

GE 06

Frequency coordination
for Sub-Saharan Africa



GE06 Frequency coordination activities and Plan modification Since 2nd Summit

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DIGITAL MIGRATION AND SPECTRUM POLICY SUMMITS

December 2011: Nairobi

September 2012: Accra

MAIN RECOMMENDATIONS

African countries need to establish minimum spectrum requirements for broadcasting and broadband at the national level.

HOW?

Actions for DSO and DD -Africa-

- Through ATU/ITU workshops initiating frequency coordination.
- Consolidate sub regional roadmaps into a Regional Roadmap.
- ITU and other relevant regional groups working towards harmonization of digital dividend spectrum

After WRC-12

ATU GE06 FREQUENCY COORDINATION MEETINGS

12-15 March 2012

BAMAKO, MALI

16-20 April 2012

KAMPALA, UGANDA

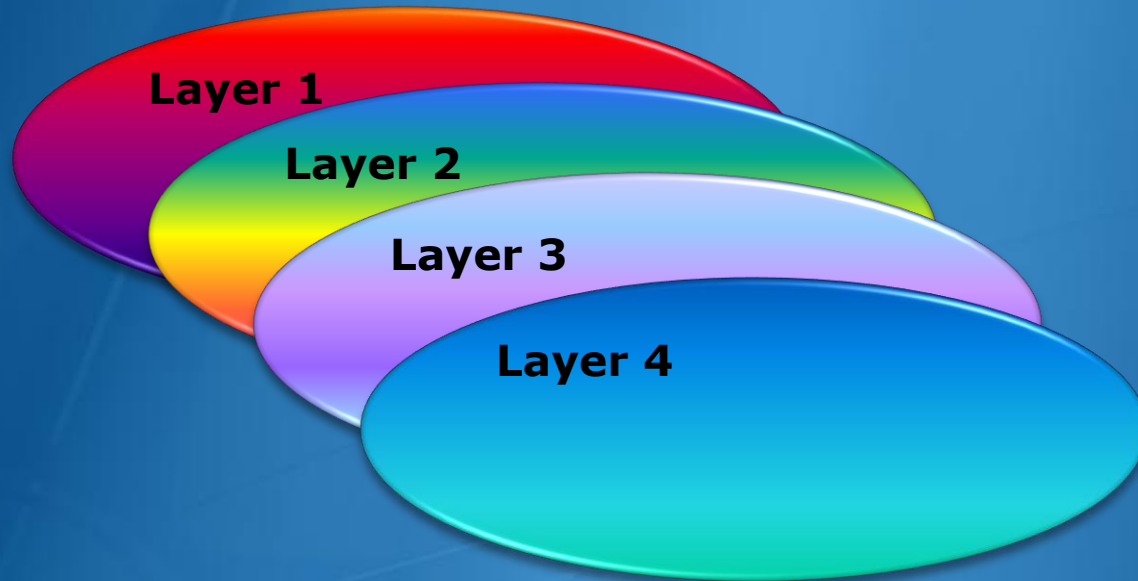
17-19 July 2013

NAIROBI, KENYA

Main objectives

- Re-evaluate, as a matter of priority, the GE-06 taking into account:
 - Short and medium term Spectrum needs of broadcasting and mobile and ensure equitable and efficient access to the spectrum
 - Establishment of proper timelines and activities for the review and modification of GE06 plan

Channel identification



- To identify a minimum/maximum of 4 coverage layers (multiplexes) for the territories of all sub-Saharan African countries in the band **490-694 MHz**

ATU Recommendations

- the Bamako and Kampala meetings recommended to:
 - consider the adoption of the **MPEG4 and DVB-T2** standards at regional African level.
 - consider the adoption of the dual **HDTV/SD** format at African regional level for the set-top boxes
- those administrations currently having more than four layers (assigned frequencies in the band 470-694 MHz) be encouraged to make the **utmost effort** to release part of it to enable neighbouring countries to reach up to that level of resource.

ITU and African Organizations

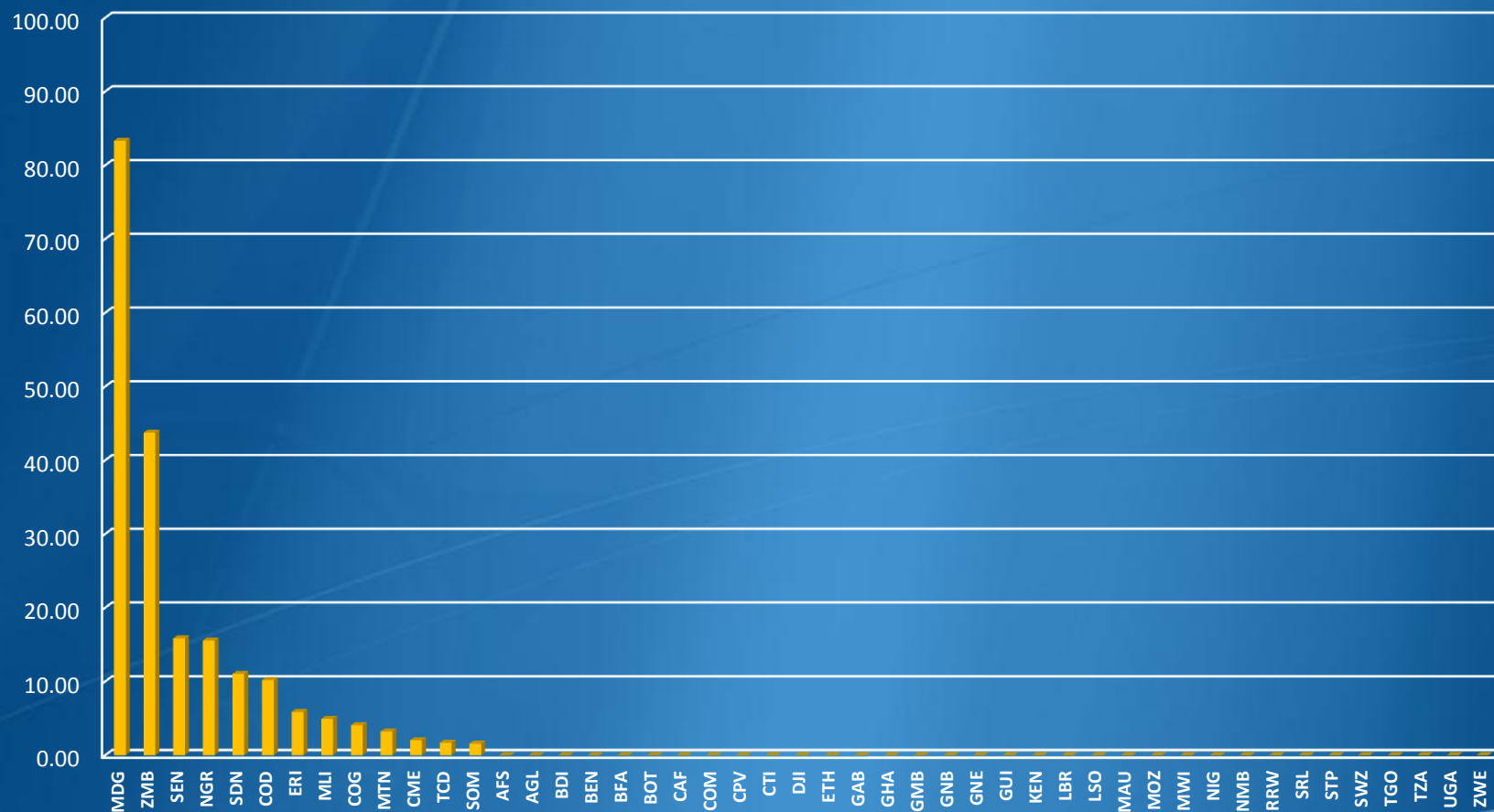
The BR, attended and assisted in the following GE06 Coordination meeting:

- Bamako, Mali, 12-15 March 2012
- Kampala, Uganda, 16 - 20 April 2012
 - SADC: Johannesburg, SA, 20-24 August 2012
 - EACO: Kigali, Rwanda, 18-22.2.2013
 - BDI, KEN, RRW, UGA, TZA. And COD
 - SADC: Victoria Falls, 17-20.6.2013
 - ECOWAS: Abuja, 1-5 July 2013
- Nairobi, 17-19 juillet 2013

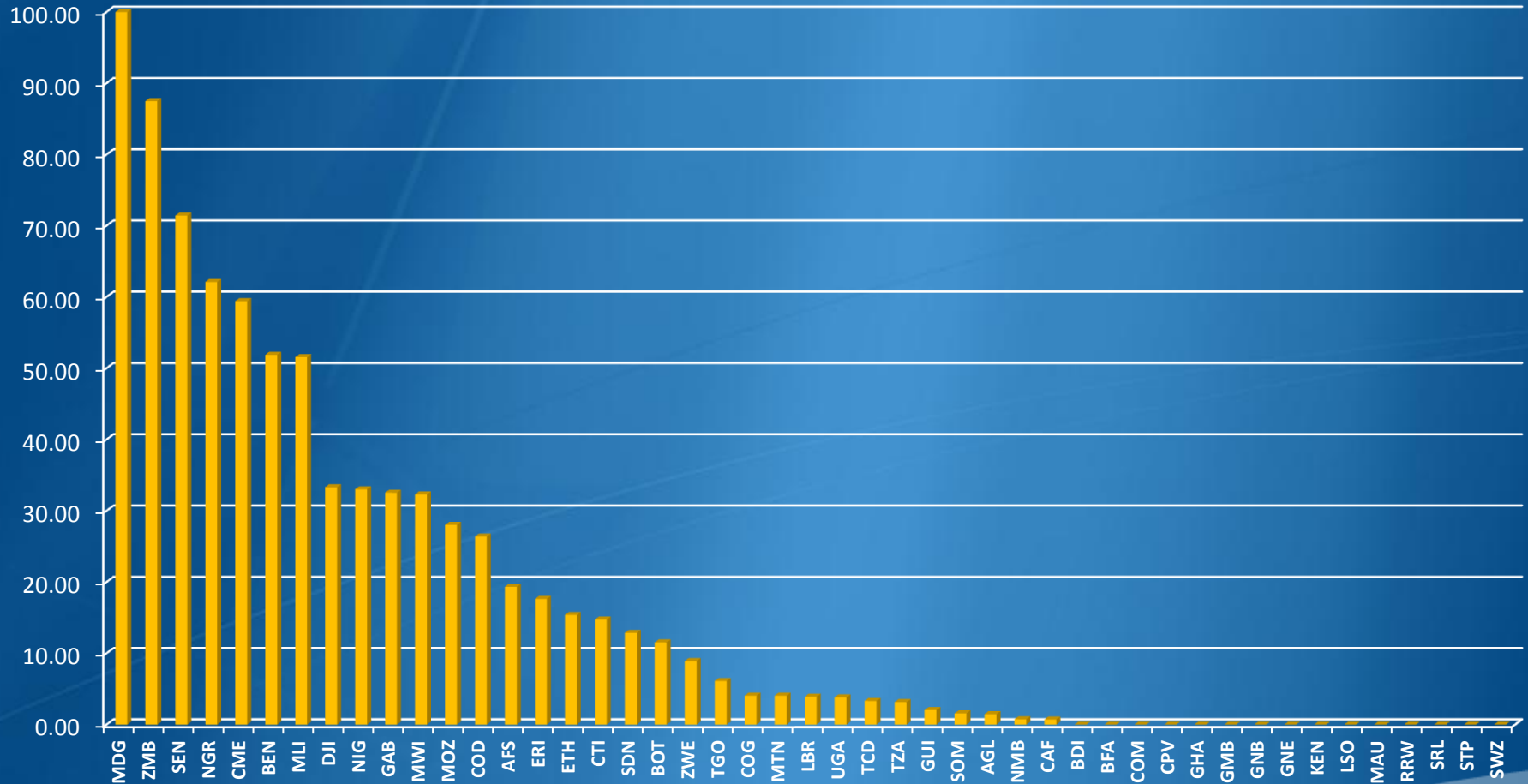
Some numbers

- 47 Sub-Saharan African countries were included in the process (Mauritius requested not to be in).
- 2 African Summits: Nairobi 2011 and Accra 2012 to launch the process.
- 3 meetings for planning and coordination: Bamako March 2102, Kampala April 2012 and Nairobi July 2013.
- 33 iterations.
- 7107 submitted requirements in the band 470-694MHz (11406 at the RRC and for the band 470-862 MHz).

Iteration 1, percentage of assigned channels

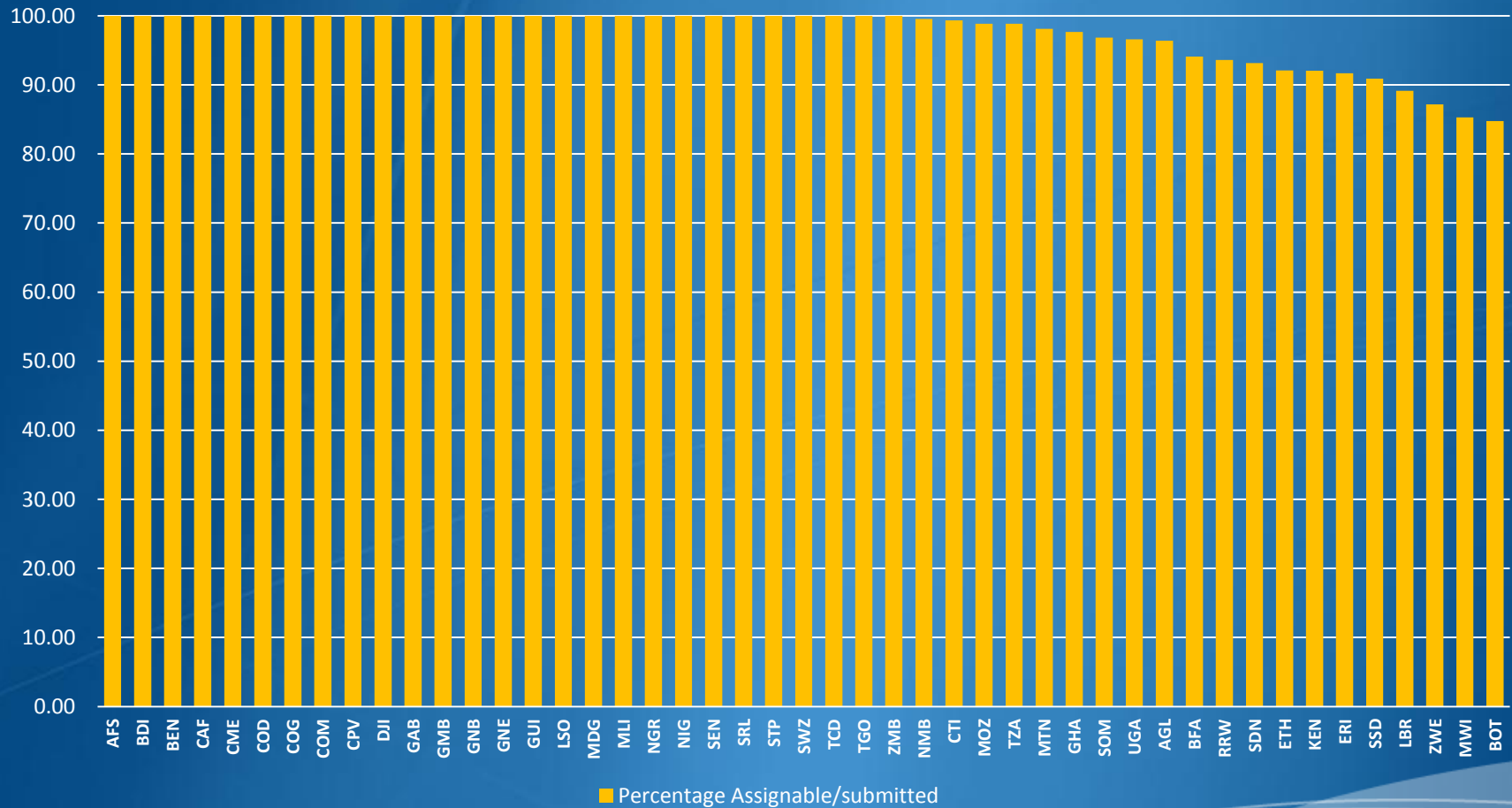


Iteration 7- Percentage of assigned channels -End of Kampala meeting-



Iteration Nairobi-2

Percentage of assignable channels/ Pourcentage de canaux assignables
Internal incompatibilities & interferers ignored/ Incompatibilité et brouilleurs ignorés
Coordination taken into account/ Coordination prise en compte

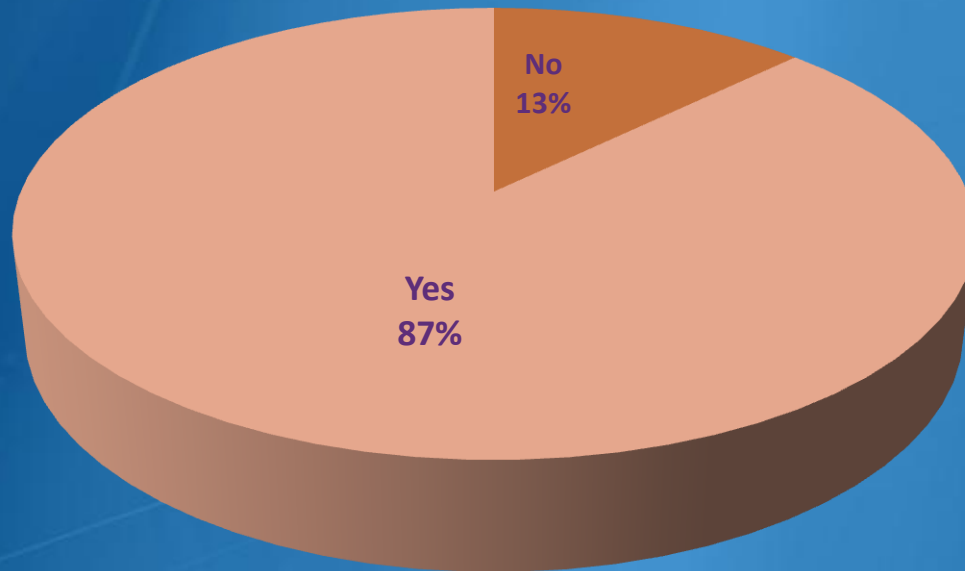


Conclusion on the actions taken by BR

- Generation of the initial requirements (to reach 4 layers)
- Provided the necessary software and tools
- Workshops and training on the GE06 tools and frequency planning
- Assistance in sub regional coordination meetings
- Iterations each 2 weeks since Kampala April 2012 (last iteration 31)
- Requirements for the non replying administrations (4layers)
- Assistance all along the process

Countries having modified the GE06 Plan

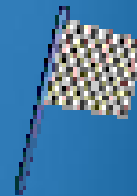
Countries having modified the GE06 Plan



Still missing:
ERI, GNB, GNE, MDG, SRL, STP

Achievements

End of Coordination
meeting



97.37% of the frequency assignments requirements were satisfied

Africa the first **region** to be in a position in 2015 to allocate the **digital dividend** to the **mobile** service for both the **700 MHz** and **800 MHz** bands while having fully coordinated its TV requirements under 694 MHz.

Africa- Set to deploy **digital television**

Cross border frequency coordination with a harmonized calculation method for Africa

- The harmonization set a **standard** that all the countries involved accept on a mutually beneficial approach by consensus;
- **Prevent** and easily **solve** radio **interference** across borders;
- Provide a solid basis for bilateral and multilateral agreements;
- Enable creation of **bilateral preferential frequency** agreements at border zones [who can operate what and with which interference ranges];
- Oblige each country to **take account of other stations before putting own into operation.**

Advantages of a harmonized calculation method for Africa (HCM4A)

- **Optimize** spectrum usage;
- Prevent harmful interferences;
- Confer an adequate **protection for stations**;
- Define **technical provisions** and **administrative procedures**;
- **Quick assignment** of preferential frequencies;
- Transparent decisions through agreed assessment procedures;
- Quick assessment of interference through **data exchange**.

Implementation of HCM4A in four phases

1. **Assessment phase - Done**

Review existing bilateral and multilateral cross-border frequency coordination agreements in Sub-Sahara Africa;

2. **Multilateral agreement proposal - Done**

Technical working group review the results of the assessment and propose a multilateral agreement

3. **Validation workshop - Done**

Adopt the draft agreement in line with the conclusion of the assessment

4. **Signature**

5. **Development of HCM4A software**

Develop and release software (.dll) based on HCM4A agreement and organize training workshops on the procedure

Indication of intention to sign the agreement

Benin	Guinee Equatorial
Burkina Faso	Ivory Coast
Burundi	Kenya
Cameroun	Niger
Congo	Rwanda
Gabon	Senegal
Gambia	South Sudan
Ghana	United Republic of Tanzania
Guinee Bissau	

Thank you for your attention

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