



Public and Private Partnership of Highways in Korea

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국토해양부

Ministry of Land, Transport and Maritime Affairs



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1. Current Private Investment

Background

National Highway Vision : 7×9 Grid by 2020

✓ 3,368km in 2007 6,000km in 2020

To Introduce **creativity & efficiency** from
the **Private sector**

To complete SOC projects on time

- ✓ SOC budget has been reduced
- ✓ Procedures of privately - funded projects are more simple

Current Private Investment

Private Investment in Total SOC Projects

	'95~'00	'01~'03	'04	'05	'06	'07
Total SOC Invest. (Trillion KRW)	65.4	49.1	19.1	20.7	21.6	21.4
Govt. Invest. (A)	62.7	46.1	17.4	18.1	18.4	18.4
Private Invest. (B)	2.7	3.0	1.7	2.6	3.2	3.0
Ratio (B/A) (%)	4.1	6.1	9.8	14.4	17.4	16.3

* 1Trillion KRW 1 billion USD

- ❖ Govt. investment for SOC has been reduced due to increased budget in social welfare and others.
- ❖ private investment gradually increase its share

Private Investment Trend in Highways

Annual 22.4% increase is expected for privately funded highways by 2015

❖ Annual 5.9% increase expected for Govt. - funded highways

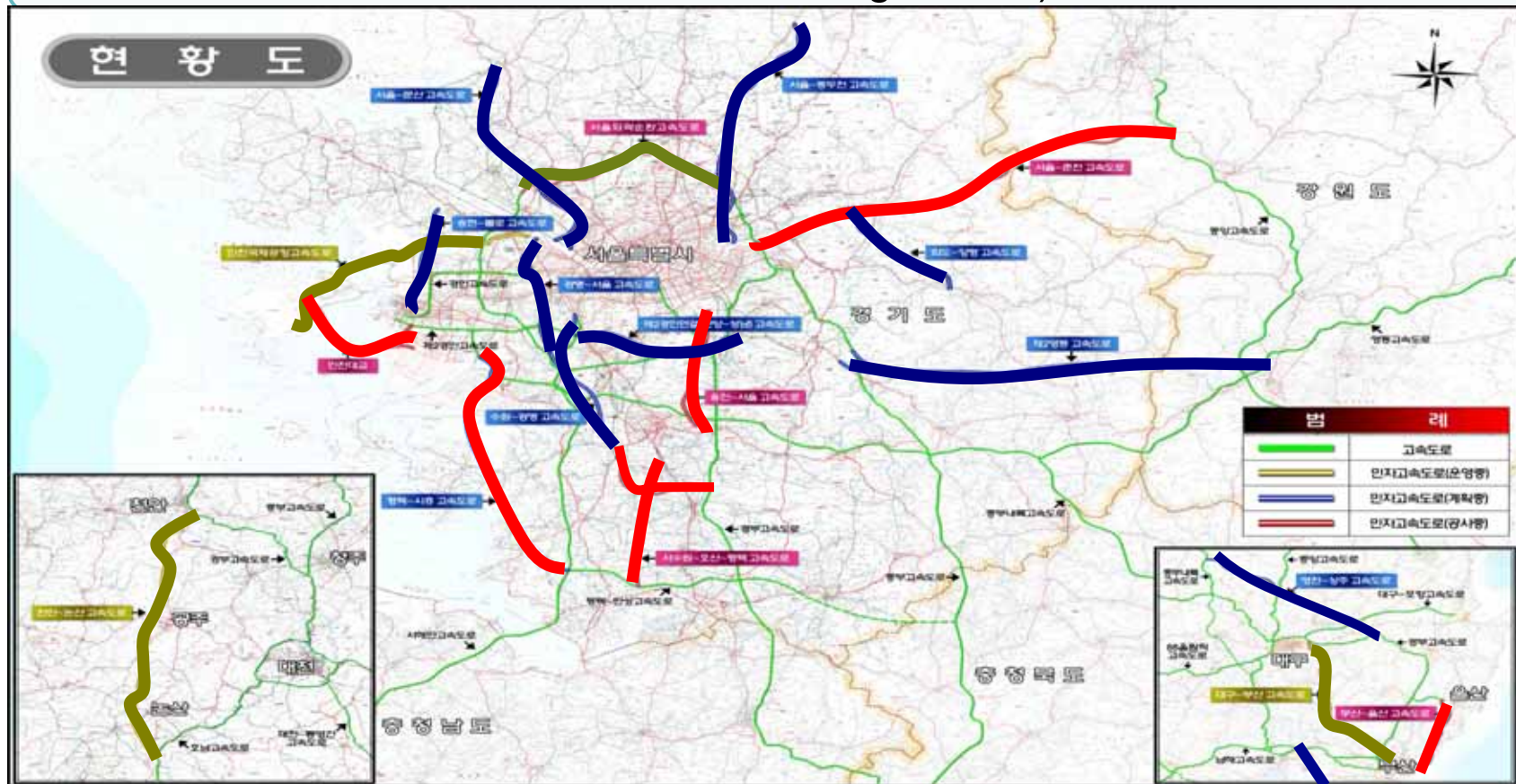
Privately - funded highways are projected to represent over 14% of total highway network by 2015

(Unit: km)

Type	2000	2005	2010	2015	Increase rate (% / yr)
Total(km)	2,131	3,079	4,495	5,760	6.9
Govt. - funded	2,091	2,847	4,073	4,932	5.9
Privately - funded	40	232	422	828	22.4

Privately - funded Highways

- ❖ 20 projects (4 in service, 6 under construction, 10 under selection of investor or negotiator)



Privately -funded Expressway

- Private investments mostly go to **expressways** since national highways are thought to be non-profitable
- Privately -funded expressway projects are **concentrated on metropolitan area** based on the profitability

Government Announcement(5)

In Service	● Incheon Int'l Airport Expressway: completed in Dec. 2000
	● Cheonan -Nonsan Expressway: completed in Dec. 2002
	● Daegu -Busan Expressway: completed in Jan. 2006
	● Seoul Ring Expressway: 1 st stage: completed in June 2006 2 nd stage: completed in Dec. 2007
Under Construction	● Busan -Ulsan Expressway: to be completed by Dec. 2008 (changed into private-funded expressway in May 2006)

❖ Private-funded expressway projects were mostly implemented by **govt. announcement** before 2003

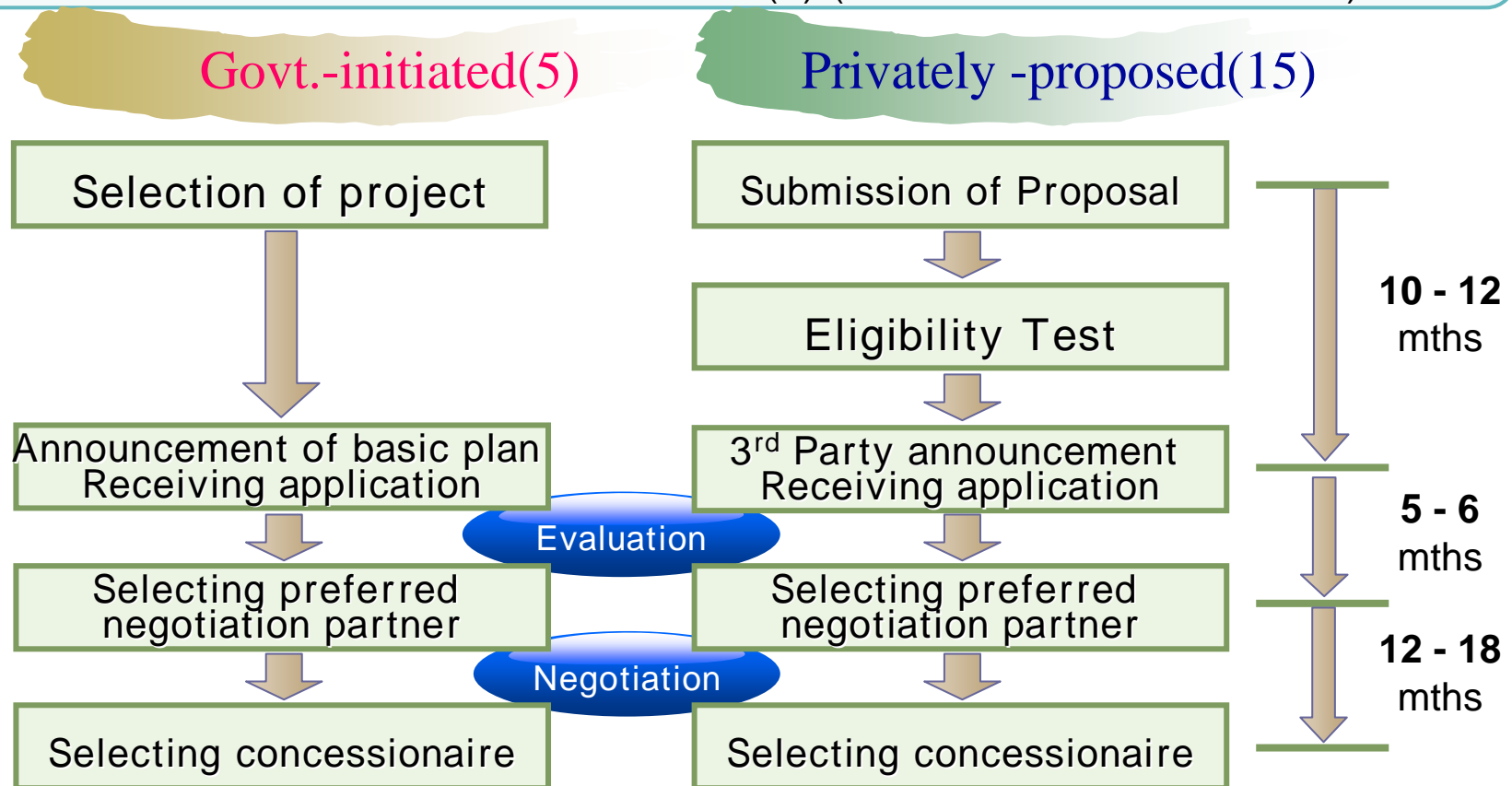
Proposed by Private Sector (15)

Under Construction (5)		<ul style="list-style-type: none"> ● Seoul - Chuncheon Highway: to be completed in Aug. 2009 ● Seosuwon - Pyeongtaek Highway: to be completed in Oct. 2009 ● Incheon Grand Bridge: to be completed in Sept. 2009 ● Yongin - Seoul Highway: to be completed in Jun. 2009 ● Pyeongtaek - Siheung Highway: to be completed in Mar. 2013
Planning (10)	Selecting Concessionaire	<ul style="list-style-type: none"> ● Incheon - Kimpo, Anyang - Seongnam('07.7) ● Gwangju - Wonju('08.5), Busan New Port 2nd Background Road ('08.8)
	Under Negotiation	<ul style="list-style-type: none"> ● Yeongcheon - Sangju, Suwon - Gwangmyeong, Seoul - Munsan, Seoul - Pocheon ● Hwado - Yangpyeong, Gwangmyeong - Seoul

2. Selection of Concessionaire

Progress

- ❖ Initial 4 projects (1994~2000): Govt. -Initiated
- ❖ Projects since 2001: Privately -proposed (15),
Govt. -initiated (1) (Govt. fund -> Private fund)



Selection of Concessionaire

Selecting Preferred Nego. Partner (Gwangju-Wonju Expressway)

Technical evaluation 50% + Price 50% = 100%

Evaluation Criteria		Point	Detail
Technical Evaluation (500)	Construction Plan	220	- Appropriateness of Lines - Appropriateness of cost calculation
	Operation Plan	130	- Appropriateness of operation cost calculation
	Creativity Public good	150	- Traffic Volume - Required Govt. support
Price Evaluation (500)	Toll	250	- Ratio to KEC toll
	Financial Support	250	- Construction subsidy ratio to total project cost

Selecting Concessionaire

Mostly **BTO** (Build - Transfer - Operation)

Negotiation based on **verified & mutually -agreed**
traffic volume ex) PIMAC of KDI

- ✓ Scale(Construction & operation cost)
- ✓ Toll
- ✓ Profitability
- ✓ Financing plan & Govt. subsidy
- ✓ Operational income guarantee, operation period
- ❖ Land cost excluded (compensated by Govt.)

Selection of Concessionaire

Main Contents of Concession Agreement

Classification	Cheonan - Nonsan(1997)	Seosuwon - Pyeongtaek(2005)	Pyeongtaek - Siheung (2007)
Scale	81km(1729.6bil)	38.5km(1595.4)	61.4km(2272.5)
Profitability	14.7%(fixed 9.24%)	11.7%(fixed 7.4%)	9.5%(fixed 5.29%)
Toll	KW 96/km	KW 95/km	KW 95/km
MRG	90% (20yrs) -> adjusted to 82%	80~60% (15yrs)	Removed (since Jan. 2006)
Govt. Subsidy	436.4(27%)	309.9 (28%)	-
Private fund	1158.9(73%)	805.5 (72%)	861.1 (100%)
Investors	· CI 100% · FI 0%	· CI 90% · FI 10%	· CI 10% · FI 90%

* CI : Construction Investor, FI : Financial Investor

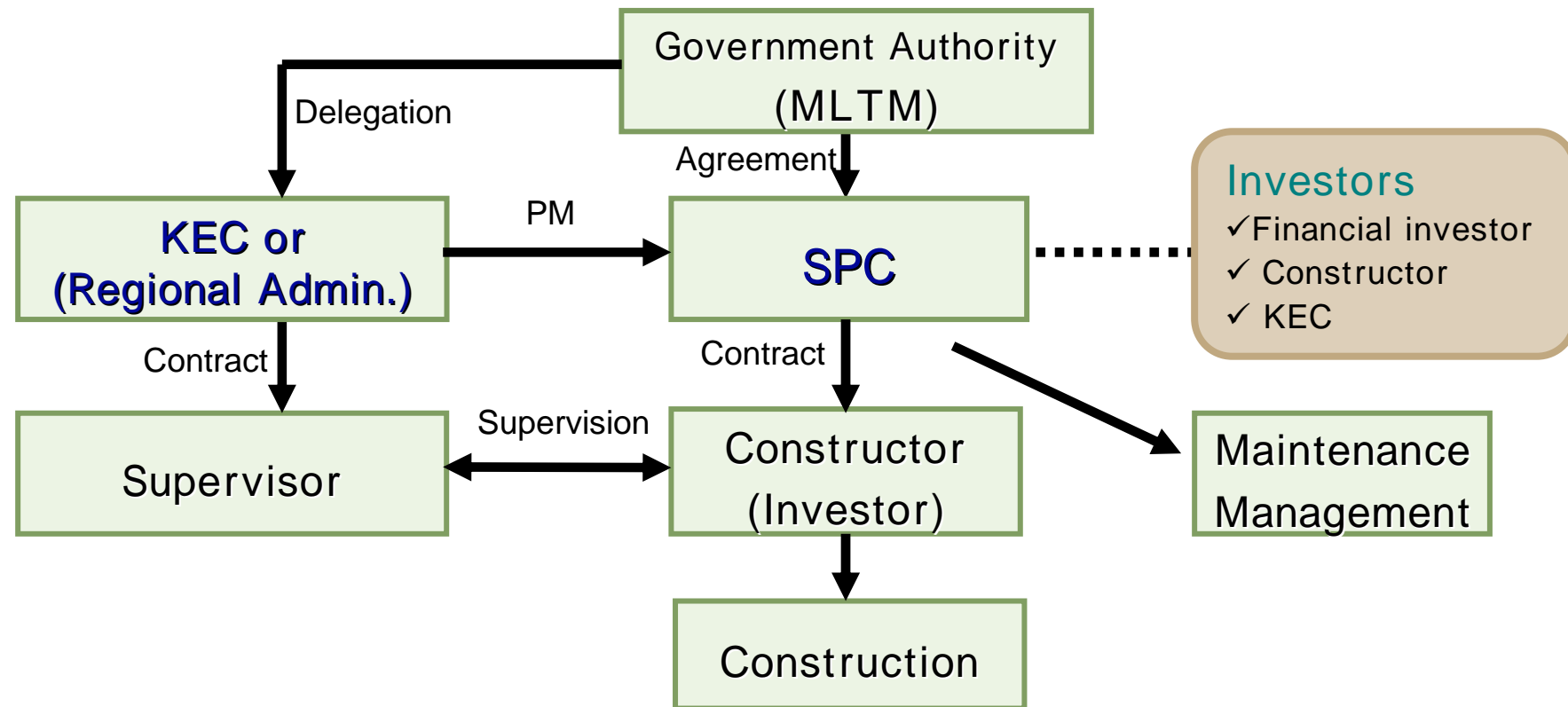
Raised Problems

- Excessive govt. burden due to **minimum revenue guarantee (MRG)** based on over - estimated demand
- **Increased user burden such as expensive toll** resulting from lack of competition in the private sector

Major Improvements

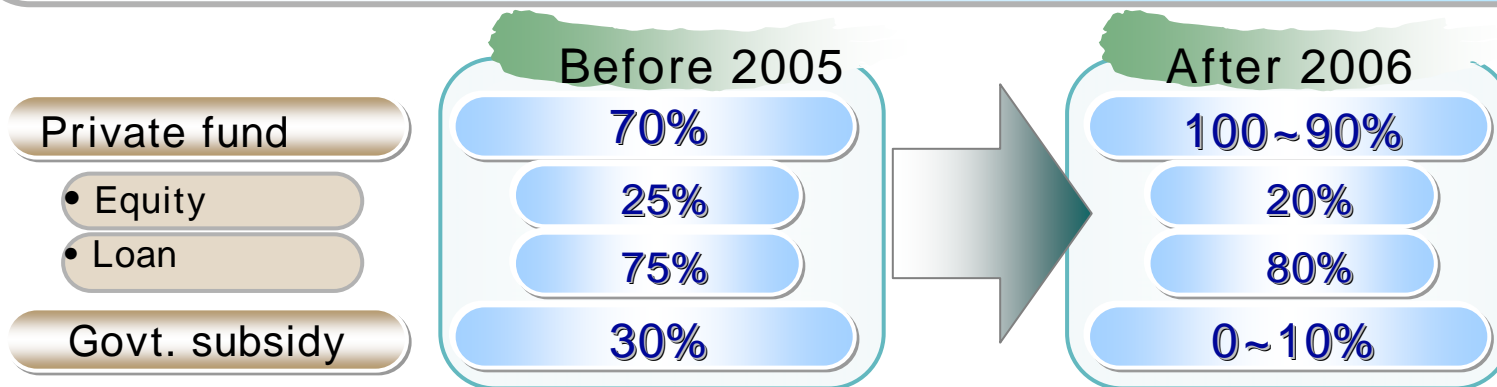
- Set up toll ceiling (within 1.5 - 2.0 times of KEC toll, 2003)
- **Compensate failed proposals** to promote competition (2003)
- Strengthen pre - qualification test by **introducing VFM** (2005)
- Reduce (announcement) & remove (proposal) revenue guarantee system to **prevent over - estimation of demand** (2006)

3. Project Management



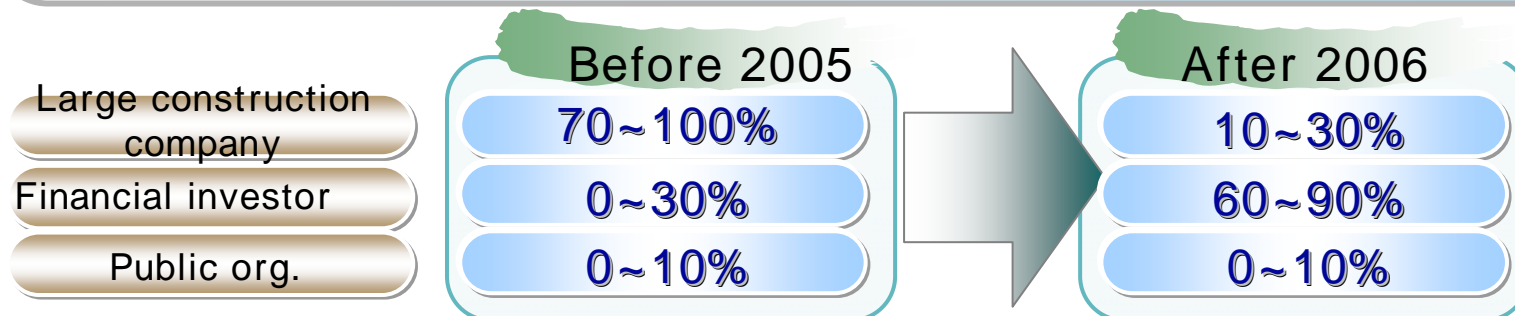
SPC Financing Structure

Financial Sources Structure



* Land compensated by govt. fund

SPC Financing Structure



Operation of Privately - funded Highways

Classification			2003	2004	2005	2006	2007
Incheon Airport Hiway	Traffic Volume (Cars/Day)	Agreement	133,438	146,554	119,026	125,322	131,965
		Performance	55,323	59,780	62,831	65,571	68,711
		Rate	42%	41%	53%	52%	52%
	Income guarantee (KW100 million)		1,050	1,114	767	805	808
Classification			2003	2004	2005	2006	2007
Cheonan~ Nonsan Highway	Traffic Volume (Cars/Day)	Agreement	46,423	48,081	50,344	53,692	55,624
		Performance	21,854	25,189	27,554	30,017	32,529
		Rate	47%	52%	55%	56%	58%
	Income guarantee (KW100 million)		404	386	390	404	390

4. Future Prospect for Private Investment

- Private investment is expected to increase continuously
- Terms of Agreements improved due to intensified competition

	Before 2000	2001 ~ 2005	After 2006
Current Yield	14.7%	12.3%	9~10%
MRG	20yr 90%	15yr 60~80%	Removed
Govt. subsidy	30%	30%	0~10%
Investment from FI	0%	0~30%	60~90%

Thank You

