

# **“Future Connectivity & How the Government’s Connectivity Initiatives can Change the industry landscape in Malaysia ”**

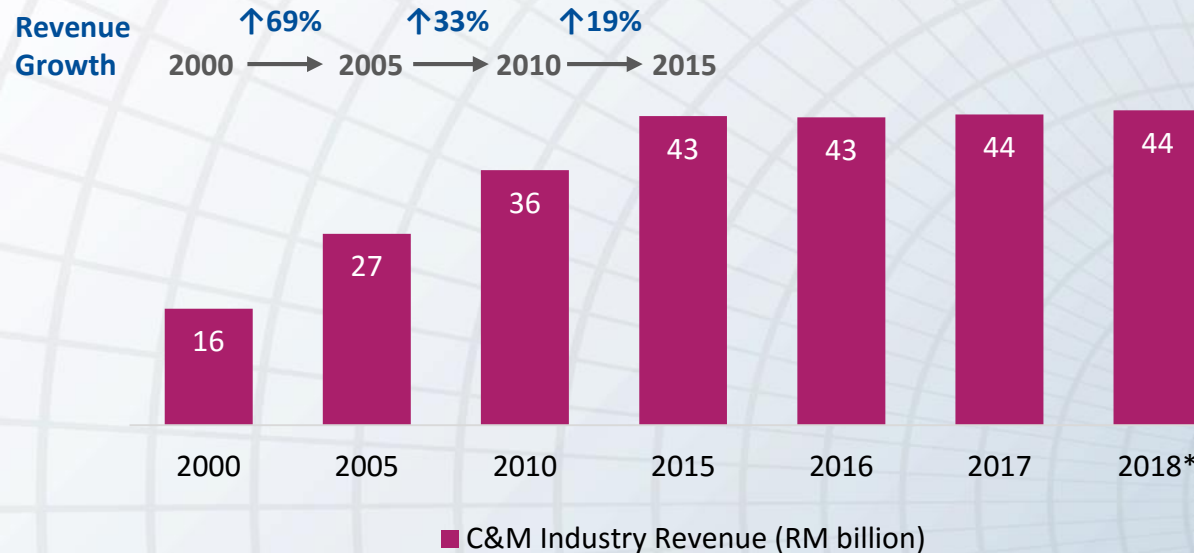
4 March 2019



# C&M Industry Revenue driven by Connectivity



C&M INDUSTRY REVENUE 2000 – 2018\*



- C&M industry revenue grew double digit over the 5-year intervals, from 2000 to 2015
- In 2018, annualised revenue stood at RM44 billion, with telecommunications sector contributing 80% to total revenue, 15% from broadcasting and 5% from postal sector
- During 2000-2018, growth was mainly due to introduction of new services and regulatory intervention, which enabled new entrants and C&M services to be introduced and to reach stable mature status

Sector	2000	2005	2010	2015	2016	2017	2018*
Telecommunications	15.0	23.6	30.2	35.3	34.7	34.6	35.3
Broadcasting	0.7	2.4	4.5	6.3	6.5	6.4	6.4
Postal	0.6	0.8	1.0	1.7	1.9	2.5	2.4
<b>Total (RM billion)</b>	<b>16.3</b>	<b>26.8</b>	<b>35.7</b>	<b>43.3</b>	<b>43.1</b>	<b>43.5</b>	<b>44.1</b>

\*Annualised

Source: Financial statements of major public listed C&M companies, namely TM, TIME, Maxis, Celcom Axiata, Digi, Astro, Media Prima, Pos Malaysia.



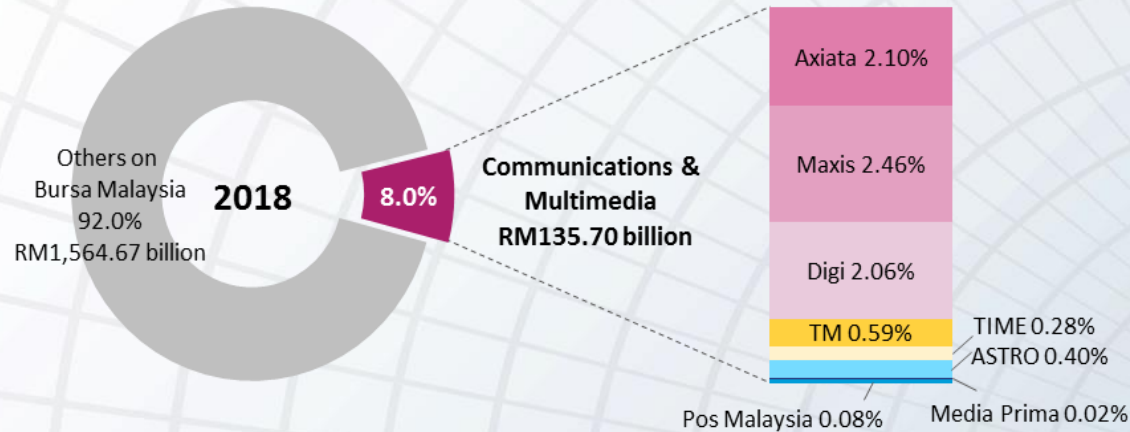


# C&M Industry Market Capitalisation

Contribution to Bursa Malaysia 2018



Bursa Malaysia = RM1,700.37 billion



C&M Industry Market Capitalisation Trend: 10 Years



- In 2018, the C&M industry constitutes 8% or RM135.7 bil of Bursa Malaysia market capitalisation of RM1,700.37 bil.
- Over the last 5 years, C&M industry market capitalisation shows a downward trend from high of RM208.5 bil in 2014. In contrast, between 2009 and 2014, trend is consistently upwards, boosted mainly by high speed mobile broadband implementation and strong demand.
- The downward trend over the last few years is due to massive roll out on 4G, spectrum refarming and challenges in the operating environment.
- To spur the next phase of industry growth, there is a need for government-regulatory, service providers and other stakeholders collaboration in infrastructure, next generation connectivity and service provision.

# The industry has grown by leaps and bounds



Industry revenue grew nearly 2.8 times over the past 18 years, from RM16 bil (2000) to RM44 bil (2018)\*

## Industry Penetration Rate



In 2004:

- Fixed line = 17.8%
- Mobile = 48.5%
- Internet dial-up = 12.2%



Today\*\*:

- Fixed line = 19.8%
- Mobile = 130.2%
- Broadband = 121.1%

## Number of Licensees

November 2003\*\*\*

Individual	
NFP	27
NSP	29
ASP	69
CASP	19
TOTAL	144

Class	
NFP	25
NSP	24
ASP	80
TOTAL	129

December 2018\*\*\*

Individual	
NFP	220
NSP	183
CASP	56
TOTAL	459

Class	
NFP	10
NSP	10
ASP	413
CASP	11
TOTAL	444

Note:

- \* : Annualised
- \*\* : @Q4 2018, C&M Facts & Figures
- \*\*\* : MCMC



# Further growth and wider consumer choice can be expected in the immediate future

We are forecasting further growth in broadband subscriptions and penetration rate over the next few years from 2019 to 2025\* as follows:

**Overall broadband** penetration rate\*\* should increase from **125.1%** to **131.3%**

Mobile broadband subscription should increase from **38.97 mil** to **44.06 mil**

\* Source: MCMC  
\*\* per 100 inhabitants



# Continued improvement to digital connectivity is critical for the economic development of the country (1/2)

The economic contribution of broadband for developing countries (including Malaysia)\*

**1% increase in fixed broadband penetration rate**



**0.08% increase in GDP**

**1% increase in mobile broadband penetration rate**



**0.15% increase in GDP**

**10% increase in fixed broadband penetration**



**1.38% increase GDP growth in developing economies**

- *Source: The economic contribution of broadband, digitization and ICT regulation (ITU, 2018) & World Bank*
- *Note: penetration refers to per 100 inhabitants*

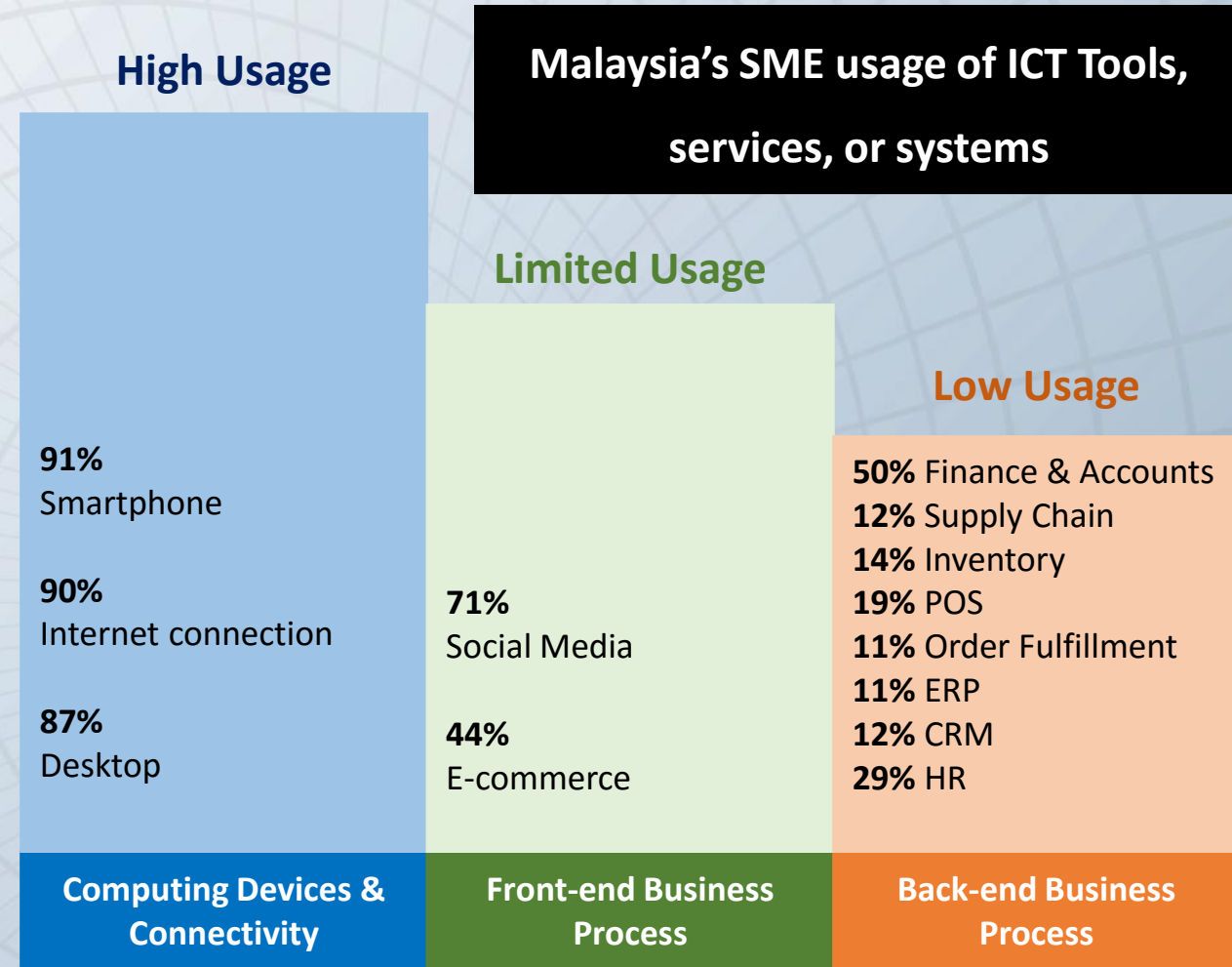




# Continued improvement to digital connectivity is critical for the economic development of the country (2/2)

SMEs form the backbone of the Malaysian economy

- 95% of business establishments in the country
- 37.1% of the country's GDP
- 66% of the country's employment
- 17.3% of Malaysia's exports.



Source: Malaysia Digital SME Study 2018

# MCMC has and will continue to bring about development of the industry and support the digital economy for the long-term benefit of consumers



FID 2002-2006

*A 5-year plan for industry development; to serve as a guide to facilitate strategic planning and investment for the industry*

MyICMS 886

*Introduced 8 new services & promotes 8 essential infrastructure to generate growth in 6 key areas*

National Broadband Initiative

*Broadband is one of the main pillars of the MyICMS 886. This plan was for nationwide rollout of high speed broadband services, both wireless and fixed*

RMK-11  
2016-2020

*Malaysia's five-year development plan towards realising the goal of Vision 2020*

NFCP  
2019-2023

*A five-year plan for robust, pervasive, high quality and affordable digital connectivity for the well-being of the people and progress of the country*





# Our Internet Centers have been at the forefront in engaging the Rakyat



Our training and entrepreneurship initiatives have had positive outcomes

Number of members	550,335
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Number of people trained		
	2017	2018 (Jan – Aug)
Male	280,413	151,090
Female	317,293	183,363
Total	597,706	334,453



Types of Courses
MS Office
E-Learning
Digital Literacy
E-Commerce
ICT
Website building
Entrepreneurship
Multimedia
Soft skills
PC Hardware



# Our Internet Centers have also uplifted local entrepreneurs



## WINNERS FOR INTERNET CENTRE BEST ENTREPRENEURS 2017

### Best Entrepreneur from Northern Region

**Name :** Nur Isma Afifi Binti Md Aris

**Product :** Stingless Bee Honey

Online marketing generates sales opportunities for honey-based products. Sales increase from RM2,000 to RM10,000. Sold to Brunei, Indonesia and Thailand.



### Best Entrepreneur from Sabah Region

**Name :** Eriy binti Dusun

**Product :** Tuhau based food

Online marketing technique helps to increase monthly sales from RM80 to RM3,000.



### Best Entrepreneur from Sarawak Region

**Name :** Zulkipli Bin Ibrahim

**Product :** Perfume

Leveraged on ICT and online marketing strategy, sales increased from RM1,000 to RM7,000 per month. Sold to Brunei, UK and Australia.





# The Internet Centers also function as banking, e-commerce & fulfilment centers



- Opening of BSN accounts
- Savings transactions
- Cash withdrawals
- Bill payments
- Prepaid reloads
- Premium savings certificates

- Pilot initiative - **Kampung by GDex**
- Collaboration between MCMC, GDex and Internet Center USP providers
- Appointed 15 Internet Centers as courier agents in March 2018
- Centers located along existing routes
- Most popular product is parcel below 1 kg

- Strategic partnership with MCMC since 2016
- 36 pilot sites, target 100 by 2020
- Provide value added services, eg., sell prepaid envelopes and boxes, registered mail and stamps
- Acceptance counter for Pos courier delivery, ordinary mail and registered mail and call point for delivery service



# Remote healthcare to citizens



- The objective is to develop an integrated ecosystem for the delivery of healthcare services to rural communities through the Internet Centers
- MCMC conducted the first pilot at our Internet Centers since 2013
- Remote patient monitoring at 12 Internet Centers
- Devices were placed at the Internet Centers to check body weight, blood pressure, glucose, bone mineral density





# We also conducted a second e-health pilot with MOH

## OVERWEIGHT POPULATIONS IN SOUTHEAST ASIA

Overweight prevalence (%) for adults of both sexes (BMI of  $> 25$  kg/m<sup>2</sup>)



Source: WHO Non-Communicable Diseases Country Profiles, 2011



## In 6 Months

- 5,401 new users
- 3,361 (62%) did health screening
- 2,948 referred to clinics for further check-up



# Digital Connectivity = Smart Communities



- Smart Community is a vital building block of the vision of smart nation.
- MCMC has spearheaded the Smart Community initiative to empower the communities with exposure, knowledge and sufficient ICT facilities.
- To-date, we have 5 districts.



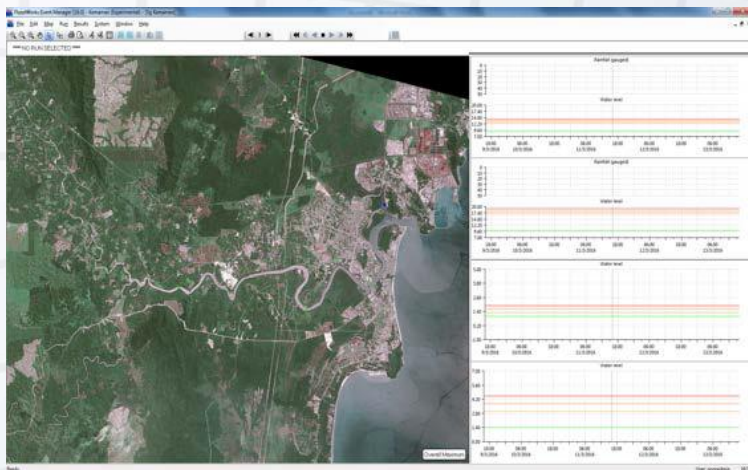


# Smart Community: Kemaman, Terengganu



## Next Generation Internet Center:

- Flood management system – an integrated system that enables the authorities to monitor floods at all times
- Project led by district officer, local assemblyman & other local community leaders
- Command center equipped with wide area CCTV monitoring





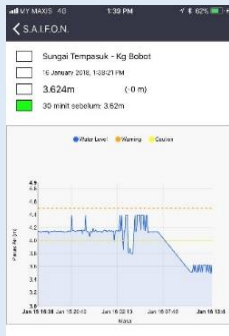
# Smart Community: Kota Belud, Sabah

- Smart Community committee established in 2015
- Objective is to raise the living standard, economy and communications facilities of Kota Belud
- Chaired by local district officer, members include various local departments, agencies and MCMC

## Next Generation Internet Center:

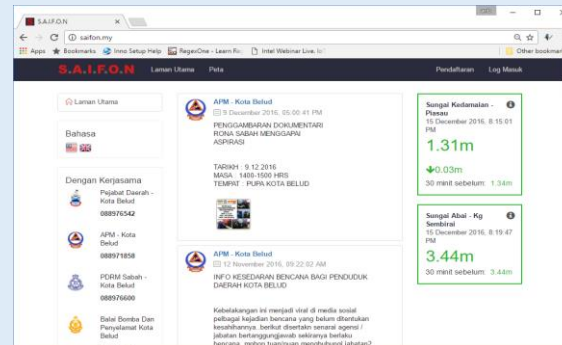
- Weather monitoring & water level sensors
- Water sensors installed at a few rivers identified as flood hotspots
- 12 CCTV monitors installed around Kota Belud town connected to the police command centre
- Early warning system for local authorities and community in case of danger

## SAIFON Apps and website



SAIFON App

No. of downloads



SAIFON Website  
<http://www.saifon.my/>





# MCMC will also leverage on regulatory instruments such as the Access List and MSAP to ensure licensees play by the rules



Suruhanjaya Komunikasi dan Multimedia Malaysia  
Malaysian Communications and Multimedia Commission

COMMUNICATIONS AND MULTIMEDIA ACT 1998

COMMISSION DETERMINATION ON THE  
MANDATORY STANDARD ON ACCESS PRICING

DETERMINATION NO. 1 OF 2017

Pursuant to the Ministerial Direction on Access Pricing, Direction No. 1 of 2005 and in exercise of the powers conferred by sections 55, 56, 104(2) and 106 of the Communications and Multimedia Act 1998 [Act 588] ("Act"), the Commission hereby determines as follows:

#### Citation and commencement

1. This determination may be cited as the **Commission Determination on the Mandatory Standard on Access Pricing, Determination No. 1 of 2017**.
2. This Determination shall come into operation on 1 January 2018.

MSAP was fully implemented in June 2018 with immediate impact.

- ✓ Regulated wholesale prices for high-speed broadband services which are lower than commercially agreed prices
- ✓ This resulted in lower retail prices for high-speed broadband services
- ✓ On average, retail prices for high speed broadband services declined by about 49%
- ✓ Improved broadband speed, about 71% of subscribers are subscribing to 100Mbps and above
- ✓ Between Aug to Dec 2018, there was 7% growth in subscribers of high speed broadband



# What is the National Fiberisation and Connectivity Plan (NFCP)?



What we expect to achieve:

- ✓ Wider coverage of services
- ✓ Faster broadband speeds
- ✓ More consumer choice
- ✓ Individuals, businesses and communities to effectively participate and leverage on opportunities afforded by the digital economy





# Key targets under the NFCP



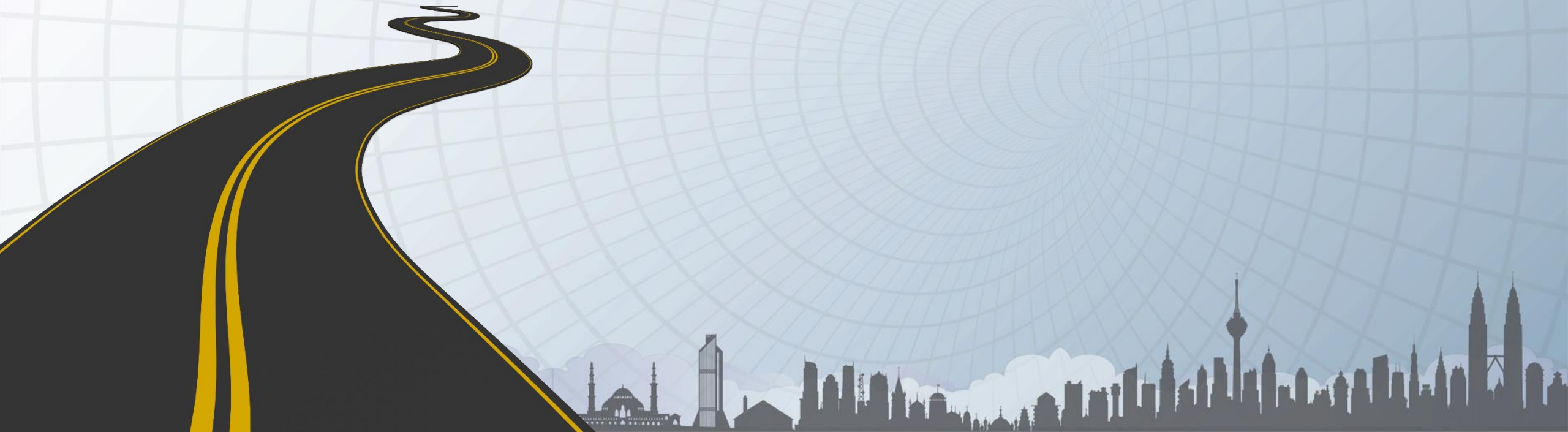
- Entry level fixed broadband package at 1% of GNI (2020)
- Gigabits availability in selected industrial areas by 2020 and to all state capitals by 2023
- 100% availability for premises in State Capitals & selected high impact areas with a minimum speed of 500 Mbps (2021)
- 20% availability for premises in sub-urban & rural areas with up to 500Mbps (2022)
- Fiber network passes 70% of schools, hospitals, libraries, police stations and post offices by 2022
- Average speeds of 30 Mbps in 98% of populated areas (2023)
- Improving mobile coverage along Pan Borneo highway upon completion



# How do we get there?



- Removing impediments to right-of-way
- Improving industry access to funds
- Optimising spectrum
- Ensuring fair competition & access





# One initiative under the NFCP is the National 5G Task Force



- This is a multi-stakeholder Task Force formed in November 2018 to study and make recommendations on nationwide 5G implementation to support the future needs of Malaysia's digital economy.
- Supported by 4 work groups

## Business Case

Encourage 5G adoption  
Introduction of use cases and lifestyle

## Spectrum Management & Allocation

Spectrum allocation  
Required bandwidth to support national targets

## Infrastructure

Infrastructure requirements and coverage

## Regulatory

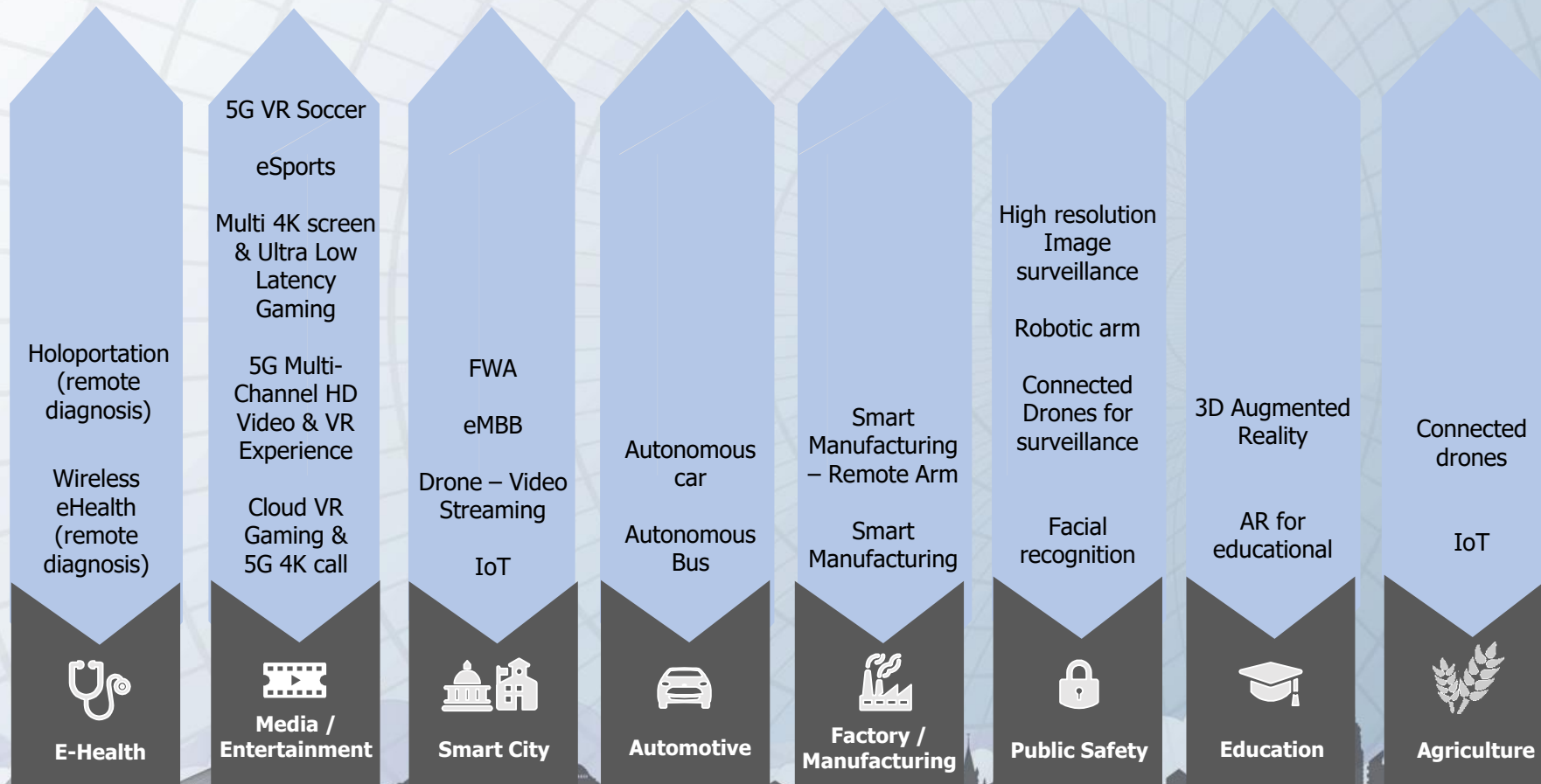
Improvements to current regulatory frameworks



# There is also the National 5G Testbed in Cyberjaya & Putrajaya



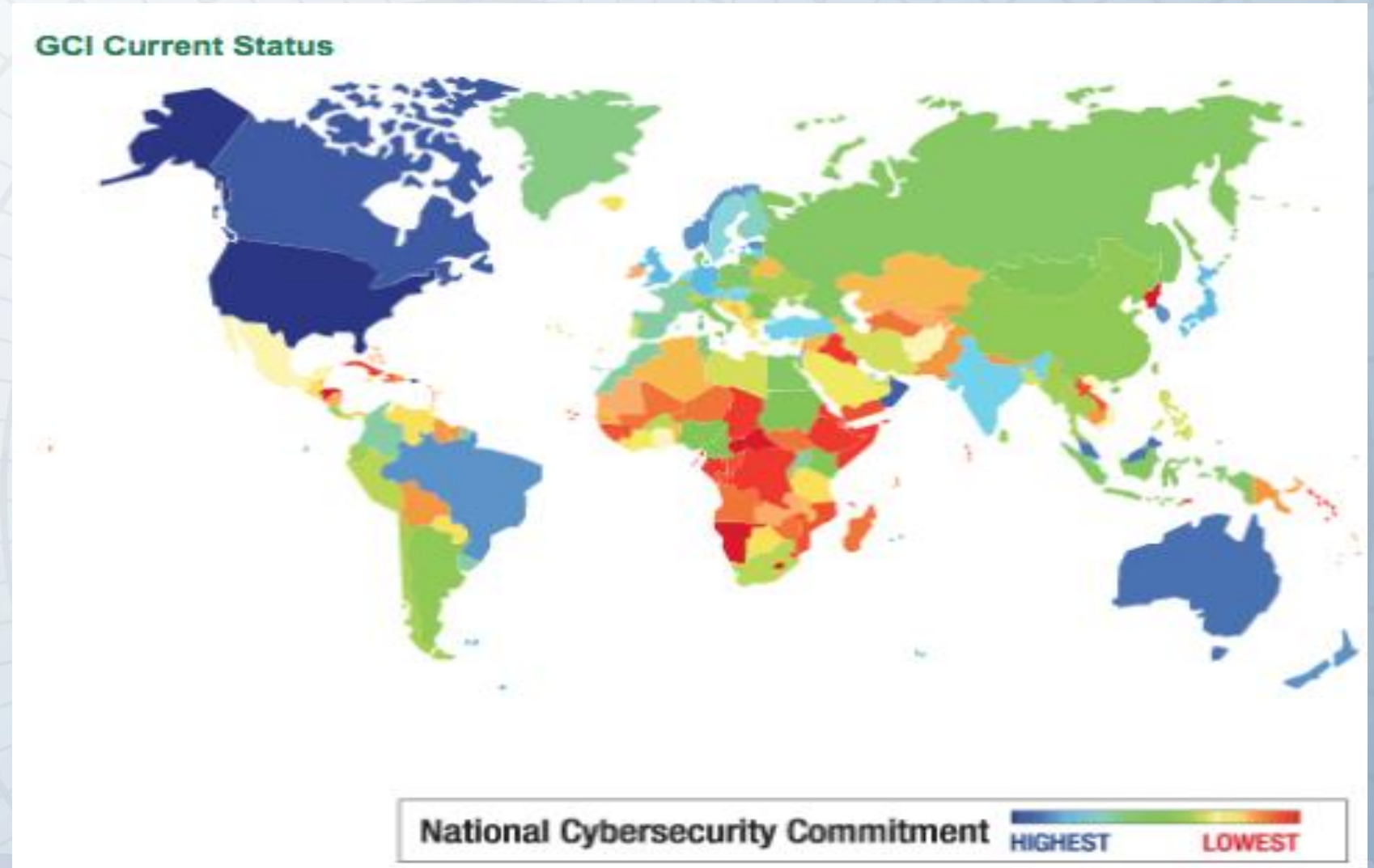
- To explore the practical uses, technologies and modes of implementation of 5G
- To learn about and iron out the prospective policies, regulations and spectrum planning for future implementation of 5G in Malaysia





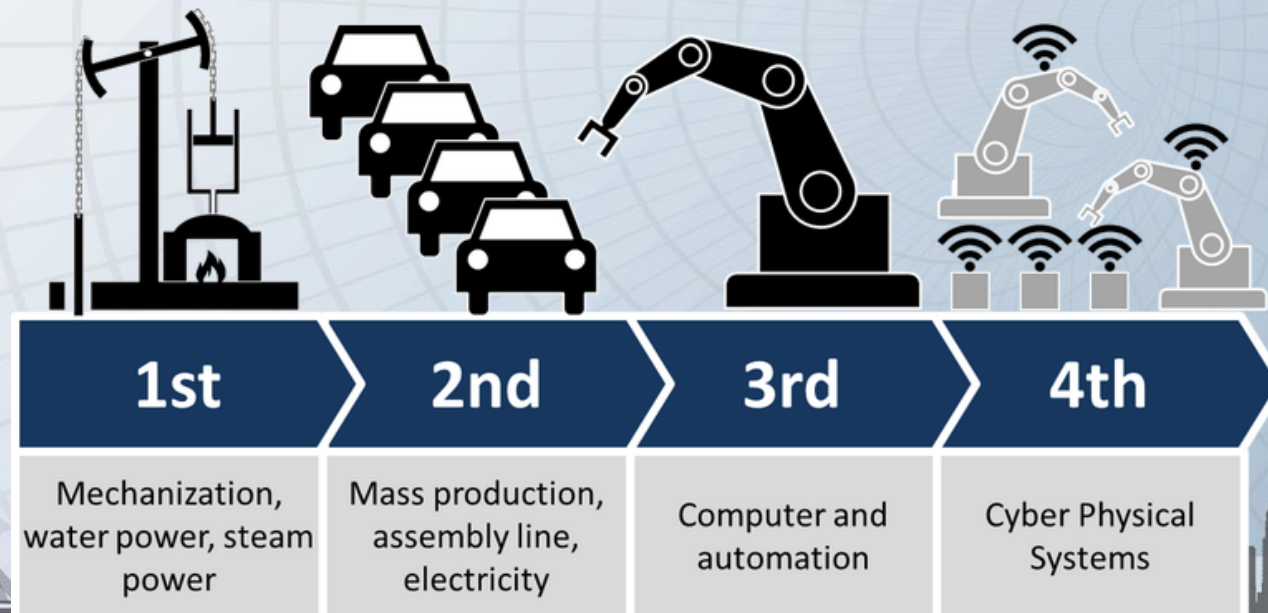
# Where is Malaysia in terms of cybersecurity?

- Malaysia's internet penetration stands at 87.5%
- Malaysia is ranked 4th globally in mobile social penetration
- Malaysia has been ranked 3rd in the Global Cybersecurity Index 2017 released by the International Telecommunication Union (ITU) and ABI Research



# In conclusion

- MCMC's initiatives over the years have had significant impact on the industry landscape, and in terms of the wide choice and service available to the Rakyat.
- Many challenges lie ahead as the industry, technology, applications and consumer demands are ever changing.
- Fourth Industrial Revolution
- The collaborative efforts of all stakeholders – government, private sector and consumers – are needed to steer the country ahead towards a positive digital lifestyle.





Thank you

