



Setting the Standard



Chaesub Lee
Director,
Telecommunication
Standardization Bureau, ITU



Setting the standard



1865

We were founded



1906

First SOS

ITU



1932

New name: International
Telecommunication Union



1880

Invention
of radio



1925

First TV
broadcast



1957

Space age
comms



1973

First
mobile
phone call



2010

Broadband
Commission

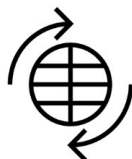


2015



1969

Roots of
Internet



2003/5

WSIS/Bridging
the Digital
Divide



2014

ICT innovation
and Digital
Inclusion

150
1865-2015





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60th Anniversary

"In Asia, the 60-year milestone represents the accomplishment of a major cycle in one's life and the beginning of the next."

CCITT 1956



ITU-T 1993



WTSA-16



WTSA-20



Why is ITU relevant in the digital era?



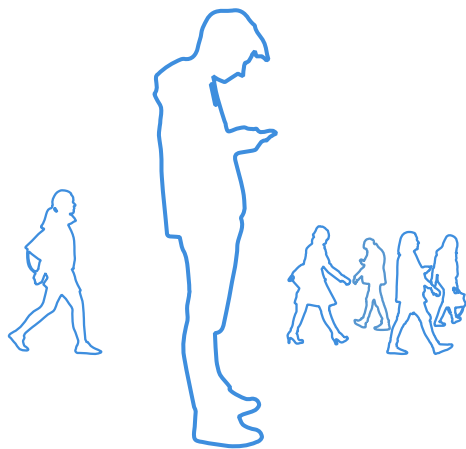


Setting the standard

ITU's international standards
are at play in
virtually every facet of
modern communications



But what does the future hold?





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1.7Mb per second

Amount of data created by each person by 2020



237 million

Number of IoT wearables shipped by 2020



\$6 trillion

The value generated by IoT technology by 2025



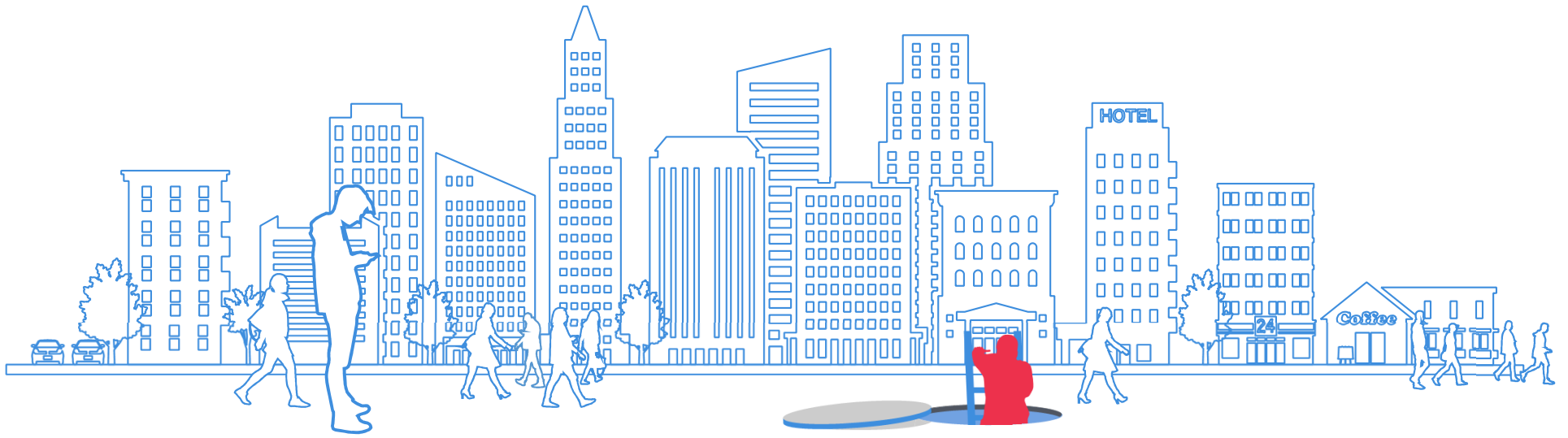


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Without widely accepted standards we will end up with
'Silos of Things' instead of an 'Internet of Things'

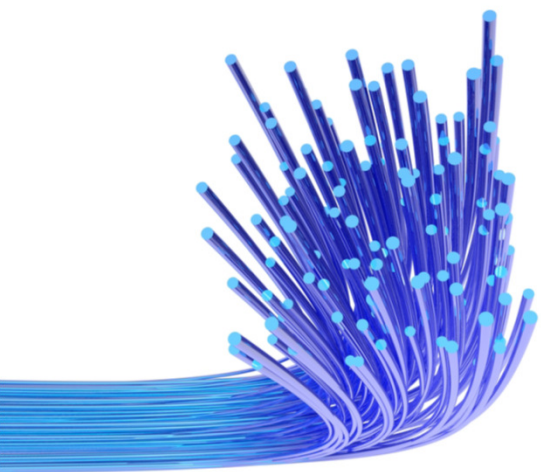


How does ITU figure into all this?





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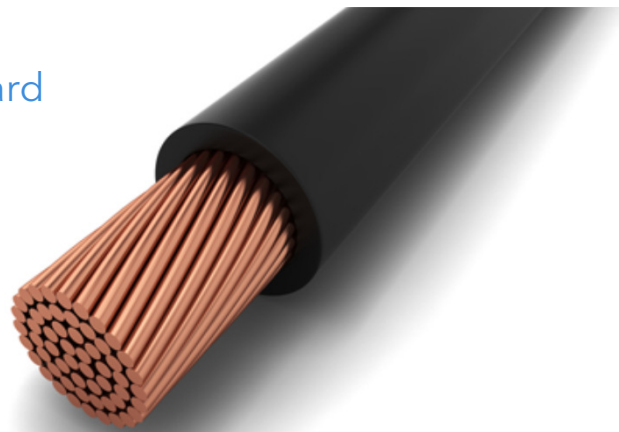
95%

International traffic
carried over fibre
networks built using
ITU standards

ITU-T continues to provide leadership
in the standardization of networks,
technologies and infrastructures for
transport and access.



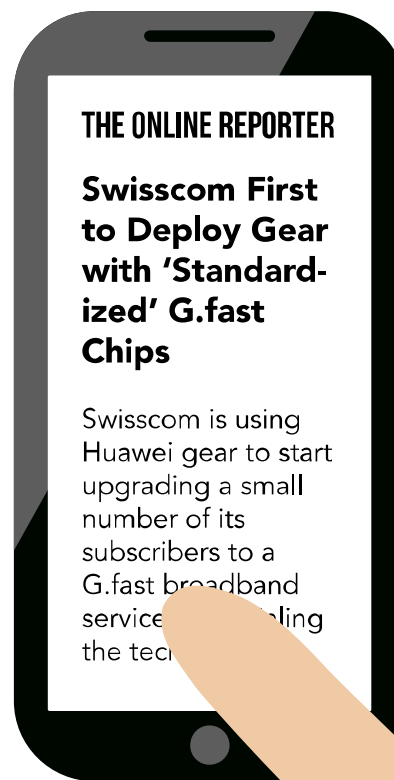
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Copper X250

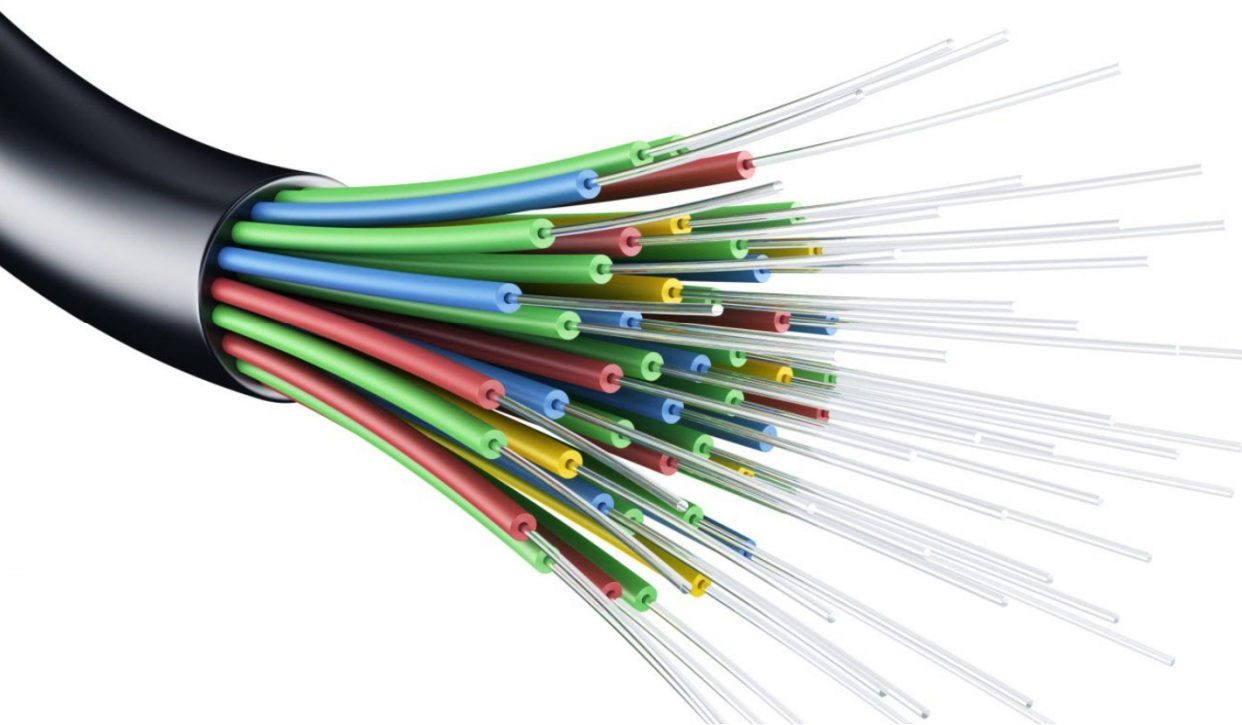


Breathing new life
into copper...



BREAKING NEWS: G.fast achieves 2 Gb/s over existing telephone lines

Ultra-high-speed broadband



Fiber X64

-  40G FTTH NG-PON2
-  OTN beyond 100G



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Multi-media

Platform for the next decade
of video innovation





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H.263



H.264



H.265

80%

of traffic will be video in 2020,
video enabled by ITU
standards



Emmy winning H.264 is the
most deployed video codec

Next-generation H.265 to
enable 4K & 8K UHDTV



Smart Cities and Green ICTs



BREAKING NEWS: New universal charger for laptop standard approved

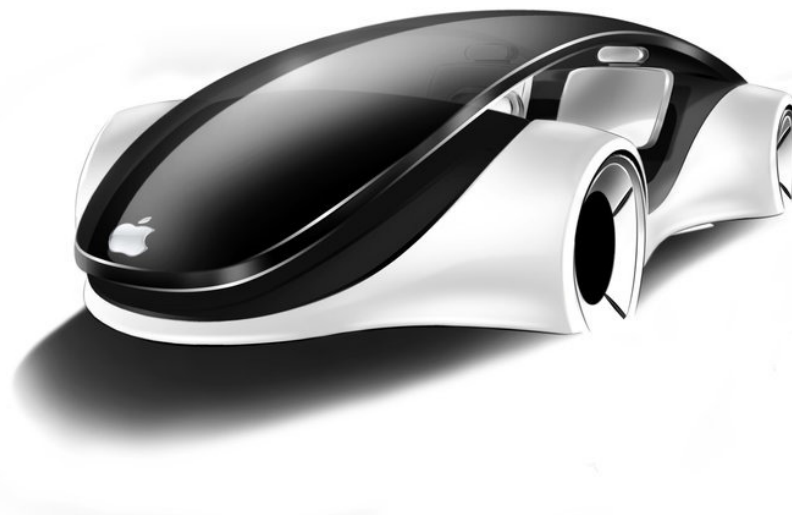


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Connected, automated cars

More new cars are recalled than are sold each year. Over-the-air updates can save billions and save lives...



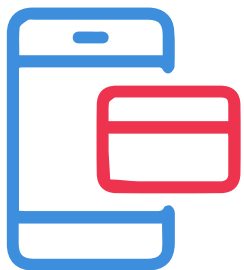
- i ITS Communication Standards provides trusted guidance
- i Trouble-free, hands-free communications in cars
- i Global vehicle emergency call performance standard
- i Secure remote software updates
- i Future Networked Car Symposium



BREAKING NEWS: Hyundai Motors has joined as ITU's first auto manufacturer



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Mobile money

Bill Gates predicts that the next big bank will be a technology company...





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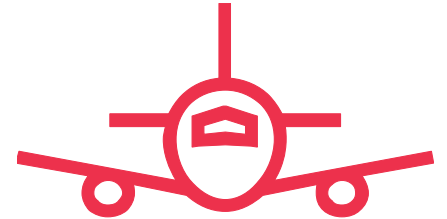
2 
Billion
still unbanked...





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Aviation flight data monitoring



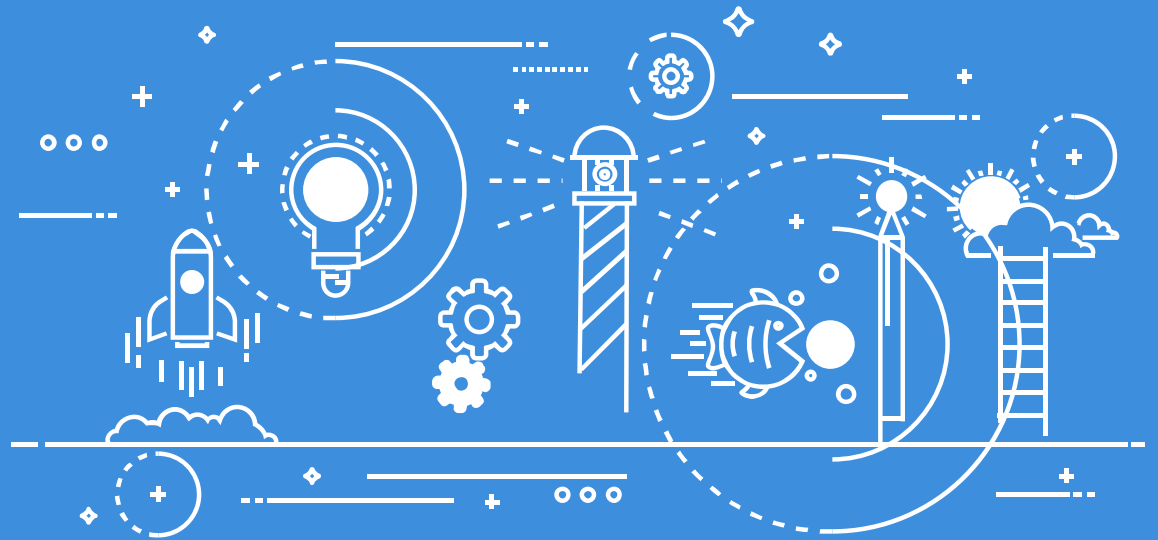
"I believe that data from aircraft, including from the black box could be continuously transmitted and stored in data centres on the ground."

H.E. Ahmad Shabery Cheek
Minister for Communications & Multimedia
Malaysia



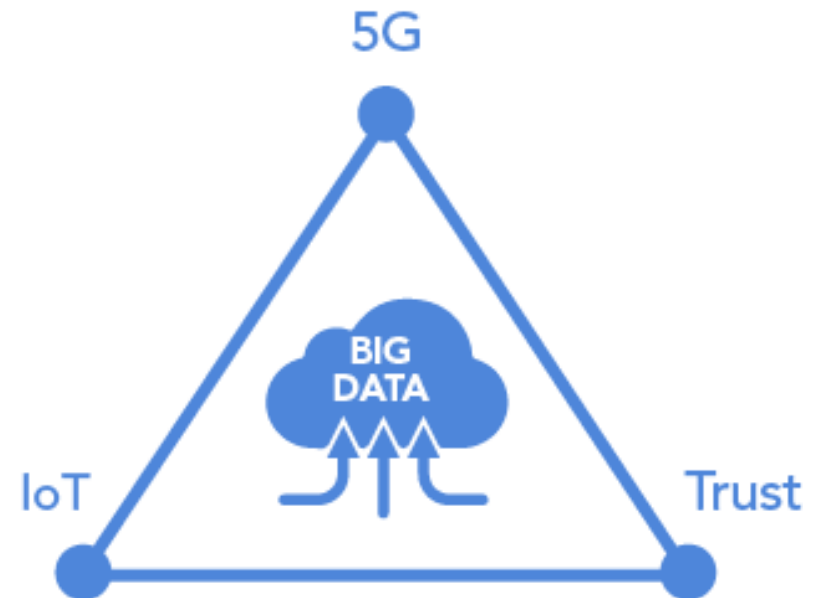


2020 vision and beyond

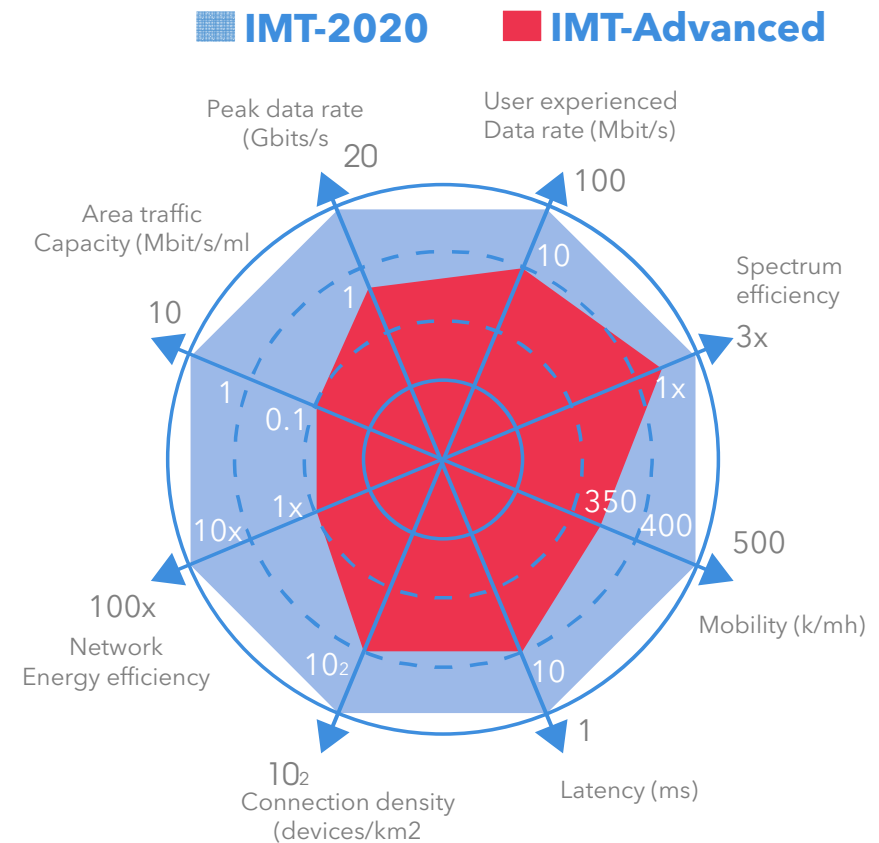
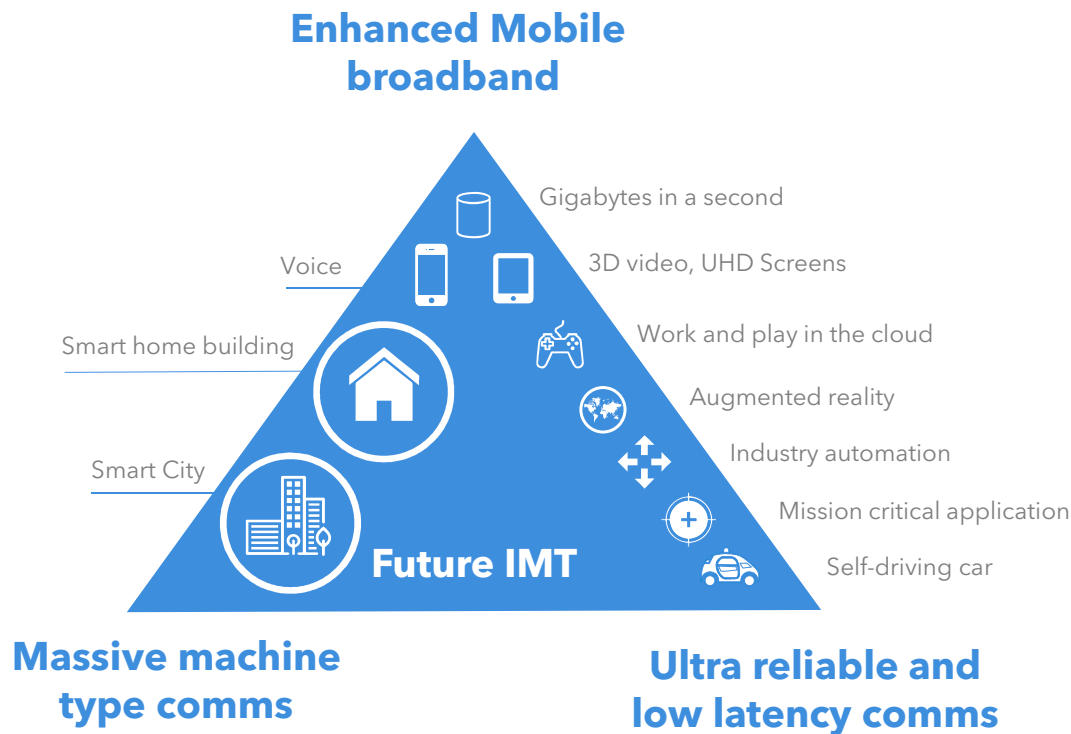


2020 vision

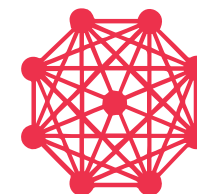
-  The future of standardization will be driven by 5G, IoT and Trust
-  WTSA-16 will provide members with a standardization toolkit optimized to assist government and industry in achieving their ambitions for the year 2020 and beyond.



Smart 5G networks

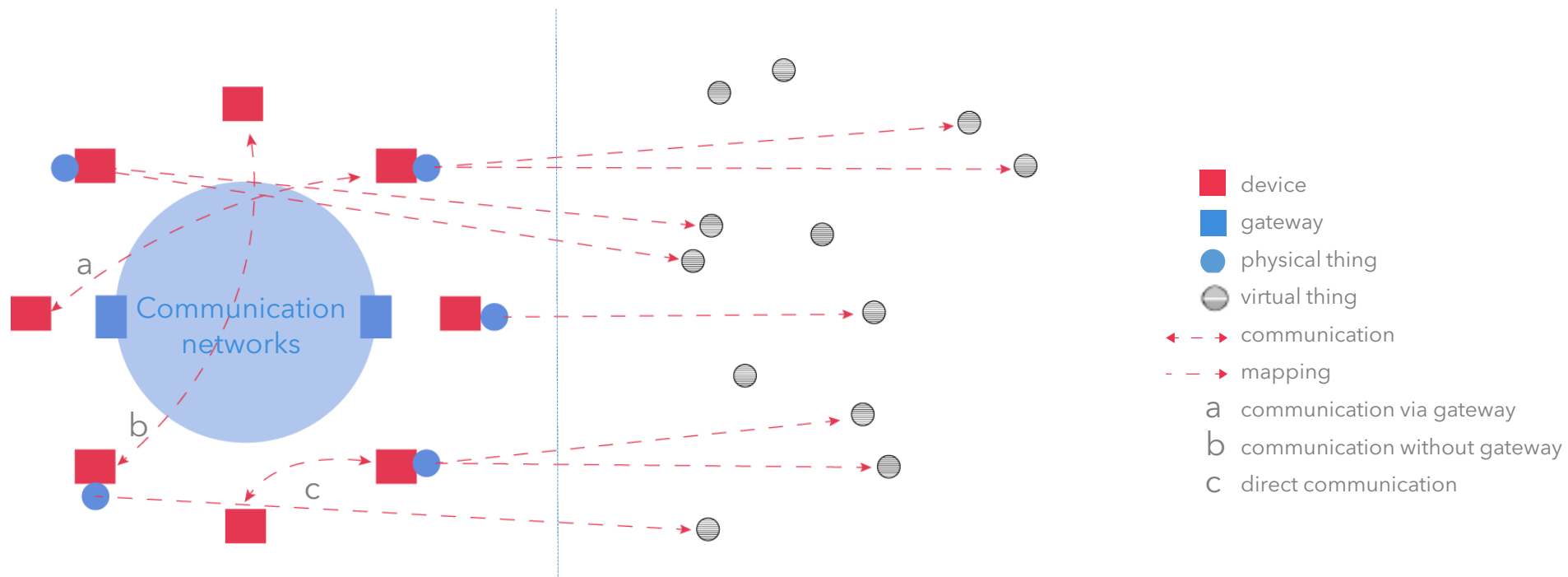


Hyperconnected smart world



Physical world

Information world

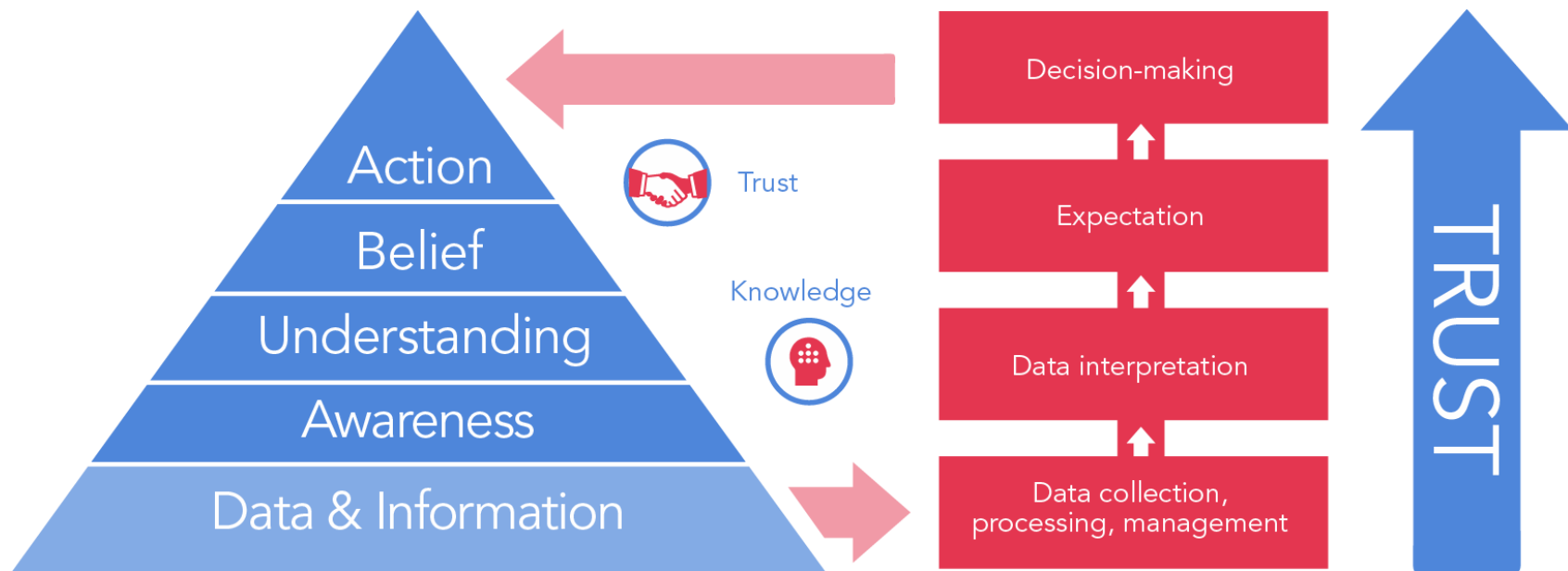




Security and Trust



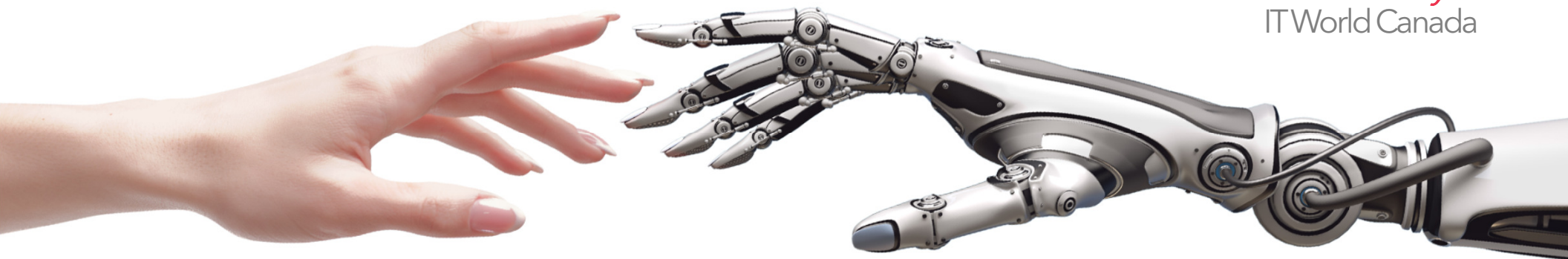
 New standardization effort to describe the **fundamentals** of a **trusted** ICT environment.



Artificial Intelligence

If anyone can plot a positive and productive path for AI, the ITU can...

Dave O'Leary
ITWorld Canada



IBM **Watson™** AI **XPRIZE®**



Bridging the gap





Membership & Appreciation



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193

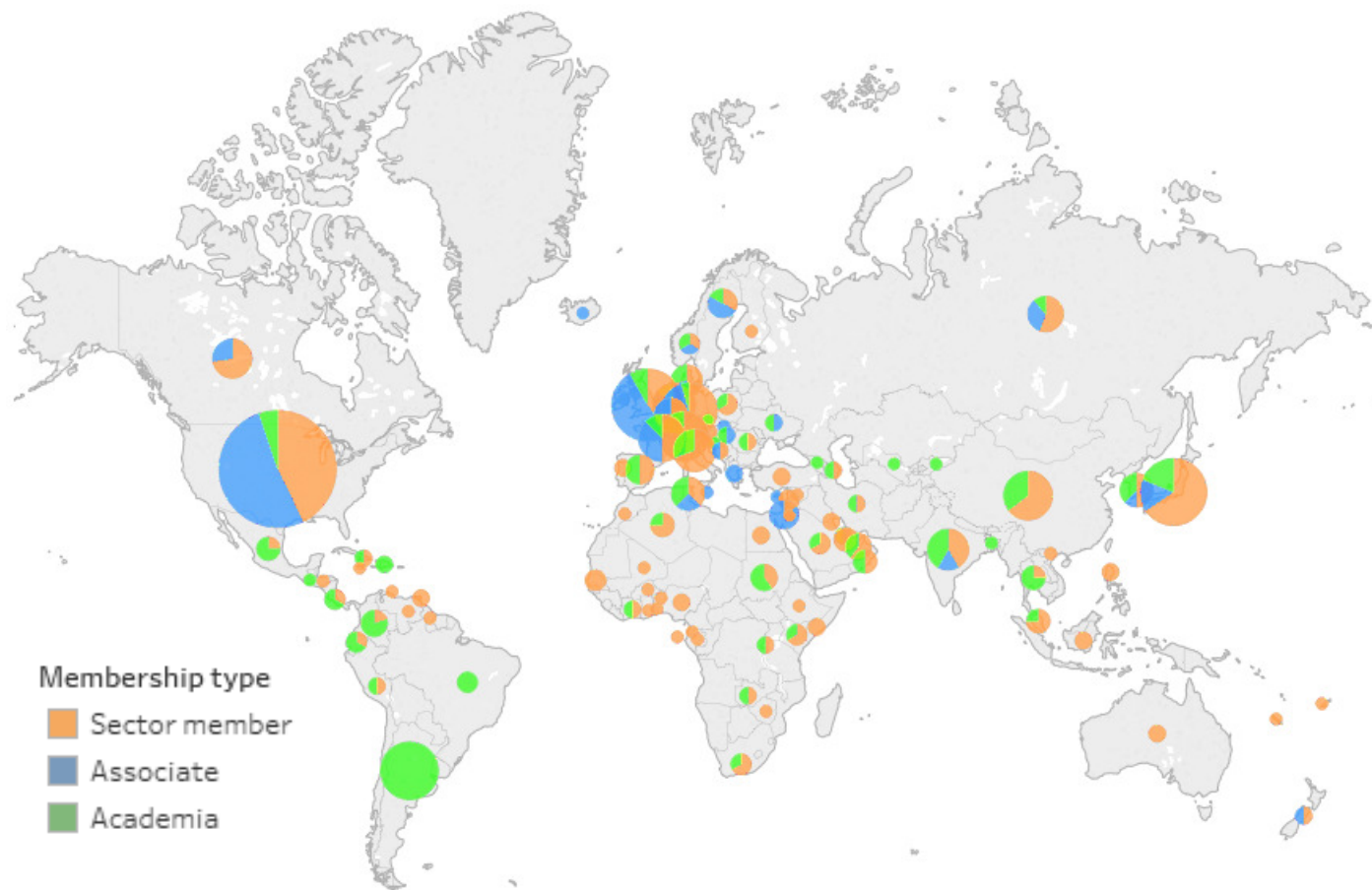
Countries

+700

ICT players

+120

Academia



NETFLIX





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Thank you!



SG2

Sherif Guinena

NTRA

Coordinator at International
Telecommunications
Organizations



SG3

Seiichi Tsugawa

KDDI

Senior Manager, Standards Strategy
Section, Industry Standards Department,
R&D Strategy Division



SG5

Ahmed Zeddami

Orange

Head of Orange
Expert Community
on "Energy & Environment"



SG9

Arthur Webster

NTIA

Lead Electronics Engineer



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Thank you!



SG11
Wei Feng
Huawei
Consultant



SG12
Kwame Baah-Acheamfour
Ghana National Communications
Authority
Deputy Director, Monitoring and
Compliance at National Communications
Authority



S13
Leo Lehmann
Swiss Federal Office
of Communication



SG15
Stephen Trowbridge
Nokia
Consulting Member of Technical Staff



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Thank you!



SG16

Yushi Naito

Mitsubishi Electric Corporation
Senior Technical Advisor at the
Information Technology R & D Center



SG17

Arkadiy Kremer

Russian Association for Networks and
Services (RANS)
Executive Committee Chairman



SG20

Nasser Al Marzouqi

UAE representative to the ITU



TSAG Chairman

Dr. Bruce Gracie

Ericsson



Thank You!



#ITUWTSA