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TRANSITION
FROM ANALOGUE TO
DIGITAL
BROADCASTING
BDT activities

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The challenges of Switchover

- **Legal and Political issues**
 - Program editors, Licensing, number and ownership of Multiplexes, Network Operators, Public TV services, commercial TVs, local TV Standards, Analogue Switch Off (ASO), etc
- **Technical issues**
 - Standards, compression system (MPEG2/MPEG4), Spectrum availability, network planning (MFN/SFN), coverage areas, end users equipment (Set-Top Box/ D-TV), etc.
- **Economical related issues**
 - Introduction of new business model, transition costs, subsidizing vulnerable people, etc.
- **Allocation of Digital dividend**

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ITU Activities for the Transition



- **Regional Radiocommunication Conference 2006 (RRC-06)**
 - Frequency plan for the digital terrestrial broadcasting
 - Deadline to switch over for region 1 countries: 17 June 2015 (some countries and bands 2020)
- **Software Packages for spectrum management**
 - Compatibility analysis in the GE 06 Frequency bands
 - Spectrum Management Systems for Developing Countries (SMS4DC)
- **Recommendations, Reports and Handbooks on digital broadcasting technologies**

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Roadmap



A roadmap
is a
management
forecasting
tool

- Directed to the implementation of strategy and related to project planning
- Matching short-term and long-term goals
- Indicating the main activities needed to meet these goals

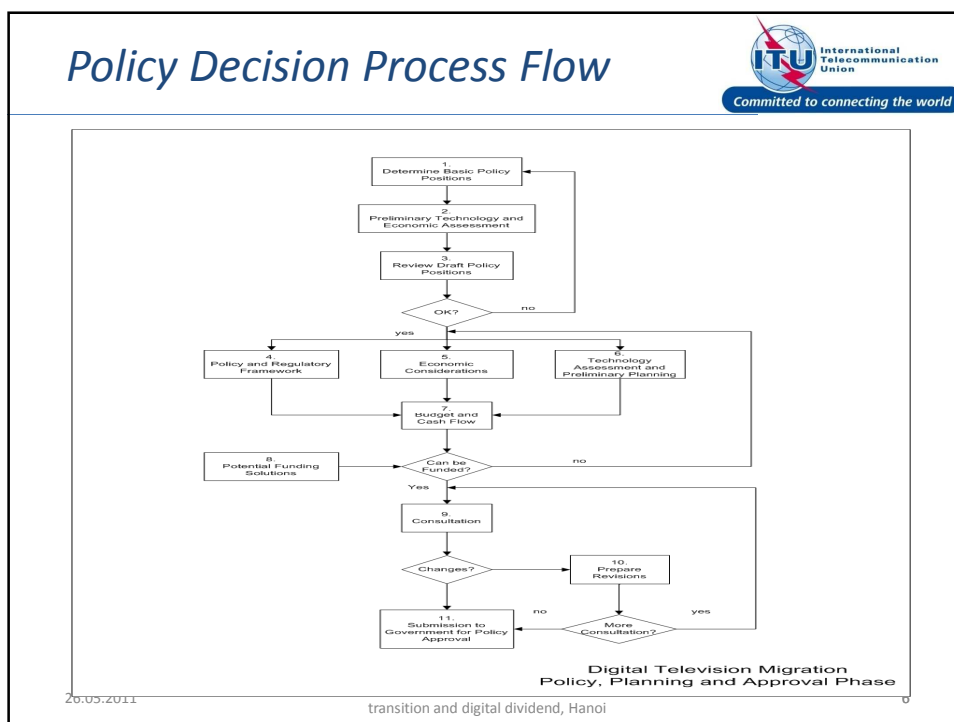
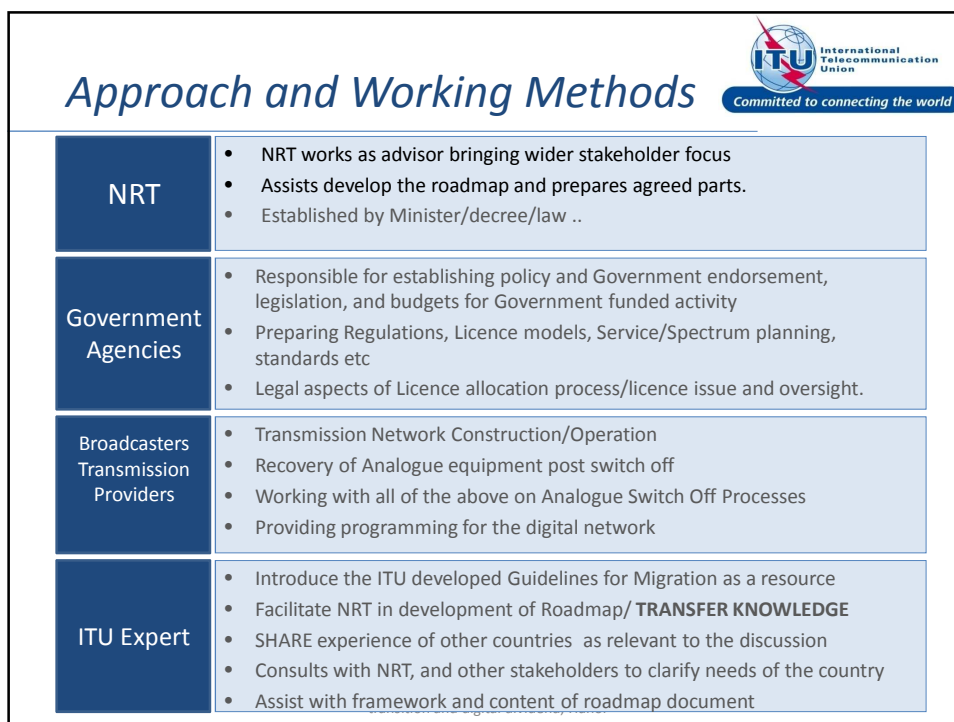
Roadmap
development
has three
major uses

- Helping to reach consensus about requirements and solutions
- Providing a mechanism to help forecast the key milestones
- Providing a framework to help plan and coordinate the steps needed

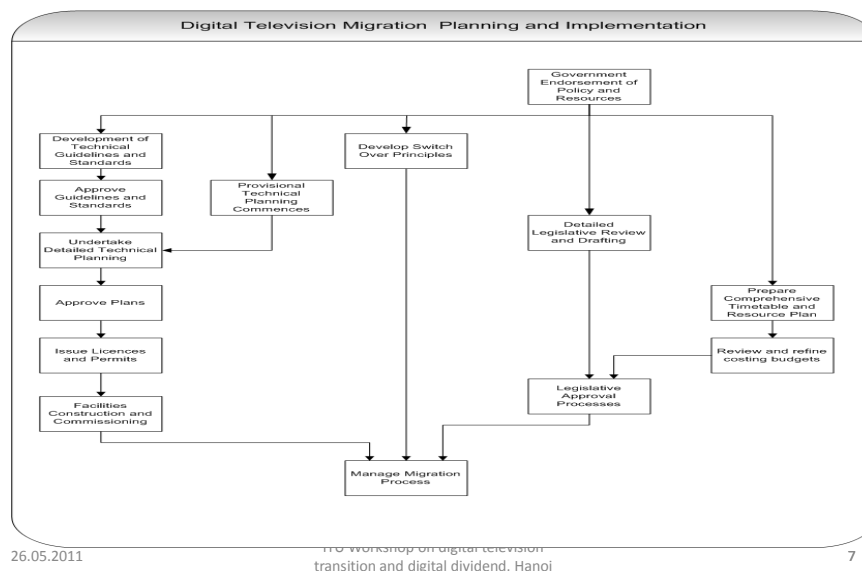
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Migration Planning and Implementation



Guideline: Situation and challenge



Situation

- ITU/BDT activity on the implementation of regional initiatives projects approved by WTDC-06
- Directed by Mr. Gue-Jo Jo (ITU-D)
- Supported by ITU and Korea Communications Commission (KCC), Republic of Korea

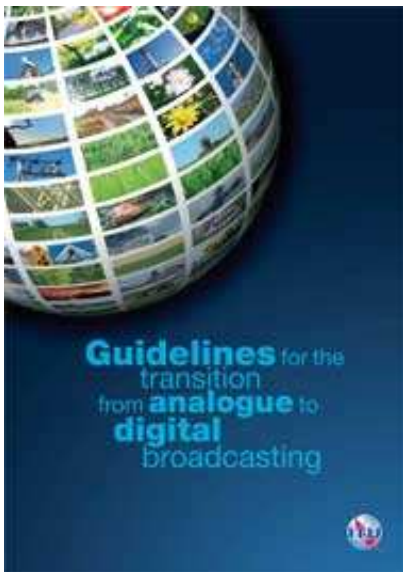
Challenge


- DTTB and MTV (?) is being implemented in all Regions
- Analogue switch-off has been completed in a number of European countries and in the USA
- According to the GE06 Agreement, analogue TV will no longer be protected after 17 June 2015
 - In a number of countries, including 31 African countries, not after 17 June 2020 in Band III
- Digital TV has proven its success
 - Countries not preparing for DTTB and MTV introduction should start rather sooner than later

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➤ Posted on ITU web for free download


<http://www.itu.int/publ/D-HDB-GUIDELINES.01-2010/en>

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Guideline: Scope and objective

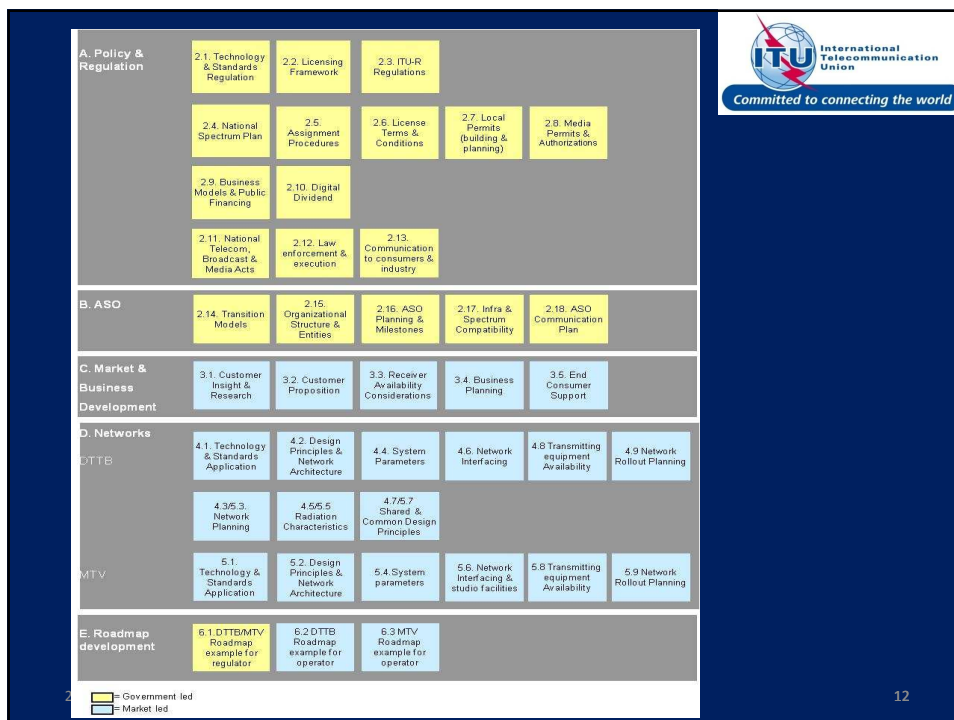
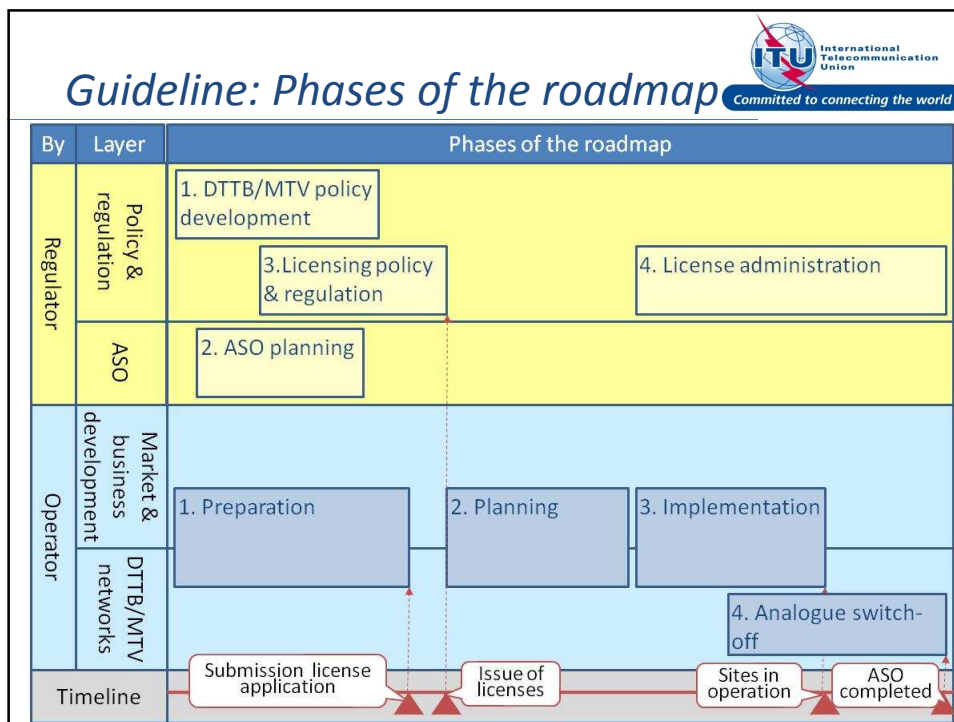



Scope	<ul style="list-style-type: none"> • Guidelines on <ul style="list-style-type: none"> – Transition from analogue TV to Digital Terrestrial Television Broadcasting (DTTB) – Introduction of Mobile Television Broadcasting (MTV) • Identification of <ul style="list-style-type: none"> – The policy, economic and technology choices – Their potential impact DTTB and MTV introduction • Providing many practical examples and references to documents for additional or more detailed information
Objective	<ul style="list-style-type: none"> • To assist the African countries in making their own roadmap <ul style="list-style-type: none"> – To shift smoothly from analogue to DTTB and MTV • To provide information regarding the cost benefit analysis of policy decisions and best practices

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2.1 Preparing technology & standards regulations

1. Carry out market research/surveys to identify industry and consumer needs for standardization
2. Determine minimum set of receiver Standards for the DTTB and MTV market, based on the market developments and the *planned* licensing procedures, terms and conditions
3. Map on existing standardization policies/rules and determine additional standardization needs
4. Assess impact on industry and end consumers
5. Determine receiver requirements and include in frequency license terms & conditions and/or media permits & authorizations
6. Determine communication messages, planning, standardization/testing bodies and methods (including logos & labelling)
7. Update, if necessary National Spectrum Plan and Legislation

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2.11 Proposing changes in national telecom, broadcast and media acts

1. Make inventory of current Legislation
2. Map inventory on DTTB/MTV introductions and compare with 'best practices'
3. Identify gaps and draft proposals for additional and/or changes in Legislation (based on 'best practices')
4. Determine planning for changes in the law and determine 'must haves' for launching DTTB/ASO and MTV

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Guideline: Asia Pacific Revisions


ASIA
PACIFIC
UPDATE

- WTDC 10 assigned priority to assisting developing countries in Asia Pacific on digital migration including archives
- Guidelines Updated to reflect the different ITU rules and requirements in Region 3 (Asia Pacific)
- Addition of New Chapter on Archives Migration
- Survey conducted to identify needs and to select 5 pilot countries with whom to develop migration roadmap models for AP

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Assistance provided by BDT


Africa

- Guidelines
- Three countries selected for implementation of the Guidelines (i.e. preparation of the roadmap)
 - Ethiopia (first mission done)
 - Mali (done)
 - Angola (first mission in June)
- Additional assistance:
 - Zambia (workshop)
 - Congo (assessment)
 - Swaziland (assessment)

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Assistance provided by BDT


Asia Pacific

- Guideline extension for Asia Pacific
- Five countries selected for implementation of the Guidelines
 - Mongolia (first mission done)
 - Cambodia (done)
 - Tonga, Sri Lanka, Nepal (will start soon)
 - Cooperation with ABU
- Additional assistance:
 - Bhutan (assessment)
 - Co-organizing workshops, seminars with ABU and AIBD
 - Thailand (training)
- Cooperation agreement among ITU-ABU-AIBD

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CIS

- Assistance:
 - Georgia (assessment)
 - Organizing workshops, seminars in the region
- Project in Kyrgyzstan
 - Interactive Multimedia Digital Broadcasting (IMDB) Networks in the Kyrgyz Republic (area with mountainous terrain)

Americas

- Suriname: workshop on standards
- Participation at the CBU General Assembly and delivering presentation on the transition

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Regional initiatives



- In all the regions Digital broadcasting and transition
 - Africa
 - Asia Pacific
 - Arab
 - Americas
 - Europe (Central and Eastern Europe)
 - CIS

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Conclusions



- Transition to DTTB and the introduction of MTV services is a complex process
 - Involving decisions on key topics and choices of 41 functional building blocks
- A successful transition to DTTB and the introduction of MTV services requires:
 - Strong leadership of government
 - Firm decision of analogue TV switch-off date
 - Close cooperation of Regulator and market parties
 - Clear and timely regulatory framework (including decisions on the “Digital Dividend”)
 - Adequate information and assistance to viewers

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Thank you !

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