CAICT
中国信息通信研究院
China Academy of Information and Communications Technology

Broadband China Strategy Experience and OBOR Strategic Initiatives Study

China Academy of Information & Communications Technology

（China Academy of Telecom Research of MIIT）

中国信息通信研究院

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Contents

1 **The Achievement of Broadband China Strategy**

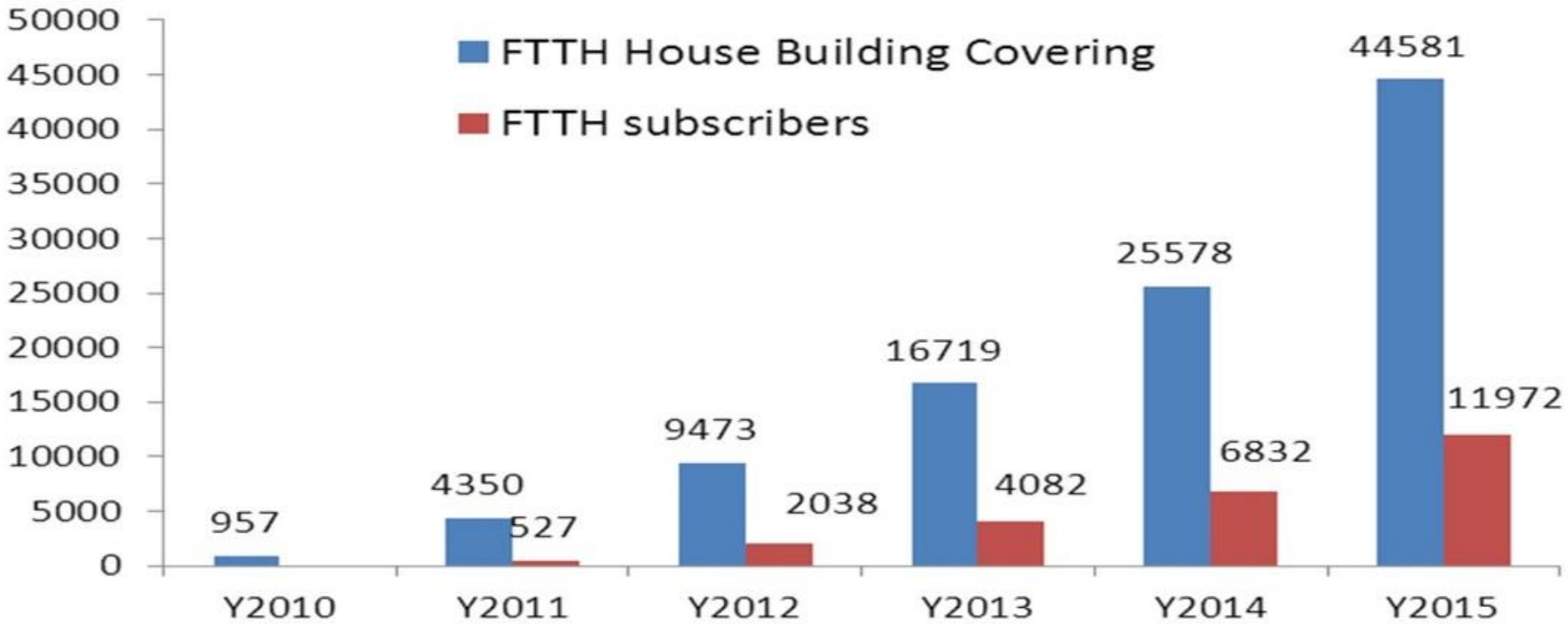
2 The Experience from Broadband China strategy

3 The Study of OBOR Strategic Initiatives in ICT Area

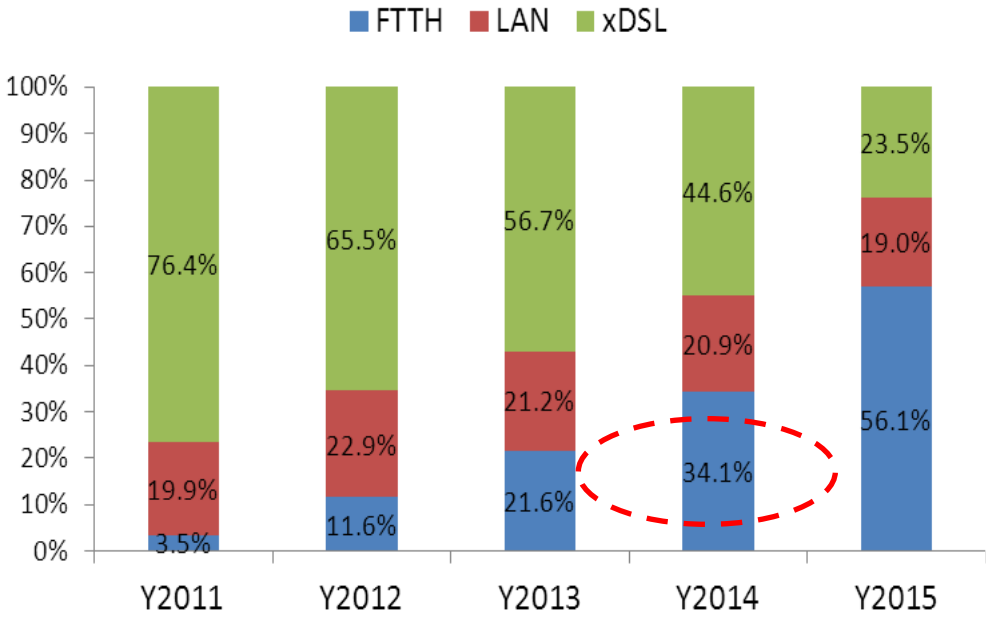
Fixed broadband—Network construction speed up

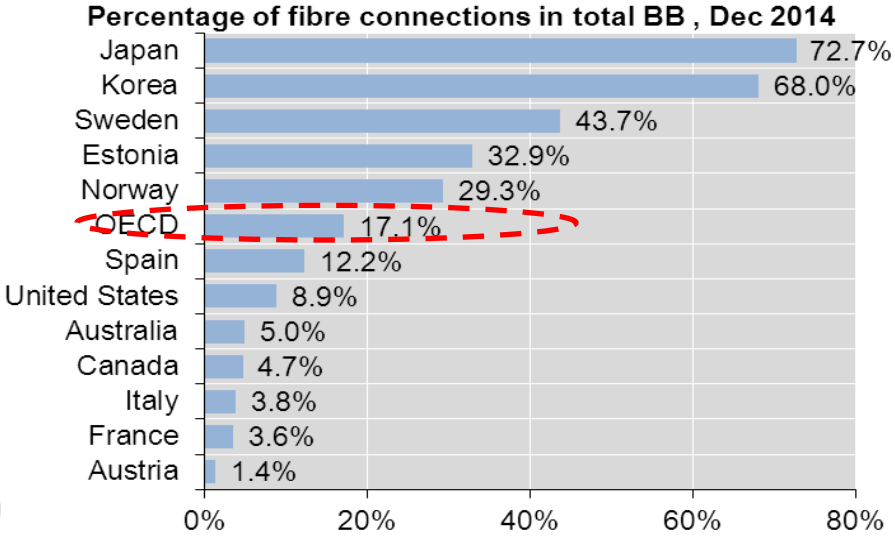
Rapid coverage of FTTH and high-speed growth of FTTH subscribers

- **446 million households** have been covered by FTTH
- FTTH subscribers reached to **119.72 million households**, accounting for **56.1%** of total fixed broadband subscribers.



Fixed broadband—FTTH subscribers grow significently





Note:OECD statistics, fiber users include FTTH and FTTB

Proportion of FTTH outstripping the average level of OECD countries

- According to OECD, the average proportion of fiber users in OECD countries was 17.1% in Dec 2014 meanwhile that in China was 34.1%. By the end of 2015, the proportion of FTTH among total fixed broadband user reached 56.1%, almost among the leading group in the world.

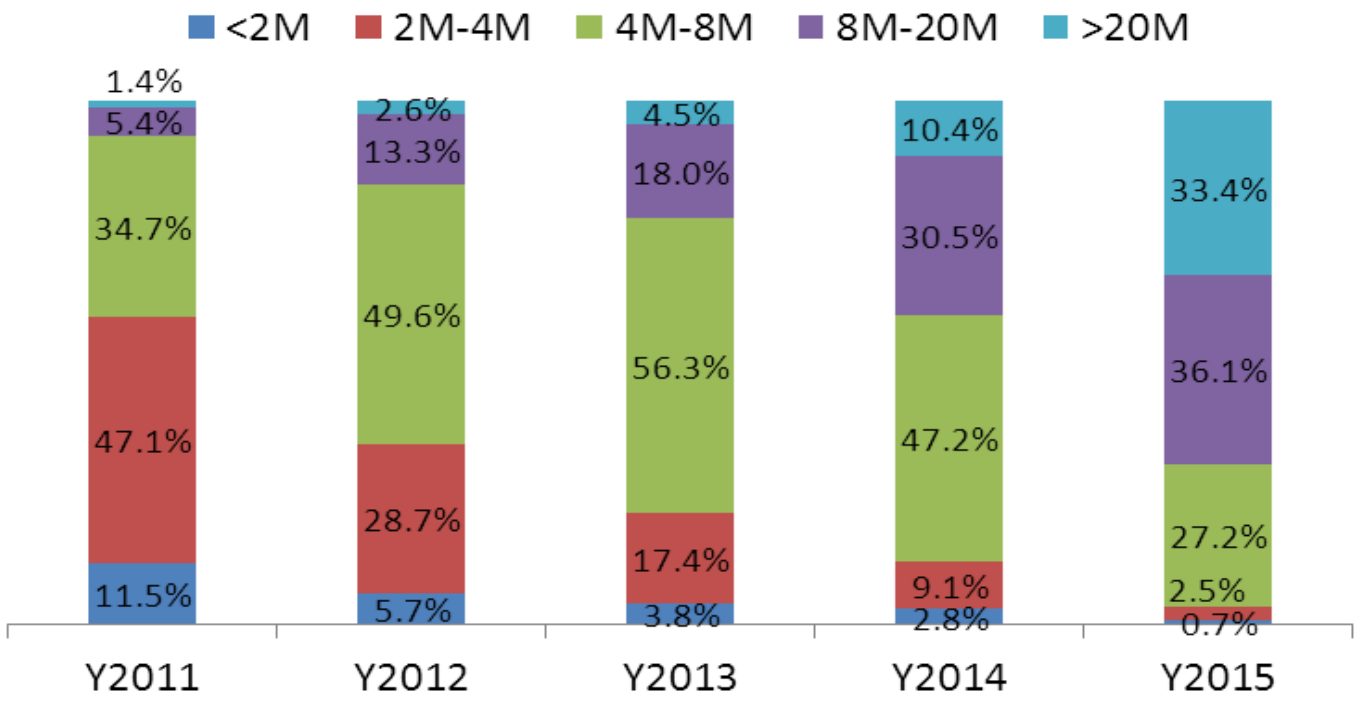
Percentage of fibre connections in total broadband among countries reporting fibre subscribers, Dec 2014

Fixed broadband——The access speed was promoted constantly

Main speed for broadband access moving forward from 4 Mbit/s towards 8 Mbit/s

- By the end of 2015, proportion of 4M and above accounted for **96.8%** and that of 8M and above accounted for **69.5%**, which shows that Chinese subscribers are entering into a high speed era.

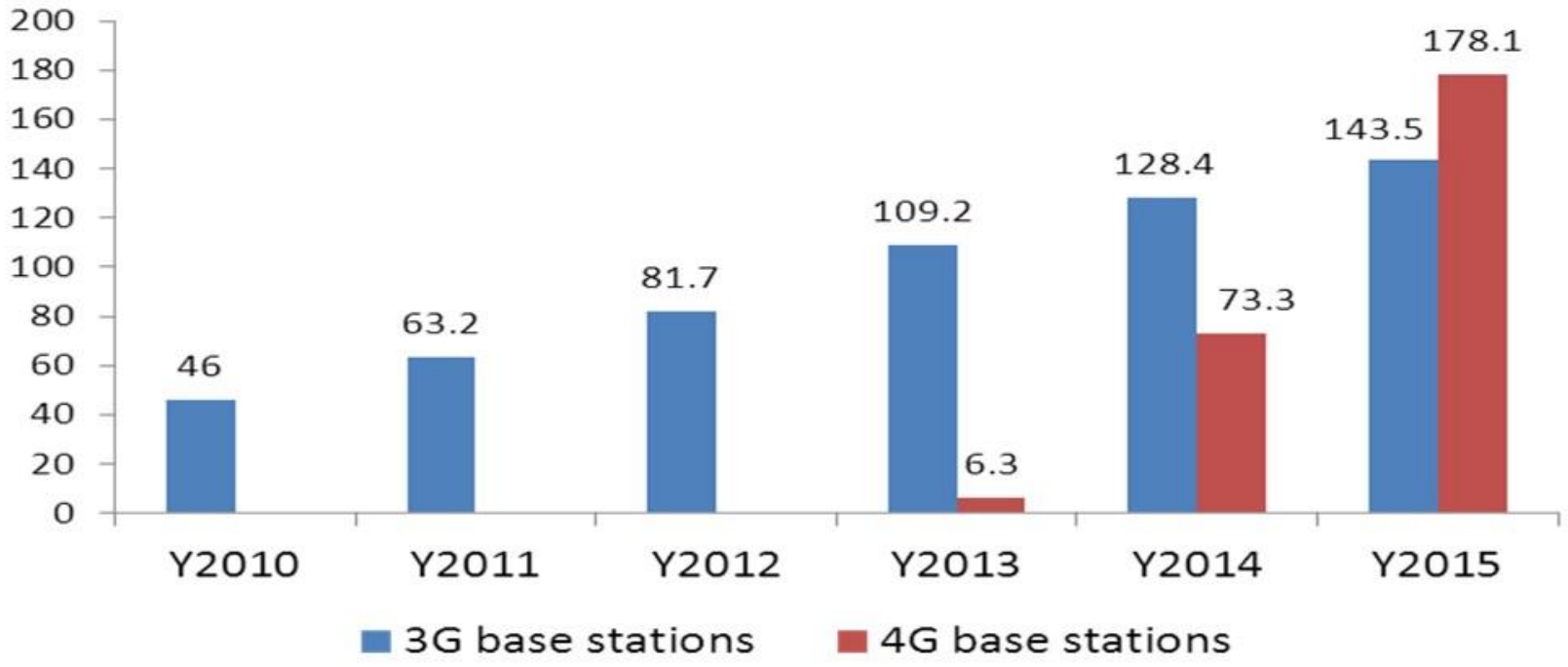
subscriber proportion in different rate levels



Mobile broadband—Network construction accelerate

After the release of 4G license in Dec. 2013, the deployment of LTE accelerated.

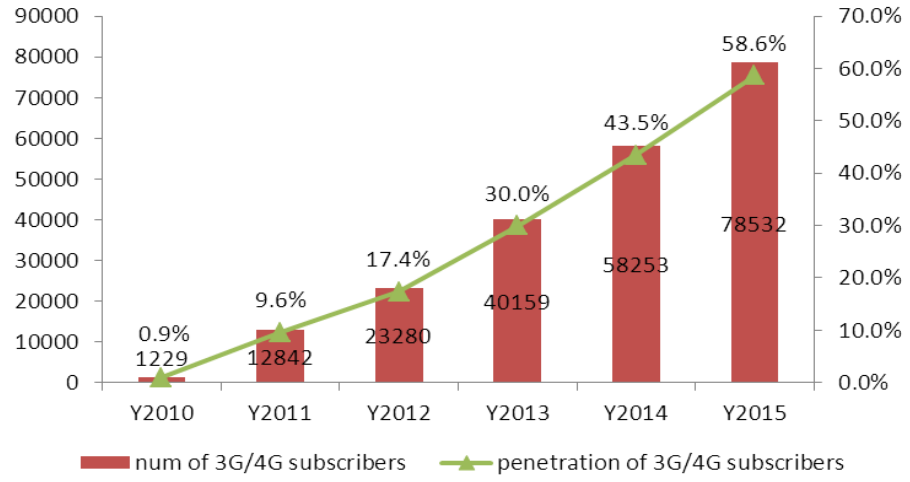
- By the end of 2015**, Number of 3G and LTE** base stations reached **to 1.44 and 1.78 million** respectively, accounting for **68.7%** of total.
- The **4G** base station number has **surpassed** that of **3G**.



Mobile broadband—Proportion of broadband subscribers rises quickly

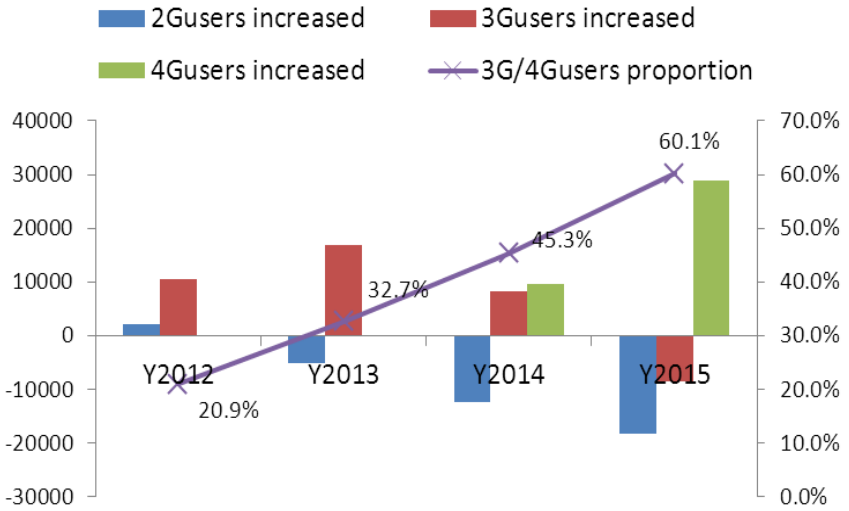
2G/3G subscribers are expediting the migration to 4G.

3G/LTE subscriber and penetration



By the end of 2015, subscribers of 3G/4G surpassed **780 million** households, with the penetration rate up to **58.6%**.

New increased mobile user contrast



The growth of 3G subscribers in 2015 is **-86 million.** The 4G subscribers are replacing 3G and 2G subscribers obviously. By the end of 2015, the uers of LTE reached to **38.62 million** households.

Internet applications develop prosperously

Development of Internet applications shows an overall upward trend

- The usage of **instant messaging** keeps on going up to 90.7%.
- The development of **mobile business applications** bursts out . Its annual growth rate far exceeds that of other applications.

Application	2015		Annual growth rate
	Subscriber(M)	utilization rate	
Instant communication	624,08	**90.7%**	6.2%
Search engine	566,23	82.3%	8.4%
Network news	564,40	82.0%	8.8%
Network music	501,37	72.8%	4.9%
Network video	503,91	73.2%	16.4%
Network game	391,48	56.9%	7.0%
Network shopping	413,25	60.0%	14.3%
Online payment	416,18	60.5%	**36.8%**
Network literature	296,74	43.1%	1.0%
Online bank	336,39	48.9%	19.2%
Email	258,47	37.6%	2.7%
Travel booking	259,55	37.7%	17.1%
Group purchase	180,22	26.2%	4.4%
Internet Banking	90,26	13.1%	15.0%

Note: data source CNNIC

Broadband development ecosystem greatly improved

- **Social orientation of broadband changed**
- **Drawn attention of the leadership**
- **Performance appraisal**

Contents

1 The Achievement of Broadband China Strategy

2 **The Experience from Broadband China Strategy**

3 The Study of OBOR Strategic Initiatives in ICT Area

Successful experience of broadband China Strategy

- Central government paid high attention to
- The effect of broadband China Strategy itself
- Combined effect of the following released policies and measures after the broadband China Strategy
- Efficient operating government and the Cooperation and support come from various Community of the whole society
- Perfect ICT infrastructure and hardworking people engaged in ICT field

Central government paid high attention to

- **The publishment of “Broadband China” Strategy and its Implementation scheme**
- **The cooperation and support of other department of Chinses government for the broadband china strategy.**
- **The implementation of following released policies and measures after the publishment of broadband China Strategy**

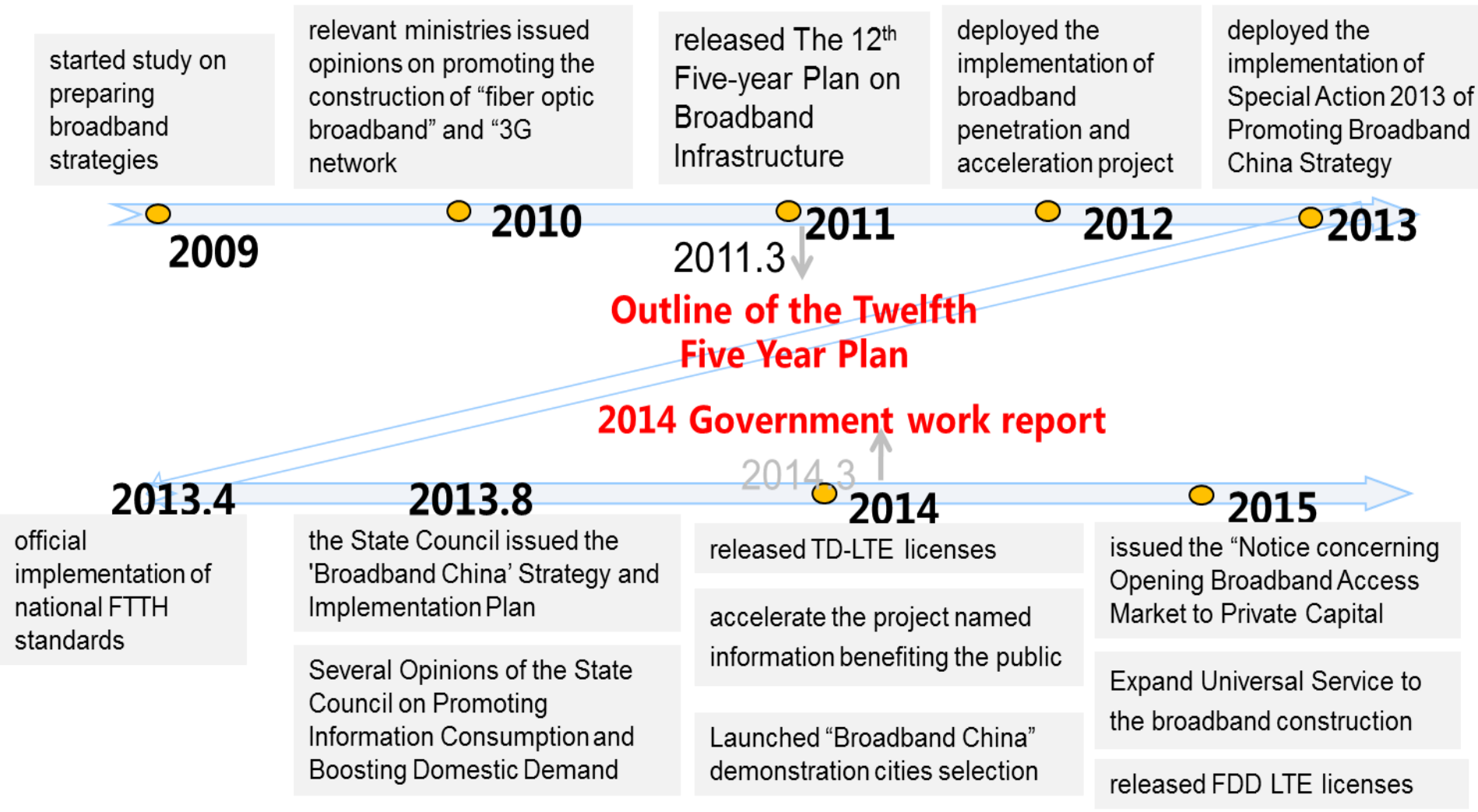
The effect of broadband China Strategy itself

- **The analysis of the problems in the broadband development of China is incisive and accurate.**
- **The object of Broadband China Strategy is practical and feasible, especially suitable for the developing practice of China.**
- **The tasks, policies and measures put forward by the Broadband China Strategy targeted well and really can solve many problem in the broadband development of China.**

Combined effect of the following released policies and measures after the broadband China Strategy

- **“Several Opinions of the State Council on Promoting Information Consumption and expanding Domestic Demand”**
- **Code of practice for the design and acceptance check for the FTTH engineering project**
- **Notice for related work about accelerating the implementation of project named information benefiting the public**
- **Began the appraisement and election of creating “Broadband China” demonstration cities (city cluster)**
- **announced the open-up of broadband access service to private capital**
- **Expanded the scope of Universal Service including the broadband construction in rural areas**

Important measures to promote rapid development of broadband



Major national policies that reduced cost of FTTH

- Policy documents regarding **FTTH construction in residential district and buildings**
- Policy documents regarding **Co-construction and Sharing**
- Policy documents regarding **the protection of communications facilities**
- Other documents regarding **the reduction of FTTH construction costs**

Efficient operating government and the Cooperation and support come from various Community of the whole society

- **The release of all the about-mentioned following policies and measures are the efficient work of different department of Chinese government**
- **The open-up of the national superhighway pipeline systems**
- **The open-up of the roof of governmental offices**
- **Incorporating the information infrastructure construction into Municipal Development Master Planning**

Perfect ICT infrastructure and hardworking people engaged in ICT field

- **Perfect national optical fiber backbone network**
- **The implementation of copper backward and optical forward project and the layout of optical fiber access backbone network**
- **The fast built 3G/LTE network and rapid growth of broadband network subscribers**
- **Best telecommunications equipment manufactures in the world**
- **The rapid growing Internet enterprises like BAT**
- **Competent，efficient and diligent people engaged in ICT field**

Summary

- **The whole society,** governments, industries, originations and communities, **recognize the importance of broadband network**, which is national information infrastructure.
- **Deeply research the tasks, steps, policies and measures, issue the national broadband plan, and keep working on it**.
- Not only speed up the network infrastructure, but also boom internet application, **integrate internet and traditional industries, foster new industries and business development**

Contents

1 The Achievement of Broadband China Strategy

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3 **The Study of OBOR Strategic Initiatives in ICT Area**

OBOR Strategic Initiatives-Six Corridors, Six Roads, Multi-countries and multi-harbour Main Structure

Six Corridors

- China-Mongolia-Russia Economic Corridor
- The New Asia-Europe Continental Bridge Economic Corridor
- China-Central Asia and Western Asia Economic Corridor
- China-Pakistan Economic Corridor
- China-Banglagesh-India and Myanmar Economic Corridor
- China-IndoChina Peninsula Economic Corridor

OBOR Strategic Initiatives-Six Corridors, Six Roads, Multi-countries and multi-harbour Main Structure

Six Roads

- Railway Roads
- Highway Roads
- Waterway Roads
- Sky Roads
- Pipeline Roads
- Information Superhighway Roads

OBOR Strategic Initiatives-Six Corridors, Six Roads, Multi-countries and multi-harbour Main Structure

Multi-countries

- Fostering several countries who are interested in OBOR as supporting point countries to push forward the OBOR construction work.
- China already signed MOU with about 30 countries to enhance the co-construction of OBOR trying to promote the economic development of these countries.

Multi-harbors

- Structuring several harbors surround Maritime Silk Road route as the supporting point harbors to accelerate the Maritime Silk Road construction.

Study of OBOR Strategic Initiatives in ICT Area

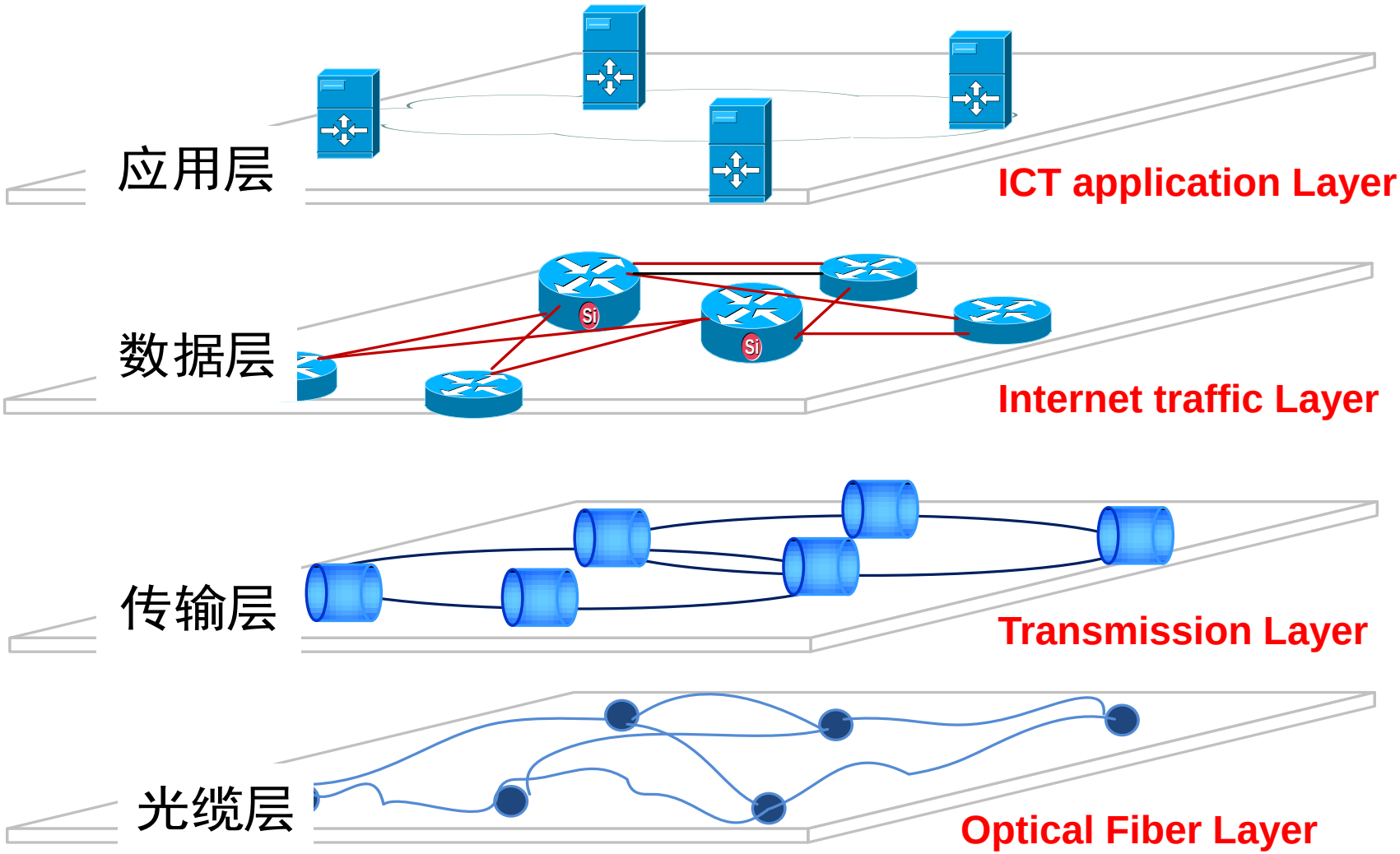
Development Objects

- ***Promote the network interconnection among countries along OBOR***
- ***Effectively reduce the access cost of the countries along OBOR***
- ***Bridge the digital divide among and within the countries along OBOR***
- ***promote economic prosperity through popularizing the pervasive ICT application in the countries along OBOR***
- ***Enhance the investment and technology cooperation in ICT area among countries along OBOR***

OBOR Strategic Initiatives Structure in ICT Area

- ***Promote the network interconnection in optical fiber layer***
- ***Promote the network interconnection in transmission layer***
- ***Smooth the flow of the internet traffic among countries along OBOR and also from these countries to the other regions around the world***
- ***Push forward the Informatization and ICT application in the countries along OBOR to support the sustainable development of these countries***

OBOR Strategic Initiatives Structure in ICT Area



OBOR Strategic Initiatives Structure in ICT Area

Network interconnection in optical fiber layer and transmission layer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Thank you