# Mobile Connect as a global service - Asia is leading the way

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#### A mobile operator facilitated global digital identity solution



- Simple, secure and convenient access to online services
- Combines the user's unique mobile number and optional PIN to:
  - Authenticate users online
  - Authorise digital transactions and payments
  - Verify identity
  - Confirm attributes about user or device

Mobile Connect makes everyday access to digital services more convenient, private and secure



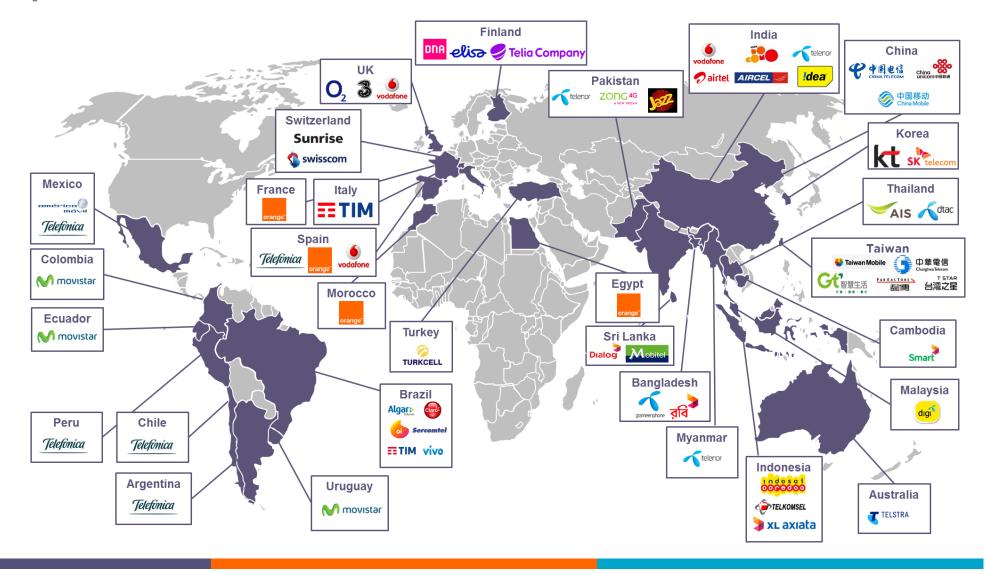
#### 62 operators launched in 30 markets

3bn

Enabled users world-wide

105m

**Mobile Connect** registered users





#### What factors influence Mobile Connect success?



**Govt Focus** 



Collaboration



Digital Economy



**Identity Data** 



**Mobile Penetration** 



#### **Mobile Connect in Asia**

- India 6 largest operators launched on common platform enabling SPs to authenticate users and securely identify MSISDN of visitors to online presence
- Taiwan 5 operators' My Number identity verification service (Mobile Connect) is now available as part of Taipei Governments' Smart City and Payment Platform with payment authorisation services
- Pakistan 4 operators launched and building on mandatory prepaid registration
  of SIMs with NADRA to make available eKYC to financial institutions
- Korea MNOs making existing proprietary digital authentication platforms compatible with Mobile Connect to enable cross border and regional authentication



#### Mobile Connect is being deployed for government services





**US – National Strategy for Trusted Identities in Cyberspace (NSTIC)** by National Institute of Standards and Technology – proof of concepts using Mobile Connect for authentication, identification and attribute verification (financial services, consumer goods, health, e-Government)

**EU – European-wide solution for log-in to government services (eIDAS)** 



UK – user identity verification service to confirm identity for e-Government services EU funded project on transferring identity cross-border to open bank account (eIDAS)



Spain – Use of Mobile Connect to log into digital public services in Catalonia



France – French government pilot with Orange France on accessing government services using Mobile Connect

## Launching Mobile Connect as a government service use-case



Mr Jiunn-Rong Chiou, Deputy Minister, National Development Council (NDC) Ms Cijay Tseng, Business Manager, Alliance Digital Technology Co. (ADTC)



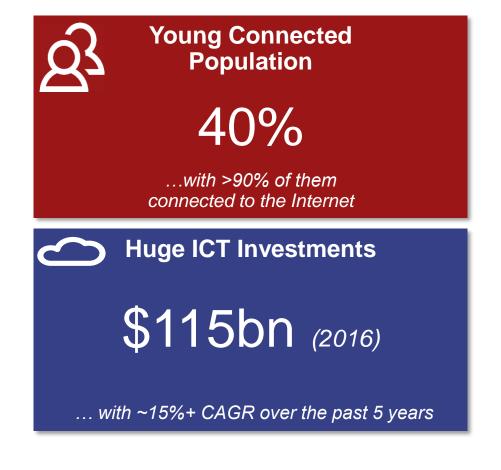


**GSMA Global Connect Summit** 

# Growth of the Digital Economy in ASEAN and the importance of Cybersecurity

November 21<sup>st</sup>, 2017

### ASEAN has a great foundation to become a global leader in the emerging Digital Economy

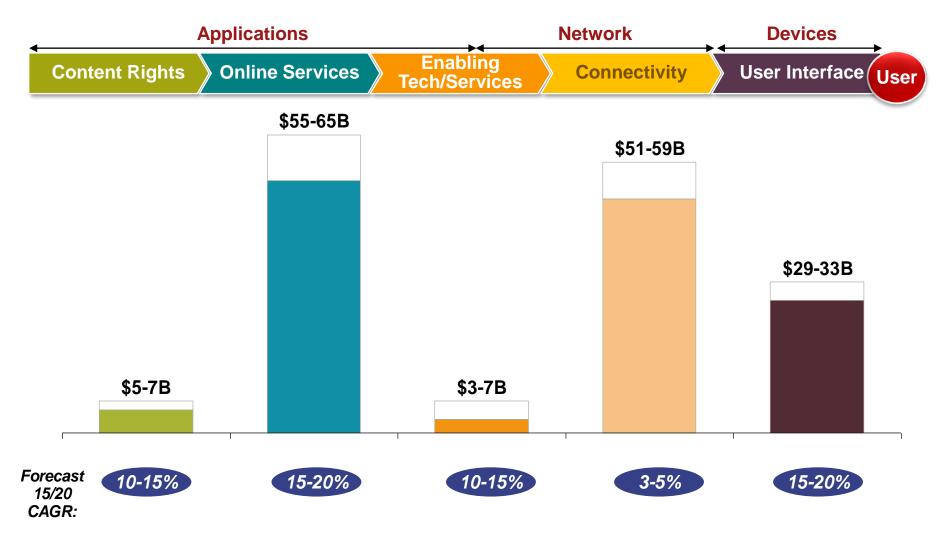




### If ASEAN were a country, it will be globally ranked #3 in population and #7 in GDP

		Population 2017	Global Rank (Population)	GDP (nominal; USD) 2017	GDP Growth (2017-2022)
	ASEAN	645 mn	3	\$2.7 tn	8.2%
	US	326 mn	5	\$19.3 tn	4.0%
*‡	China	1,410 mn	1	\$11.9 tn	9.0%
	India	1,340 mn	2	\$2.4 tn	9.4%
	EU	512 mn	4	\$17.1 tn	4.1%
	GCC <sup>1</sup>	54 mn	30	\$1.5 tn	4.8%
	NAFTA <sup>2</sup>	482 mn	•	\$22.1 tn	4.1%
+++  MERCOSUR	MERCOSUR <sup>3</sup>	303 mn	6	\$2.8 tn	5.3%

### The ASEAN Digital Economy was \$150B+ in size (by revenues) in 2016



### Current rankings of Digital Economy suggests that ASEAN punches below its weight in terms of digital potential

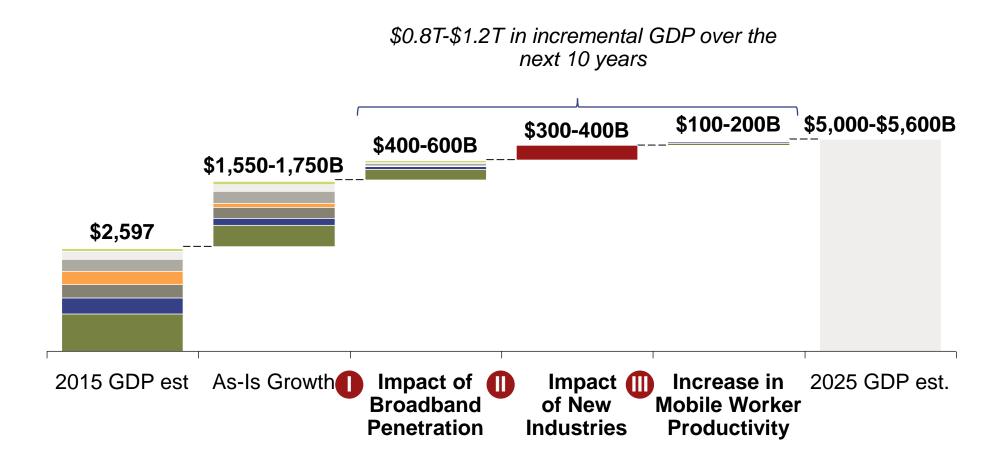
		UN ICT Index (2016)	World Digital Competitiveness (IMD, 2017) <sup>1</sup>	Digital Evolution Index (Tufts Uni, 2017)
	Singapore	20	1	Stand out
	Brunei	77	-	-
	Malaysia	61	24	Stand-out/ Break out
	Malaysia Thailand Vietnam	82	41	Watch out
A N	Vietnam	105	-	Break out
ASEAN	Philippines	107	46	Break out
	Indonesia	115	59	Break out
	Cambodia	125	-	-
	Laos	144	-	-
	Myanmar	140	-	-
Select Peers	United States	15	3	Stall out
	China	81	31	Break out
	India	138	51	Break out
	EU	29		Stand out = High digital advancement &
Group Averag	GCC	45		High momentum  Stall out = High digital advancement &
	NAFTA 🕍	44		slowing momentum  Break out = Low digital advancement &
	MERCOSUR	69		high momentum  Watch out = Low digital advancement &
	ASEAN	98		low momentum

<sup>1.</sup> Ranking against top 60 countries Source: ITU, EIU, Tufts University, A.T. Kearney

#### ASEAN has not kept pace to usher in the digital era

	European Union	* * * * * * * * * * * * * * * * * * *	ASEAN
Region-wide Digital Vision	<ul> <li>Single Digital Agenda established – 7 pillar</li> <li>Digital Economy and Society Index (DESI ranking of countries with tracking metrics</li> </ul>		<ul> <li>e-ASEAN Framework Agreement as high level guidelines only – No actions defined</li> <li>Limited measures and tracking to evaluate progress</li> </ul>
Consumer Protection (Privacy, Cyber Security)	<ul> <li>EU-wide common privacy initiatives drive by new General Data Protection Regulation</li> <li>Cybersecurity a regional priority; regionwide cybersecurity agency (ENISA), NIS Directive</li> </ul>	n	<ul> <li>Only half the countries (MY, SG, PH, ID, TH) have privacy laws in-place</li> <li>Cybersecurity now a priority but no region-wide unifying framework in place</li> </ul>
Development Of E- commerce And MFS	<ul> <li>Mobile-only banks are operational e.g. Fide Bank, Number26, Hello Bank</li> <li>Market consultation launched for EU-wide instant payments service</li> </ul>	or	<ul> <li>Cash payments still primary method, but increasing demand for mobile payments</li> <li>New platforms, e.g. K-pay, OCBC's mobile payment app</li> </ul>
Digital Public Services	<ul> <li>Region-wide rollout of e-Public Services e.g.</li> <li>eIDAS Regulation: cross-border mutual recognition of eIDs (electronic IDs)</li> <li>Health &amp; care: enabling citizens' secure access to health data across-borders</li> </ul>		Statement of intent expressed in high-level Framework agreement, no actions or monitoring mechanisms so far
Industry Structure (Definition of Digital, OTT)	<ul> <li>Directive to establish European Electronic Commissions Code – to extend regulations to OTT players</li> </ul>	3	<ul> <li>Regulations on traditional providers not yet extended to OTT players</li> </ul>

### Digital Economy has a potential to add an incremental ~\$1T to GDP over the next 10 years



<sup>1.</sup> Based on current prices; uses 2015 as baseline to project future nominal GDP growth Source: GSMA, World Bank, Broadband Commission for Digital Development, IMF, ITU, Deloitte, Telenor, Jones Lang LaSalle, Warsaw Institute for Economic Studies, A.T. Kearney

### Five key policy imperatives are critical to enable ASEAN to achieve full potential

Broadband Revolution

- Increase access by:
- -Ensure healthy operator economics
- Encouraging digital literacy
- -Expediting the release of digital dividend (700MHz) across ASEAN

Mobile Financial Services

- Encourage operator-led non-banks to scale-up payment solutions
- Establish clear and simple regulations around digital payments, harmonized across ASEAN
- Build connected smart cities across ASEAN, with positive tax incentives

Trust & Security

- Create a national e-ID in each country based on mobile ID/numbers for delivery of public services
- Ensure interoperability of national IDs across ASEAN
- Harmonize cybersecurity, data protection and privacy laws across ASEAN

Local
Digital
Economy

- Drive local economic contributions from international OTTs and operators alike through fair tax regime and local employment with two potential options:
- Tax the provider: Diverted profit tax on global MNCs
- —Tax the consumer: Consumption tax when a consumer buys OTT

Digital Innovation

 Revamp the education system to implant innovation and create workers for the Digital Economy

### Cybersecurity is a clear and present danger for ASEAN's digital economy aspirations

#### A Prime Target for attack....

- 7<sup>th</sup> largest single market; GDP expected to reach \$4.2 Trillion;
- More than 40% of the population is below 30 years and digitally connected;
- ASEAN countries emerging as launchpads for cyber-attacks

#### ....Lack of a Holistic Approach

- Absence of a unifying framework
- Limited understanding of value-atrisk amongst corporates...
- ..leading to under-investment
- Limited threat intelligence sharing due to lack of trust and transparency



#### ... with low regional preparedness

- Varying levels of National preparedness around Strategy, Governance and legislation
- Strong digital divide with differing National priorities
- Limited development of the local industry

#### Challenge will escalate over time

- Increasing systemic risk as ASEAN gets more connected
- Technology evolution adding complexity
  - Convergence of IT/OT
  - Proliferation of consumer IoT devices expands attack surface

#### ASEAN Cybersecurity – A Call to Action



- ASEAN Rapid Action Cybersecurity Framework
- Cybersecurity as a "must have" in economic dialogue
- Progressive Glide path approach to Cybersecurity funding
- Define and track impact-oriented Cybersecurity metrics
- Defense in Depth mindset for corporates
- "Value at risk" mindset to share threat intelligence
- Resilience across the supply chain
- PPPs and Industry alliances
- Next generation of security professionals
- Strengthen the local Cybersecurity industry
- R&D around emerging threat vectors and tech

and Africa

Doha

Johannesburg

Riyadh

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## Using Mobile Connect to bring benefits and overcome the challenges of e-Gov services and regulation in

<u>Asia</u>



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Victor Tsai, COO, ADTC, Taiwan



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Moderator



Alasdair Grant Head of Asia Pacific, GSMA

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