

EXPERIENCES AND THE WAY FORWARD FOR BROADCASTERS

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EBU TECHNOLOGY & INNOVATION (T&I)

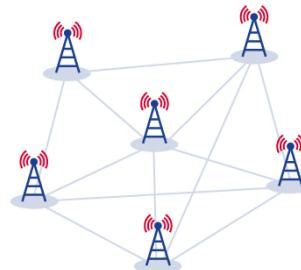
WORKSHOP ON “DIGITAL BROADCASTING
TECHNOLOGIES” FOR SUB-SAHARAN AFRICAN
COUNTRIES

NAIROBI, 6-7 MARCH 2018

THE EBU COMMUNITY IN NUMBERS

THE EUROPEAN BROADCASTING UNION
IS THE WORLD'S LEADING ALLIANCE OF
PUBLIC SERVICE MEDIA

73
MEMBERS



in 56 COUNTRIES



operating
820
TV SERVICES

1156
RADIO SERVICES

broadcasting in
122
LANGUAGES

to a potential
audience of
1.04
BILLION PEOPLE

EBU
OPERATING EUROVISION AND EURORADIO

Learn more about the EBU:
www.ebu.ch/about

EBU Media Intelligence Service 2016

Source: EBU based on Members' data

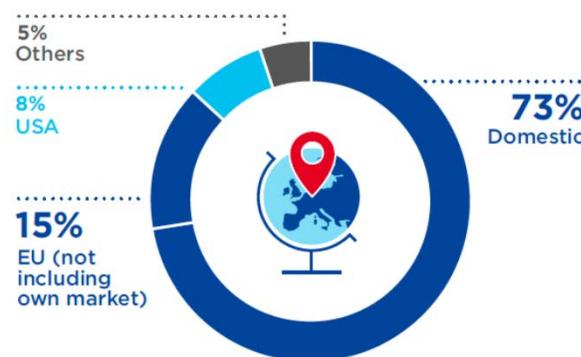
Note: TV services include linear channels, windows and internet streams. The figure does not include HD simulcast or time-shifted channels. Radio services include linear stations, windows and internet streams.

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PSM (PUBLIC SERVICE MEDIA)

CONTRIBUTION TO SOCIETY

PSM are drivers of their national media market.



88%
of our Members' TV output is
of domestic or EU origin



Our Members invest more than
€ 18 BILLION
a year in content creation



Our Members directly employ over
250 000
people across all EBU countries

CONTENT

- 1. STATUS OF DTT IMPLEMENTATION**
- 2. AVAILABLE EXPERIENCE**
- 3. SPECTRUM ISSUES**
- 4. CONCLUSIONS**

CONTENT

1. STATUS OF DTT IMPLEMENTATION
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FEW "MUST KNOWs" about DTT

DTT is a technical means to distribute digital media content to mass audience in a cost efficient way

- DTT is mature
- DTT is flexible
- DTT is secure
- DTT is evolving



- Limited capacity
- Local Media regulation sensitive
- Public Policy decision dependent
- Multistakeholder reliant



DVB>IP



REQUIREMENTS FOR PUBLIC SERVICE MEDIA

- Free-to-air
- Universal availability
- Quality of service
- Ease of use
- No gatekeeping
- Service integrity
- Findability/Prominance
- Accessibility
- Reachable in emergency



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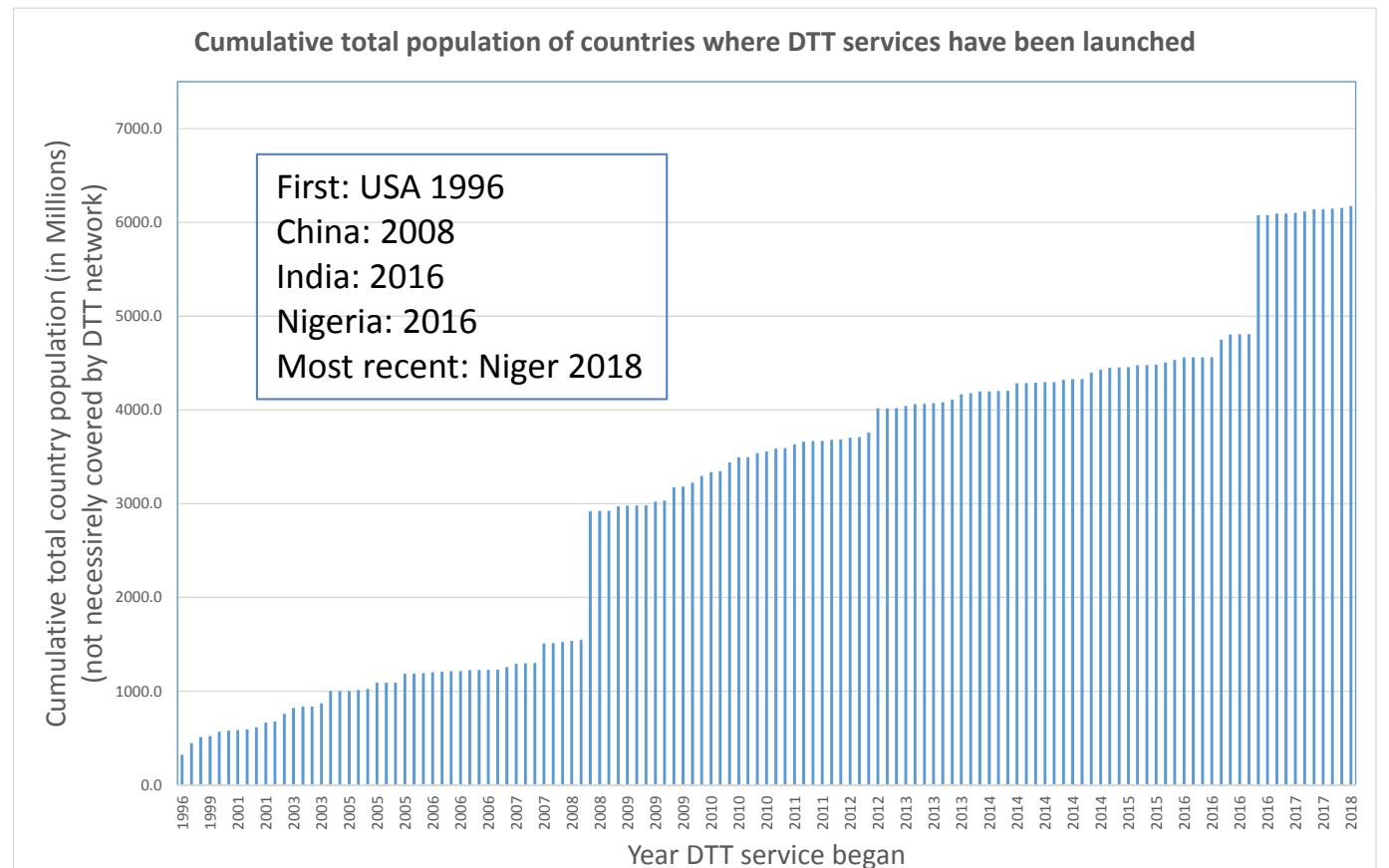


JOINT EBU/DVB/BNE ACTION

- Assisting the broadcasters where possible
- Monitoring the DTT implementation projects



DTT START DATES - GLOBAL

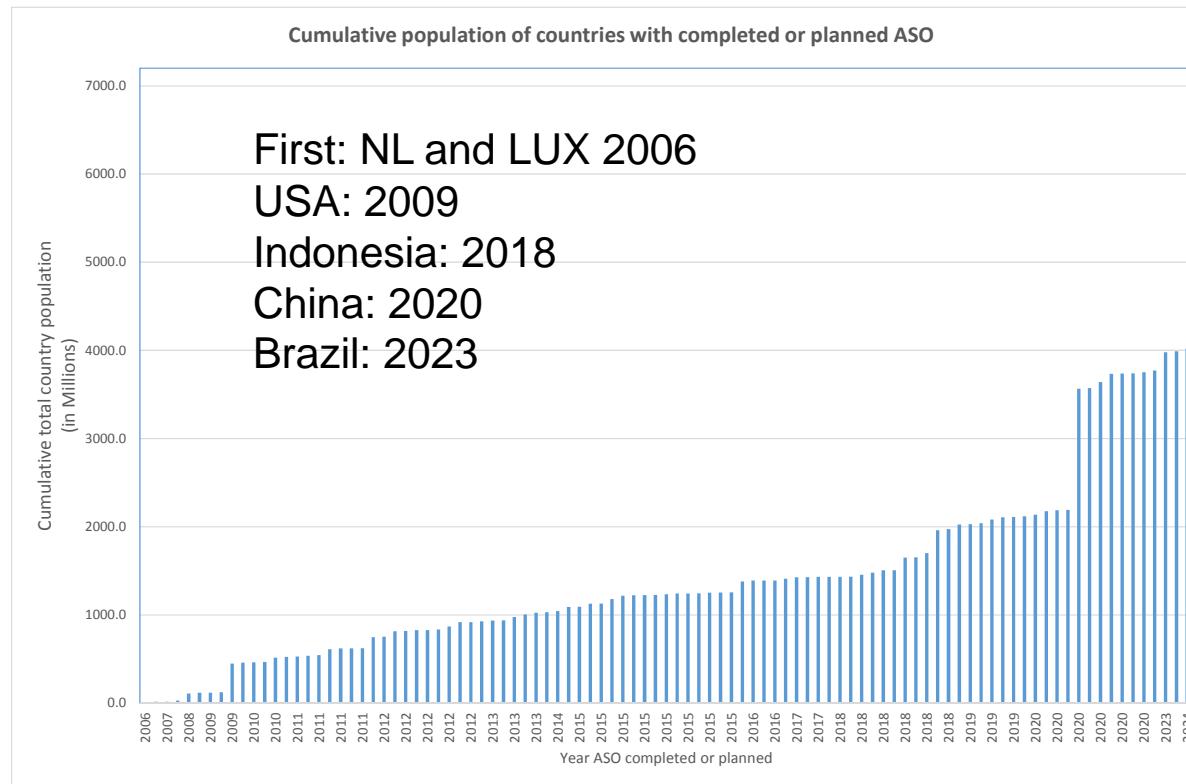


Summary of DTT launches			Cumulative Population (M)	
Total number of countries	196		7237.8	
Number of countries having started DTT	127	65%	6174.1	85%
Number of countries that have not started	69	35%	1063.7	15%

DTT START DATES – ITU REGIONS AND SUB-SAHARA

Summary of DTT launches (ITU Region 1)			Cumulative Population (M)	
Total number of countries	122		2251.7	
Number of countries having started DTT	90	74%	1781.3	79%
Number of countries that have not started DTT	32	26%	470.4	21%
Summary of DTT launches (Sub-Saharan Africa)			Cumulative Population (M)	
Total number of countries	48		995.6	
Number of countries having started DTT	26	54%	634.0	64%
Number of countries that have not started DTT	22	46%	361.6	36%
Summary of DTT launches (ITU Region 2)			Cumulative Population (M)	
Total number of countries	36		967.7	
Number of countries having started DTT	17	47%	904.4	93%
Number of countries that have not started DTT	19	53%	63.3	7%
Summary of DTT launches (ITU Region 3)			Cumulative Population (M)	
Total number of countries	38		4018.5	
Number of countries having started DTT	20	53%	3488.5	87%
Number of countries that have not started DTT	18	47%	530.0	13%

ASO DATES - GLOBAL



Summary of ASO			Cumulative Population (M)	
Total number of countries	196		7237.8	
Number of countries with completed ASO	97	49%	4019.9	56%
Number of countries with no date for ASO	99	51%	3217.9	44%

ASO DATES – ITU REGIONS AND SUB-SAHARA

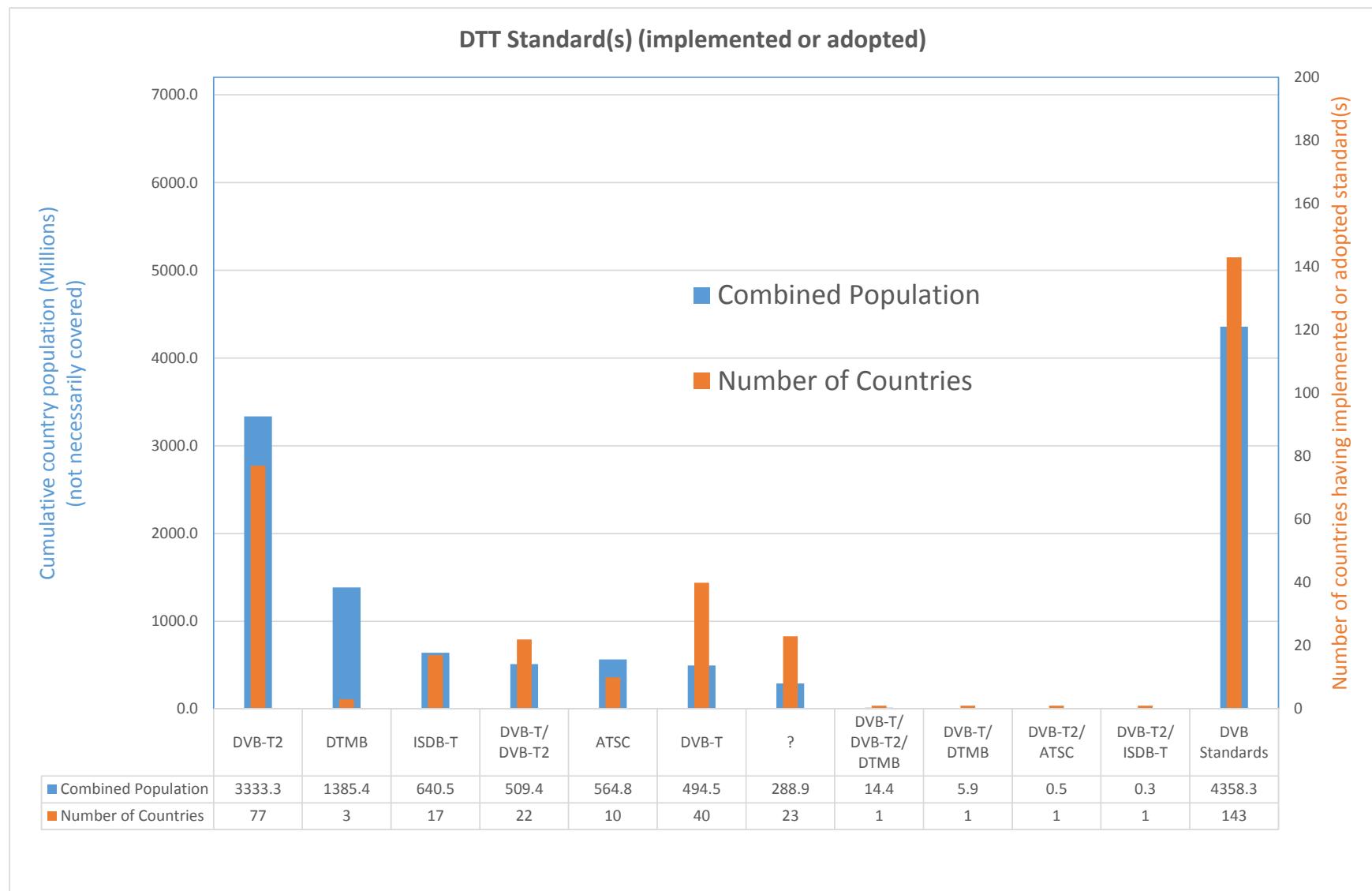
Summary of ASO (ITU Region 1)			Cumulative Population (M)	
Total number of countries	122		2251.7	
Number of countries with completed or planned ASO	67	55%	1094.9	49%
Number of countries with no date for ASO	55	45%	1156.8	51%

Summary of ASO (Sub-Saharan Africa)			Cumulative Population (M)	
Total number of countries	48		995.6	
Number of countries with completed or planned ASO	18	38%	351.3	35%
Number of countries with no date for ASO	30	63%	644.3	65%

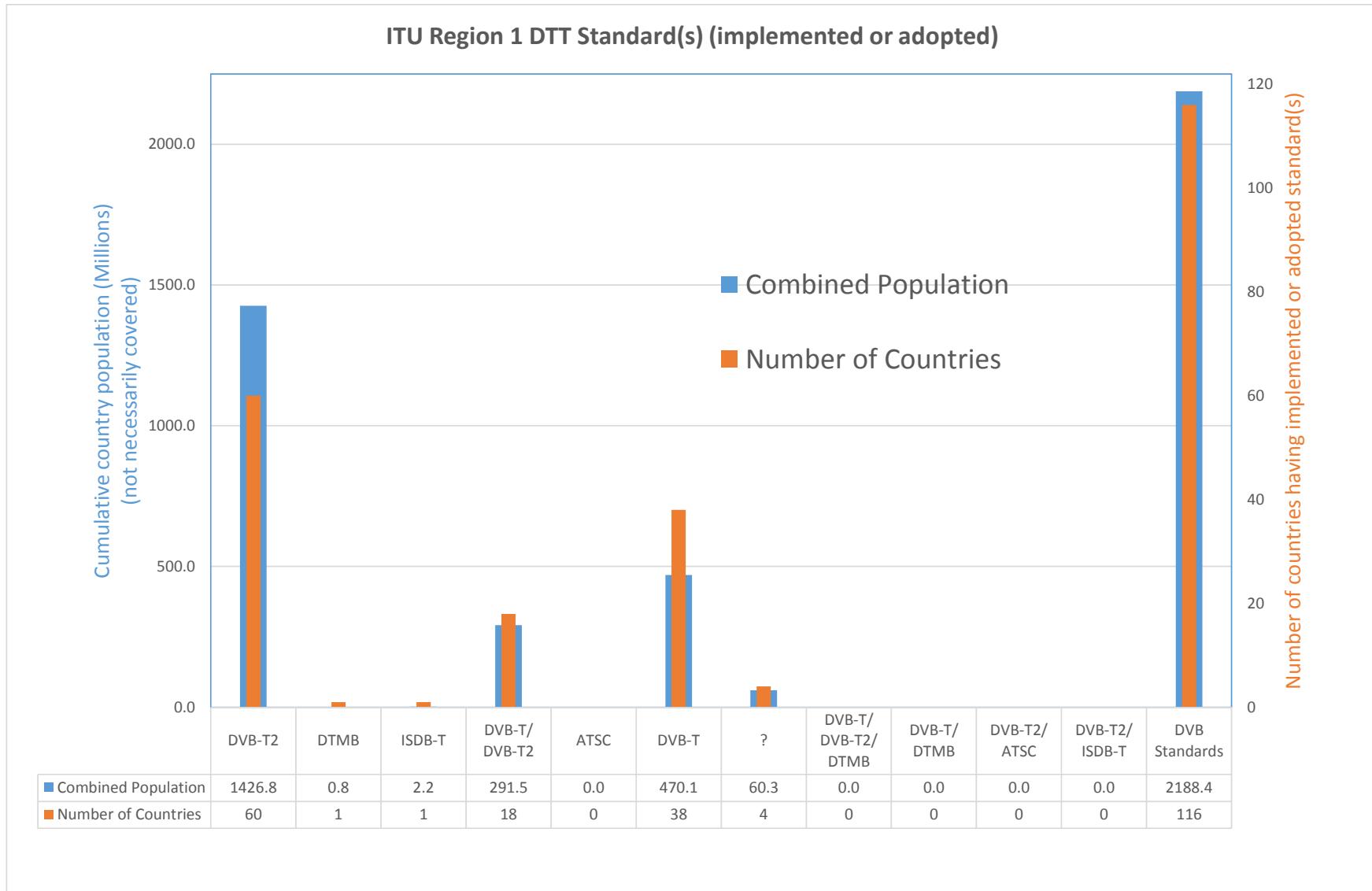
Summary of ASO (ITU Region 2)			Cumulative Population (M)	
Total number of countries	36		967.7	
Number of countries with completed or planned ASO	16	44%	881.7	91%
Number of countries with no date for ASO	20	56%	86.0	9%

Summary of ASO (ITU Region 3)			Cumulative Population (M)	
Total number of countries	38		4018.5	
Number of countries with completed or planned ASO	14	37%	2043.3	51%
Number of countries with no date for ASO	24	63%	1975.2	49%

SYSTEM CHOICE - GLOBAL



SYSTEM CHOICE – REGION 1



COVERAGE- ITU REGIONS AND SUB-SAHARA

Summary of DTT Network Coverage - ITU Region 1		
Data from	51	countries
Median	95	% of population covered in country
Minimum	25	
Maximum	100	

Summary of DTT Network Coverage - Sub-Saharan Africa		
Data from	13	countries
Median	80	% of population covered in country
Minimum	25	
Maximum	95	

Summary of DTT Network Coverage - ITU Region 2		
Data from	5	countries
Median	80	% of population covered in country
Minimum	70	
Maximum	100	

Summary of DTT Network Coverage - ITU Region 3		
Data from	6	countries
Median	87.35	% of population covered in country
Minimum	25	
Maximum	92.6	

STATISTICS OF THE PROGRAMME OFFER ON DTT - GLOBAL

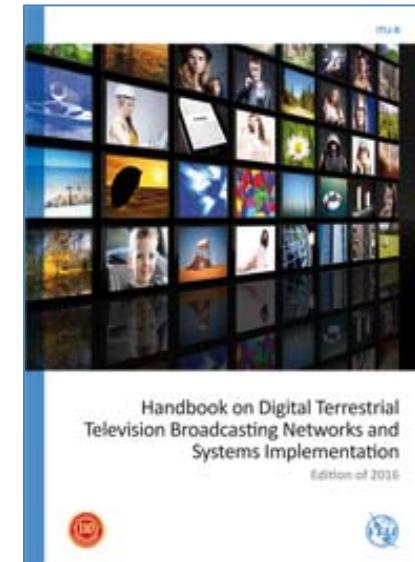
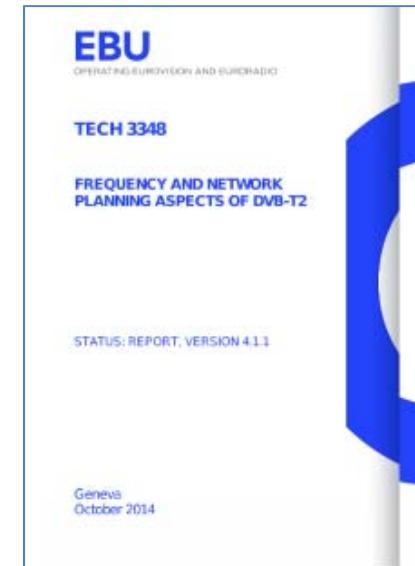
Summary of Programme Offer on DTT				
	No. of Multiplexes	National FTA Progs.	Regional/Local FTA Progs.	Pay-TV Progs.
Maximum	21	70	298	tba
In 5% of the countries	8	54	193	tba
In 25% of the countries	5	22	36	tba
In 50% of the countries	3	12	12	tba
In 75% of the countries	2	7	4	tba
In 95% of the countries	1	4	1	tba
Minimum	1	2	1	tba
No. of countries considered	78	81	28	tba

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AVAILABLE EXPERIENCE

- **EBU, DVB Publications**
- **ITU, CEPT Publications**
- **Capacity building workshops**



AVAILABLE EXPERIENCE

- **Mainly three Business models:**

- Free-to-Air model



- Mixed FTA and Pay-TV model

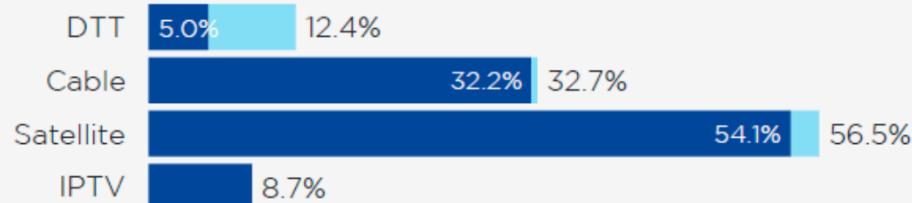


- Pay-TV model



TV Distribution (2016, % of TV households)

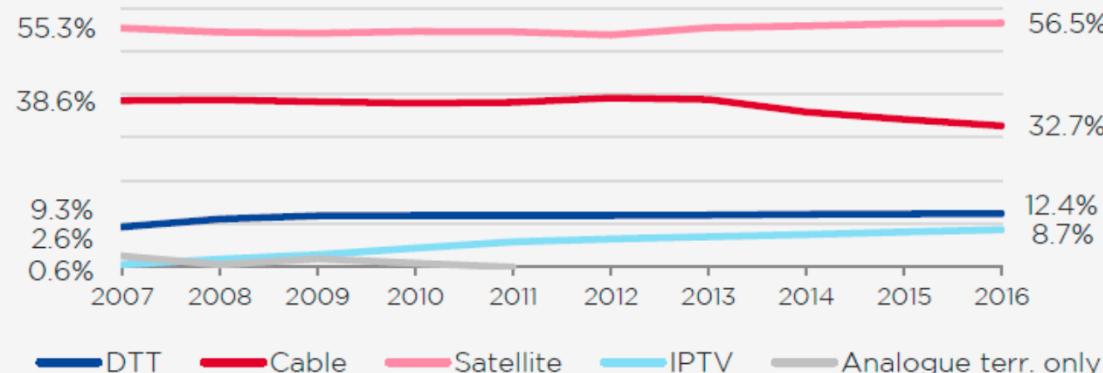
■ Main reception mode ■ Total penetration



Analogue terr. only (Switch off completed in 2011)

AUSTRIA

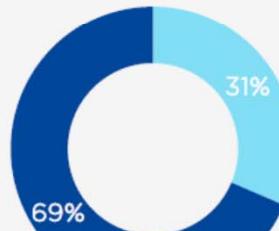
TV Distribution evolution (% of TV households, total penetration)



— DTT — Cable — Satellite — IPTV — Analogue terr. only

DTT

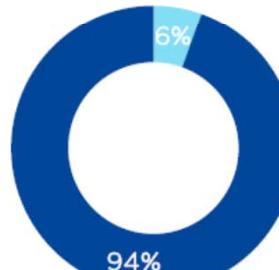
free ■ pay



based on DTT
as main reception mode

Satellite

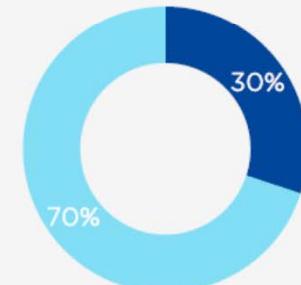
free ■ pay



based on satellite
as main reception mode

Cable

digital ■ analogue



based on cable
as main reception mode

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TV Distribution (2016, % of TV households)

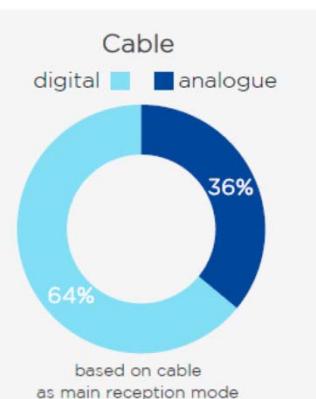
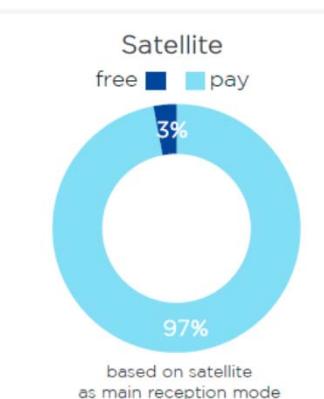
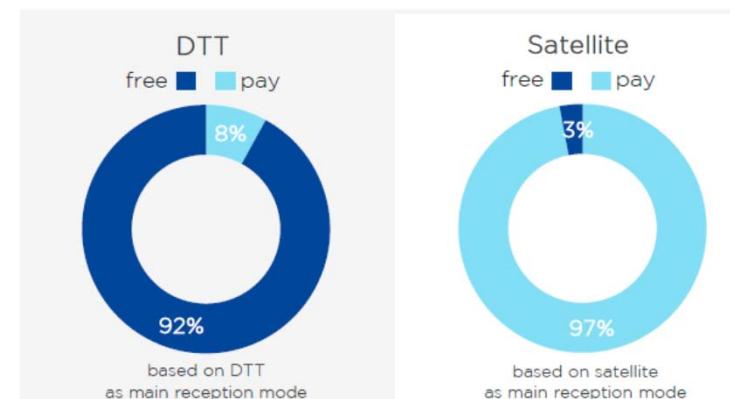
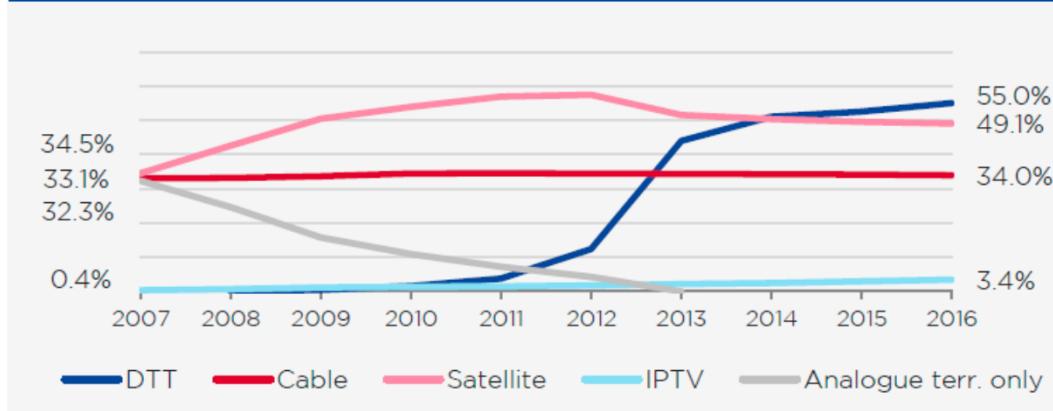
■ Main reception mode ■ Total penetration



Analogue terr. only (Switch off completed in 2013)

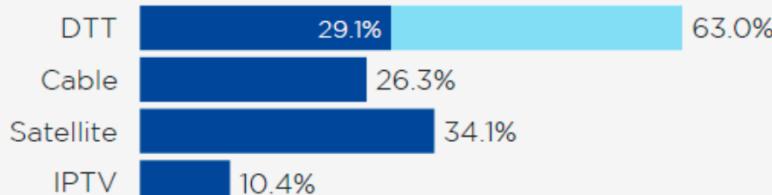
POLAND

TV Distribution evolution (% of TV households, total penetration)



TV Distribution (2016, % of TV households)

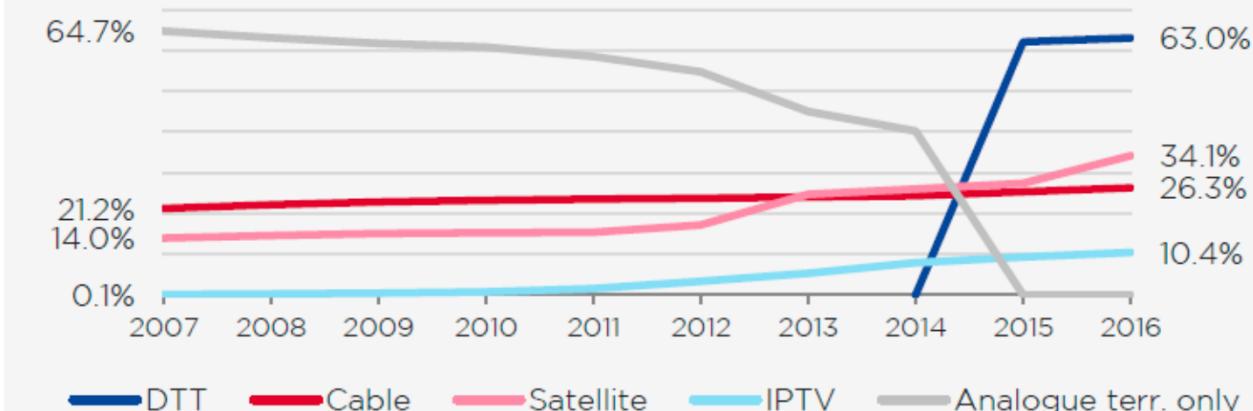
■ Main reception mode ■ Total penetration



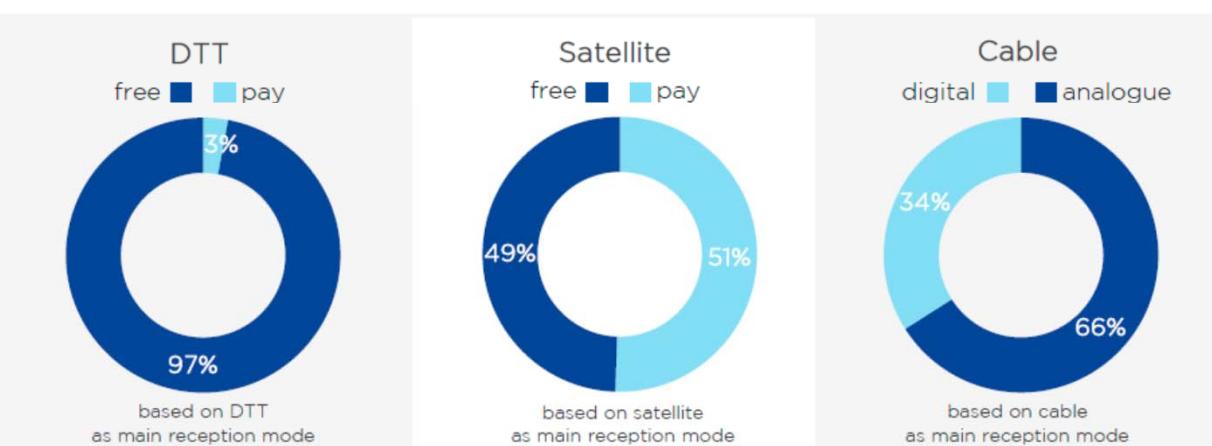
Analogue terr. only (Switch off completed in 2015)

GEORGIA

TV Distribution evolution (% of TV households, total penetration)



— DTT — Cable — Satellite — IPTV — Analogue terr. only



AVAILABLE EXPERIENCE

- Content is



- Audience measurement is

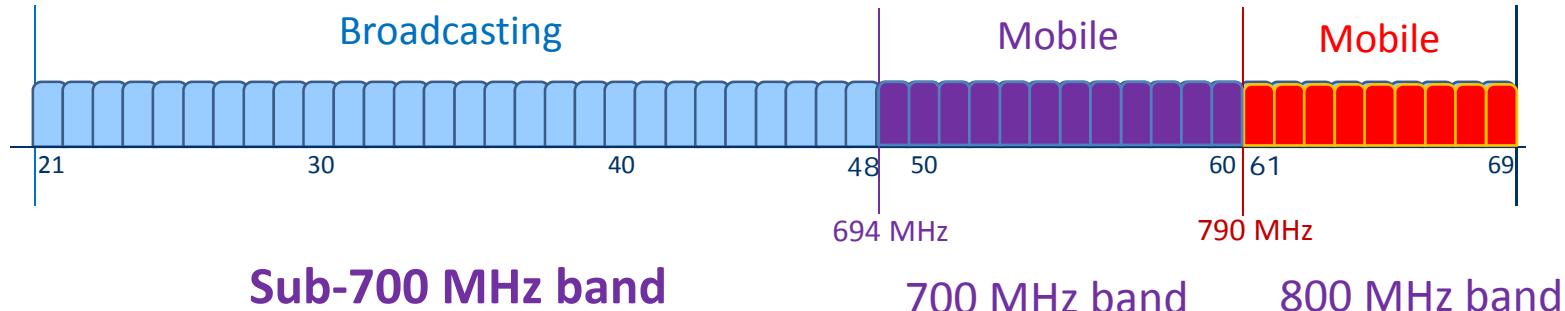


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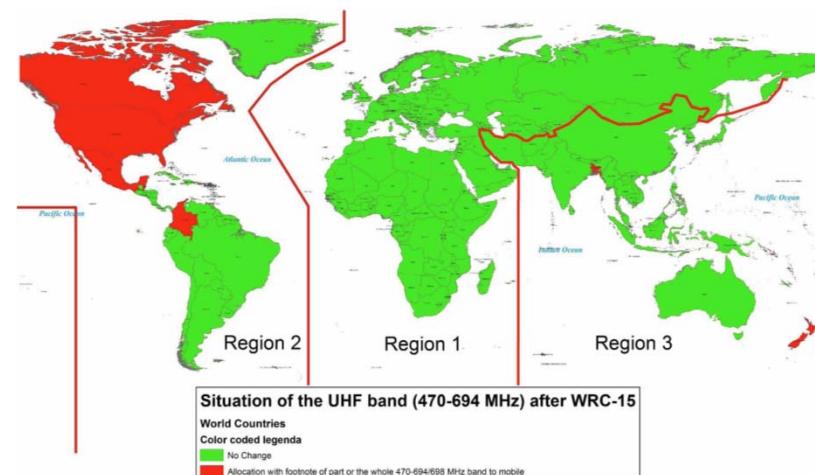
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The Sub-700 MHz band



- 28 x 8 MHz channels : 224 MHz
- DTT Primary band
- Radio Astronomy and PMSE
- GE06 in Region 1
- WRC-15: a milestone
- USA: Incentive Auction
- EU Decision: broadcasting until 2030



IS THERE A RISK ON BROADCASTING SPECTRUM AT WRC-19?

CONCLUSIONS

1. DTT implementation is progressing but needs time.
2. Considerable experience on DTT is available to the African broadcasters and regulators.
3. Market surveys, attractive content and Audience measurements are key for success
4. Certainty of access to sub-700 MHz spectrum for DTT is more important than ever.



POUR RAPPEL

- la sécurité de l'accès au spectre dans le long terme est essentiel pour permettre les investissements nécessaires dans les réseaux de diffusion
- Une proportion significative de spectre alloué au service mobile n'a toujours pas été utilisée. Ce spectre doit en priorité être utilisé avant toute autre allocation de spectre supplémentaire



Pour l'Afrique, le Numérique doit être une opportunité pour promouvoir la Diversité, le Développement et la Démocratie

DIVERSITE (CULTURELLE ET LINGUISTIQUE) :

- Promouvoir la diversité culturelle et linguistique et favoriser l'intégration des peuples et des cultures africains

DEMOCRATIE (PARTICIPATIVE) :

- Promouvoir le pluralisme de l'information et contribuer au renforcement de la démocratie participative

DEVELOPPEMENT (SOCIAL ET ECONOMIQUE) :

- Faire de la télévision un outil du développement social (contenus et services multimédias pour l'éducation, la santé,...)
- Valoriser le dividende numérique pour favoriser l'économie numérique et utiliser une partie des ressources générées pour accompagner le développement de l'audiovisuel



LE DEFI MAJEUR DE

L'UNION AFRICAINE DE RADIODIFFUSION

**Traduire la prouesse technologique du
Numérique, en rayonnement culturel , en
opportunités économiques, en progrès social,
et en avancées démocratiques**



By M. MAMADOU BAAL

AFRICAN UNION OF BROADCASTING
UNION AFRICAINE DE RADIODIFFUSION

*".GIVEN THE CURRENT DEVELOPMENT, A
QUESTION WHICH KEEPS BOTHERING MY
MIND IS WHETHER THERE WOULD BE ENOUGH
SPECTRUM FOR TERRESTRIAL
BROADCASTING IN CHANNEL 21 48 IF ALL
THESE SERVICES UPGRADE TO HD AND UHD"*

Dr. Adam Icarius Imoro
Ghana Broadcasting Corporation

THANK YOU,

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