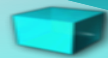


# IPv6 Experiences in Korea

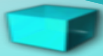
June 1, 2012

Chanki Park(ckp@kisa.or.kr)

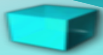




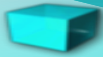
Introduction of KISA



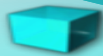
Difficulties



Our Goal



What we have done



What we are doing

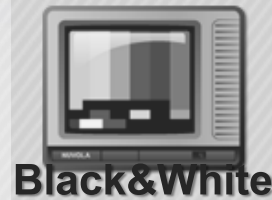
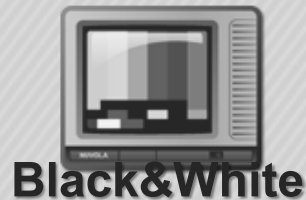
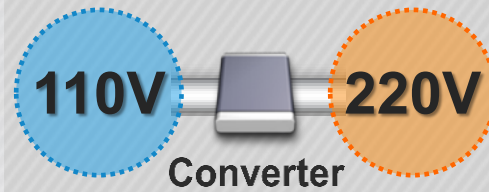


What we plan to do

- Korea Internet & Security Agency is a government agency of KCC (Korea Communications Commission)
- More than 500 employees
- Main Activities:
  - Manages .kr domain name and IP addresses
  - Prevention and response to cyber security incidents
  - Personal information protection
  - Promotion of healthy cyber culture
  - Promotion of broadcasting and communications services

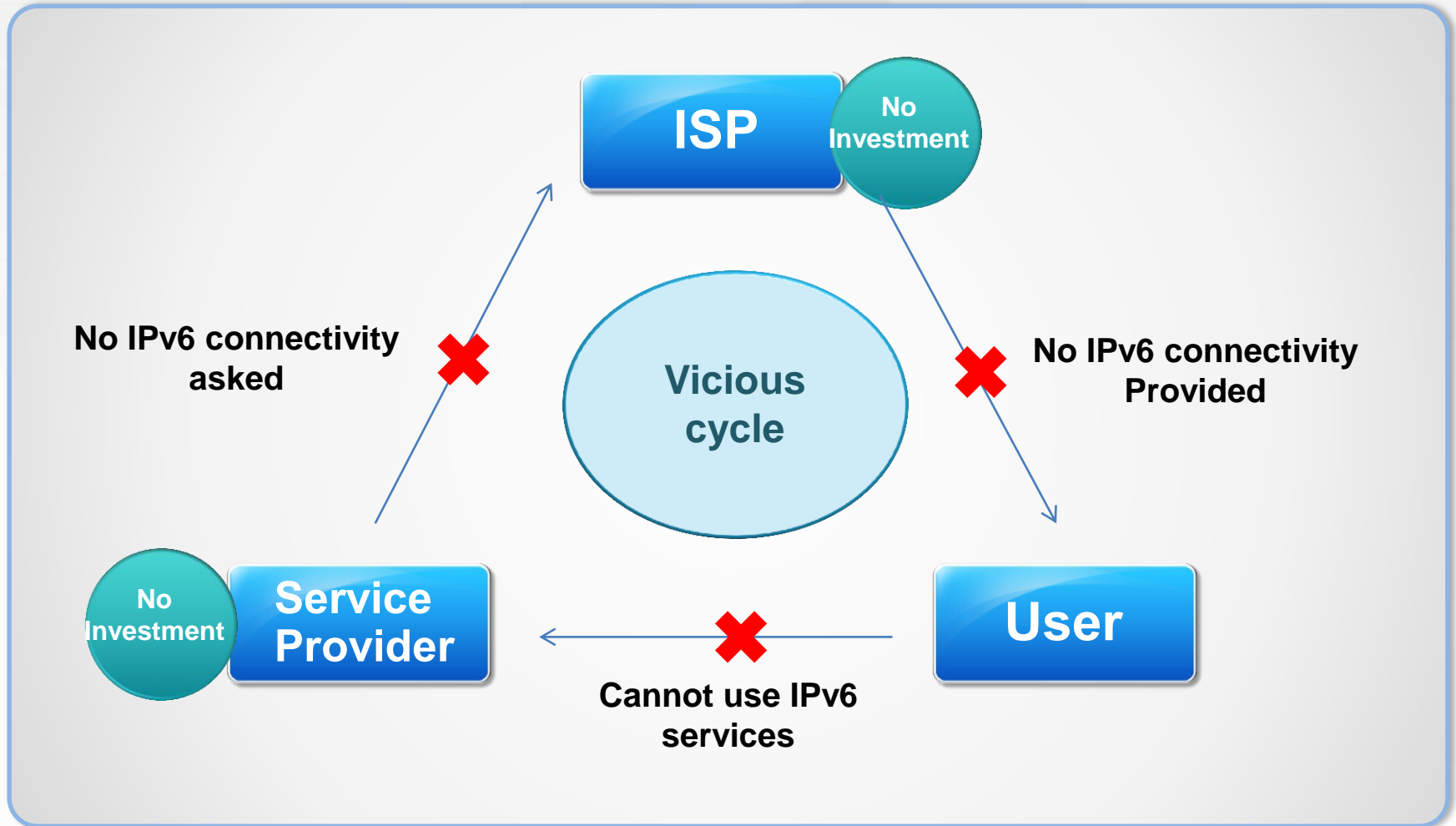
# Difficulties

## Local

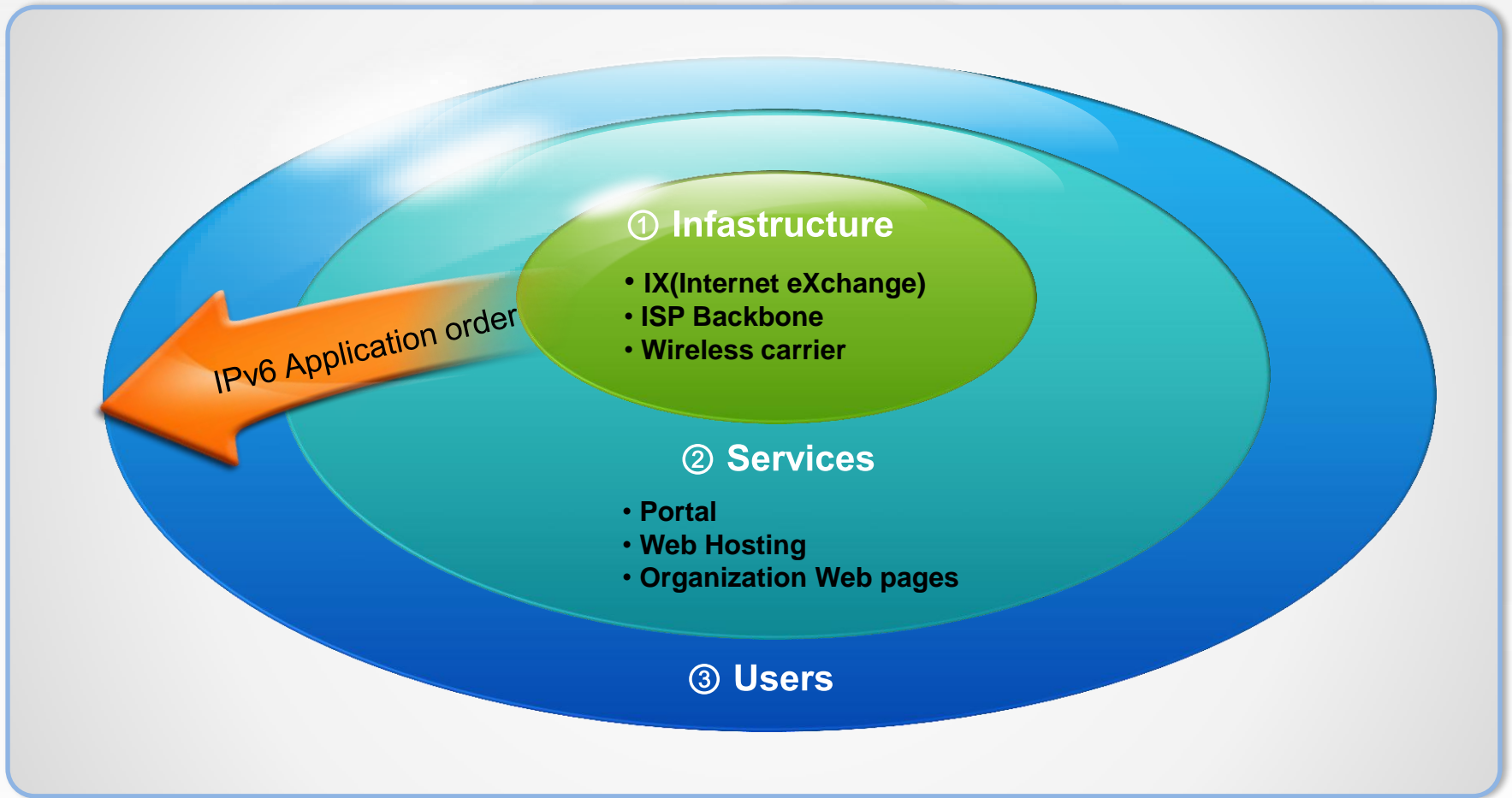


## International










# What we have done...

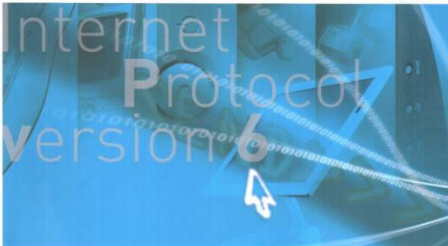
인터넷 산업 강국 건설을 위한  
**IPv6 보급 촉진 기본계획**  
Internet Protocol version 6



m/c 정보통신부

**IPv6 Promotion Plan I  
(2004)**


인터넷 산업 강국 건설을 위한  
**IPv6 보급 촉진 기본계획 II**



m/c 정보통신부

**IPv6 Promotion Plan II  
(2007)**

선도적 인터넷서비스 기반구축을 위한  
**차세대인터넷주소(IPv6) 전환 추진 계획**  
2010. 9. 15.



방송통신위원회 한국인터넷진흥원  
Korea Communications Commission Korea Internet & Security Agency

**Next Generation  
Internet Address  
(IPv6)  
Transition Plan (2010)**



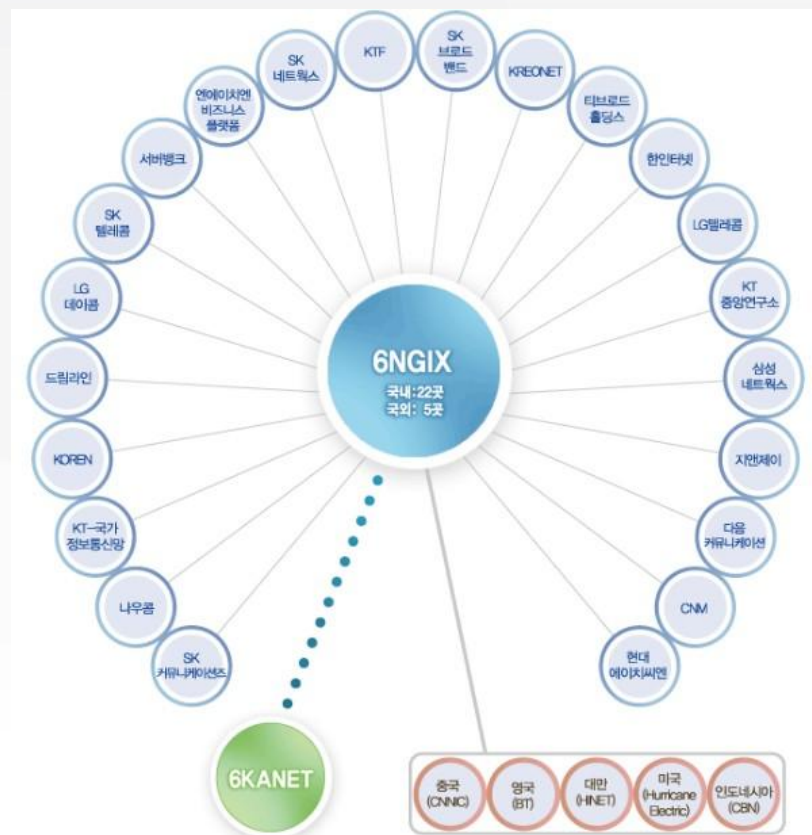
## ● IPv6 Strategy Council

- Member : Executive directors of ISPs, Portals, wireless carriers, government agencies, and high level government officers.
- meets around 3 times a year

## ● IPv6 working meetings

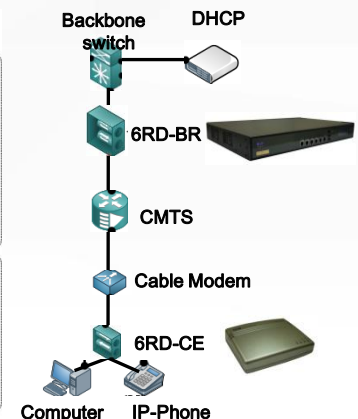
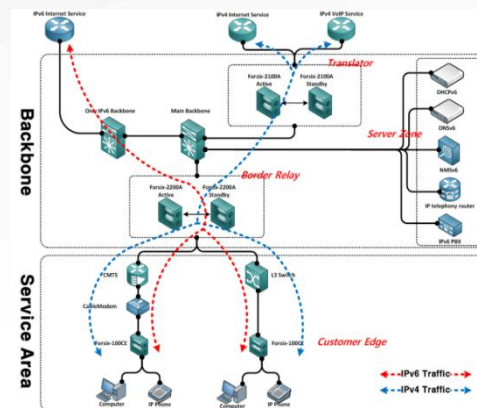
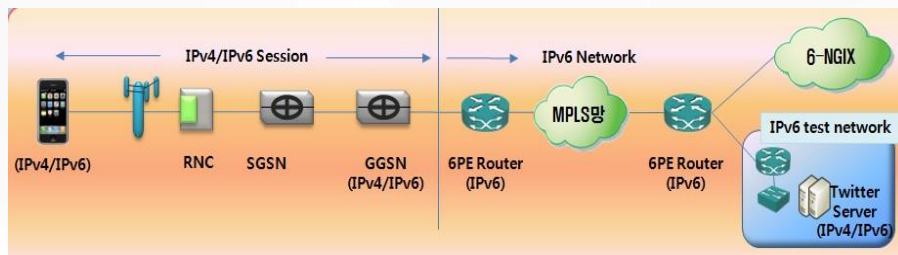
- Member : Working staffs of ISPs, Portals, wireless carriers, government agencies, and government officers.
- meets around 6 times a year and if needed

- **6NGIX provides IPv6 exchange point for major ISP in Korea and overseas.**
  - Hurricane Electric(US), BT(UK), HINET(TW), CBN(ID), KT, SKT, LGU+ etc.
- **6KANET provides IPv6 connectivity to local organizations**
  - 30 organizations are connected



- developed small size routers and VoIPv6 switched
- aided a few public organizations, schools, research organizations building IPv6 service network
- All together 26 various trial projects were run

- Built IPv6 test network with commercial ISP, KT
- Tried IPv6 wireless 3G network with commercial wireless carrier, SKT
- Built IPv6 subscriber network with commercial cable network carrier, Hyundai HCN(dual stack) and T-broad(6RD)



- Provided different levels of IPv6 education



So far we educated 2,500 executives and staffs.

We provide consulting service since 2011.

If requested, experts visited the company and analyze their network.

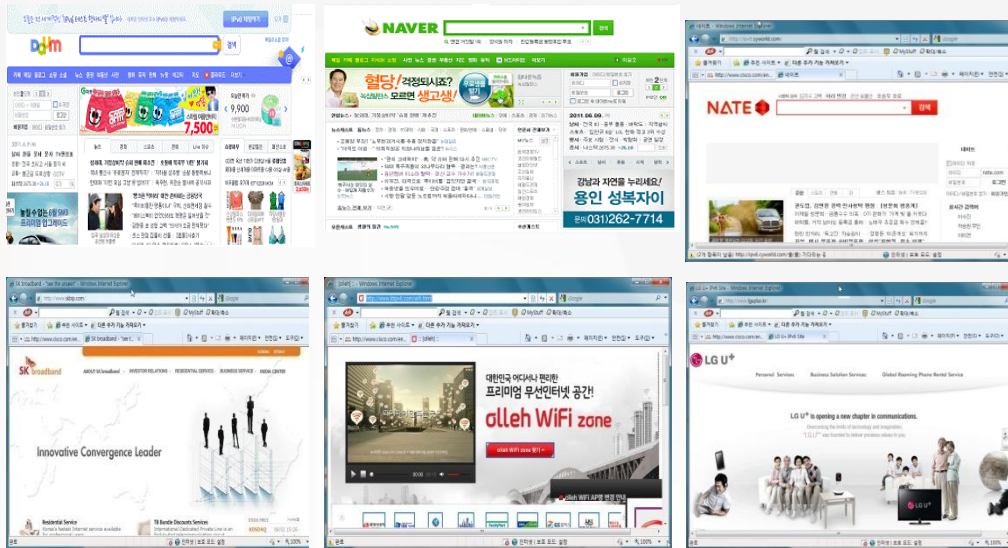
We provided detailed guideline to change their network to IPv4/IPv6 network.

Last year, we consulted 10 organizations.

# 2011 World IPv6 Day Participation

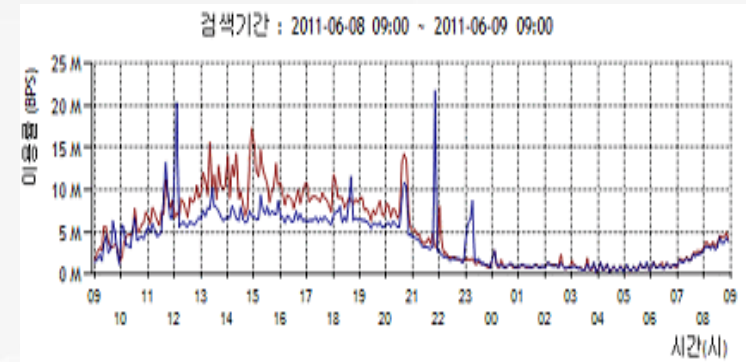
- 12 major ISPs, portals, organization participated for the event

[World IPv6 Day participated webs]



※ KT, SKB, LGU+, NAVER, DAUM, SK Communications, Dreamline, G&J, KISA, and etc.

[IPv6 Traffics]



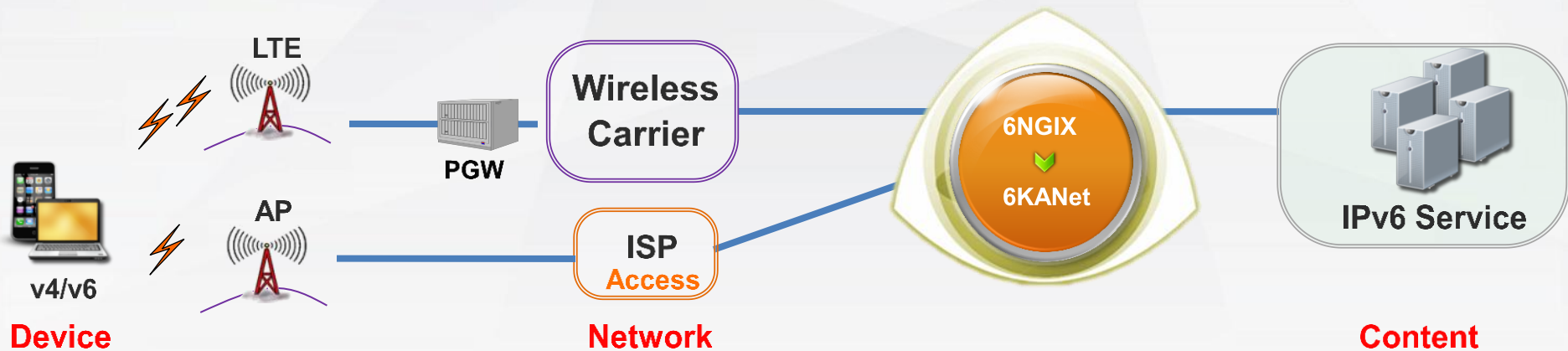
	MAX	MIN	AVG
KT	38.9M	730.3K	9.2M

※ 6NGIX traffic increased about 10 times compare to normal day.



# **What we are doing...**

# Collaboration project with SKT



Set up IPv6 Infrastructure on LTE and WiFi, we will select particular region, not the whole country.

We will develop IPv6 capable device and IPv6 contents

## Expected result:

IPv6 contents can be accessed through LTE with mobile device.

# Collaboration project with web hosting company **KISA**

## ● **Setting IPv6 Infrastructure on one of web hosting providers in Korea**

- We are asking the company to set up IPv6 service facilities
- We are asking more than 50 IPv6 accessible web pages and DNS settings
- We are asking for a guideline to share their experiences with other web hosting companies

### **Expected Result:**

- We will have IPv6 accessible web pages, and facility
- IPv6 experienced staffs will be produced
- a guideline for other web hosting will be published

Korea IPv6 Day is an event to promote IPv6 in Korea, and to share IPv6 experience with others

## Overview

- Time : May 31, 2012
- Participants : ISPs, Portals, Contents Providers, Manufactures(22 participated)

	Participation Contents
ISP	o Provide partial IPv6 network and IPv6 users
Contents Provider	o IPv6 accessible contents
Manufacture	o IPv6 ready equipment

# What we plan to do...

Main focus will be getting rid of barriers deploying IPv6

- Operating 6NGIX and 6KANET, IPv6 Education, IPv6 Consulting
- Getting rid of barriers
  - developing S/W for old network equipment that are still used
  - developing security S/W that can be used by public organizations
  - aiding CDN provider to build IPv6 network
- Collaboration Project
  - May be with web hosting companies

**Three major ISPs plan to deploy IPv6 on their IX and backbone early 2013.**



Thank you

