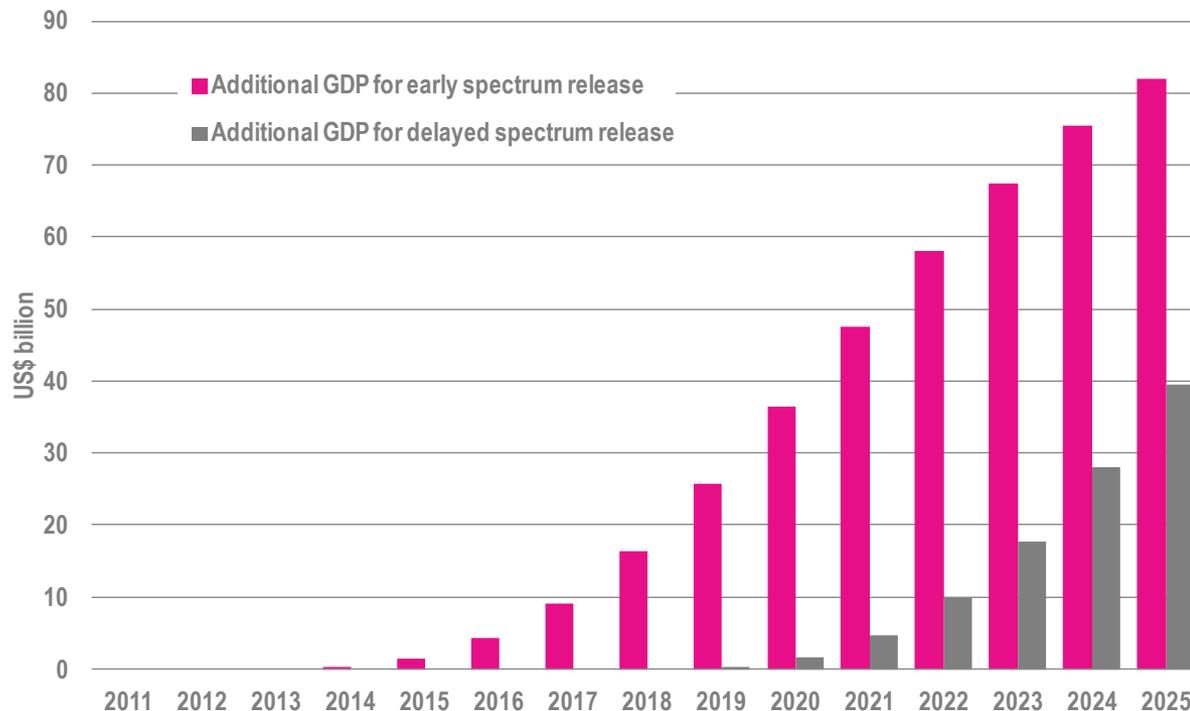


Source: Plum Consulting

SOURCE: Boston Consulting Group *The Economic Benefits of Early Harmonisation of the Digital Dividend Spectrum and the Cost of Fragmentation in Asia Report on the Asia-Pacific Region* (Shanghai: BCG, June 2012) <http://www.gsma.com/spectrum/wp-content/uploads/2012/07/mae12-ppf-bcg-final.pdf>

## 1. A Massive One Time Opportunity

Additional GDP (2010 constant price)



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## 2. Attached to Considerable Challenges

a. DSO is costly



The Cost of Part-Subsidy in Selected Countries

| State        | Households unable to afford | Estimated % unable to afford | Overall subsidy cost        | Cost of subsidy per household |
|--------------|-----------------------------|------------------------------|-----------------------------|-------------------------------|
| Nigeria      | 6.58 million*               | 37%                          | USD 69.1 million (estimate) | USD 28.38 (estimate)          |
| South Africa | 5 million                   | 37%                          | USD 5.6 million             | USD 3.03                      |
| Ghana        | 1 million                   | 33%                          | USD 10.5 million (estimate) | USD 31.81 (estimate)          |

\* This figure is based on TV households and those not able to afford a mobile handset. All data compiled by the authors. For sources for other figures see country reports on Ghana, Nigeria and Senegal published by APC: <http://digmig.apc.org/en/resources>

# A no-brainer for better or for worse?

| Country | Purpose              | Amount                 | Source                        |
|---------|----------------------|------------------------|-------------------------------|
| UK      | Help Scheme          | €693 million           | BBC                           |
|         | Marketing activities | €230 million           | Digital UK                    |
|         | DSO total            | €4.37 billion          | Private/public                |
| France  | Marketing activities | €255 million           | Govt / PSBs                   |
|         | Help Scheme          | €142 million           | Government                    |
| Italy   | Help Scheme          | €50 per qualifying HH  | Government                    |
|         | ASO pilots           | €55 million            | Government                    |
|         | DTT roll-out         | €33 million (2007)     | Government                    |
|         | DTT subsidy          | €220 million (illegal) | Government                    |
| Spain   | DSO projects         | €75 million            | Government                    |
|         | DSO total            | €12 billion            | Private/public (incl viewers) |
| Sweden  | Help Scheme          | No special budget      | Government                    |
|         | Marketing activities | €5.5 million           | Government                    |

# A no-brainer for better or for worse?

| Status  | #  | Countries   |
|---|----|---|
| Total countries                               | 54 |   |
| look unlikely to meet the ITU's 2015 deadline | 43 | Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo-Brazzaville, Cote d'Ivoire, Djibouti, DRC, Egypt, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Ghana, Guinea, Guinea-Bissau, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mozambique, Namibia, Niger, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Swaziland, Uganda, Zambia and Zimbabwe |
| Policy paper or Task Force/Committee          | 11 | Benin, Botswana, Cameroon, Ghana, Mali, Senegal, Zambia, Congo-B, Mozambique, Namibia, Niger  |
| Pilots  | 6  | Angola (short one), Burundi (commercial), CAR (small-scale), DRC (small-scale), Guinea (small-scale), South Africa<br><i>Note: Only 2 of which (Angola and South Africa) look likely to lead to public transition process.</i>  |
| Launched                                      | 9  | Algeria, Gabon (private), Kenya, Morocco, Nigeria (Star Times/NTA), Rwanda (Star Times), Tanzania (Star Times/TBC), Tunisia, Uganda<br><i>Note: No policy yet announced in Nigeria</i>  |
| Completed                                     | 1  | Mauritius   |

## 2. Attached to Considerable Challenges

### c. Policy and regulatory Issues

- Licensing process
- Additional digital channels
- Spectrum plan
- Structure, governance and financing of signal carrier
- A framework for a low-cost set-top box

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## 3. An Agenda To Mitigate Opportunity Cost of the Status Quo

- a. Avoid Widening of the Digital Divide
- b. Avoid Hampering of the efforts to use Broadband
- c. Avoid interference and duplication of initiatives

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## 1. Step 1 – A Practical Guide Guide Outline – Five Modules

### MODULE 1

#### The Context for the DSO in Cameroon

- Why Digital Migration is Important .....
- What is the Starting Point? .....
- Who is Affected by the Digital Switchover?
- The DSO Context in Cameroon .....
- Positives and Negatives of the Digital Switchover in Broadcasting .....

### MODULE 2

#### Policy and Regulatory Framework for Cameroon's DSO

- Introduction to the Issues .....
- The Policy Rationale for Digital Switchover in Cameroon.....
- Institutional Framework for the Implementation of the DSO .....
- Public and Private Partnership on Signal Distribution. ....
- Institutional Arrangements .....
- Financial Considerations .....
- Content and Cultural Diversity.....
- Consumer Policy Issues .....
- Environmental, Health and Safety Factors .
- Human Resources Development and Capacity Building. ....
- Regional Coordination .....
- Regulating the DSO .....
- DSO Regulatory Issues.....

## 1. Step 1 – A Practical Guide Guide Outline – Five Modules

### MODULE 3 Technical Issues and Cameroon’s DSO

- Spectral Efficiency and Interference Mitigation.....
- Global Trends in Wireless Technology Evolution Affecting Spectrum Management .....
- Technological Implications of the Transition to Digital Terrestrial Television Broadcast (DTTB) .....
- Spectrum Requirements for the DSO .....
- Managing the Dividend .....

### MODULE 4 Business Planning for Cameroon’s DSO

- The DTV Value Chain.....
- The Public—TV Audiences and Broadband Users, Television and Internet Access Equipment.....
- Radio Spectrum Aspects .....
- The TV Signal Transmission System .....
- Broadcast Television Content (Channels and Programming) .....
- Implementation Planning.....
- Financing the DSO.....
- Recommendations for Business Planning Activities and Related Projects to Support the DSO .....

### MODULE 5 Cameroon’s DSO Calendar

- Digital Switchover Timeline .....
- Digital Switchover Task List .....

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## 2. Step 2 – A Pilot Project - eWaste

- E-waste and health issues
  - Increase the number of devices
  - Old TV sets being shipped out
  - Availability of substandard decoders
  - Broader issues of electromagnetic radiation



## 2. Step 2 – A Pilot Project - eWaste

### ▪ Objectives

- Developing an environmental management strategy
- Establishing guidelines and standards
- Inclusion of relevant guidelines
- Creating public awareness
- Establishing a recycling



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## 3. Step 3 – A Strategic Program

### a. Component 1 – Enabling Legal and Regulatory Environment

- Spectrum auditing
- Liberalization
- Security and state integrity
- Open access approaches to program production
- Support for local content policies

## 3. Step 3 – A Strategic Program

### b. Component 2 – Mitigating Market Failures

- Invest in subsidy schemes for STBs
- Investment in e-waste programs
- Rural electrification – vital in providing power in the many areas where there is none

## 3. Step 3 – A Strategic Program

### c. Supporting Regional Collaboration

- Cross border co-ordination
- Setting up of the bodies for devising practical strategies to speed up the DSO process
- National multi-stakeholder consultation processes

# Undertaking DSO process in Cameroon

Merci !

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