

# IPv6 transition in APAC, IPv6 policy practice in France and Africa

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# Agenda

01

IPv6 Forum and IPv6 Enhanced Council

02

Europe & Arab Experience

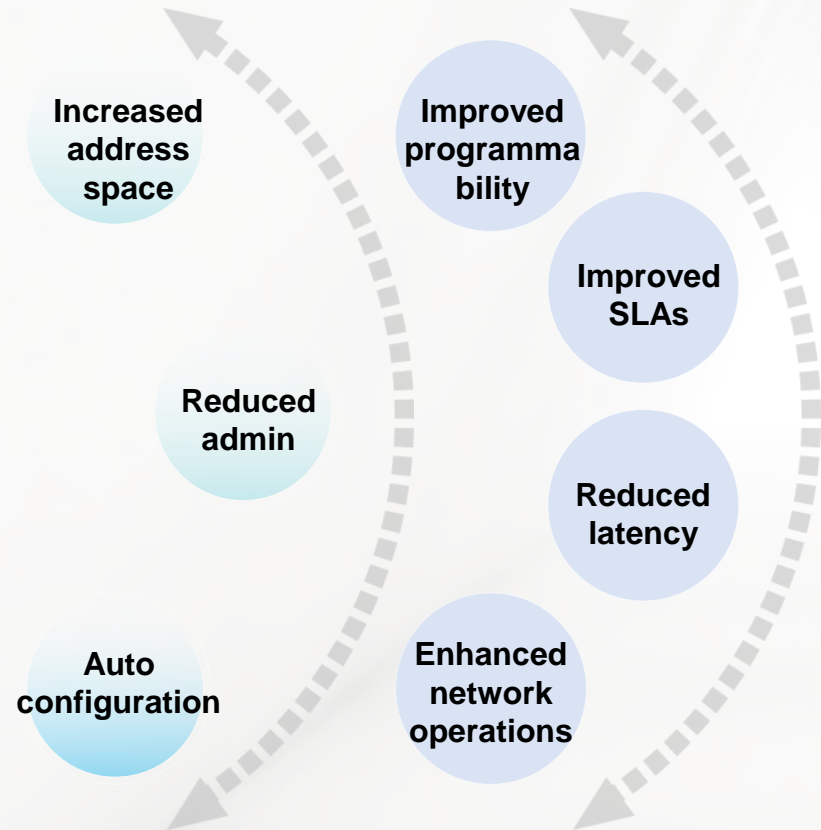
03

APAC IPv6 Council Looking for cooperation with ITU RDF

# IPv6 → IPv6 Enhanced: Unleashing Connectivity Potential with 10 Trillion\$ Value by 2030

IPv6 increases address **QUANTITY**

IPv6 Enhanced improves **QUALITY**



**IPv6 Enhanced: Innovation based on IPv6 to enhance network quality**  
**IPv6 increases the QUANTITY of the digital connections**  
**IPv6 Enhanced increases the QUALITY of the digital connections**

## Innovation based on IPv6 to support 5G and beyond



**SRv6:** navigator that finds the best route based on the route conditions.

**Network Slicing:** creates dedicated *LANES* in the Network

**Deterministic behaviour:** the network performs precise and punctual

**In-Flow monitoring:** real time monitoring the network status

## Roland Berger Report: 10 Trillion\$ Value of IPv6 and IPv6 Enhanced innovations

Roland Berger assessed the impact of IPv6 and IPv6 enhanced:

- IPv6 index growth is correlated to GDP growth
- By 2030, it can create a total of \$10 trillion in global economic output

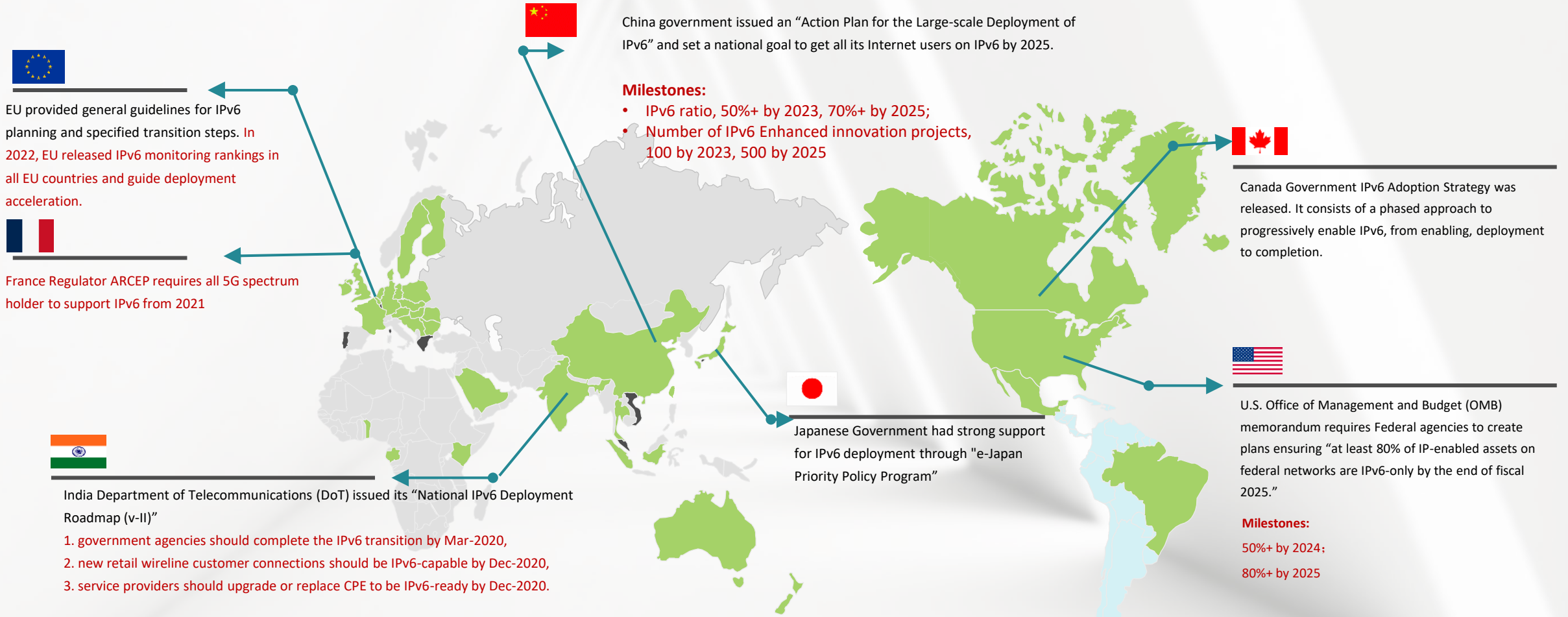
769	4408	1223	1160	535	309
Communication	Manufacturing	Finance	Government	Transportation	Entertainment
479	300	177	708	180	636
Healthcare	Education	energy	Retail	Agriculture	real estate

Unit / billion USD

\* <https://www.rolandberger.com/en/Insights/Publications/Global-IPv6-Development-Report-2022.html>

# Countries Release National Policies Facilitate IPv6 Deployment, for Digital Equity and Economy

**Digital equity:** Balance digital power among countries, provide equal access to the Internet for the general public, and let people have the ability to access Internet fairly, especially for those countries have large population and growing fast



**The APAC region accounts for one-third of the world's population, but the development of the IPv6 does not match the development level.**

**Recommend to learn from other regions to release policies to guide the development.**





# European Commission: IPv6 and related Instruments



In 2000's: Established EC's IPv6 Task Force and IPv6 Policy & Deployment Plan

## Recent EU related IPv6 Policies

**ETSI Standardization**  
**ETSI ISG IPE**  
(2020)



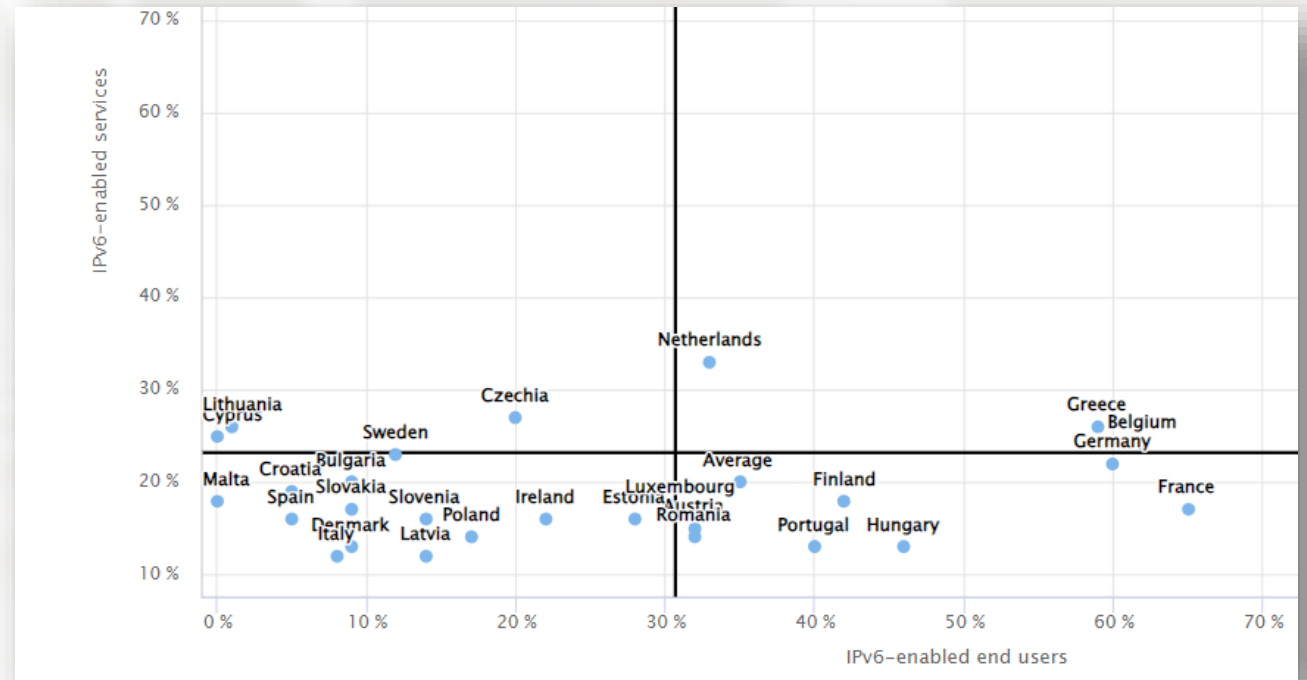
**EU Cybersecurity Strategy**  
The EC will accelerate the uptake of key Internet Standards including IPv6  
(Dec 2020)

**BEREC IPv6 Workshop**  
Acknowledges the role of IPv6 as an essential precondition for a Digital Europe  
(May 2021)

**EU Strategy on Standardization**  
The EC is considering Policy measures to promote IPv6  
(Feb 2022)

Their Enforcement, Instantiation, Operationalization will open up a new IPv6 Era in the Digital Economy

## IPv6 Monitoring Site of Member States



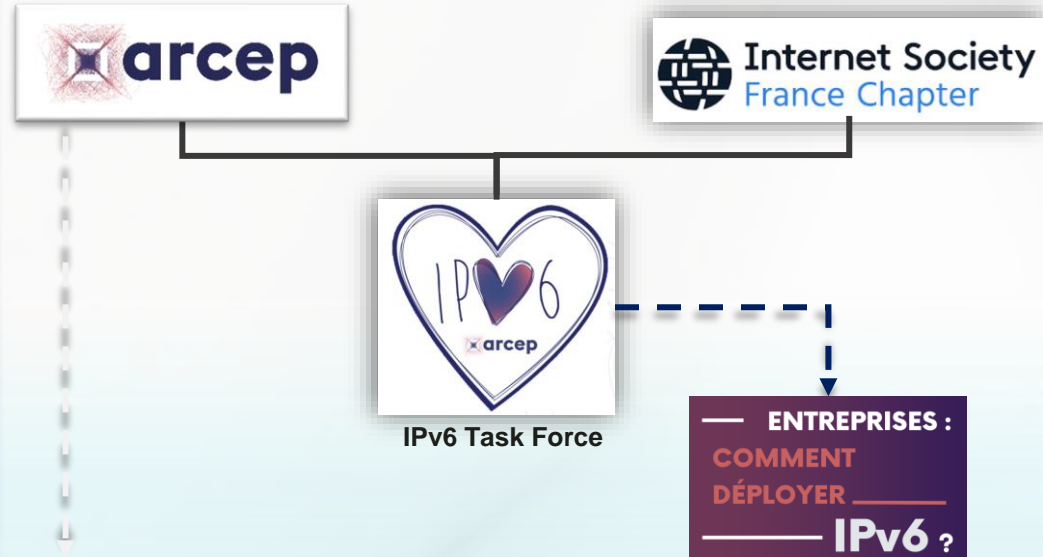
URL: <https://ec.europa.eu/internet-standards/ipv6.html>



# France: ARCEP Leads the IPv6 Deployment by Releasing IPv6 Policies



## Setup of France IPv6 Task Force (v2) 2019



- Communicate with Carriers and Enterprises and regularly release IPv6 Deployment Reports.
- A Multi-stakeholder Platform.
- Build Test Tools and Platforms
- Provide Guidelines to promote IPv6 and SRv6.

## Regulator Releases IPv6 Policies

- IPv6 requirement for 5G networks
  - The 3.4-3.8 GHz 5G spectrum holders must have their network compatible with IPv6 protocol from December 31 2020.
- ARCEP support to Carriers & Enterprises
  - Annual Barometer on IPv6 Evolution in France
  - Annual Report on Data Interconnection in France
  - France 2021 Internet Report
  - Internet Service Quality 2020 Report
  - Global IPv6 Deployment Statistics

# Arab IPv6 Council and White Paper for Regional IPv6 Development Strategy

## IPv6 Industry summit and Establishment of Arab IPv6 Council

- Established by **AICTO (Arab ICT Organization)** and **IPv6 Forum** (May 9<sup>th</sup> 2023)
- Participation of key stakeholders from the Arab region
- **Mission: Promote IPv6 deployment in the Arab Region**



Board Members

## Release of Arab-Africa IPv6 White Paper

- Released during Gitex Africa IP Gala on May 31<sup>st</sup> 2023
- Published by **AICTO**, **ATU (African Telecommunications Union)**, **IPv6 Forum** and **Huawei**
- Introduced IPv6 for digital economy and policy recommendations, **encourage IPv6 and IPv6 Enhanced deployments such as SRv6**



[http://www.aicto.org/publications/studies/#dearflip-df\\_6823/1/](http://www.aicto.org/publications/studies/#dearflip-df_6823/1/)



# APAC IPv6 Council created @ 2023, APAC IPv6 industry white paper started, Looking for cooperation with ITU RDF

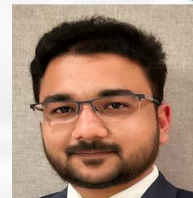
## Goals of APAC IPv6 Council

- 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 v6 Adoption
- Engage with international forums to foster global collaboration
- Identification of Member States, key stakeholders, current adoption rates and challenges, strategies, and potential solutions



Sures  
Ramadass  
APAC v6 Council

2023



Co-Chairs: Krishna Lahoti Robin Li



Governments  
Operatos  
Regulators  
Industry

**We hope to work with ITU RDF to promote the IPv6 industry development in the Asia Pacific.  
The council is working on the APAC IPv6 industry white paper. ITU RDF experts are welcome to participate in.**



**Thank you**