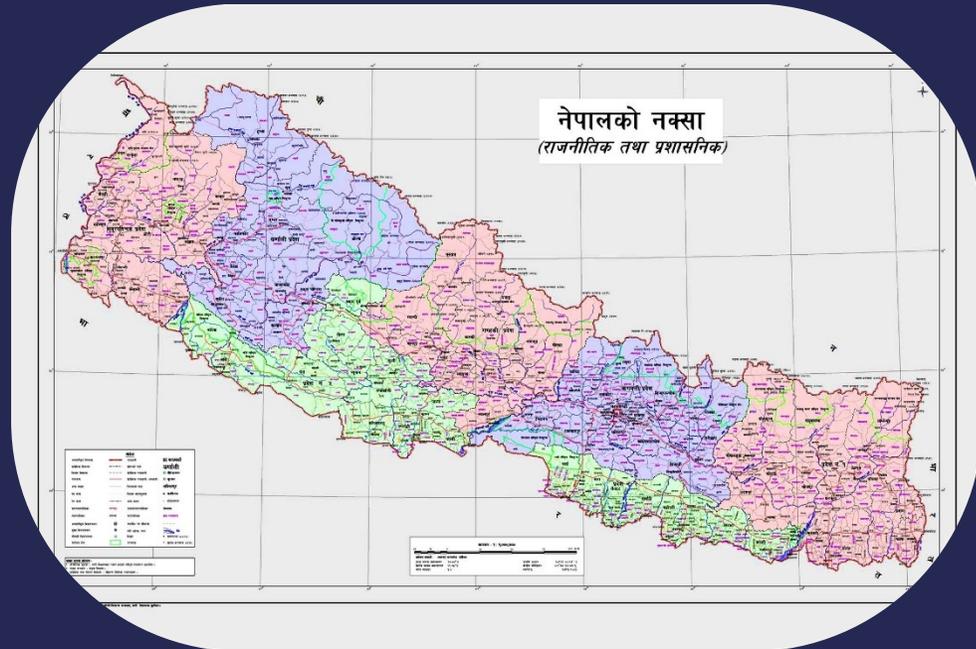


TV Regulation in a digital age: Nepal's Perspective



ITUEvents

ITU workshop The Future of Television for South Asia, Arab and Africa Regions

11 May 2023
Bangalore, India

www.itu.int/go/FutureTV5

Hosted by
 Department of Telecommunications
Ministry of Communications
Government of India

Co-Hosted by
 worlds future school

Organized by
 ITU

Subodh Nepal
Frequency Management Division,

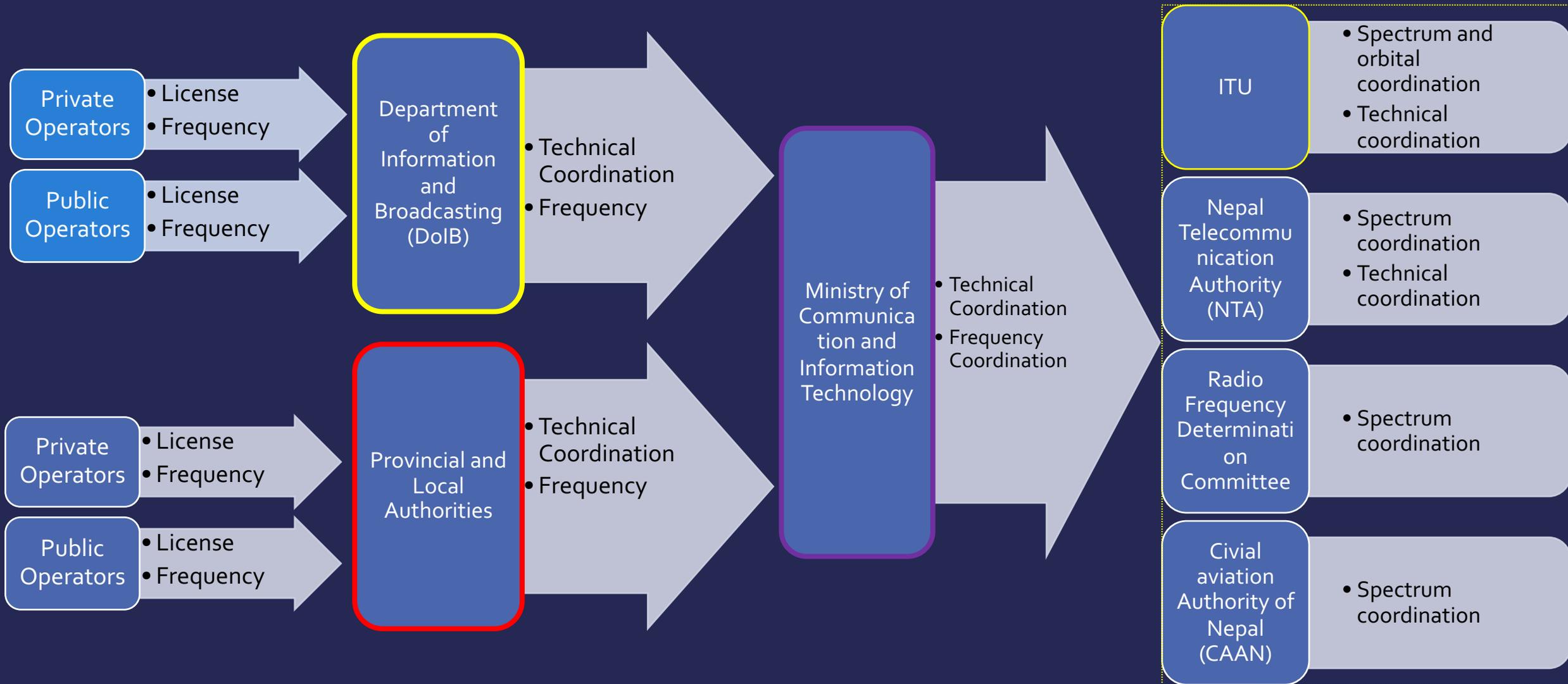


Ministry of Communication and Information Technology
Nepal

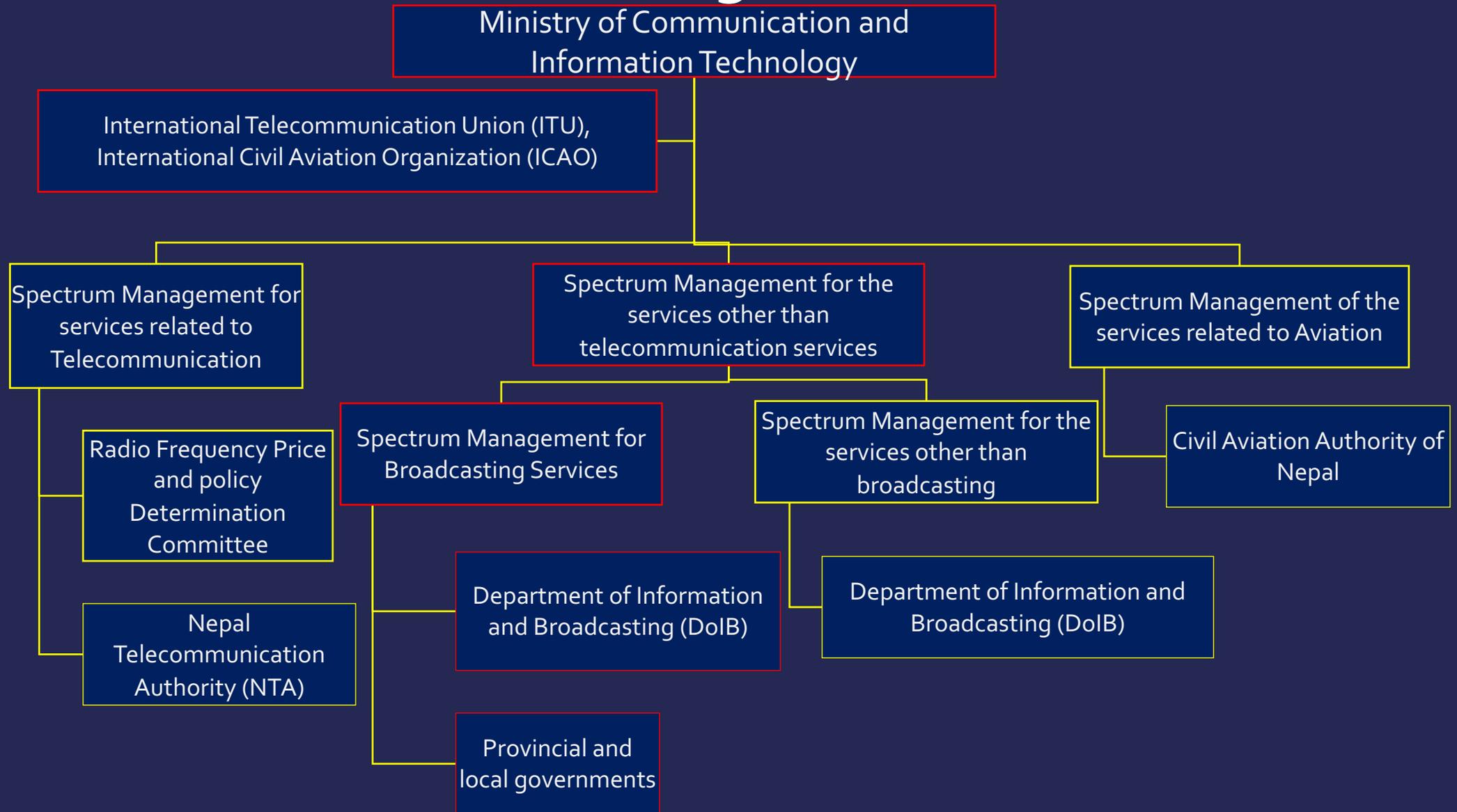
Brief Outline

- Regulatory Framework
- Governing rules and regulations
- Television service operators
- Cable TV digitization
- Terrestrial (Wireless) Television digitization
- Satellite distribution
- IPTV and OTT
- Regulatory Complexities and resolutions

Regulatory Framework: Licensing



Regulatory Framework for Spectrum Management



Governing rules and regulations

Policies

- Long Term Policy of Information and Communication Sector, 2002
- ICT Policy
- Satellite Policy

Rules

- Radio Act 1957 .
- National Broadcasting Act 1993

Regulations

- National Broadcasting Regulation 1995
- Radio Communication (License) Regulation 1992

Television service Operators

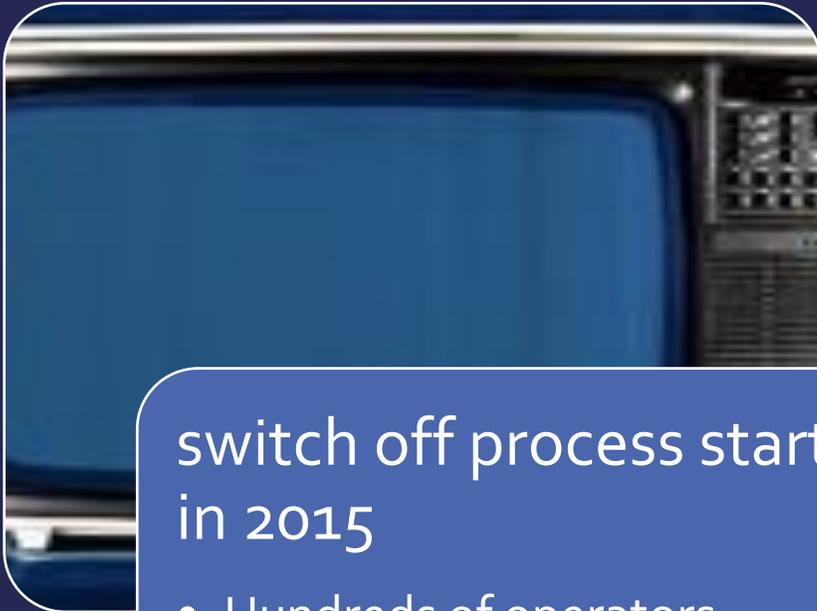
Television (Content producer): 200 stations

- Satellite Television
- Terrestrial Television
- Cable Television

Distribution

- Satellite (DTH): 1
- Digital Cable: 14
- MMDS (Ku-band): 3
- DTTB (UHF band): 7
- IPTV: 16
- OTT

Cable TV digitization



switch off process started
in 2015

- Hundreds of operators



Switch off process
completed in 2018

- Few operators
- DVB-C
- Millions of users
- less geographical coverage
- large population coverage

Terrestrial Television digitization

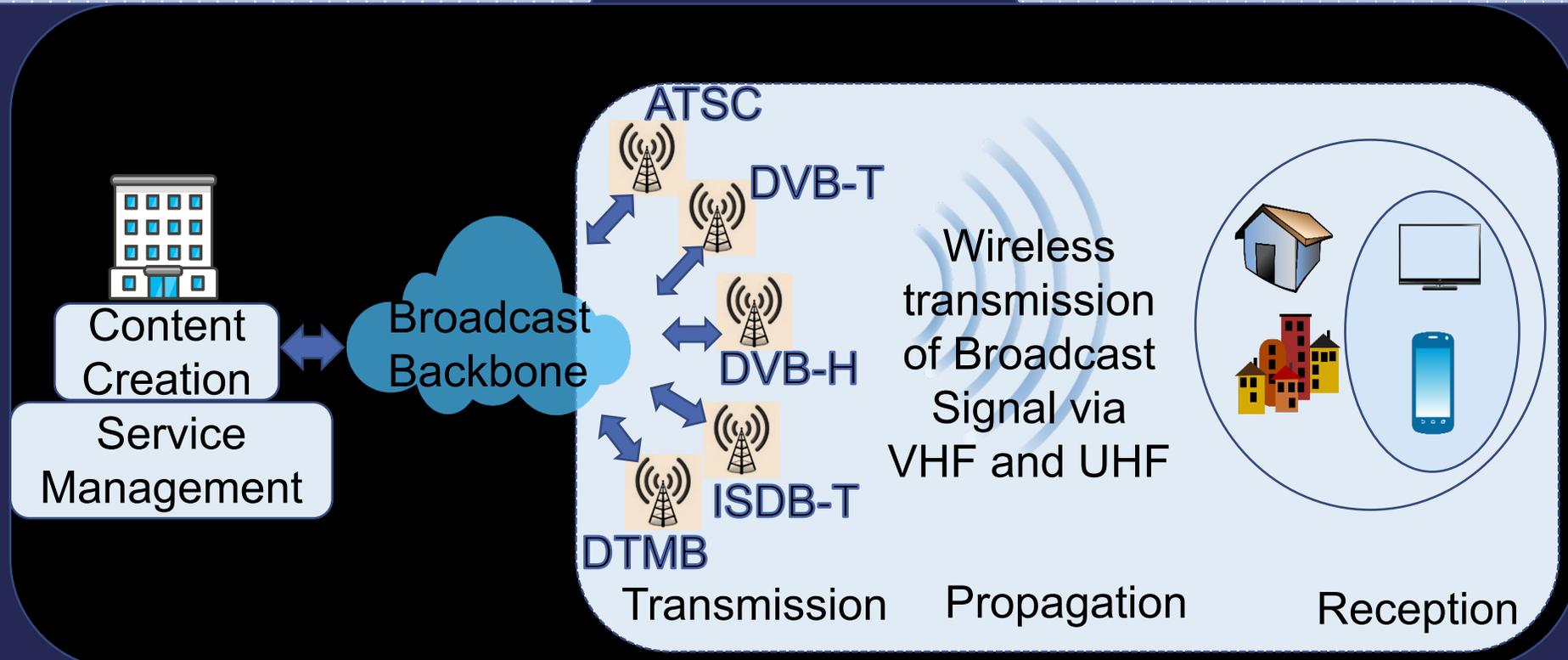
Analog

- digitization process started in 2012
- Roadmap for the transition: ITU report in 2012
- Around 40 terrestrial television channels

Digital

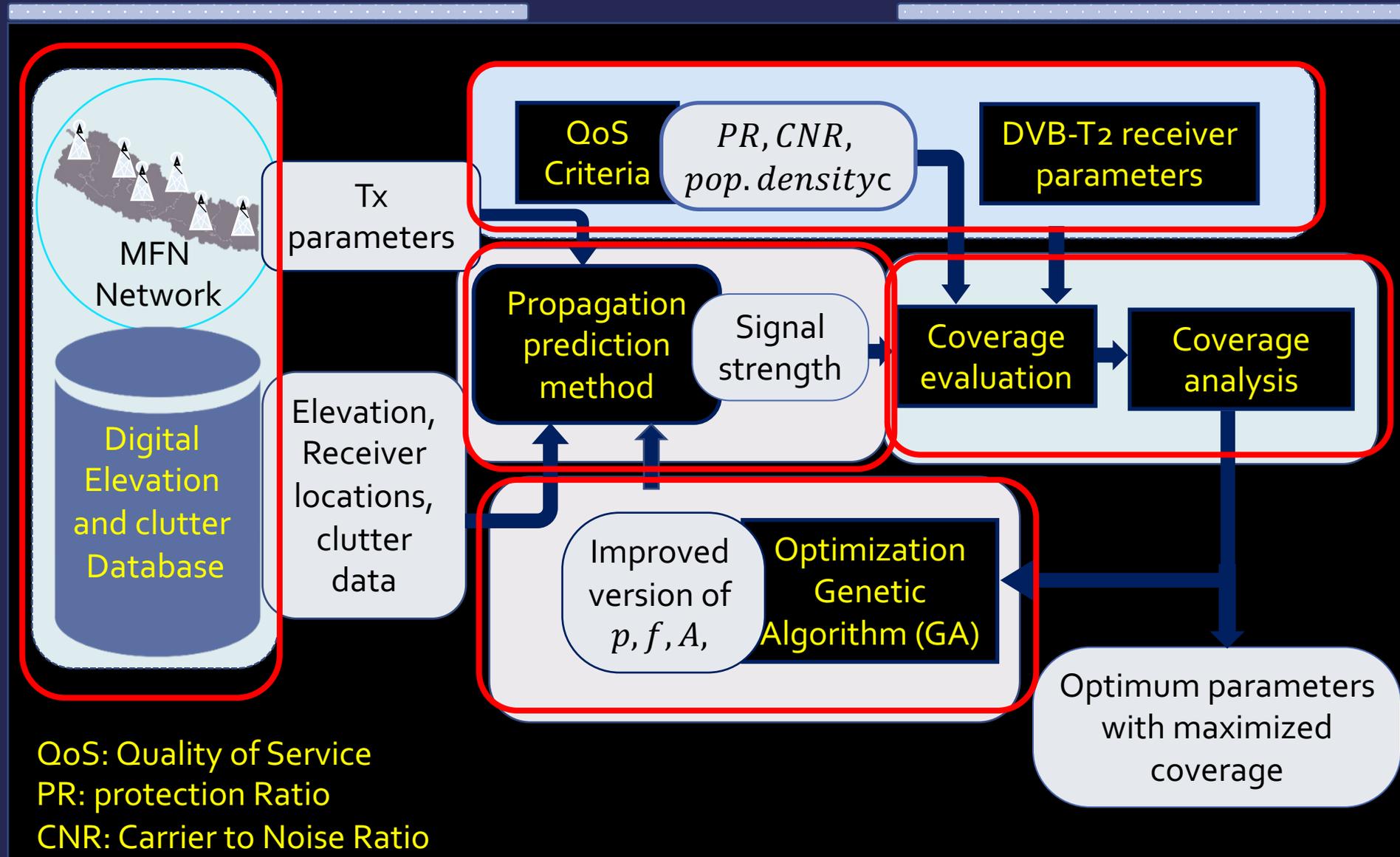
- Digitization Completed in 2018
- Only Nepal Television is transmitting the digital signal in terrestrial domain
- All other TV station migrated either to satellite or cable
- DVB-T₂

Digital Terrestrial Television Broadcasting (DTTB) System



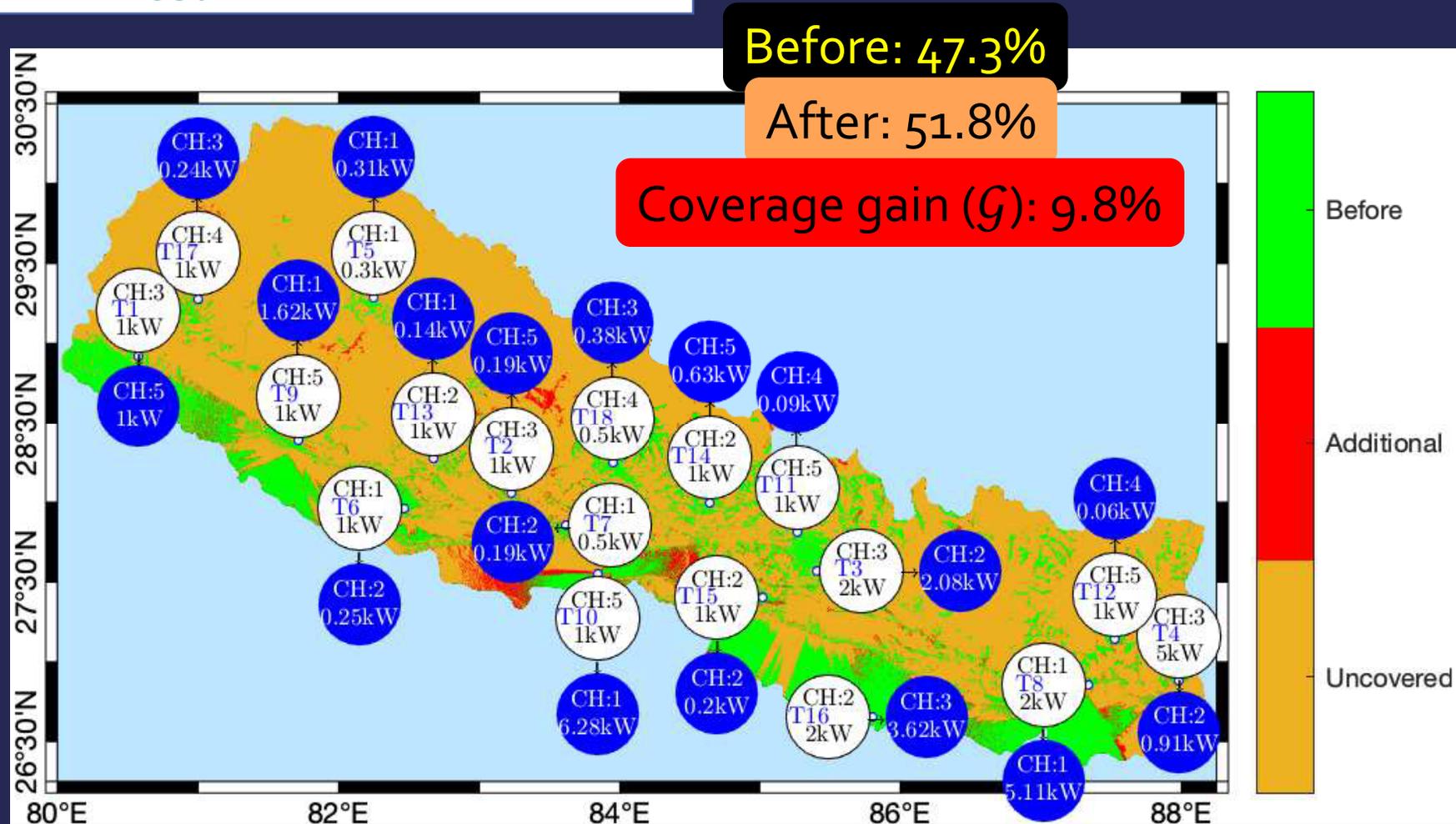
Digital Terrestrial Television Broadcasting (DTTB) is the foundation of free- to-air TV access and widely used means of receiving a television signal.

Radio Coverage prediction and Optimization of an MFN based DTTB



DVB-T2: Coverage optimization

when P_{cov} is maximized



Satellite: Direct to Home

- More than 2 Million plus users in Nepal
- One of the leading access for broadcasting in Nepal due to its Complex orography
- Only one single operator
- 100 percentage geo coverage
- Ku-band (465 MHz satellite bandwidth)
- Digital services
- Effects of rainfades



IPTV and OTT

- Over-the-top TV
 - YouTube
 - Netflix
 - ...
- TV Delivery via IP (IPTV)
- Multi-screen TV
 - Live streaming
 - VoD
- 16 IPTV operators
- The service seekers are increasing
- performance is limited due to Internet availability



Regulatory Complexities

- **Declining Television Market:**

- Due to fast growth of internet availability, internet technologies, social sites, internet online games, online news, YouTube, Netflix etc. the market share of broadcasting specially the cable TV, terrestrial wireless TV and DTH is decreasing fast.
- Government need to implement quick action plan on saving the broadcasting industries at the same time promote the new technologies based on internet.

- **OTT Regulations**

- Nepal is facing problems in regulating OTT platform and specially its content
- Most of the OTT platforms are neither registered nor regulated in Nepal
- Need a prompt intervention via a new and updated regulatory regime

Regulatory Complexities

- **Content Regulation:**

- The television channels viewed in Nepal consist foreign (specially Indian) channel in large number.
- It is technically and lawfully difficult to regulate the content in the television
- The clean feed policy helped to solve these problems in some extent

- **Pricing Regulations**

- As the the television viewers are drastically decreasing, government has the challenges to safeguard the industry and this can only be accomplished by motivating the use of new technologies and applications in production and delivery of the television signal
- At the same time government need to formulate the flexible, timely and updated regulations on pricing of the license s and the services charges levied by the operators.

Thank you for your kind attention!!



Namaste