CNNIC UPDATE

30th APNIC, Gold Coast, Australia

Aug,2010
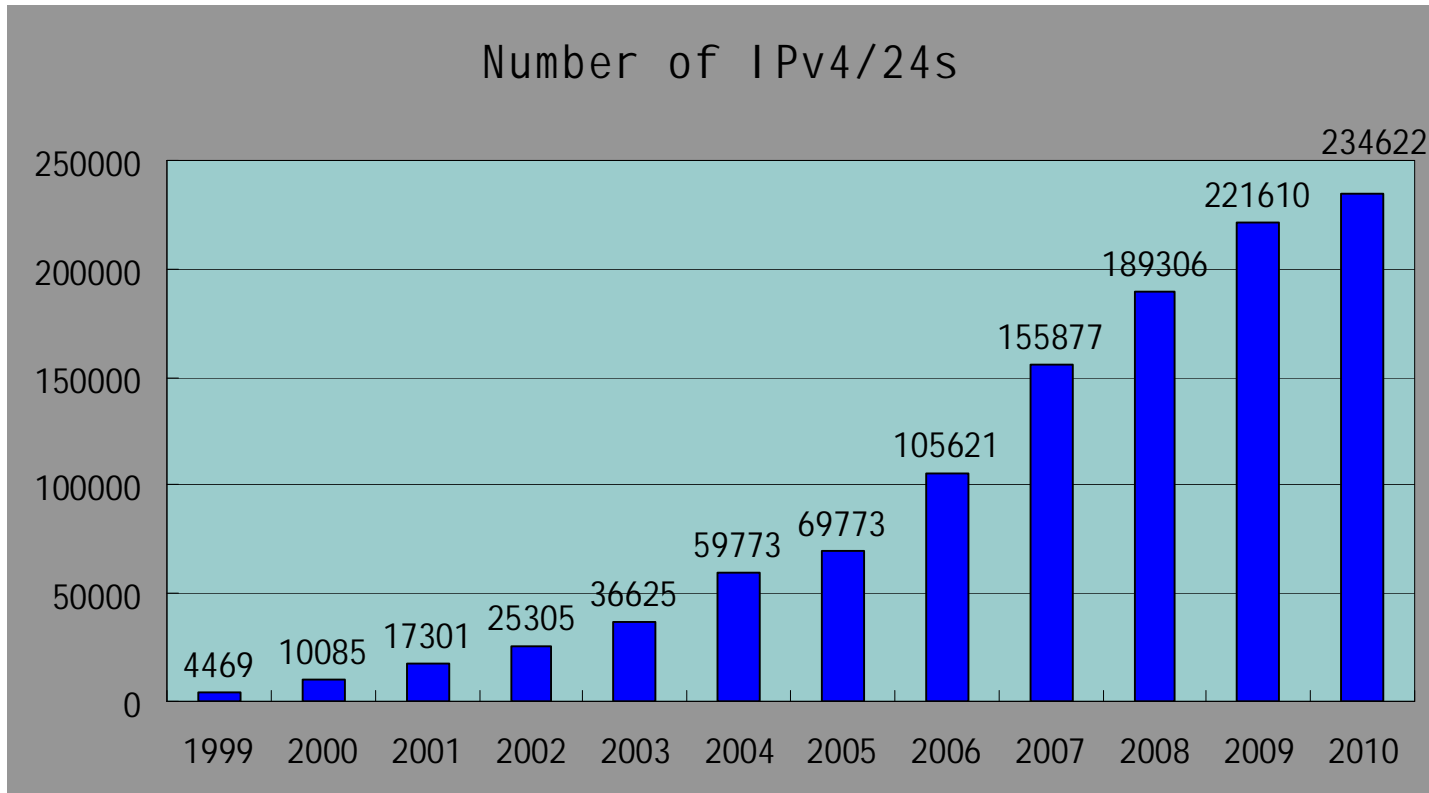
CNNIC
中国互联网络信息中心
CHINA INTERNET NETWORK INFORMATION CENTER

Ø   Membership & Address Allocation Status

Ø   IPv6 Promotion

Ø   OPM in 2010

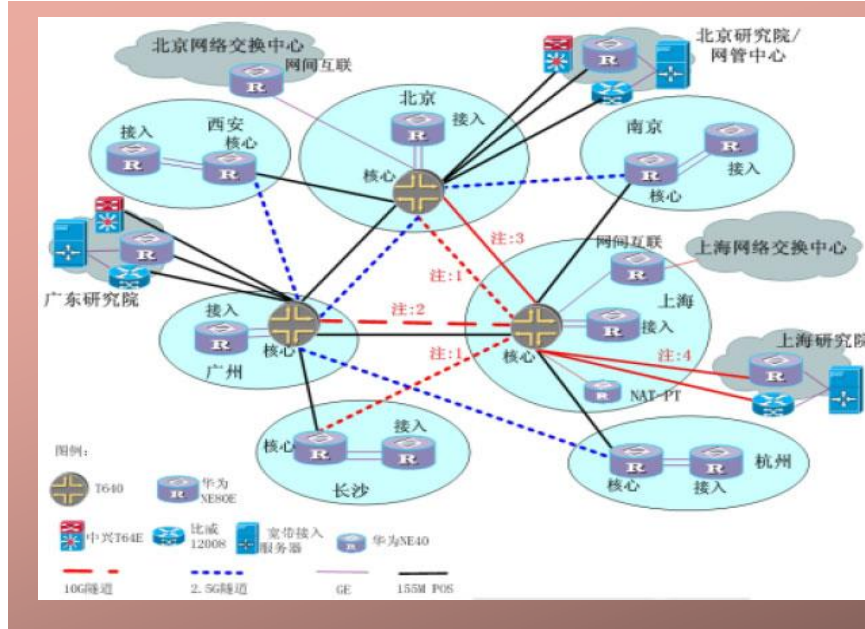Ø   Plan in 2010

- Members: 276 (end of July)

- IPv4 Allocation : 234622*/24s

- IPv6 Allocation : 102*/32s

- ASNs : 274(2-byte)
          10(4-byte)

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CNNIC holds 234622*/24s (end of July)

ɪ CNNIC holds 102*/32s (end of July)

    ɪ still increasing

Number of IPv6/32s

Year	Value
2002	1
2003	2
2004	6
2005	7
2006	16
2007	19
2008	25
2009	28
2010	102
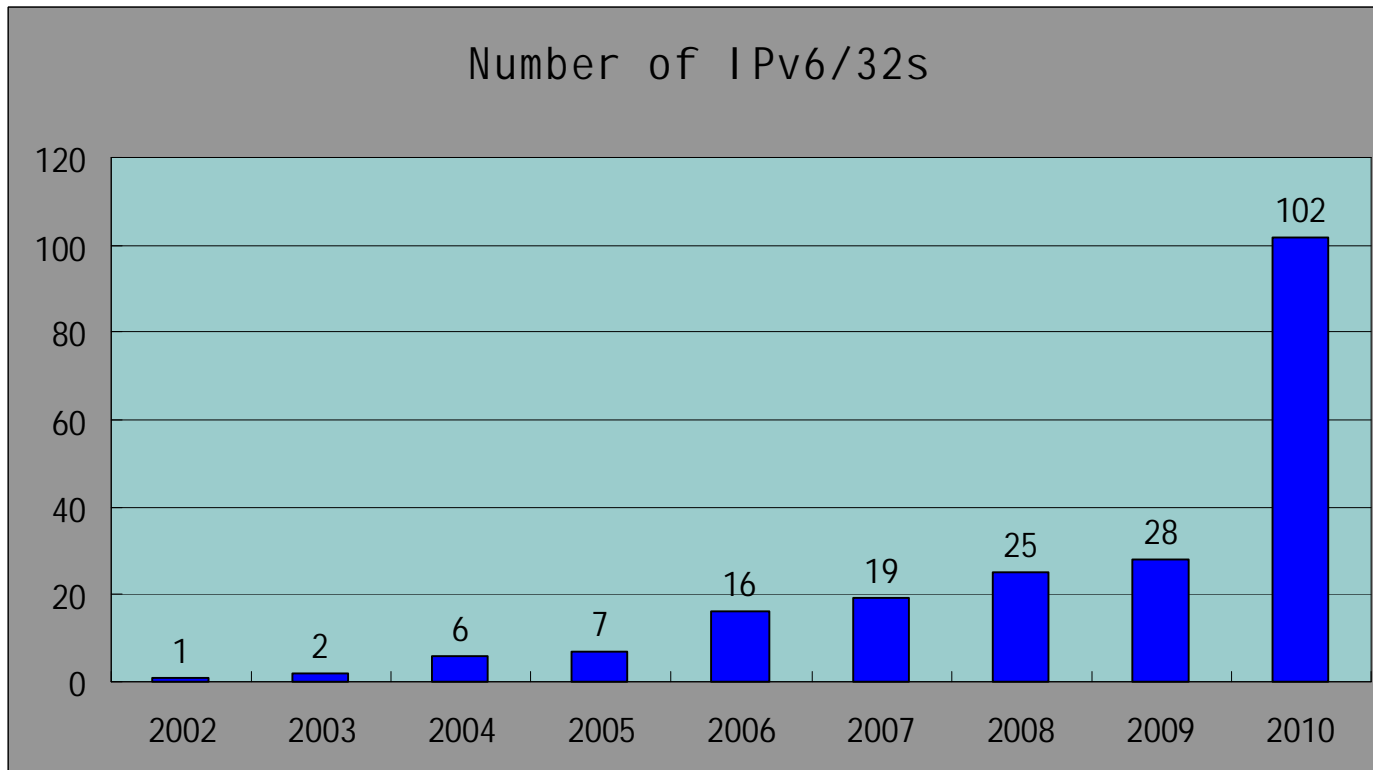
nThe trial network platform consists of backbone network, network administration center, IXP and 7 MAN networks

nTrial applications including business gateway, business platform and P2P on the trial platform
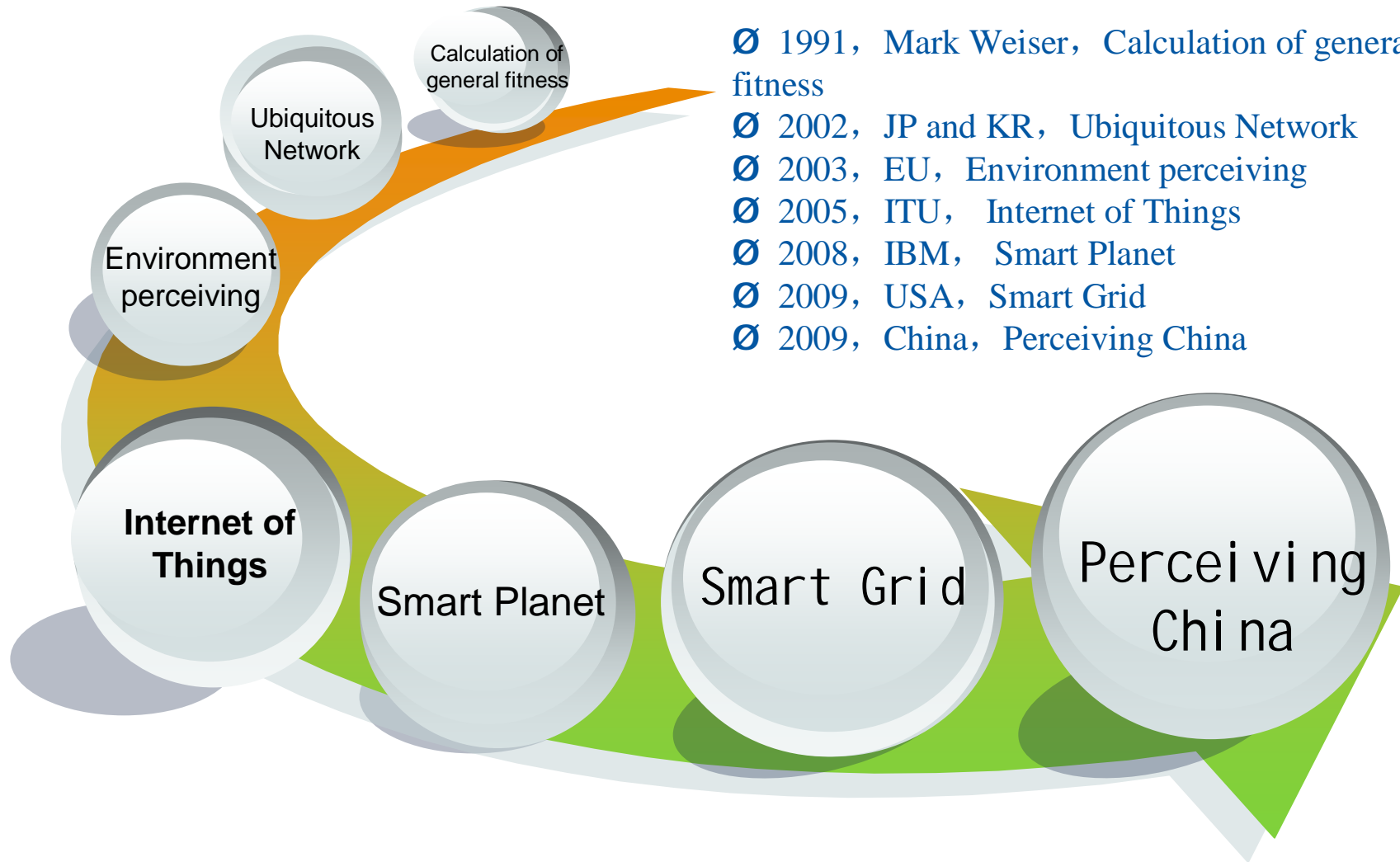
Problems:

nLack of consideration on the transition of network, business platform and EU

nLack of guidance to the IPv6 business and supporting system

nLack of industry value because the scale is still small

nLack of the participation of the actual operators, especially the ICPs
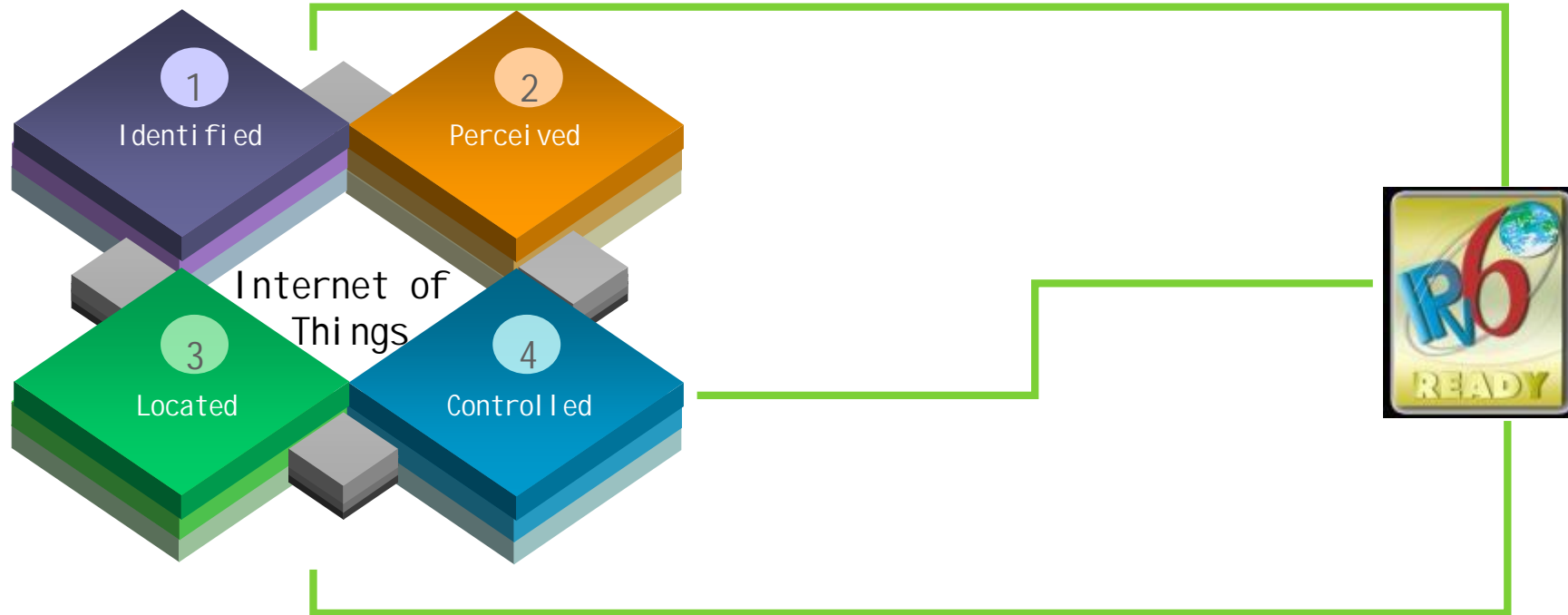
IPv6 in China – CHINA MOBILE

- Held 3GPP and IETF IPv6 co-summit in 2009
  - Establish IPv6 study item
  - In Software workshop, made a proposal on DS-life, 6rd
  - In Behave workshop, made a proposal on PNAT, NAT64

- New business operation in 2009
  - Scale test in the lab of carrying network equipment
  - IPv6 mobility tech test
  - Provide HDTV service on IPv6
  - Improve the work on the IPv6 standards for mobile terminal
  - Raise PNAT as IPv6 transition tech

Ø 1991，Mark Weiser，Calculation of general fitness

Ø 2002，JP and KR，Ubiquitous Network

Ø 2003，EU，Environment perceiving

Ø 2005，ITU，Internet of Things

Ø 2008，IBM，Smart Planet

Ø 2009，USA，Smart Grid

Ø 2009，China，Perceiving China

Calculation of general fitness

Ubiquitous Network

Environment perceiving

Internet of Things

Smart Planet

Smart Grid

Perceiving China

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The Internet of Things

Can be identified: by assigning certain tag onto things (eg. Ip address)

Can be perceived: attribute of the things and their environment

Can be located: by investigating the info collected by the tag

Can be Controlled: by analyzing and calculating the locating info

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- The Internet of Things needs huge amount of IP addresses
- The Internet of Things needs the IP address supporting mobility
- The Internet of Things needs the IP address supporting security

IPv6 is the one it needs!

IPv6 Promotion by CNNIC

- ## Allocated 73 /32s since APNIC IPv6 Promotion
  - Encouraging members trial on IPv6 connection
  - Providing IPv6 assignment guidance

- ## IPv6 Training on OPM
  - IPv6 assignment and deployment guidance

- ## Established IPv6 DNS System
  - Provide IPv6 service addresses for .CN TLD
  - Set up exemplary IPv6-enabled DNS services nodes under the support of CNGI project

- ## Research on IPv6 Management System
  - Intelligent IP planning and automatic address delegation
  - Real time IP info query
  - IP info authentication

- ## Co-lab on IPv6 with Cisco
  - Research on IPv6 assignment algorithm for optimized allocation
  - Research on DHCP protocol extension for address management

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Date: May. 2010
Location: Dunhuang
Member Attendees: 100
-ISP, ICP, IDC
-Internet Association

Topic:

IP/AS Allocation Status/Policy

IPv6 and hot Internet Application

IPv6 Training

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Plan in 2010

- IPv6 Training

- Research on IPv6 technique

- RMS Upgrade

  - Whois Query & DB Mirroring

- Promotion

  - Cooperation with other organizations

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Thank you!

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