UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

UNCTAD

MULTI-YEAR EXPERT MEETING ON TRADE, SERVICES AND DEVELOPMENT

Geneva, 11–13 May 2015

STRATEGIC DEVELOPMENT OF KOREA'S ICT POLICY EXPERIENCE

SESSION 4

UNITED NATIONS
UNCTAD

Mr. Jongbong Park
Director
Standards Promotion Department
Telecommunications Technology Association
Republic of Korea

Strategic Development of Korea's ICT Policy Experience

12th May, 2015

Jongbong PARK. Ph.D.

Director

Telecommunications Technology Association

Korea, Republic of ???

What is in your mind?

Table of Contents

I. Status of ICT Industry

II. ICT Policy in Korea

III. Key Success Factors

IV. Challenges

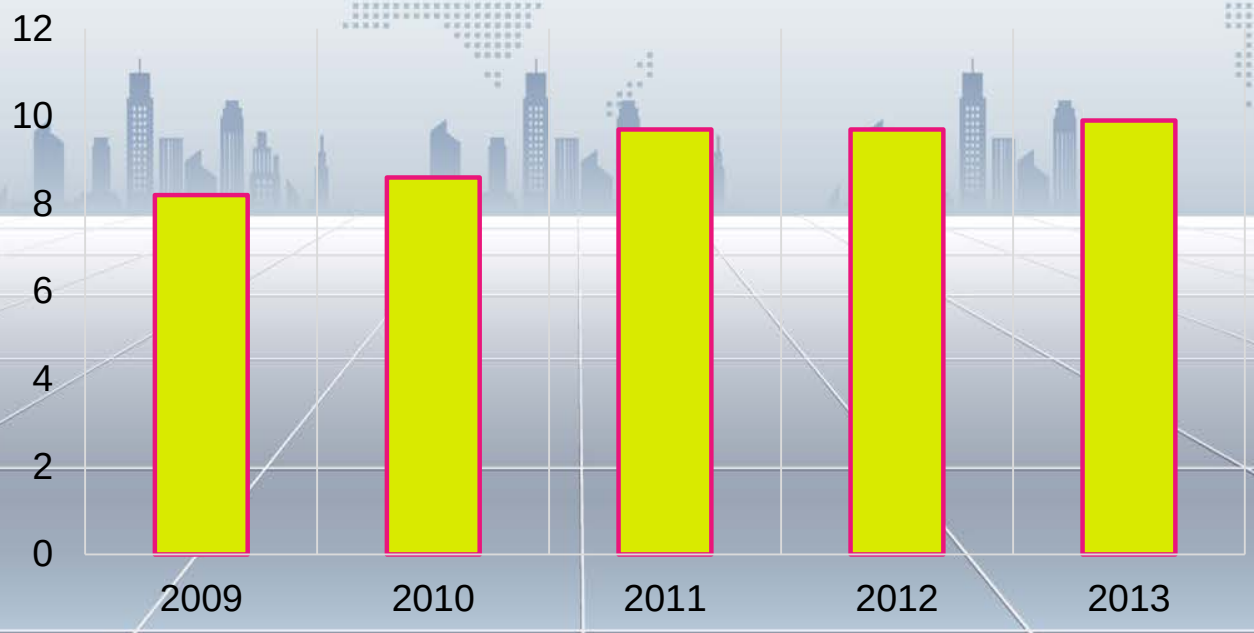
V. Lessons

I. STATUS OF ICT INDUSTRY

ICT Industry In Korea (1/3)

ICT vs. GDP

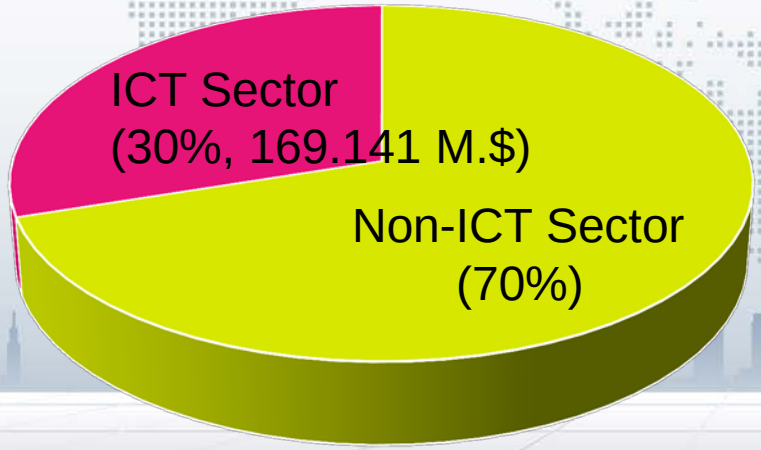
	2009	2010	2011	2012	2013
ICT Growth Rate (%)	4	12.5	11.6	3.1	5.5
Contrib. to GDP(%)	8.2	8.6	9.7	9.7	9.9



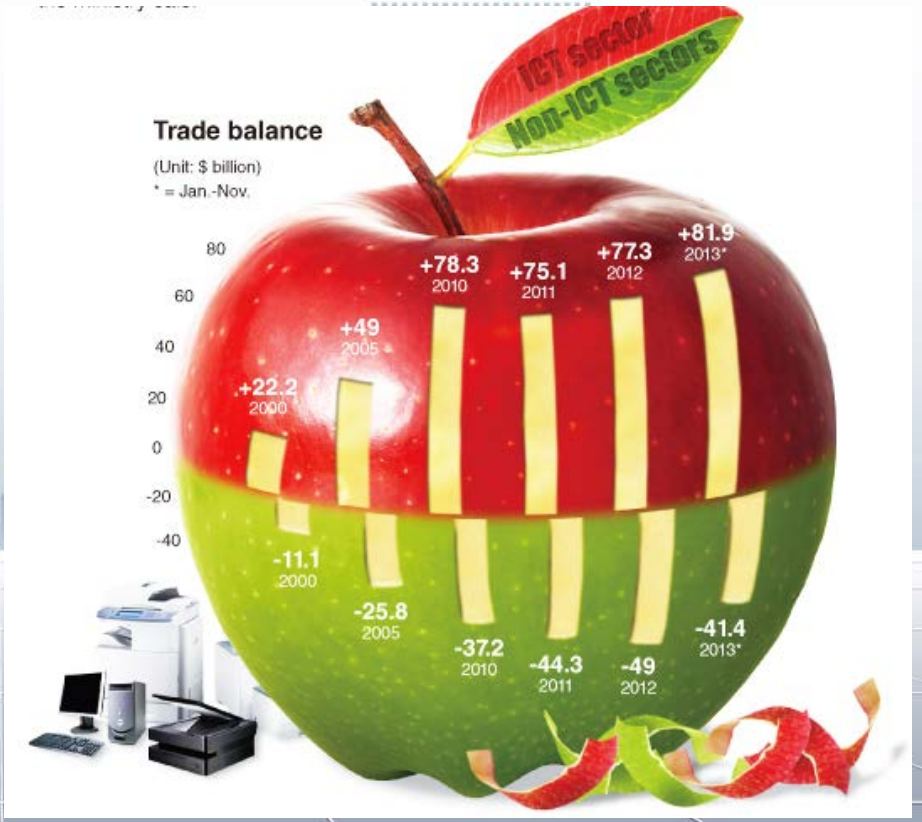
ICT Industry In Korea (2/2)

ICT Contribution to Export

(in 2013)



Trade balance



Korea' ICT in the World

Global position as a ICT powerhouse

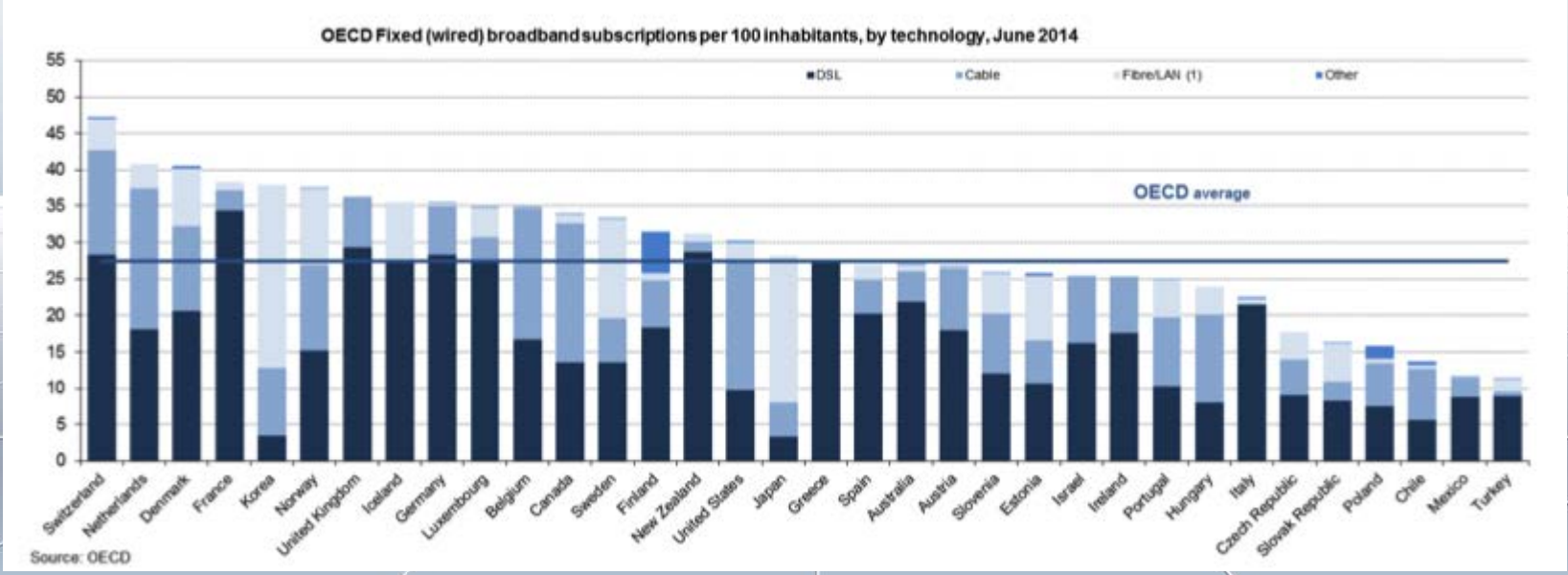
UN e-Government Survey
2010, 2012
UN

ICT Development Index
2010~2013
ITU

ICT Global Competitiveness Index
2010, 2011
MIC-Japan

1ST

OECD Broadband Subscription



II. ICT POLICY IN KOREA

Significance of ICT in Korea

- A key driving force behind social changes
- The key element and best strategy for enhancing a national system
- A principal force in the growth of Korea for the past 20-25 years

Development History of ICT in Korea

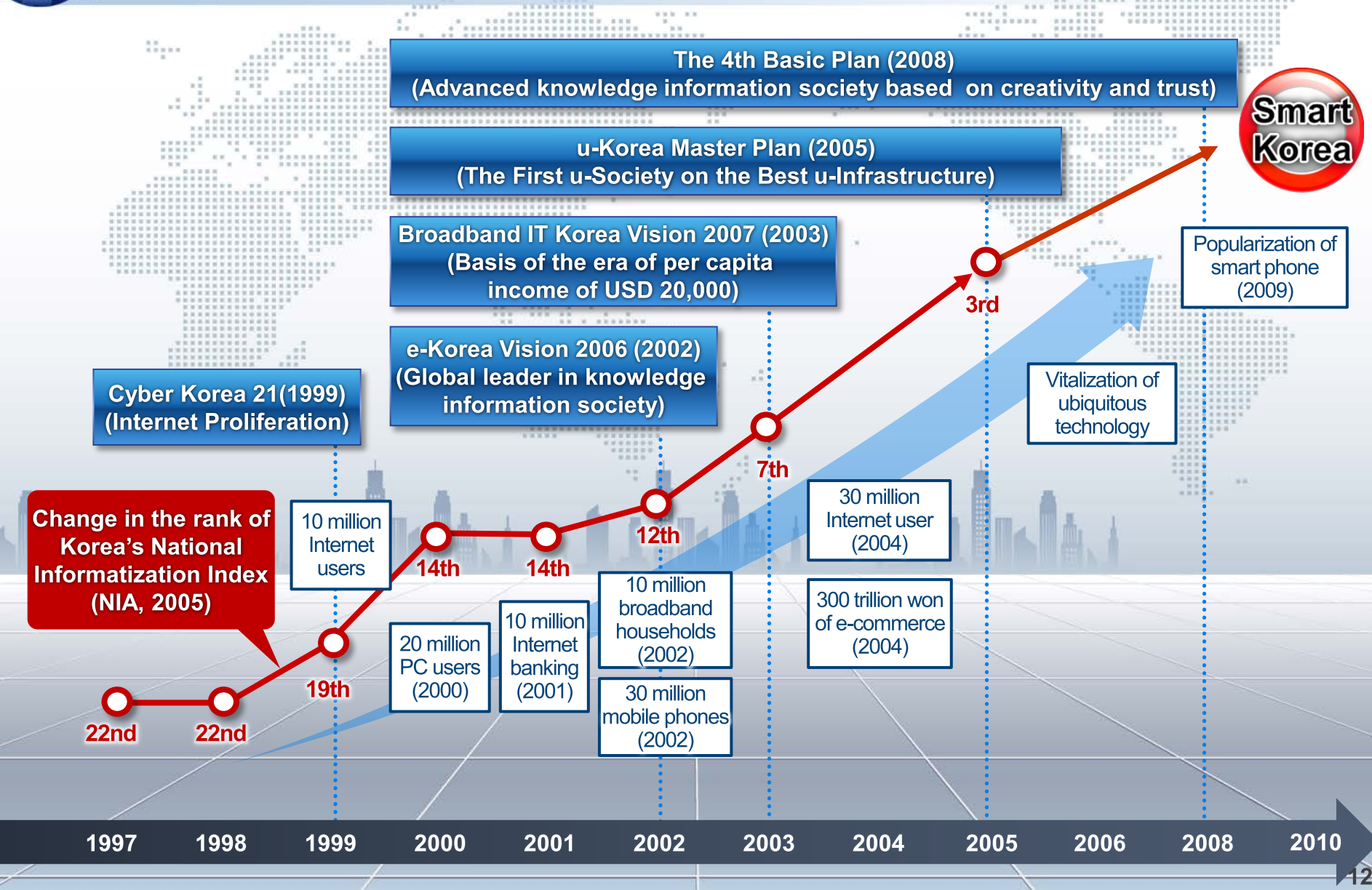
	Initiatives	Legislations	Achievements
Digitalization (1987~1994)	• Digitalization Project for Public Administration • National Basic Information System Project	• Act on Digital Network (1985)	• 10 M + telephone lines (1987) • Internet Commercialization (1994)
Informatization (1995~2002)	• Basic Plan on Informatization Promotion • Comprehensive e-Government Implementation Plan	• Basic Act on Informatization Promotion (1995) • Informatization Steering Committee (1996) • e-Government Act (2001) • Act on Resolving Digital Divide (2001)	• 10 M + Internet users (1999) • 10 M mobile users (1998)
E-Government (2003~2007)	• e-Government Roadmap • Basic Plan on u-Korea	• Presidential Committee on Government Innovation (2003)	• 40 M Internet banking users (2007) • First place in ITU Digital Opportunity index for 3 consecutive years (2005~2007)
Integration (2008~2012)	• 4th Basic Plan on National Informatization	• Framework Act on National Informatization (2009) • National Informatization Steering Committee (2009)	• First place in UN e-Government evaluation ('2010, 2012) • 50 M + mobile users (2010) • 10 M + mobile banking a day (2012)
Creative Economy (2013~Present)	• 5th Basic Plan on National Informatization • Government 3.0	• Act on Disclosure of Public Data (2013) • Special Act on ICT (2013)	• Creative use of ICT • Resolve social issues with ICT • Create jobs

Korea's 20-year Trace of ICT

Focused on national informatization to realize a knowledge-information society

	1987	1995	2001	2008 Present
Phase	INTRODUCTION	GROWTH		MATURITY
Goal	To build basic DB	To establish the foundation of ICT and promote the use of the Internet		Utilize & enhance ICT
Means	Automation & efficiency	Improving the networking productivity		Convergence & service innovation
Main plan	National Backbone Network Project	Basic Plan for Informatization Promotion Cyber Korea 21	e-Korea Vision 2006 u-Korea Basic Plan	Basic Plan for National Informatization
e-Gov		Informatization of Ministries / Local administration integrated information system	11 major e-Gov initiatives 31 major e-Gov initiatives	Smart e-government Integration of data resources
Data-based		Broadband Network		Broadband integration WiBro, RFID/USN, DMB, IPTV

Korea's Informatization



Informatization Promotion Fund

Goal

- Promotion of e-Government
- Broadband Network Roll-out
- Support R&D and Standardization
- Human resources development in ICT

Management

- MIC (overall management), IITA (specific project management)
- Fund Management Council (Evaluation)
  - **Chair**: Vice Minister of MIC
  - **Members**: Director Generals of related Ministries

Status of Fund Investment

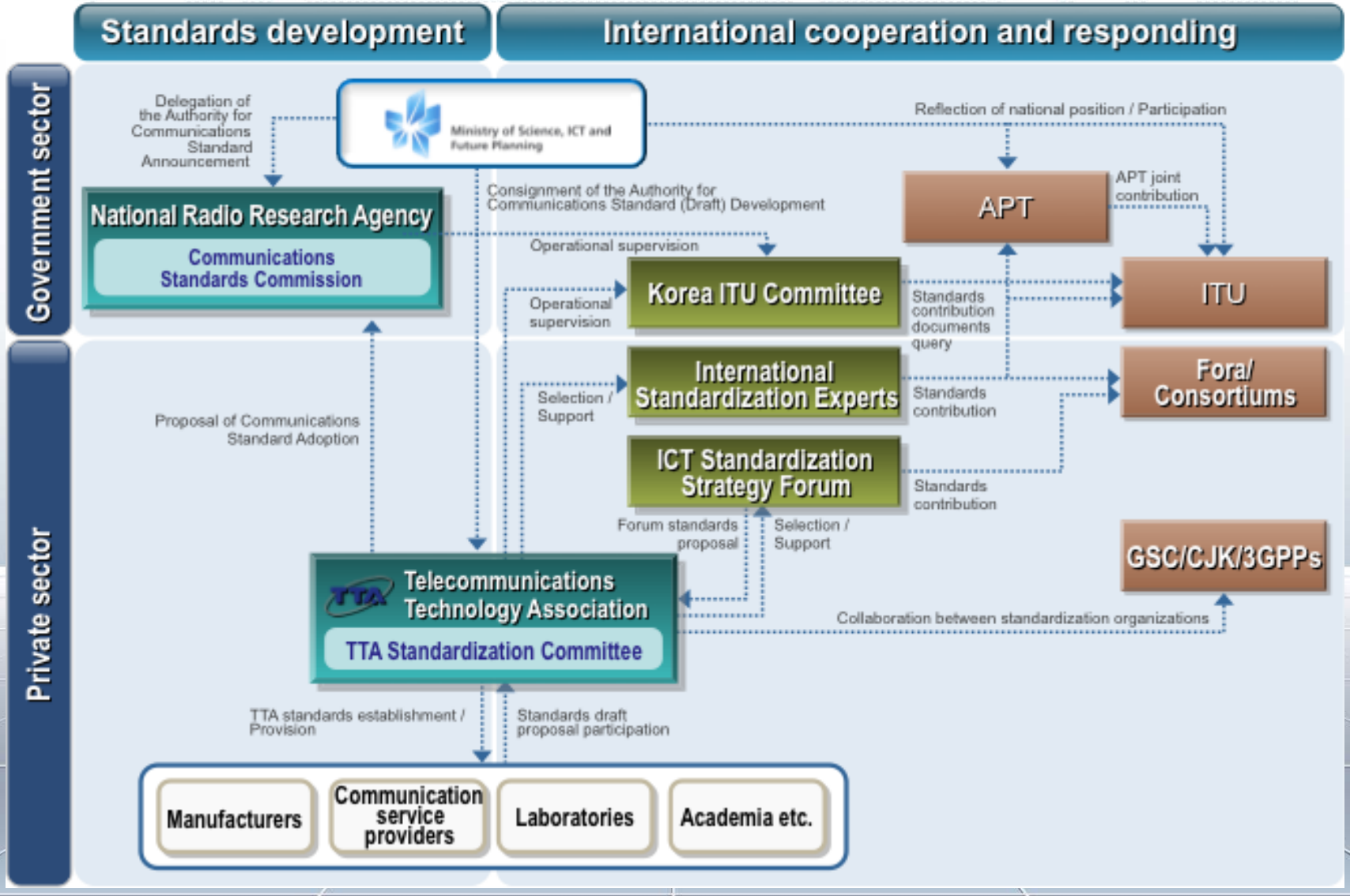
Funding: Total of US$ 7.78 billion (1993~2002)

- Government: US$ 3.06 billion (39.3%)
- Private Sector: US$ 3.59 billion (46.2%)
- Miscellaneous profits and interests: US$ 1.13 billion (14.5%)

Investment: Total of US$ 5.33 billion (1994~2003)

- Broadband infrastructure and promotion: US$ 800 million (15.1%)
- Informatization Promotion: US$ 1.07 billion (20%)
- R&D Infra : US$ 375 million (7%)
- ICT R&D: US$ 2 billion (37.5%)
- ICT Human Resource: US$ 950 million (17.8%)
- Standardization: US$ 135 million (2.6%)

Standardization Policy/Framework



III. KEY SUCCESS FACTORS

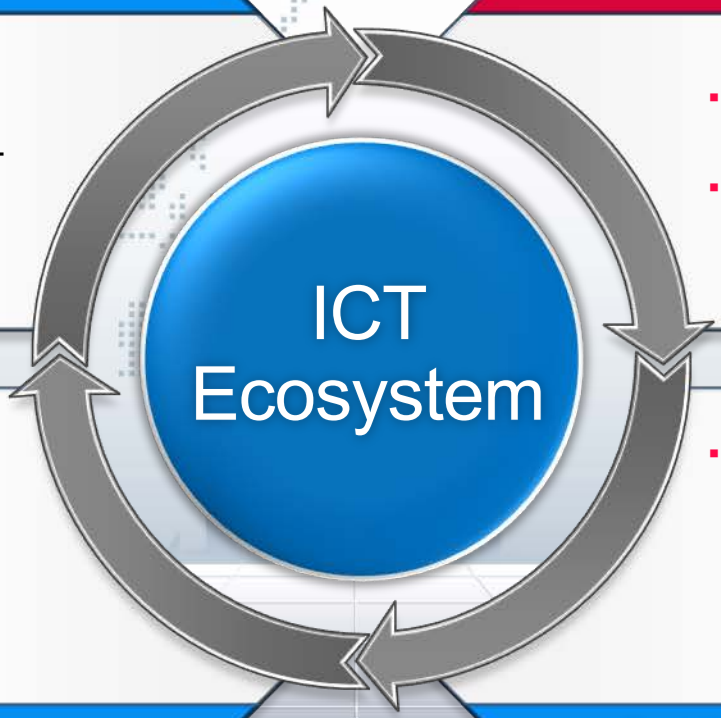
KEY Success Factors

Government Driven Economy

- Designated Ministry for ICT
- Continuous and evolving ICT Master-plan

Securing Designated Funds

- ICT Informatization Fund
- Broadcast Development Fund, etc.



Public-Private Partnership

- Research and Development
- Deploying Broadband network , etc.

Setting up Designated Expert Organizations

- Specialized agencies or association in the filed of ICT : Informatization, Security, R&D, Standardization, Promotion, Broadcasting, Spectrum, etc.

IV. CHALLENGES

ICT Paradigm Shift

	PC Age	Internet Age	Mobile Age	Smart Age
Paradigm Shift	Digitalization, Computerization	Online, Informatization	Social, Mobile	Intelligence, Individualization, Informatization of Things
ICT Issue	PC, PC Communication, Database	High-speed Internet, www, Web-server	Mobile Internet, Smartphone	Big Data, Next-Gen PC, M2M
Key Sector (Service)	PC, OS	Portal, Search Engine	SNS, App Service	Future Prospective, Situation Recognition, Customized Service
ICT Vision	1 person → 1PC	Click e-Korea	PC in Hand, Communication	ICT Everywhere, Creation of New Value
Leading Companies	Microsoft, IBM	Google, NAVER	facebook, twitter	?

Policy on Technology

Techno-Nationalism

- Lessons from CDMA case

Convergence with non-ICT sectors/industries

- ICT in mature stage which needs collaboration with non-ICT sectors (e.g. Internet of Things)

Roles of New National Informatization

1. **Lead investment in new technology and institutional improvement**
   ⇒ Foster a creative economy (ICT convergence & expansion and the creation of new business ecosystem & demand for ICT)

2. **Solve current national and social issues** scientifically and effectively at low costs
   ⇒ Ensure a human-centered **safe and comfortable life**

3. **Strengthen the ICT literacy** of citizens
   ⇒ Combine imagination & creativity with ICT (creative assets)

4. **Enhance the network infrastructure**
   ⇒ Support national & social innovation

V. LESSONS FROM KOREA'S EXPERIENCE

Characteristics of ICT Policy

Policy needs to be developed based on the premise that technology development in ICT fields is very fast and hard to forecast.
→ Constant updates are required

National informatization policy entails long-term large-scale investment and has great ripple effects
→ Long term planning is required

Policy serves as an effective tool to ensure the constant growth of economy and improve the quality of people's life, and entails changes in social structure and systems as well as values, behaviors, and norms of people
→ Cross-sectoral cooperation is required

Thank You