

APRICOT 2015

Internet Society @ APRICOT 2015 Session

IPv6 Deployment in Japan

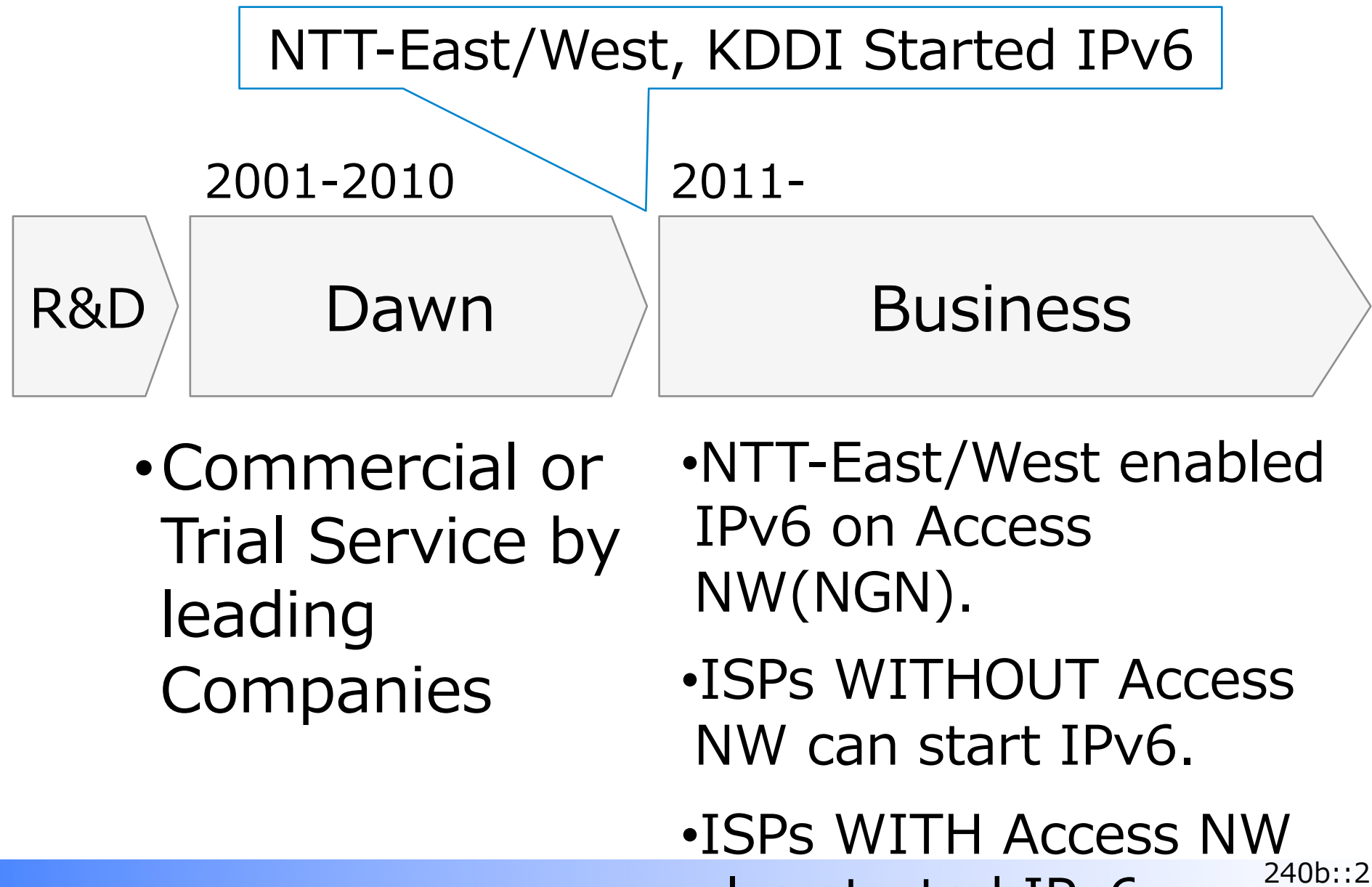
Mar.3.2015

IPv6 Promotion Council (IPv6-PC)

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IPv6 history in Japan at a glance



Japanese position (Observed by Akamai)

- Country-base measurement.
- Japanese IPv6 rate is 5.5%.

as of
Feb.28.2015

Rank	IPv6 %	Country
1	31.9%	Belgium
2	14.5%	Germany
3	12.6%	United States of America
4	12.3%	Peru
5	10.9%	Luxembourg
6	8.6%	Switzerland
7	7.7%	Czech Republic
8	7.6%	Norway
9	7.5%	Greece
10	7.1%	Portugal

Home	Connectivity	Security	Trends	Resources	About
11	6.5%		Estonia		
12	5.9%		Romania		
13	5.5%		Japan		
14	5.5%		Malaysia		
15	4.8%		France		
16	4.2%		Other Europe		
17	4.0%		Ecuador		
18	3.0%		Bosnia/Herzegovina		
19	2.0%		Austria		
20	1.6%		Nauru		

state of Internet

<http://www.stateoftheinternet.com/trends-visualizations-ipv6-adoption-ipv4-exhaustion-global-heat-map-network-country-growth-data.html>

IPv6 Network operator measurements

(as of Feb. 28 2015)



● Network(AS)-base measurement

Participating Network	ASN(s)	IPv6 deployment
Comcast	7015, 7016, 7725, 7922, 11025, 13367, 13385, 20214, 21508, 22258, 22909, 33287, 33489, 33490, 33491, 33650, 33657, 33666,	35.95%
ATT	6389, 7	38.14%
KDDI	2516	18.17%
Verizon Wireless	6167, 2	64.57%
Time Warner Cable	7843, 1	14.35%
Deutsche Telekom AG	3320	33.15%
Free	12322	35.33%
T-Mobile USA	21928	50.86%
Telenet	6848	56.35%
Liberty Global	5089, 6	8.10%

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Japanese:

No.3 KDDI

No.13 CTC

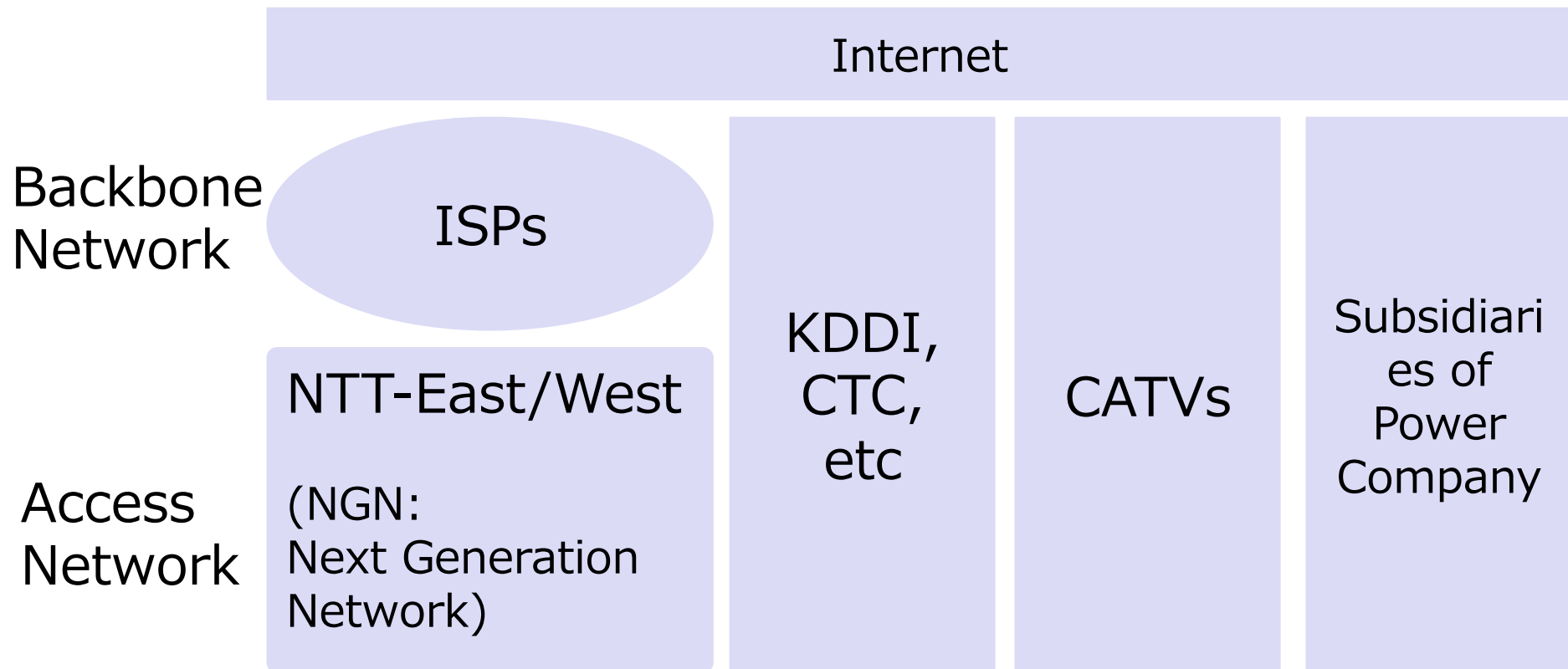
No.14 SoftBank BB

No.24 STNet

No.37 iTSCOM

NW Providers in Japan

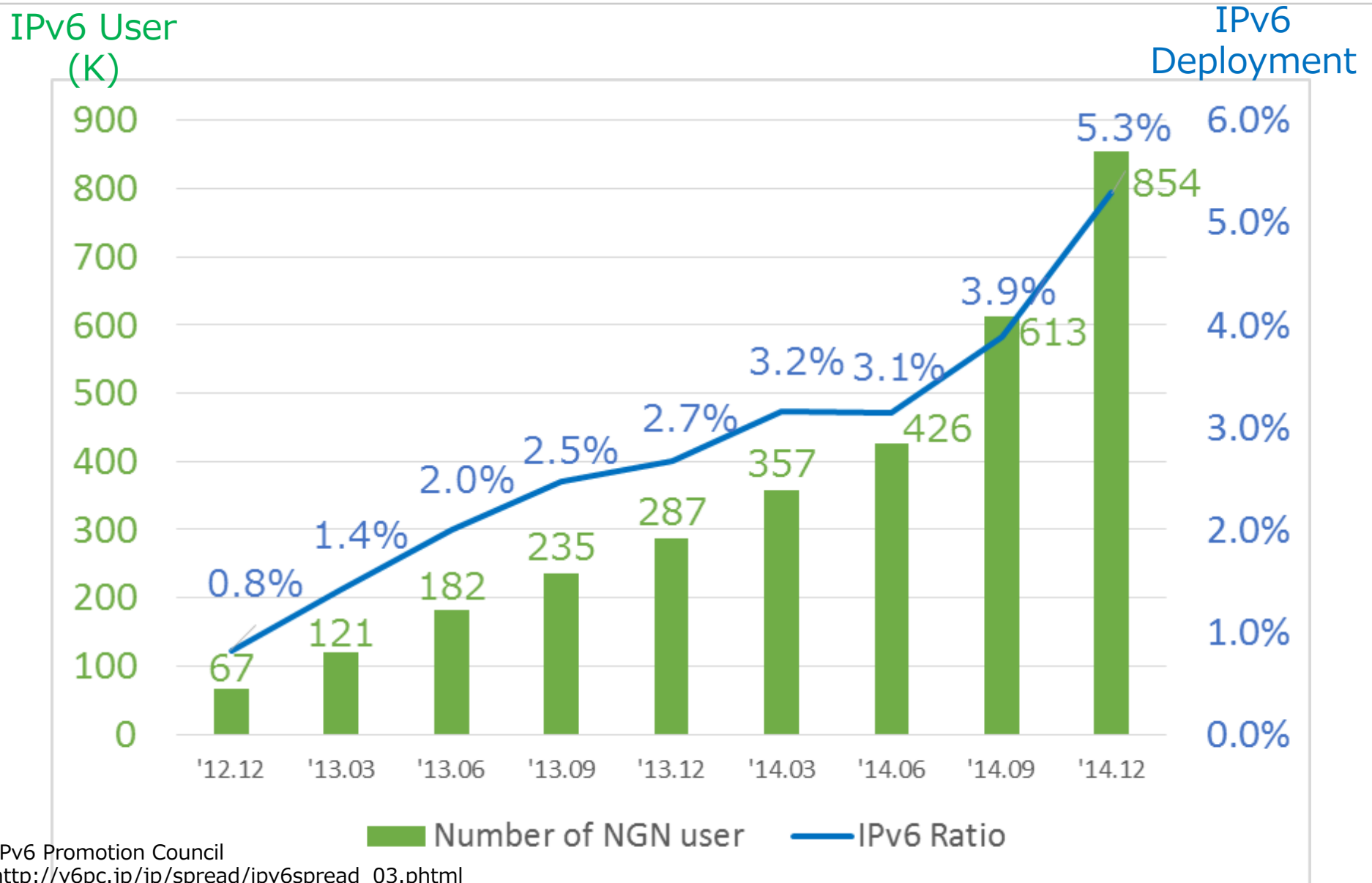
- Divided into Four.
- NTT-East/West with ISPs are the majority.



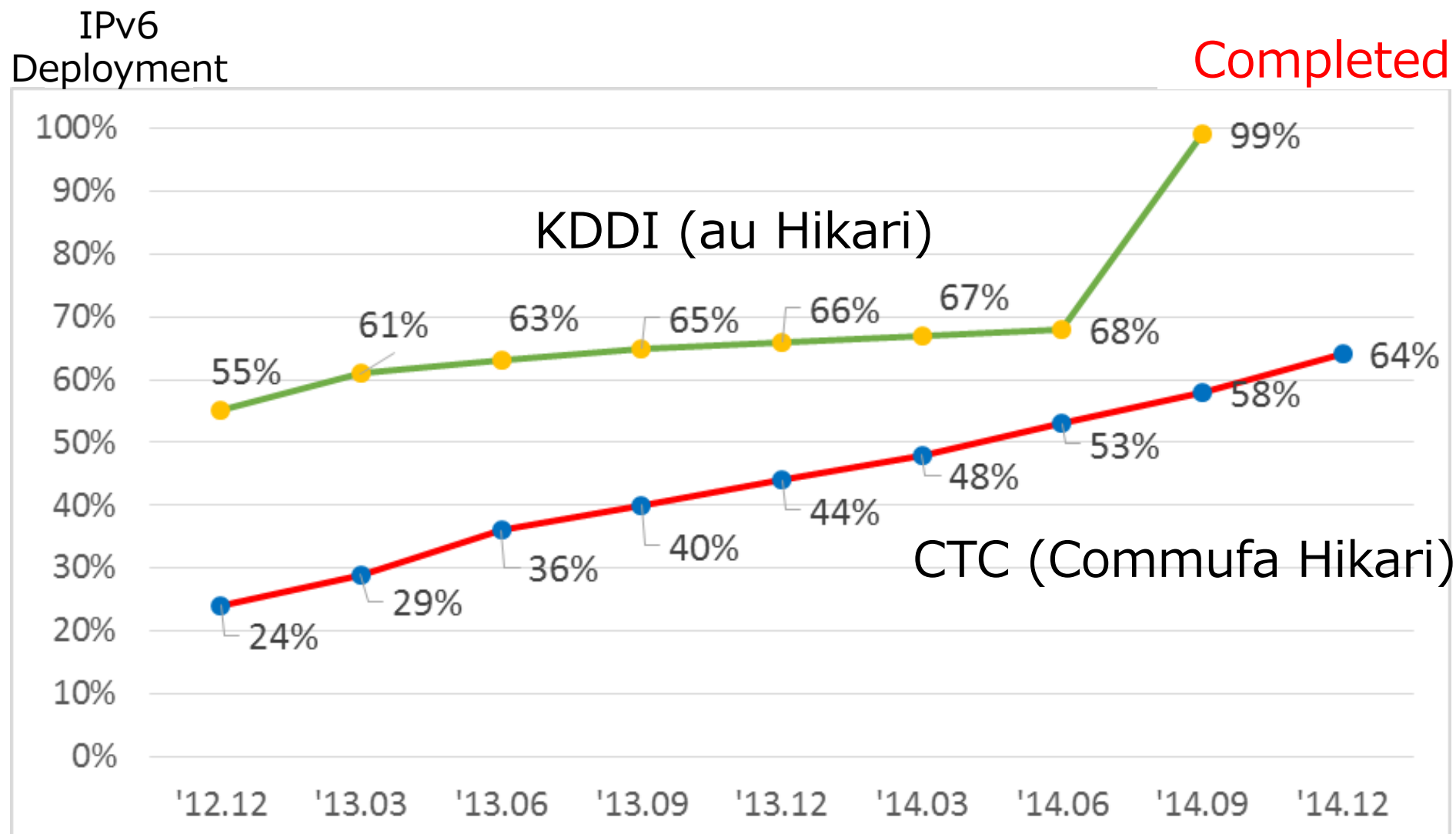
Share: 77%(East) 65%(West) (*1)

(*1) <http://www.ictc.co.jp/report/20140704000064.html>

IPv6 Deployment rate of NGN (NTT-East/West)

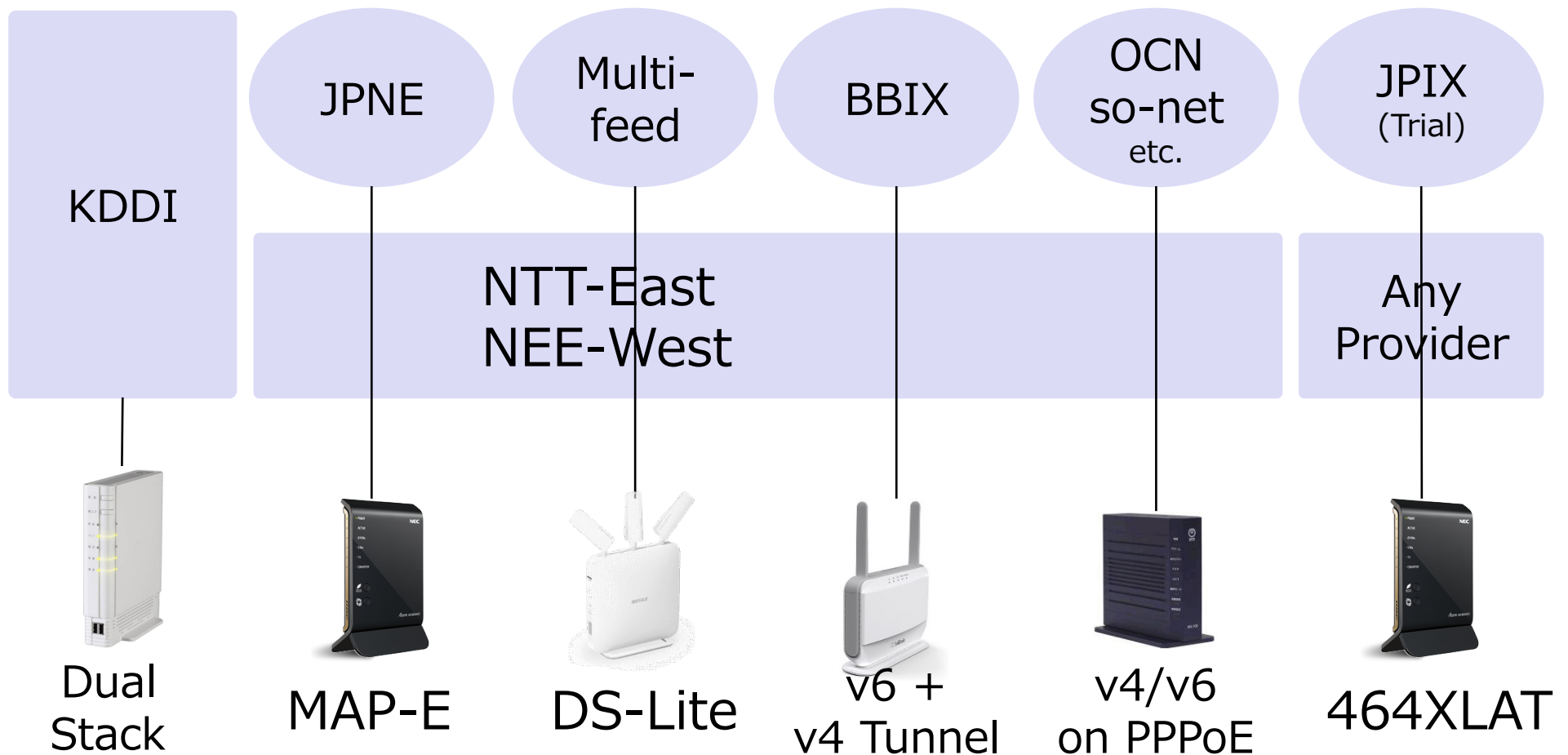


IPv6 Deployment rate of KDDI and CTC











IPv6 Transition status in Japan

- Providers started Dual Stack.
- Different method depending on their present NW and strategy.



Recent Outstanding Progress in Japan

- Some Makers released IPv6 transition functions for Home/Enterprise Routers.

Maker/Company	Transition technology	Consumer /Enterprise	Released date or Date started to use transition function in JP	
NEC Platforms WG1810HP	MAP-E 464XLAT	Consumer	Feb. 2015 (not on sale yet)	 
NEC Platforms RG-G200LV(*1)	DS-Lite	Consumer	Feb. 2015 (not on sale yet)	
Buffalo WXR-1900DHP	MAP-E DS-Lite	Consumer	Oct. 2014	 
Huawei WS325	DS-Lite	Consumer	Oct. 2014	
Cisco 1812J	DS-Lite	Enterprise	Oct. 2014	 
IIJ SEIL	DS-Lite	Enterprise	Oct. 2014	
YAMAHA NVR500	DS-Lite	So-Ho	Oct. 2014	 
NTT-East/West	MAP-E(*2)	Consumer	Apr. 2013	

(*1) for export only

(*2) Home Router doesn't have MAP-E function, needed to use Flets JOINT

Summary

- Japanese IPv6 users and traffic are increasing.
- Japanese network providers have introduced IPv6 transition technology.
- Each providers are introducing different transition technology.
- Home/Enterprise router makers started to support variety of transition technology.

Questions ?