



# APAC IPv6 COUNCIL

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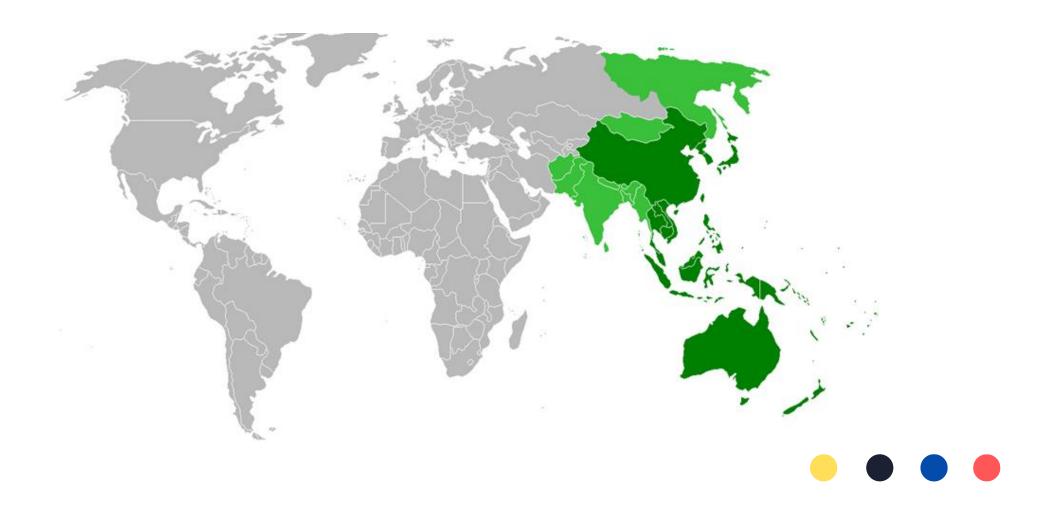
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## **INTRODUCTION**



APAC IPv6 Council is a not-for-profit organization established to collaborate with government, industry, and academia representatives to assist develop strategic roadmap documentation and to provide expertise for IPv6 adoption in the APAC region.





## **Council Committee members**

### **Dr Latif Ladid**

Advisor, APAC IPv6 Council



Mr.Krishna Kumar Lahoti

Vice-Chair

Mr.Robin Li Vice-Chair

**Dr.Will Liu** Steering Committee Member



### **Prof Dr Sureswaran** Ramadass

Chairman - APAC **IPv6** Council



Ms. Vallikkannu Nagappan Chief Secretary

## GOALS

Promote IPv6 Awareness and Education

Drive IPv6 Policy Making and Regulatory Framework creation in APAC region

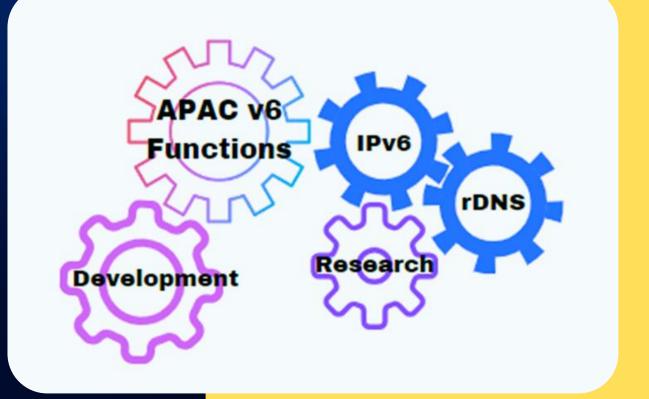
Facilitate IPv6 Test and Deployment Infrastructure

 Monitor and Evaluate Progress of current IPv6 adoption rates and challenges, strategies, and potential solutions

 Engage with international forums to foster global collaboration

Identification of Member States, and key stakeholders









Publish a whitepaper titled

" Asia Pacific IPv6 Implementation whitepaper"



Collaborate with the World Broadband Association (WBBA) to increase awareness and cultivate best practices for IPv6 implementation.







### **APAC IPv6 Council Introduction in Australia** - CyberOZ 2023– September 2023 in Sydney

### **APAC IPv6 Council Introduction in China** – November 2023 in Shenzen







### **APAC IPv6 Council Introduction in ICANN** - The 80th ICANN Meeting– June 2024 in Rwanda

First APAC IPv6 Council Meeting in Vietnam - VNNIC Conference- June 2024 in Hanoi







### **APAC IPv6 Council Introduction in Thailand** – Asia Pacific Net5.5G IP Gala 2024 - August 2024



### Council's participation in ITU-T WTSA

Mr. Krishna Kumar Lahoti, Vice Chair of APAC IPv6 Council, participated in the ITU-T World Telecommunication Standards Assembly(WTSA) 2024, which was held in New Delhi, India from 14-24 Oct 2024, and contributed to updating Resolution-64 to boost IPv6 adoption in developing APAC nations. After several discussions, Resolution 64 underwent a major revision with key changes aimed at Promoting, Facilitating, and Accelerating The Transition to and Deployment of IPv6. Training, Testing, and Stakeholder Consultation for defining and driving IPv6 deployment roadmaps were at the forefront of this update.



### WORLD TELECOMMUNICATION STANDARDIZATION ASSEMBLY

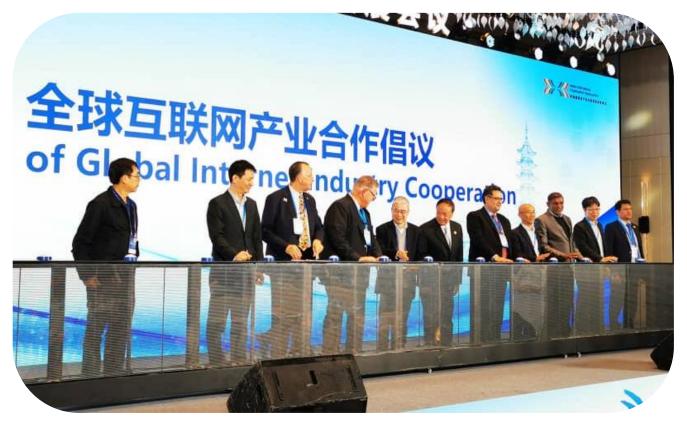
## NEW DELHI

### Shaping the technology s

14-24 October 20 New Delhi, India

itu.int/wtsa #WTSA2024





### **2nd Network Innovation and Development Conference**

APAC IPv6 Council was a part of the 2nd Network Innovation and Development Conference, sponsored by the NIDA Alliance and coorganized by the Computing Power Professional Committee of the China Communications Society and the Global IPv6 Forum, was successfully concluded. With the theme of "Net5.5G Leading Pioneer Set Sail", the conference attracted nearly 180 top industry people from different regions and organizations around the world to jointly point out the direction and path of the next generation of Internet development - Net5.5G Global Pioneer Program set sail!

China CCTV2 reported in detail the second network innovation and development conference hosted by NIDA Alliance, and Net5.5G global pioneer plan was launched on CCTV!.

More info can be found here: https://mp.weixin.qq.com/s/\_TjJvqaubLse76ysqnFlPg





### Malaysia IPv6 Policy Framework Report 2023

This policy report developed by the APAC IPv6 Council comprehensively examines Malaysia's journey in Internet development, with a particular focus on the adoption of Internet Protocol version 6 (IPv6). It delves into the historical context of Internet development, milestones in infrastructure growth, and the evolution of Internet governance in Malaysia. The report highlights the government's initiatives, policies, and collaborative efforts to promote IPv6 adoption and foster publicin this critical private partnerships digital transformation.



## Halaysia IPv6 Policy Framework Report 2023





NOTICE

PUBLIC CONSULTATION ON THE PROPOSED WAY FORWARD ON 100% ADOPTION OF AND COMPLETE MIGRATION TO INTERNET PROTOCOL VERSION 6 (IPv6) IN MALAYSIA

Submission of feedback by 31 October 2024 (12:00 noon, Thursday)

CYBERJAYA, 2 October 2024 – The Malaysian Communications and Multimedia Commission (MCMC) is undertaking a Public Consultation on the proposed way forward for 100% adoption of and complete migration to IPv6 in Malaysia, from 2 October 2024 to 31 October 2024.

The transition from Internet Protocol Version 4 (IPv4) to IPv6 represents a significant advancement of the Internet as it addresses the limitations and depletion of IPv4 due to the exponential increase in connected devices, with the ultimate goal to achieve an IPv6-only state.

Considering the above, it is essential that a defined timeframe is established to expedite the full adoption and migration to IPv6. A phased implementation plan targeting a complete transition over a four-year period from 2025 to 2028 is proposed to be incorporated as a way forward for this exercise.

MCMC invites written feedback and views from the industry, interested parties, and members of the public on the proposed way forward for 100% adoption of and complete migration to IPv6 in Malaysia. Such feedback and views are to be submitted to:

### Malaysian Communications and Multimedia Commission

MCMC HQ Tower 1, Jalan Impact, Cyber 6 63000 Cyberjaya Selangor Darul Ehsan

Attention to: Numbering and Electronic Addressing Management Department (NEAMD), Licensing and Monitoring Division (LMD)

Email: neamd@mcmc.gov.my

For more information, please visit: https://mcmc.gov.my/skmmgovmy/media/General/Resources/PCP-Proposed-Way-Forward-on-100-Adoption-of-IPv6.pdf

### www.mcmc.gov.my

### Supporting 100% IPv6 Adoption in Malaysia

- APAC IPv6 Council, along with IPv6 Forum Malaysia, assists local businesses and organizations with technology consultation, human capacity building, and upskilling required for the seamless transition to a fully connected IPv6 Malaysia.







### 5G ASEAN Industrial Development Guideline

This report, titled "5G ASEAN Industrial Development Guidelines," is designed by the APAC IPv6 Council along with the IPv6 Forum Malaysia, NIDA, RUMC, & USM to provide a comprehensive framework for the deployment, standardization, and application of 5G technologies among industries across the region.



# 5G ASEAN Industrial Development Guideline















 $\langle \overset{\circ}{\frown} \rangle$ IPv6 initiative.  $\bigcirc \circ$ 

- **Department of Telecommunication, India**
- Malaysian Communications and Multimedia Commission (MCMC), Malaysia
- Ministry of Communication and Information Technology of the **Republic of Indonesia**
- VNNIC, Vietnam

- Lao National Internet Center, Laos
- Ministry of Science & Technology, Zambia







### Communicating with Member States and establishing correspondence to encourage their participation in the

Participate/Conduct international conferences, workshops, and forums to represent the APAC IPv6 Council

### In 2024:

- 2<sup>nd</sup> IPv6 Enhanced and 5G Global Conference 2024, Malaysia
- IPv6 Workshop for Universities, India
- Asia Pacific Advanced Network (APAN57), Thailand
- APRICOT 2024, Bangkok, Thailand
- VNNIC Conference, Vietnam
- ICANN80, Kigali, Rwanda
- Certified IPv6 Migration Strategy for Regulators and Governing Authorities Workshop, Kuala Lumpur, Malaysia
- Asia Pacific Net5.5G IP Gala 2024, Bangkok, Thailand
- Malaysia-Japan ERAB Cybersecurity Conference 2024, Kuala Lumpur, Malaysia
- 2024 World Internet Conference Wuzhen Summit, Wuzhen, China











IPv6 Capacity Building – for Awareness, Training, Testing, and Deployment best practices through whitepapers, blogs, and technical recommendations.

- IPv6 Evolution Roadmap and Implementation Guide
- Transition to IPv6-Only Networks for Govt Infra
- Cybersecurity Measures for IPv6-Only Networks
- Training programs for Engineers
- IPv6 and DNSSEC Deployment Status Check
- IPv6 Readiness Assessment









APAC region



- developed by Dr. Hafez



### Technical Contributions to IPv6 Enhanced Council for

**SRv6 Deployment Guidelines for APAC Region** 

- INTERNET PROTOCOL VERSION 6 - DEPLOYMENT SPECIFICATIONS FOR **SEGMENT ROUTING OVER INTERNET PROTOCOL VERSION 6** 

SRv6 and IoTv6 Ready Logo programs – IPv6 Ready Logo

**IFIT Deployment Guidelines for APAC Region – In Progress** 



Dr. Hafez













SMART INDUSTRY MALAYSIA





(::) **AP**NIC

HUAWEI



-Collaborate



**Global IPv6 Forum** 

**APNIC** 

**ITU-APT** 

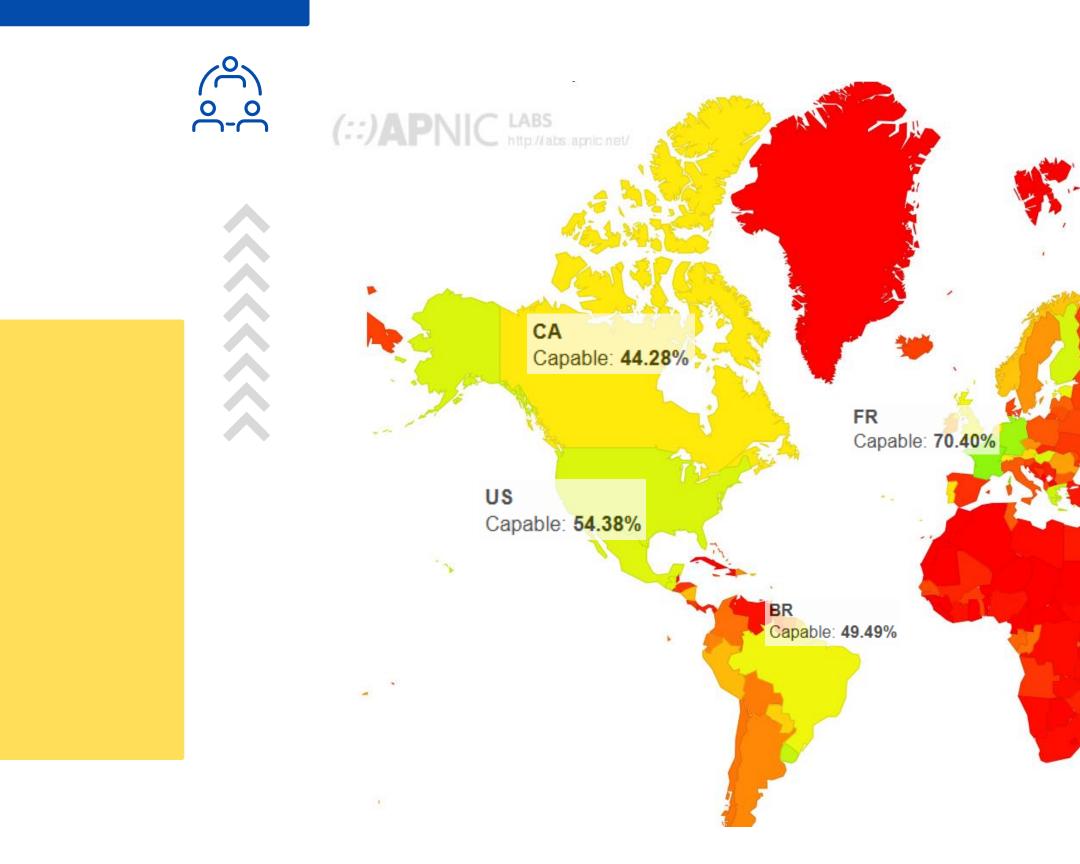
- **APAN**
- MCMC, Malaysia
- **Bharath IPv6 Forum, India**
- NIXI, India
- Huawei, China
- **IPv6 Forum Malaysia**
- **IPv6 Enhanced Council**
- **WBBA**
- Lao NIC, Laos



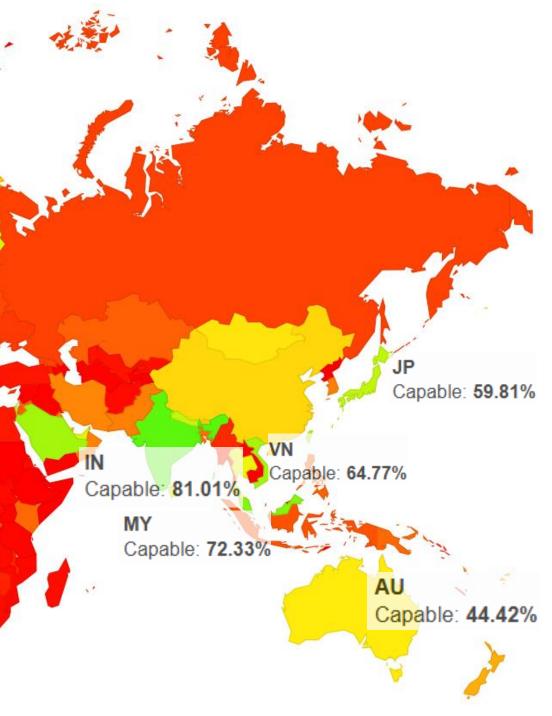
### with regulators, forums, and Organisations across APAC to increase awareness and cultivate best practices for IPv6 implementation.

**Pertubuhan Smart Industry Malaysia (Industry 4.0)** 

### **The Global Picture(IPv6 Capability)**







## **MEMBER ORGANISATIONS** (Nations)

- Malaysia
- Sri Lanka
- India
- China
- Tonga
- Laos
- Australia
- Myanmar
- Nepal
- Japan
- Indonesia

- Nigeria
- Ecuador
- Pakistan
- Bhutan
- Philippines
- Vietnam
- Mauritania
- Malawi
- Sudan
- Egypt

















## **MEMBER ORGANISATIONS** (Governments & Forums)

- Global IPv6 Forum
- Asia-Pacific Advanced Network (APAN) •
- National Internet Exchange of India (NIXI) ullet
- National Advanced IPv6 Center, Malaysia ullet
- Persatuan IPv6 Malaysia (IPv6 Forum Malaysia) ullet
- Bharat IPv6 Forum, India  $\bullet$
- ITU-APT
- NIDA, China
- Department of Communication, Tonga •
- Posts and Telecommunications Department, Myanmar
- Telecommunications Regulatory Commission of Sri Lanka
- Lao National Internet Center (LANIC), Laos
- APNIC



## MEMBER ORGANISATIONS (Organizations)

• Pertubuhan Smart Industry Malaysia (Industry 4.0) • True Meridian LLC, USA • InfinIT ComTech LLP, India • Richat Partners, Mauritania Agile Consultancy, Malaysia • Subisu Cablenet Limited, Nepal • Hassan Solutions, Pakistan • NLTVC Education Sdn Bhd, Malaysia • Nokia, Australia • JMCS SDN BHD, Malaysia • BII, China • Huawei, China • Bhutan Telecom Ltd., Bhutan • CNLABS Test Services Pvt. Ltd., India Malawi Revenue Authority, Malawi • Adasta Network Sdn Bhd, Malaysia • SAIM ENTERPRISES, Pakistan • Digital Bridge Institute, Nigeria • Nokia Malaysia Sdn. Bhd., Malaysia • Edgepoint Towers Sdn Bhd, Malaysia • Wexa Consulting, Ecuador



## **MEMBER ORGANISATIONS** (Universities)

- Malaysia University of Science and Technology, Malaysia
- Asia Pacific University of Technology & Innovation, Malaysia
- Dr. MGR University, India
- UNSW Sydney, Australia
- Comsats University Islamabad, Pakistan
- ITS Engineering College, India
- Sudan University of Science and Technology, Sudan
- IEC College of Engineering and Technology, India
- Meenakshi Sundararajan Engineering College, India







## **CONTRIBUTING MEMBERS**

- Mr.Liu Shuai BII, China
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- Mr. Paul Wilson Director General, Asia Pacific Network Information Centre (APNIC)
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- Mr. Lawrence Hughes IPv6 & PKI Specialist, IPv6 Forum
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## **CONTRIBUTING MEMBERS**

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- Mr. Ashish Kapahi, Chief Executive Officer, ASEAN Economic Forum
- Mr. John L Lee, CTO Internet Associates, LLC
- Dr. Masaki Umejima, Professor, Keio University Cyber Civilisation Research Center (CCRC), Japan

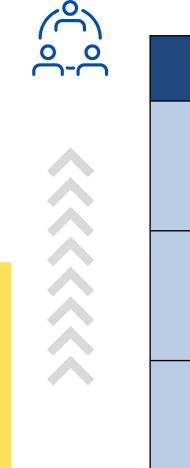
**Individual Members – 200** 







## **TRAINING PROGRAMS**



IPv6	5G	ΙοΤ
Certified Network Engineer for IPv6 (Silver)	Certified 5G for Management (C5GM)	Certified IoT Engineer
Certified Network Engineer for IPv6 (Gold)	Certified 5G for Business Professionals (C5GBP)	Certified IoT Security Engineer
Certified Security Engineer for IPv6 (Silver)	Certified 5G for Enterprise Engineer (C5GEE)	
Certified Security Engineer for IPv6 (Gold)		
Certified Network Programmer for IPv6		





## TRAINING PORTFOLIO





## IPv6 TRAINING

- IPv6 Train the Trainer Online Workshop in Dec 2024 for clients from across different regions worldwide.
- Certified Network Engineer for IPv6 (Silver) in Nov 2024 for clients from Yemen, Malaysia, and Papua Guinea in Kuala Lumpur, Malaysia.
- Certified Security Engineer for IPv6 (Silver & Gold) in October 2024 for clients from Multimedia University, Malaysia.











## IPv6 TRAINING

- Certified Network Engineer for IPv6 (Silver) in June & September 2024 for 175 engineering students in Chennai, India.
- CNE6- Silver, Gold, and TTT for clients from ITU in July 2022.
- CIoT- Fundamentals and TTT for clients from ITU in July 2022.
- Certified Network Engineer for IPv6 (Silver) in April 2022 for clients suggested by Iverson.









## **5G TRAINING**

- Certified 5G for Business Professionals in ulletFebruary 2025 for clients from Celcom Digi in Kuala Lumpur, Malaysia.
- Certified 5G for Management in December • 2024 for clients from multiple Telcos, Malaysia.
- Certified 5G for Management in July 2024  $\bullet$ for several telcos in Malaysia.
- Certified 5G for Management in March 2024 for clients from Theta Edge, SIRIM, Arinaa Kambyan, Sura Energy in Malaysia.







## **5G TRAINING**

- Certified 5G for Management in
  November 2023 for clients from Telekom
  Malaysia in Malaysia.
- Certified 5G for Management in June
  2023 for clients from Edgepoint Towers in Malaysia.
- Certified 5G for Enterprise Engineer in June 2023 for DNB, Malaysia





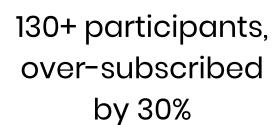




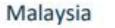
### **IPv6 Enhanced & 5G Global Conference 2023**





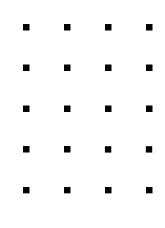






India







10 countries



### First APAC IPv6 Council Meeting - Vietnam, June









Malaysia

India

Luxembourg

Australia

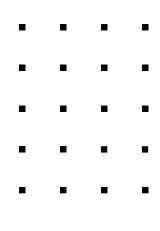
lia

Vietnam

China



S





### 10 countries



Laos

Spain



France

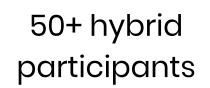


Nepal



### **APT Asia Pacific IPv6 Migration Strategy for Regulators and Governing Authorities 2024**





























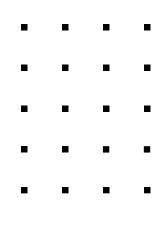
China

India

Indonesia

Luxembourg

Bhutan



12 countries



Myanmar

Samoa



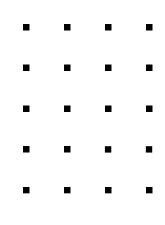






### Second APAC IPv6 Council Meeting - Malaysia, Dec 2024







### Cybersecurity for Energy & IoT: ERIA ERAB CPSF Workshop Jan 2025



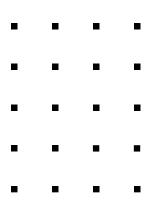


50+ hybrid participants









## Join the IPv6 Movement

An organization/individual wishing to join the APAC IPv6 Council can submit the particulars in the link :

https://www.apacv6.org/membership/member-registration

**EMAIL ADDRESS** 

sysadmin@apacv6.org



WEBSITE

apacv6.org





# THANK YOU!!

