



IPv6: challenges are (being) turned into business opportunities by a non-telco ISP



Many people know ...

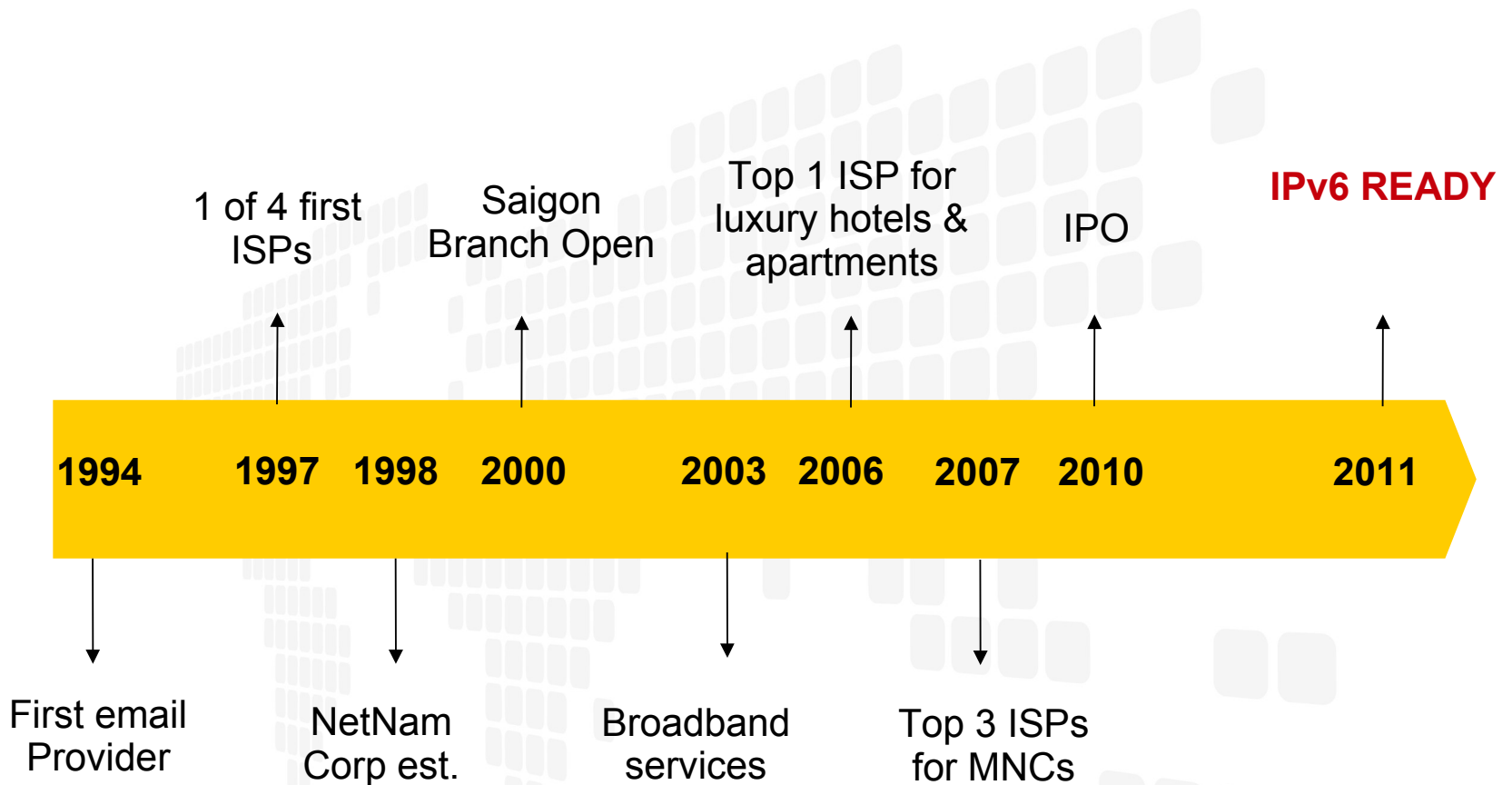
and what should we do?

IPv4
PAST

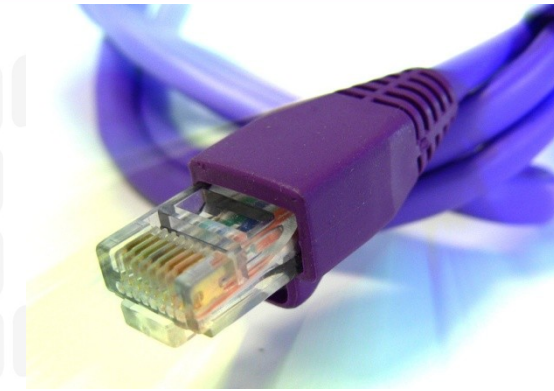
IPv6
FUTURE



NetNam ISP milestones

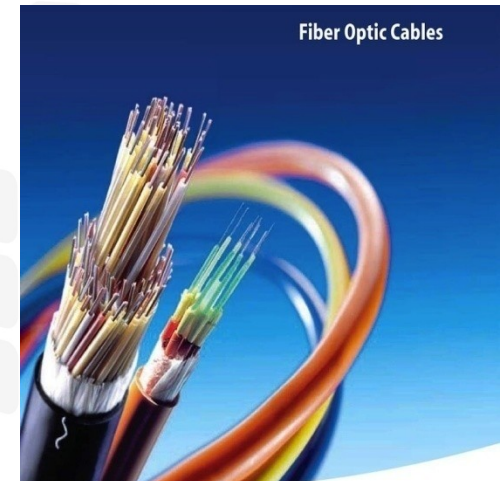


Pure Ethernet & IP based ISP



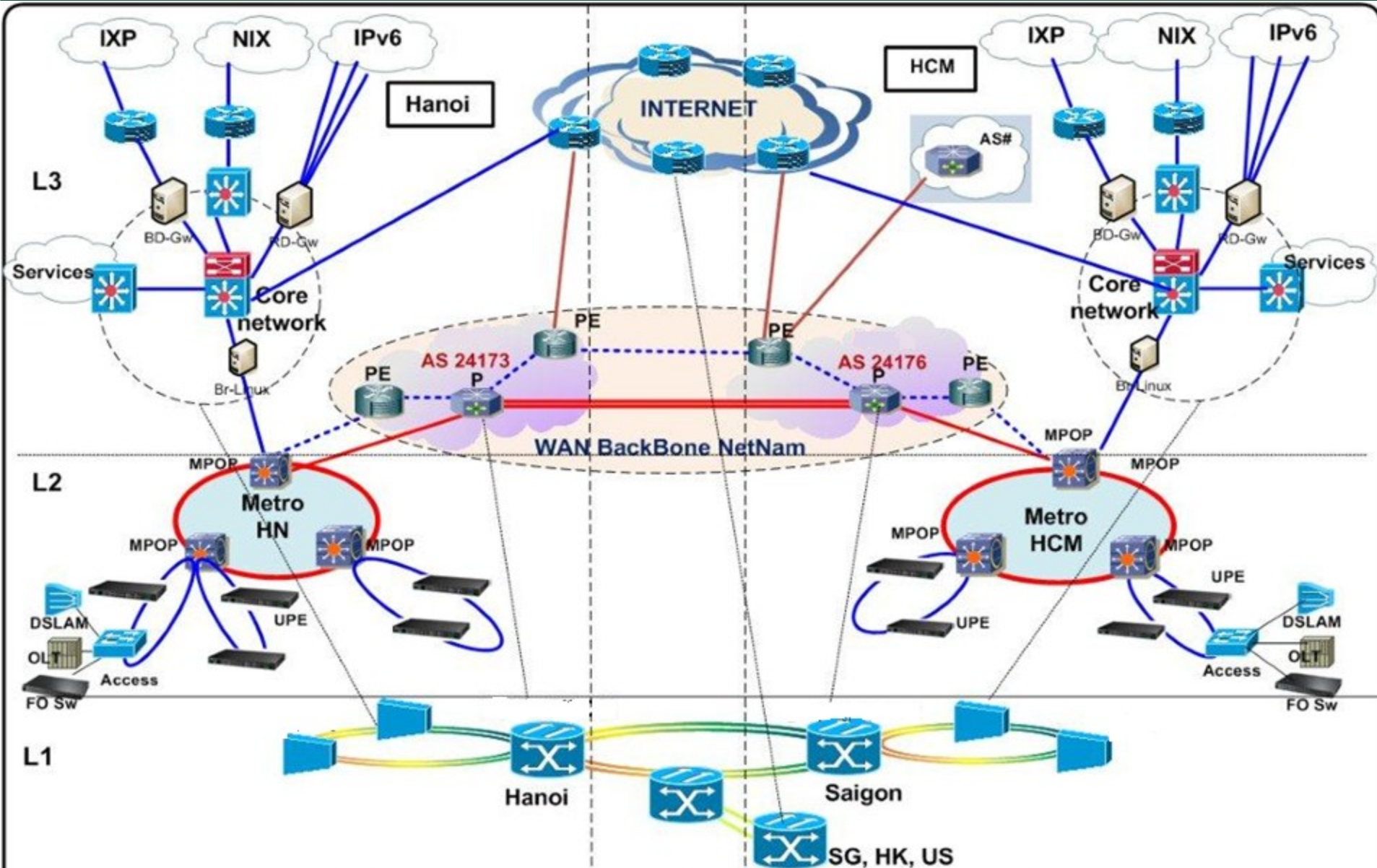
37.229.18.10337.229.18.10337.229.
29.18.10337.229.18.10337.229.18.1
37.229.18.10337.229.18.10337.229.
37.229.18.10337.229.18.10337.229.
229.18.10337.229.18.10337.229.18.1
229.18.10337.229.18.10337.229.18.1
229.18.10337.229.18.10337.229.18.1
229.18.10337.229.18.10337.229.18.1

TCP/IP



Fiber Optic Cables

NetNam Network Diagram



NetNam – Overall network infrastructure

NetNam IPv6 Deployment Roadmap

Phase 1

Phase 2

Phase 3

IPv6 Research
Evaluation, decision

IPv6 Experimental

Deployment
Services Provision
Solution Provision

2002

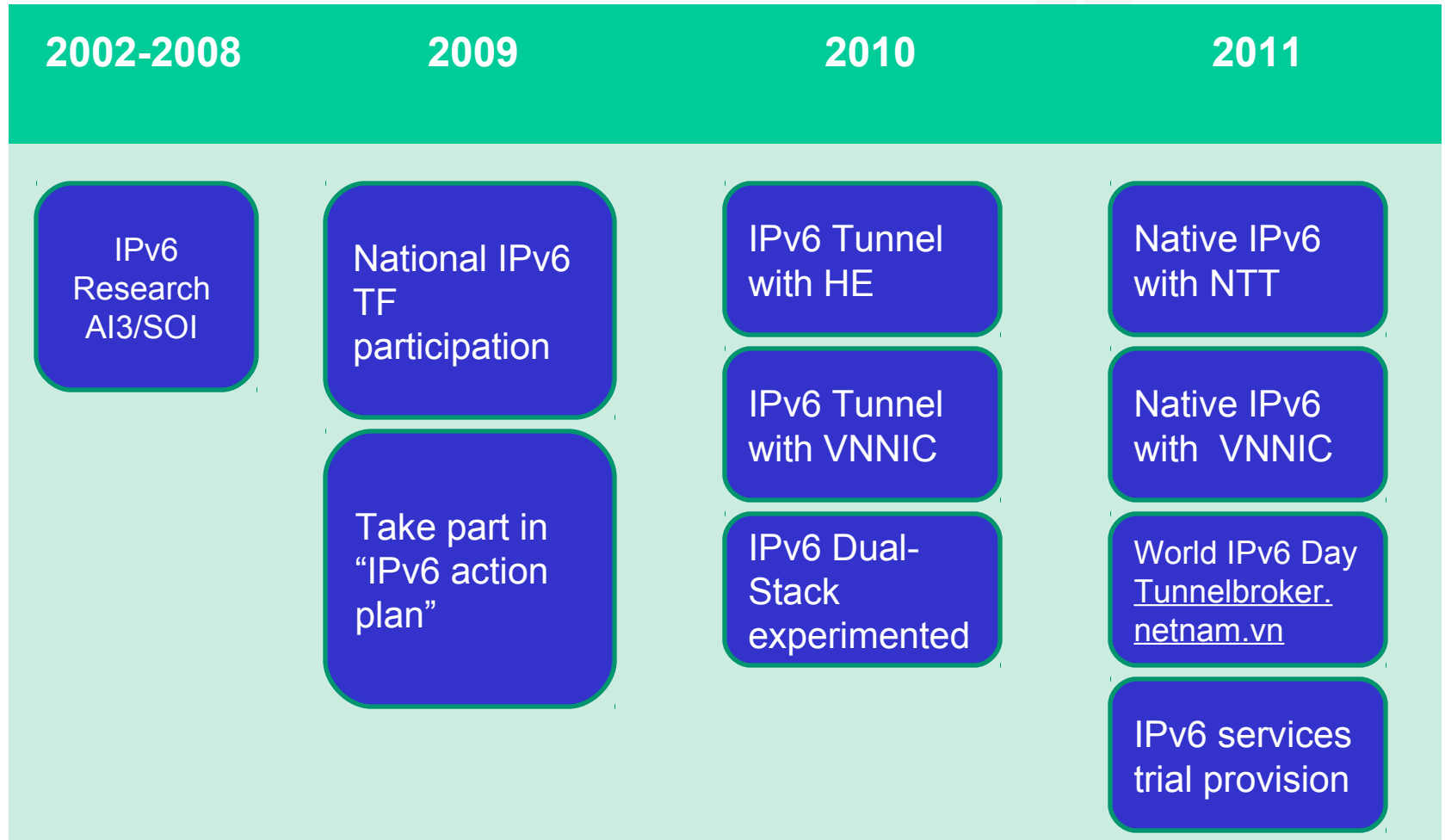
2009

2010

2011

2015

NetNam IPv6 Deployment Roadmap (cont.)



NetNam IPv6 Deployment Roadmap (cont.)

2012-
2015

Fully support system for IPv6

Provide IPv6 connections

Provide IPv6 services

Provide IPv6 transition services



IPv6 – when challenges are (being) opportunities

Challenges for telco

- ◆ Complicated infrastructure, multi-protocol, multi-vendor
- ◆ Huge investments for IPv4
- ◆ Scale of deployment
- ◆ CPE - not all IPv6 supported
- ◆ Still having pool of IPv4 for sometimes, NAT



Challenges, Investment, Time consuming

Challenges for New ISP and more...

- Exhausted of IPv4 resources
- IPv4 delivery Policy : /22 and no thing more



Lack of IPv4 → Challenges and opportunities to use IPv6

Thống kê IPv4 và IPv6:



Solutions of non-telco ISP

With pure Ethernet/IP infrastructure, NetNam transition to IPv6 much easier and flexible:

- ◆ Low investments
- ◆ Fast transition
- ◆ Flexible in technologies selection



The KAME project

1998.4 - 2006.3

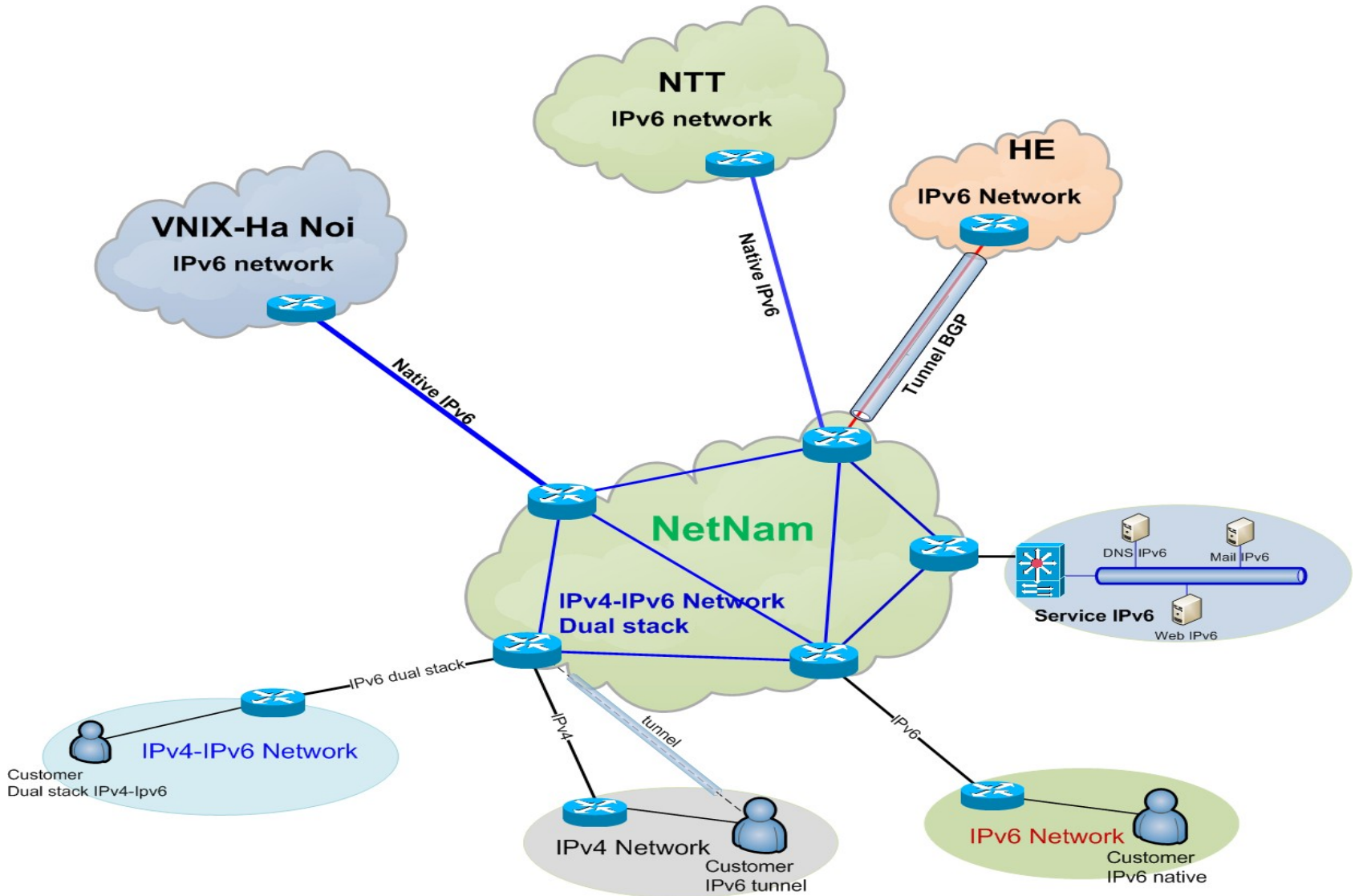


Use IPv6 HTTP and you will watch [the dancing kame](#)



NetNam - Ready for IPv6

NetNam IPv6 Deployment



What do we have now ...

- ◆ IPv6 Access:
 - ◆ native, dual-stack
 - ◆ tunneling
- ◆ Basic Services: DNSv6, mail, ...
- ◆ HOSTING v6: dual stack, native

What can we help ...

- ◆ Connect your network to IPv6 world
 - ◆ even you don't have direct line with NetNam
- ◆ Bring your Web site/server to IPv6 world
 - ◆ even you don't host in NetNam DC
- ◆ Consultancy & migration your network to IPv6

When you want to join the Day

[HOME](#)[MEASUREMENTS](#)[PARTICIPANTS](#)[JOIN THE LAUNCH](#)[DOWNLOADS](#)

THE FUTURE IS FOREVER WORLD IPv6 LAUNCH • 6 JUNE 2012

PARTICIPANTS

Follow any of the three links below to explore which websites, networks, and manufacturers will be permanently enabling IPv6 on 6 June 2012. ISOC will continue to accept registrations until 30 May 2012, so check back often on this constantly growing list as more and more organizations join the cause and commit to an IPv6-enabled Internet.

Show

100

Search:

netnam

entries

Organisation	Country	IPv6 Page	Website	Alexa Rank	Date Joined
NetNam Corporation	Vietnam		http://www.netnam.vn	185595	31 Jan 2012
NetNam Corporation	Vietnam		http://www.ipv6.net.vn/	27509327	14 May 2012

Showing 1 to 2 of 2 entries (filtered from 1,553 total entries)



NetNam is ready for helping you

http://en.wikipedia.org/wiki/List_of_IPv6_tunnel_brokers

Asia-Pacific

[edit]

Tunnel brokers that provide tunnels to users in the [Asia-Pacific](#) region.

Name	# Locations	Subnet	Protocols	Dynamic	Static	RDNS	BGP	Multicast	Registration	Configuration	Language	Prefix
Indonesian-IPv6TaskForce	1 Indonesia		6in4	No	Yes	Yes	Yes	Unknown	Signup required		English, Indonesian	2001:d68::/32
NetNam	1 VietNam		6in4	No	Yes	Unknown	Unknown	Unknown	Signup required	VPN, website	English, Vietnamese	2401:e800::/32
Aarnet ^[2]	1 Australia	/56	6in4, TSP	Yes	Yes	Yes	No	No	Anonymous, or signup	TSP, website	English	2001:388::/32
6fei	1 China		6in4, 4in6	No	Yes	Unknown	Unknown	Unknown	Signup required		Chinese	2001:e88::/32
Internode ^[2]	1 Australia		6in4, TSP	Yes	No	Yes	No	No	Anonymous, or signup	TSP, website	English	2001:44b8::/32
IPv6Now ^[2]	1 Australia	/64 or /48 on request	6in4, TSP	Yes	Yes	Yes	No	No	Signup required	TSP	English	2406:a000::/32

Free Tunnel to IPv6 World

go6.vn ☆ test-ip

Tìm kiếm IPv6 READY Sơ đồ website English

NETN@M™
Your Net, We Care!

 **IPv6** **IPv4**

TRANG CHỦ | GIỚI THIỆU | TIN TỨC | KỸ THUẬT | DỊCH VỤ | LIÊN HỆ

Địa chỉ IP của bạn :

IPv4	ipv6 test
🇺🇸 119.17.194.13	
IPv6 ⭐	
🇺🇸 2401:e800:0:c00:b547:24d7:fc87:400e	
go6.vn	0.00% / 100.00%





Let's go six ...

gob.vn

Thank you!

***Vu The Binh, CEO
binh.vt@netnam.vn***



www.netnam.vn
Your Net, We Care!