


**TRANSITION
FROM ANALOGUE TO
DIGITAL
BROADCASTING
ASO aspects**

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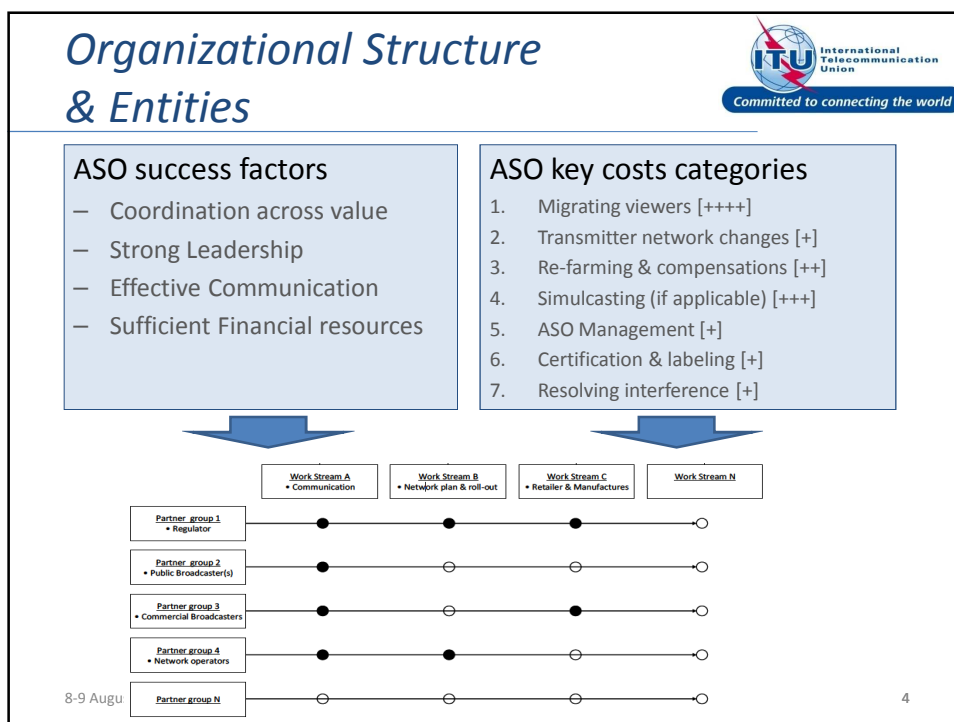
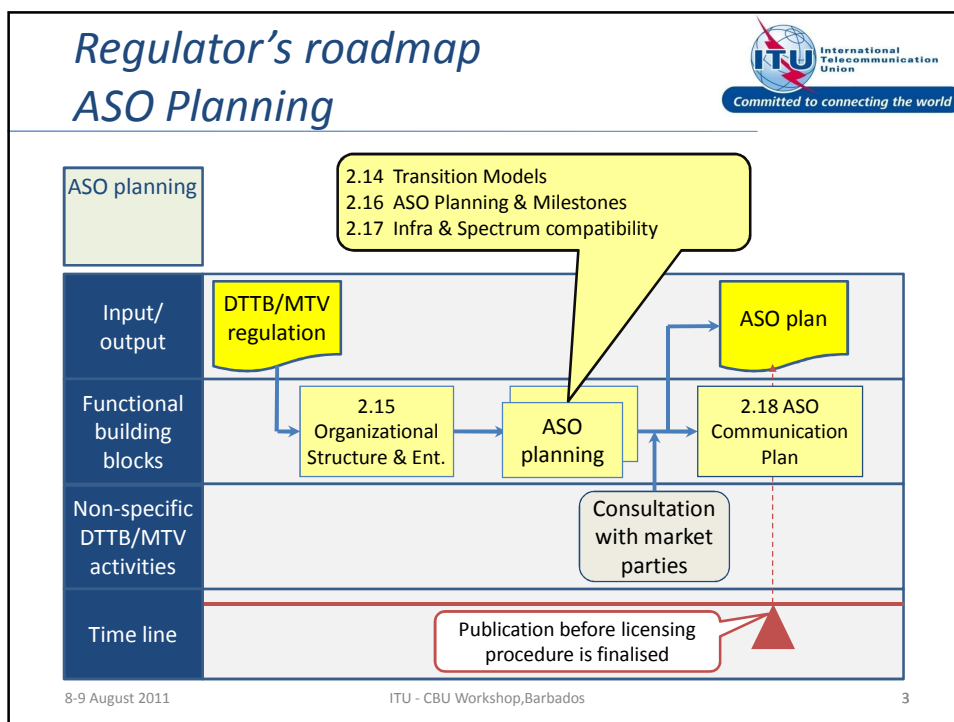
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Content

Analogue switch-off (ASO)	<ul style="list-style-type: none"> • Process of turning off the analogue terrestrial television signal and replacing it with a digital signal • Government initiated policy, aiming at <ul style="list-style-type: none"> – More channels and services – New revenue streams and business models • The key objective in the ASO process is reducing the risk of service interruption
Main items	<ul style="list-style-type: none"> • Functional building blocks related to ASO • Conclusions

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Transition Models

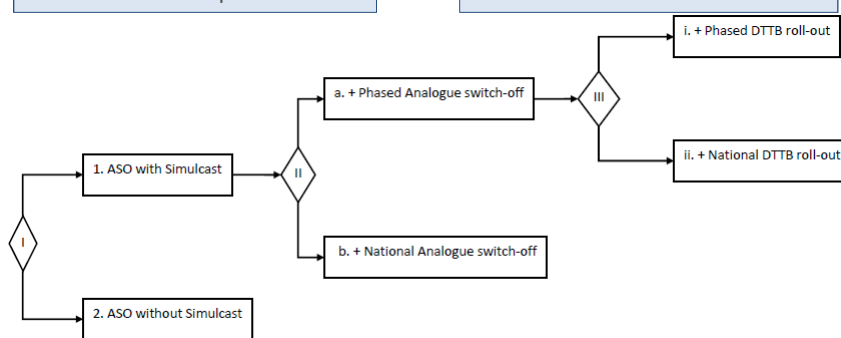
ASO model factors

1. PBS services
2. # of analogue viewers
3. Spectrum availability
4. DTTB service uptake

➔

Two basic ASO models

1. ASO with Simulcast:
 - A. Phased
 - B. National
2. ASO without Simulcast



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graph TD
    I{I} --> A[1. ASO with Simulcast]
    I --> B[2. ASO without Simulcast]
    A --> II{II}
    B --> II
    II --> C[a. + Phased Analogue switch-off]
    II --> D[b. + National Analogue switch-off]
    C --> III{III}
    D --> III
    III --> E[i. + Phased DTTB roll-out]
    III --> F[ii. + National DTTB roll-out]
    
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ASO Planning & Milestones

- **Planning questions**
 - When to start
 - Where to start
 - How long (total/each phase)
- **Key Result Paths:**
 - Communications
 - Device Logistics
 - Network Roll-out
 - Consumer Monitoring
 - Regulations & Licensing
 - Financial Support

No clear marker

Three basis options:

- Highly populated areas
- Rural areas
- Specific test areas

Minimum benefit time for viewer

1. DTV intro

- NSP updated & service licensed
- A-TV licensing stopped
- A-TV broadcasters informed

2. Simulcast


- STB distributed
- 'Post Code checker' ok
- Customer Contact Centre in place
- Compensation Scheme operational

3. ASO

- Monitoring affected viewers
- A-equipment dismantled
- Removing restrictions in DTV network

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Infrastructure & Spectrum Compatibility



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- **Incompatibility only if:**
 - Simulcast
 - Lack of Spectrum
- **Infrastructure incompatibility:**
 - Lack of antenna space
 - Lack of floor space
 - Lack of power & cooling
- **Resolving spectrum is trading off:**
 - Continuing analogue TV
 - Best digital coverage

Infrastructure principles	
Antenna space	<ul style="list-style-type: none"> • Reduce gain & increase power
Floor space	<ul style="list-style-type: none"> • Reduce power & increase gain
Transmitter Space	<ul style="list-style-type: none"> • Pre-fab containers (feeder cable loss!) • Reduce power & gain
Floor & Antenna Space	<ul style="list-style-type: none"> • Increase robustness • Reduce coverage
Spectrum principles	
Improving Digital	<ul style="list-style-type: none"> • Lowering A ERP • Increasing D robustness • Reducing D coverage
Degrading Analogue	<ul style="list-style-type: none"> • Allow more D interference

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ASO Communication Plan



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- **ASO strategy is phased in stages**
- **ASO target groups**
 - Viewers (including disabled, elderly people, community centres, landlords, public places, etc)
 - Industry (including STB producers, retailers, broadcasters, local Governments, consumer associations & certification institutes)
- **Communication tools**
 - Website
 - Printed media
 - Direct mail
 - Customer Contact Centre

- 1 Awareness
- 2 Understanding
- 3 Attitudes
- 4 Intentions to Convert
- 5 Conversion
- 6 Satisfaction with Digital TV

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Conclusions ASO



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- ASO is Government initiated and led process:
 - Government is responsible for DTV service (& levels)
 - Government will incur (significant) costs
- ASO key decisions are:
 - Simulcast or not
 - When, where and how long
- ASO process requires timely & careful planning, esp. when simulcast & infra/spectrum incompatibility exist
- ASO Key Success Factors:
 - Coordination across value
 - Strong leadership
 - Effective communication
 - Sufficient financial resources

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Thank you !

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