



Japan's Collaborative Endeavor to overcome IPv4 Address Exhaustion

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Task Force on IPv4 Address Exhaustion, Japan

<http://kokatsu.jp/en/>

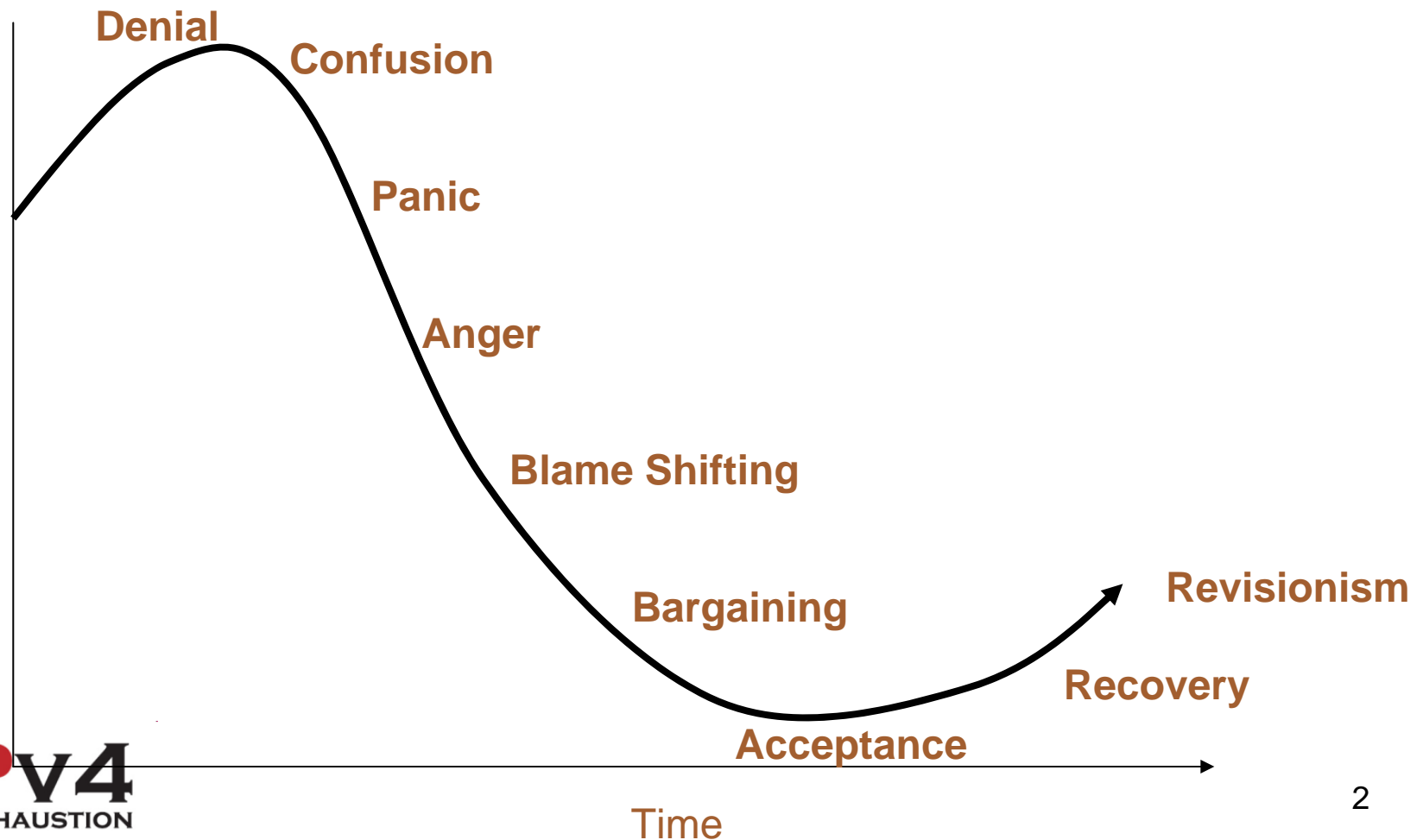
To summarize...

The last slide first

- Obvious need for collaborative endeavor to solve “*watching to see what the others will do*” situation
- Task Force on IPv4 address exhaustion, Japan for such a solution
- Information, Information, Information !! – not only IPv6 technologies, but the potential risk and “*what the others do*”
- Exhaustive and substantial endeavors are already on-going

Also sprach Geoff Huston

Cope with crises - <http://www.potaroo.net/presentations/2008-06-19-ipv6-keynote-a.ppt>



Why we deny, get confused, get into panic, get angry...

- Because;
 - We don't know that it truly comes,
 - We don't know the shape of the crisis,
 - We don't know how we can practically overcome it,
 - We don't know it is nobody but we that need take action
 - ...

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Synchronized action toward the exhaustion

- Set up a TF to make coordinated actions among all stakeholder groups
- Task Force on IPv4 Address Exhaustion, Japan launched in Sept. 2008
 - <http://kokatsu.jp/>
 - also <http://枯渴.jp/> :-)
 - Members: Various associations from Telco and Internet industries, and the Ministry concerned



Members – the taskforce (1/2)

- Internet Associations

- IPv6 Promotion Council, Japan <http://v6pc.jp/>
- Internet Association of Japan (IAJapan) <http://www.iajapan.org/>
- Distributed IX Project <http://www.distix.net/>
- Japan Internet Providers Association <http://www.jaipa.or.jp/>
- JPCERT Coordination Center <http://www.jpCERT.or.jp/>
- Japan Network Information Center (JPNIC) <http://www.nic.ad.jp/>
- Japan Network Operators' Group (JANOG) <http://www.janog.gr.jp/>
- Japan Network Security Association (JNSA) <http://www.jnsa.org/>
- Japan UNIX Users Society (jus) <http://www.jus.or.jp/>
- Japan Registry Services (JPRS) <http://www.jpRS.co.jp/>
- WIDE Project <http://www.wide.ad.jp/>

- Government

- Ministry of Internal Affairs and Communications(MIC)

<http://www.soumu.go.jp/>

Members – the taskforce (2/2)

- Telecommunications Associations
 - Telecom Services Association <http://www.telesa.or.jp/>
 - Telecommunications Carriers Association <http://www.tca.or.jp/>
 - Japan Cable and Telecommunications Association <http://www.catv-jcta.jp/>
 - Japan Data Communications Association (JADAC) <http://www.dekyo.or.jp/>
 - Japan Cable Laboratories (JLABS) <http://www.jlabs.or.jp/>
 - Japan Approval Institute for Telecommunications Equipment (JATE) <http://www.jate.or.jp/>
- Reach for Local Governments and Communities
 - The Association for Promotion of Public Local Information and Communication (APPLIC) <http://www.applc.or.jp/>
- Vendors Associations
 - Communications and Information network Association of Japan (CIAJ) <http://www.ciaj.or.jp/>

Stakeholders and their status



Area with awareness/progress by stakeholders



Areas where there is still no awareness by stakeholders



Areas where there is still no awareness by stakeholders

Stakeholders

Large Connection Providers	Small/Medium Connection Providers	Server business Providers	Access line providers	Vendors	System Integrators	Corporate Users	End-users	Internet Registries
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Status of Stakeholders

Recognition of IPv4 Exhaustion Issue				
Analysis and Grasping of Issues				
Recognition of Issues and consideration of solutions				
Technolo	Elemen	Operatio	Educatio	Service
Technolo	Elemen	Operatio	Educatio	Service
Issue Areas per stakeholder				
Determining a (Comprehensive) Solution from Management Aspet				
Planning Deployment of Solutions				
Deploying Solutions				

Recognize the Issue

Started considerations

Recognition and Considerations by Stakeholders (Requires Promotion and Outreach)

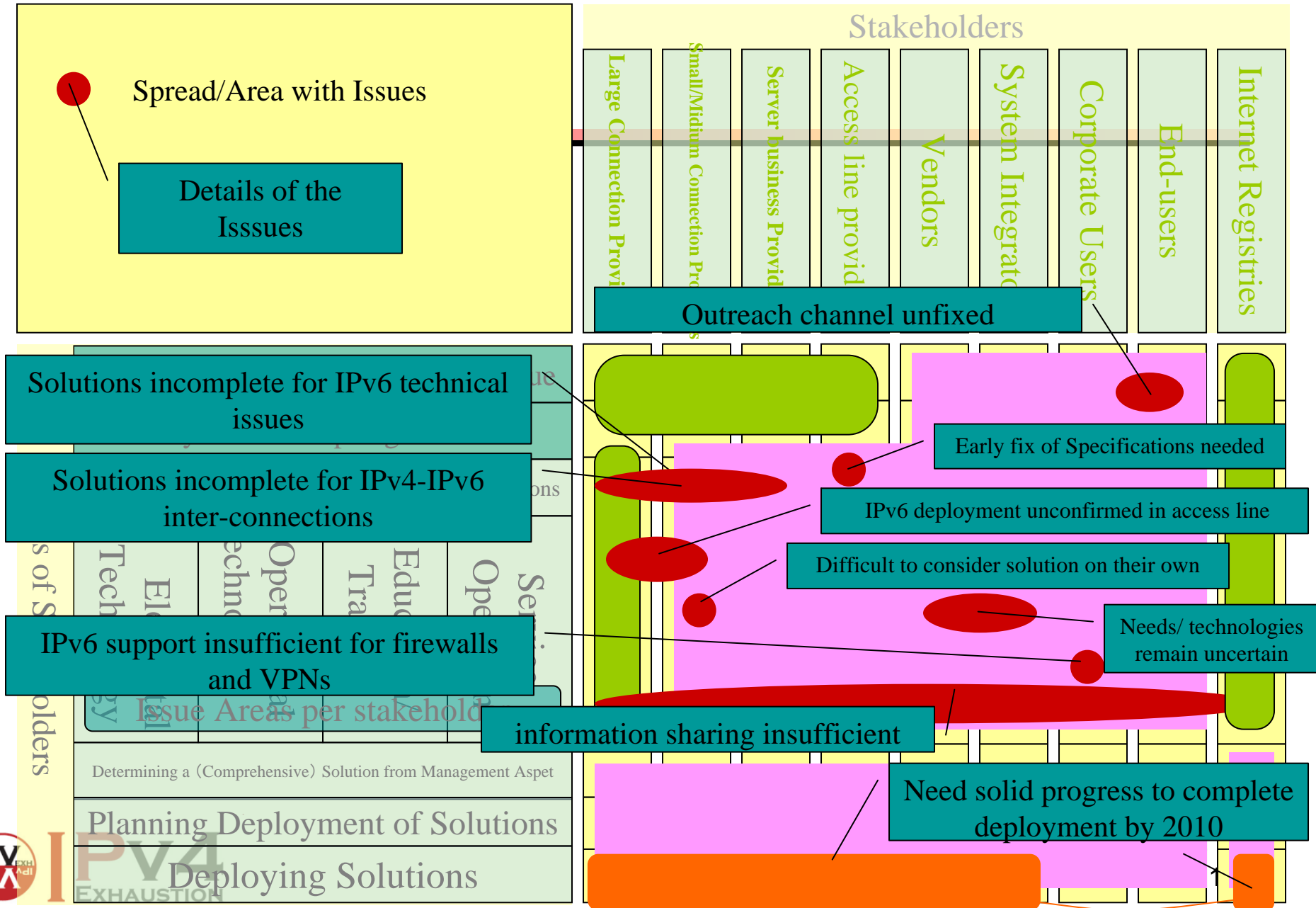
Undertaking Policy Discussions

Deployment by Stake-holders's initiative

Complete Deployment of Solutions by 2010



Stakeholders and their remaining issues



Charter of the taskforce

- Formulating a taskforce to synchronize the activities by various associations
- to overcome the crisis of the IPv4 address exhaustion in a coordinated manner
- In four aspects of
 - Solution of the issues – technique, operation and management
 - Enlightenment and publicity
 - Education
 - Progress management

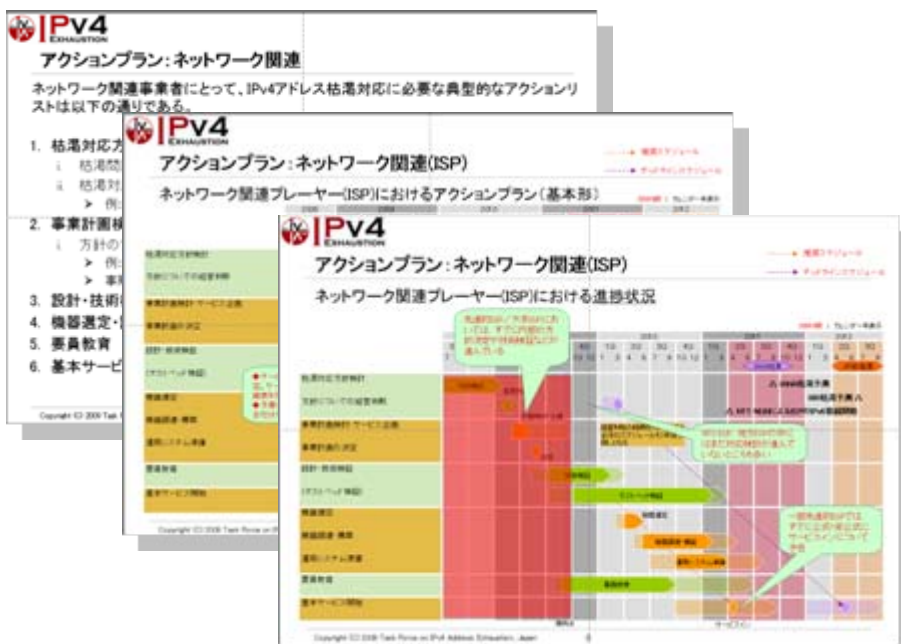
Working Groups within the TF

WG	In charge of	lead	members
Publicity	Assistance for events/conferences of member associations, Regular press conferences Planning of outreach	JPNIC	IAJapan, Telesa, JAIPA, v6PC
Education and Testbed	Education programs, negotiation with certification providers, planning the testbed	v6PC	JPNIC, JATE, JAIPA, JCTA/JCL, JANOG, jus, WIDE, DISTIX
Action planning support	Supporting the action planning by every stakeholder	v6PC	IAJapan, Telesa, JAIPA, JPNIC
Applications	Enlightening the Slers,	v6PC	JUS, JISA
Access Network	Negotiation with Access Network providers	JAIPA	TBD
Ready Logo	Planning IPv6 Ready Logo for ISPs and Web sites	JATE	v6PC
Secretariat		v6PC	JPNIC

Want to know what the exhaustion is?

Consult <http://kokatsu.jp/> for information

- Milestones, survey result, FAQs, etc...

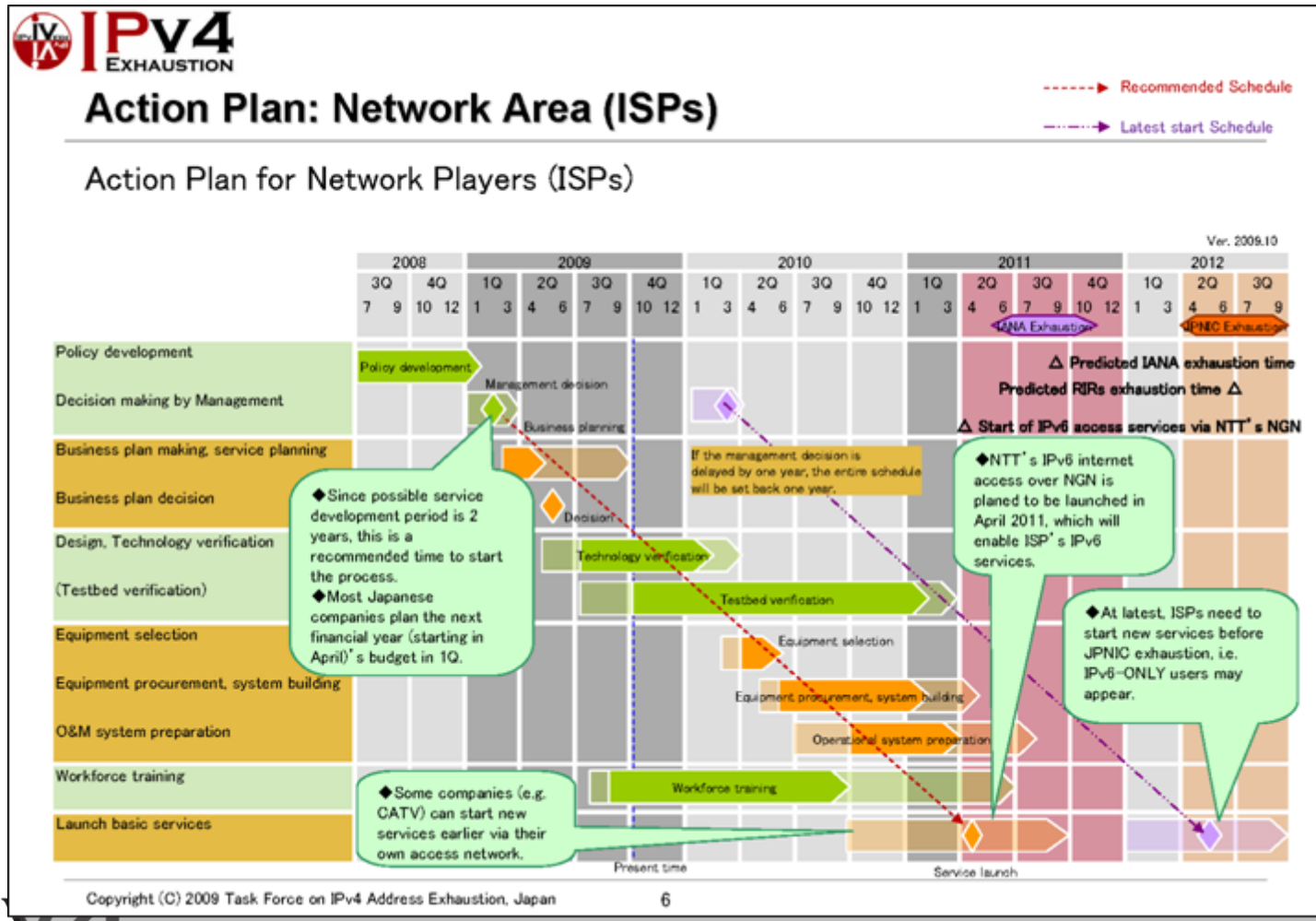


Action Plan and Milestone Ver 2009-10

<http://kokatsu.jp/>

Need help to plan the preparation?

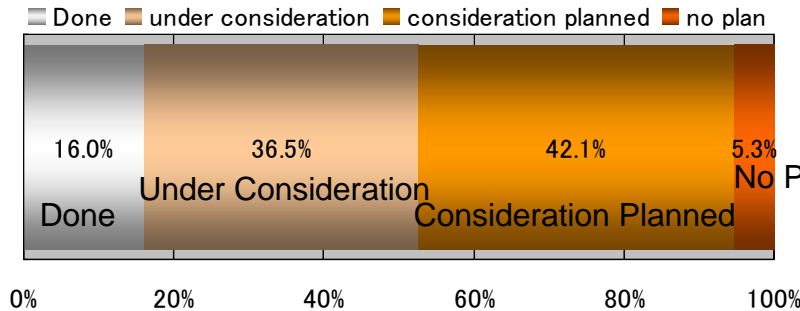
“Action Plan and Milestone” for your reference



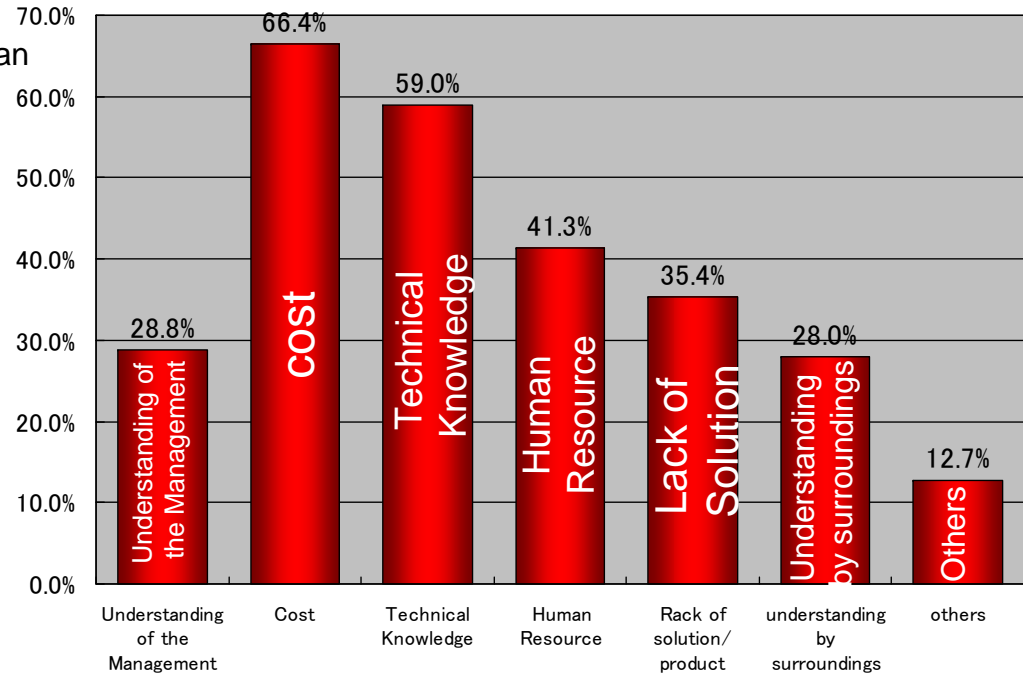
Progress? Or Problem?

Survey to identify “To Whom” “What” and “How”

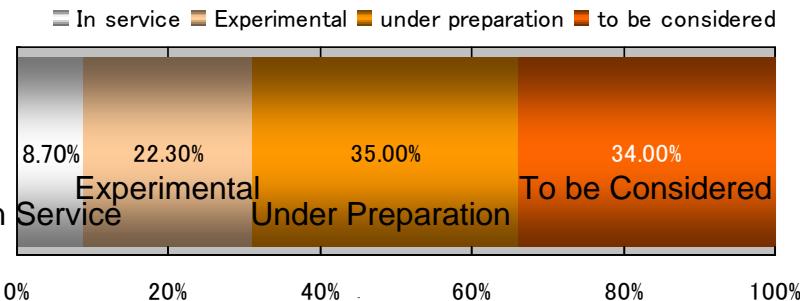
consideration for countermeasure



What is the problem for deploying the countermeasure



IPv6 service deployment



Excerpt from 1st survey result in March 2009.
2nd is already done and to be published



Let them know and try

Outreach to unaware community & testbed

- Let them know they need to prepare for it!
 - Approaching communities of the other enablers of the Internet Services
 - Conferences of embedded devices, Open Source Developers Community, etc.
- Let them try their IPv6 products and services!
 - Testbed is prepared and already available for those who suffer from the lack of IPv6 environment
 - Governmental fund invested

Display your readiness!

Put on “IPv6 Enabled Logo” for your Web and Network

- Allow IPv6-ready ISPs and Web sites to *“differentiate from others”*
 - Apply and extend the strategy of “IPv6 Ready Logo” for equipments to services like ISPs and Web sites
- Had domestic and Intra-TF discussion, then synchronize it to *“IPv6 Enabled Program”* of *IPv6 Forum* – launched in June 2009
 - Why don’t you get the logo at:
 - http://www.ipv6forum.com/ipv6_enabled/ipv6_enable.php !!



Kokatsu.jp has already put on the logo, of course!

IPv6 services available for users?

- “IPv6 Services List” launched in March
 - A provider can put the name of its IPv6 service on the list

事業者名	サービス名称	サービスカテゴリ	サービス内容	URL
株式会社電 寛	avis	アクセス	IPv6トンネル接続サービス	http://www.avis.ne.jp/service/gv6.htm
		アクセス	イーサネット専用接続サービス	http://www.avis.ne.jp/service/wasa-line.htm
		アクセス	構内データセンター専用接続サービス	http://www.avis.ne.jp/service/premise.htm
		その他	プライマリネームサーバサービス	http://www.avis.ne.jp/service/primary-name-server.htm

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お見合い 서로 눈치만 살핀다
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One more slide after the last :-p

- Progress
 - A dozen of the biggest ISPs have already made up their plan to finish preparation in two years
 - Will cover 95%ish Internet users
 - Access line provider – NTT has already committed to launch IPv6 access service between ISPs and residential customers by 2011Q1
- What's next
 - Approaching to ASPs, Slers, Systems Developers to increase the awareness
 - Deploying the training program through commercial training providers

Thank you very much 謝々
ありがとうございました

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 - <http://kokatsu.jp/en/> for English version
- E-mail us to
 - Info@kokatsu.jp for any inquiries on any of your interests