EMERGING TRENDS IN BROADCASTING

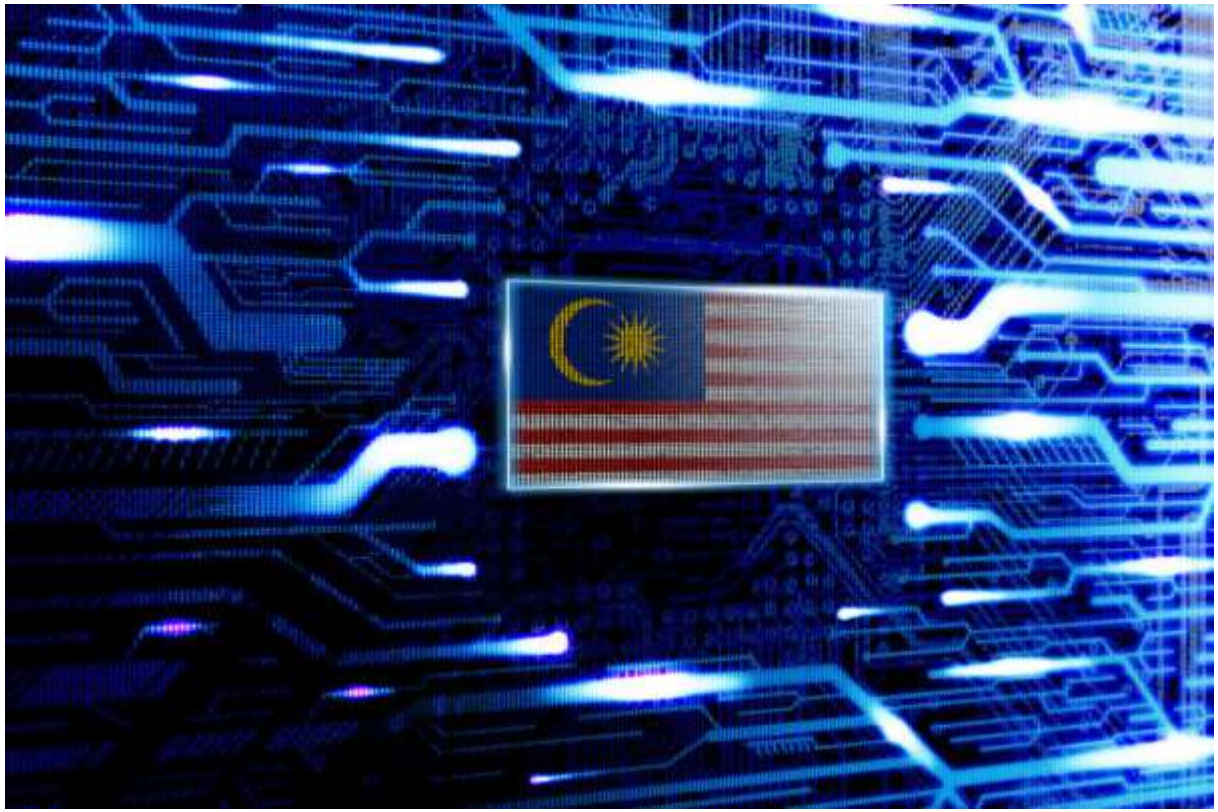
ITU – TRAI International Training Programme

10 October 2019

New Delhi, India

OBJECTIVE

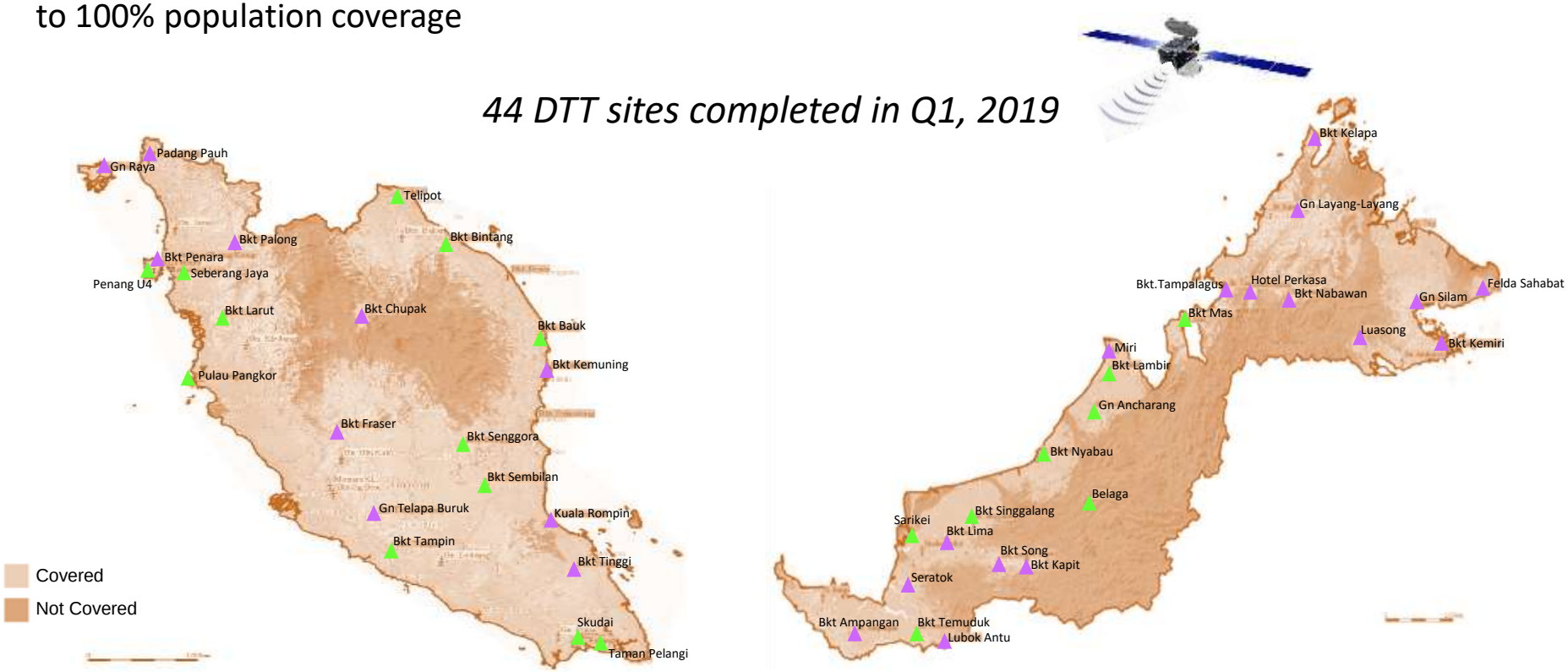
- To provide status development of Digital TV service rollout, ASO and future services post ASO
- To provide an insight on regulatory practices to enable the provision of new services to the population



DIGITAL SWITCHOVER UPDATE

- 44 DTT sites have been completed in Q1, 2019 with 95.3%** population coverage
- Satellite distribution method have been adopted to complement Digital TV coverage to 100% population coverage

44 DTT sites completed in Q1, 2019



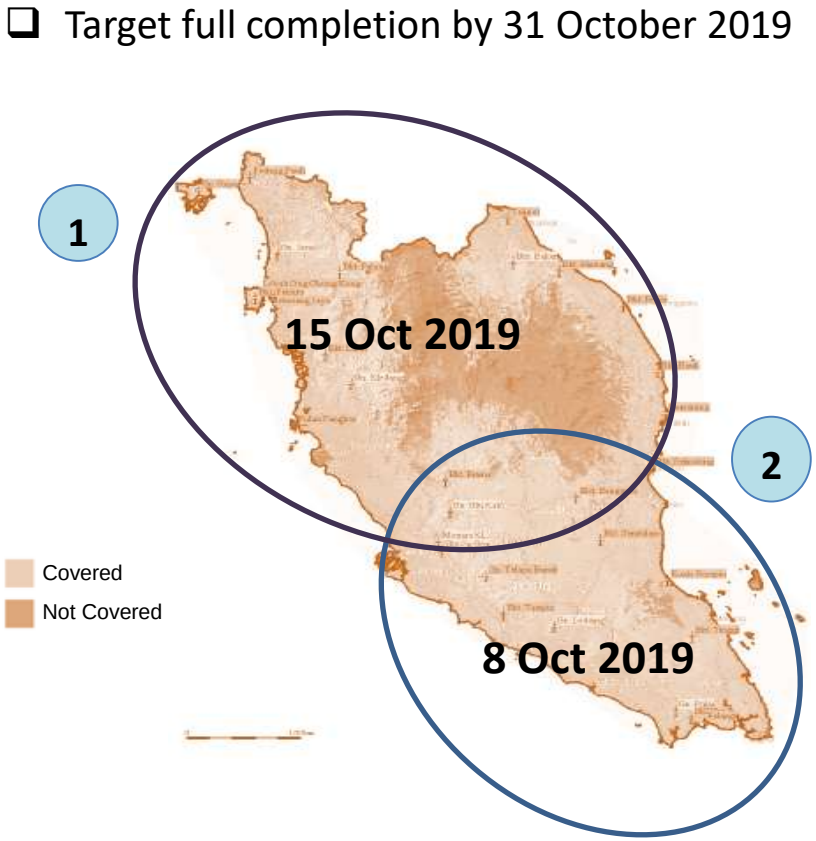
** Subject to coverage audit by MCMC

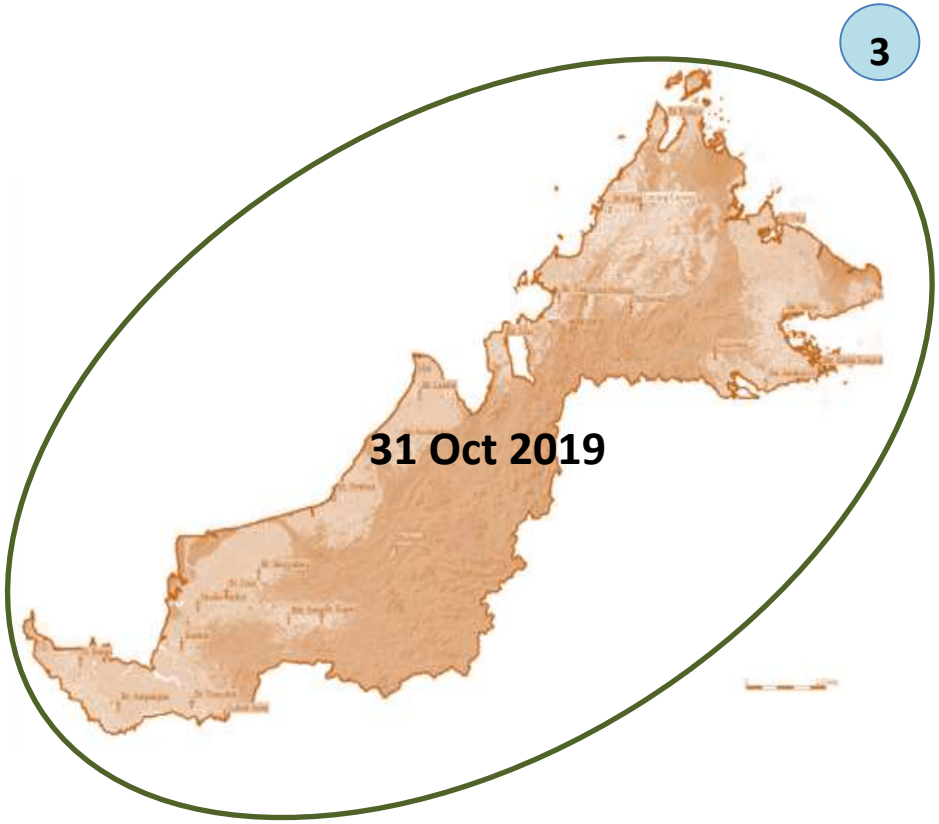
DIGITAL TV CONTENT

- 15 Free-To-Air ("FTA") TV channels and 6 FTA radio channels currently aired on Digital TV platform, more are coming

ANALOGUE SWITCH OFF IS ON-GOING

- Pilot switch off in Langkawi, Kedah completed on 28 July 2019
- Central and southern regions completed on 8 October 2019
- North and East regions shall be implemented on 15 October 2019
- Target full completion by 31 October 2019





INDUSTRY FORUMS DELIBERATE TO ROLL OUT NEXT GENERATION SERVICE

The MCMC has established 4 industry forums to promote industry consultation in advocating the rollout of new services in line with relevant provisions under the **Communications and Multimedia Act 1998 (CMA 98)**

1. TECHNICAL FORUM: Malaysian Technical Standards Forum Berhad (MTSB)

- Incorporated in 8 Jun 2004
- Designated as the Technical Standards Forum by the MCMC on 27 Oct 2004, under the CMA 98 Part V, Chapter 9 – Voluntary Industry Codes, Section 94 Industry Forum and Part VII, Chapter 3 – Technical Standards, Section 184 Technical Standards Forum.

2. ACCESS FORUM: Malaysian Access Forum Berhad (MAFB)

- Incorporated in 1 April 2003
- Designated as the Access Forum by the MCMC, under the CMA 98 Part V, Chapter 9 – Voluntary Industry Codes, Section 94 Industry Forum.

INDUSTRY FORUMS DELIBERATE TO ROLL OUT OF NEXT GENERATION SERVICE

3. CONTENT FORUM: Communications and Multimedia Content Forum (CMCF)

- Established in February 2001
- Designated as the Access Forum by the MCMC on 29 March 2001 , under the CMA 98 Part V, Chapter 9 – Voluntary Industry Codes, Section 94 Industry Forum.

4. CONSUMER FORUM: Communications and Multimedia Consumer Forum (CFM)

- Established in February 2001
- Designated as the Communications and Multimedia Consumer Forum by the MCMC in 2002, under the CMA 98 Part V, Chapter 9 – Voluntary Industry Codes, Section 94 Industry Forum.

THE TECHNICAL FORUM HAS RECOMMENDED SEVERAL STANDARDS FOR ADOPTION FOR DIGITAL TV

- The primary roles of MTSFB are to develop, recommend, modify and update the Technical Codes for registration by MCMC

SKMM MTSFB TC T004:2013

- Specification for Digital Terrestrial Television Broadcast Service Receiver

SKMM MTSFB TC G001:2013

- Compression Table of Service Information (SI) Descriptions for Digital Terrestrial Television Broadcast Service

SKMM MTSFB TC G002:2013

- Middleware Profile for Digital Terrestrial Television Broadcast Service

MCMC MTSFB TC T011:2014

- Specifications on Common Test Suite for Digital Terrestrial Television Broadcast Service Receiver for HbbTV

Hybrid Broadcast Broadband TV (HBBTV) ON DIGITAL TV (DVB-T2, MPEG-4)

- Interactive Content on Digital Terrestrial TV
- Philosophy is not to interrupt current TV Program
- Offer additional information on the Broadcast and INTERACTIVE CONTENT over the Broadband platforms

Public Broadcaster - RTM

Private Broadcaster - Media Prima

SEVERAL HBBTV APPLICATIONS HAVE BEEN ROLLED OUT

- Examples of HBBTV services on Digital TV platform in Malaysia are as follows:

Programme Guide

Programme Guide

Daily prayers quotes

Daily prayers quotes

Video on demand

Synopsis

Synopsis

News updates

News updates

Weather updates

Weather updates

Social media engagement

FUTURE SERVICES UPON ANALOGUE SWITCH OFF

- Upon completion of the Analogue Switch Off (ASO) in Malaysia, spectrum re-farming to enable the roll out of 5 G services have shall be executed

- Before ASO : 470MHz to 742MHz
  After ASO : 470MHz to 694MHz

- 5 G Task Force have been established in 2018

Task Force Objectives

Study and recommend to the Government a holistic 5G implementation strategy with analysis from the perspectives of:

Business Case

Infrastructure

Spectrum Management & Allocation

Regulatory

- **5G demonstration projects will be conducted at 32 5G sites across 6 states**

  Kedah, Perak, Penang, Selangor, Terengganu and Kuala Lumpur

5G APPLICATIONS

5G Verticals and its Applications

e-Health

- Remote Consultation
- Remote Diagnosis

Factory / Manufacturing

- Smart Industry
- Robotic Arm
- 3D Printing
- Touch Drone
- Smart Manufacturing

Media & Entertainment

- Jamming Session
- VR Online Gaming
- Multi 4K TV Screens
- Hologram
- VR Football
- Holoportation
- VR 360
- VR Ping Pong

Public Safety

- Drone Monitoring
- High Resolution Surveillance
- Robotic Arm

Smart City

- Smart Home
- Smart Commute
- Digital Mapping
- Virtual Conference

Education

- Automotive Curriculum (via AR)
- VR Classroom
- Smart IoT Campus

Automotive

- Autonomous Car
- Big Data Analytics

Agriculture

- Aquaculture
- Crop Growth Monitoring and Management

Thank you!
MCMC