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Current Status and Progress of Construction CALS in Korea

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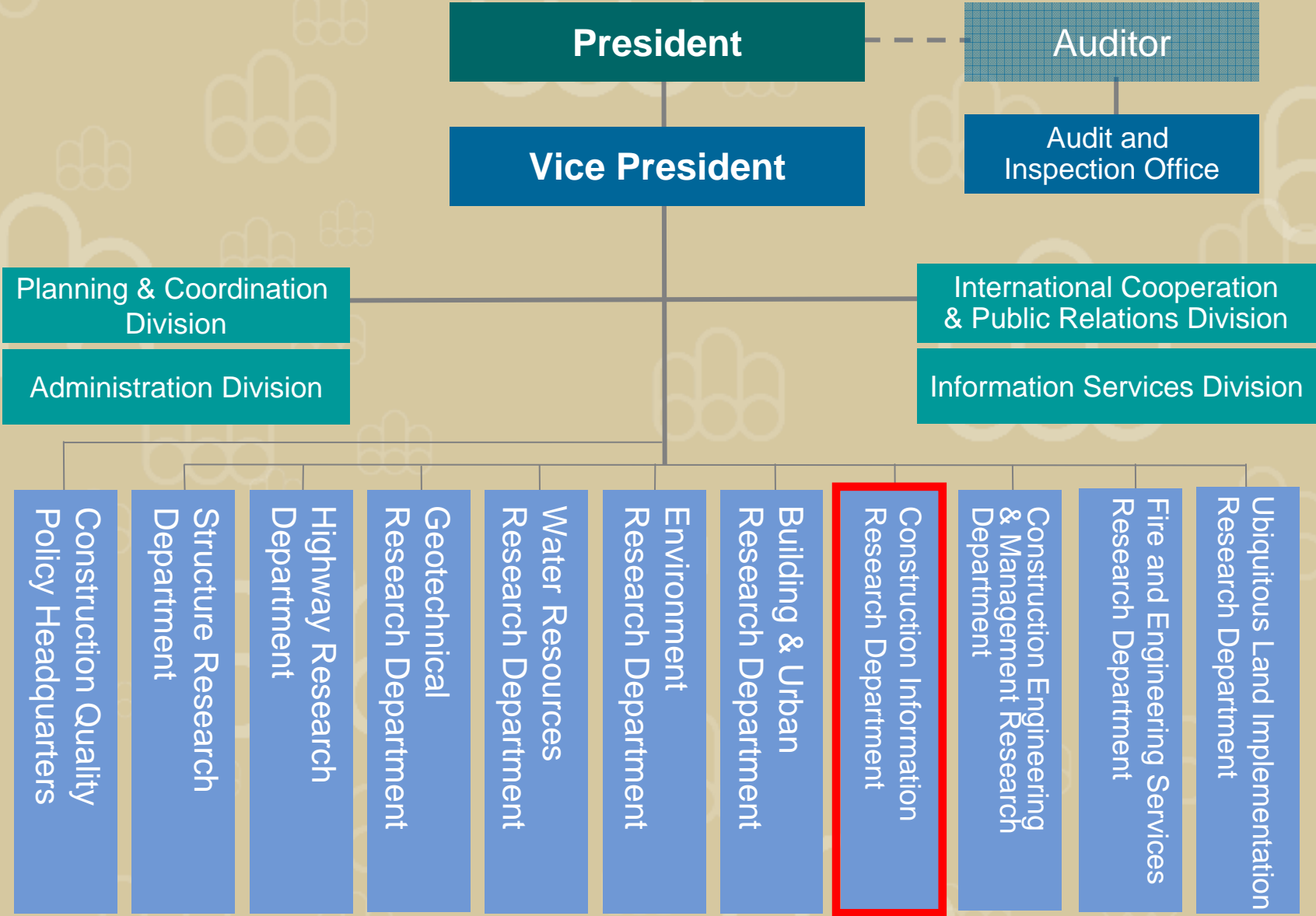
. Construction CALS in Korea

Development of cutting-edge construction technology

Application of foreign advanced technologies for safer and more efficient SOC construction

Support for the government policy development and execution related to the construction industry

Development of technology on demand



Research Activities

- Development of Construction CALS Systems
- Policy development for Construction CALS
- Research & development of IT for construction industry

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- Effective digitalization of the national land Information
- Making construction industry transparent and competitive
- Improvement of the investment efficiency of SOC
- Support for the improvement of quality of life

Project Groups in construction and transportation IT

● National land

- Digitalization of the national GIS and real estate

● Transportation

- Digitalization of transportation industry

● Construction

- Digitalization of construction industry

● Water resources

- Digitalization of water-related information

- **NGIS**
(national geographic information systems)
- Comprehensive land information systems
- AIS (architectural information systems)
- Land usage information systems
- Industry location information systems

- **ITS (intelligent transportation systems)**
- **Logistics**
- **National transportation DB**
- **Vehicle registration systems**

- Construction CALS
- Construction industry DB
- HMS (highway management systems)
- Overseas construction DB

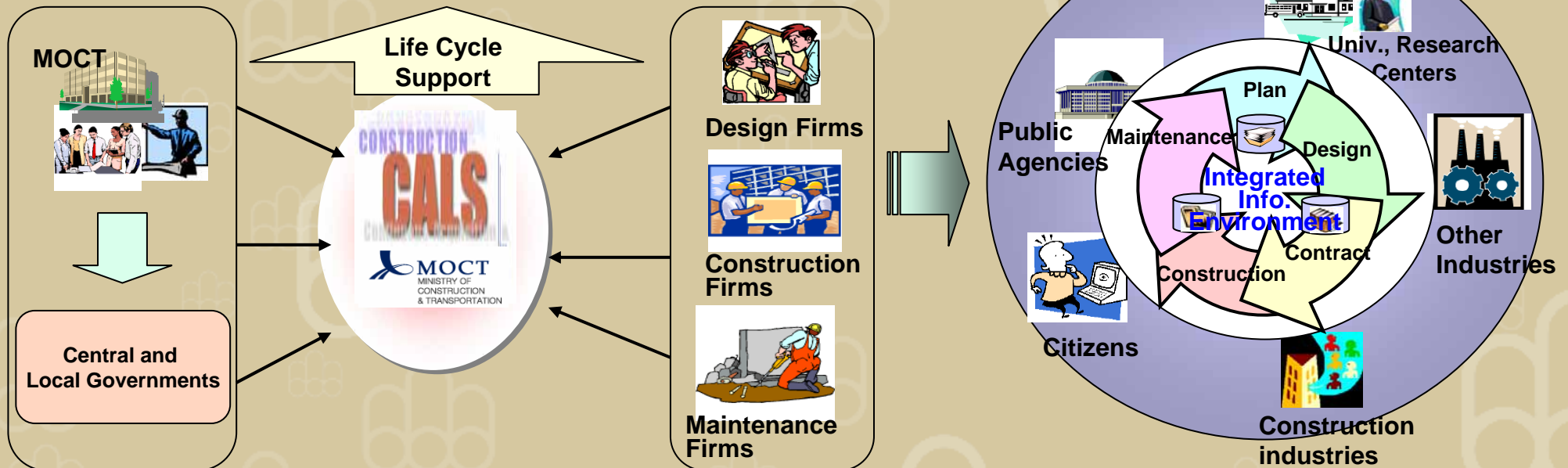
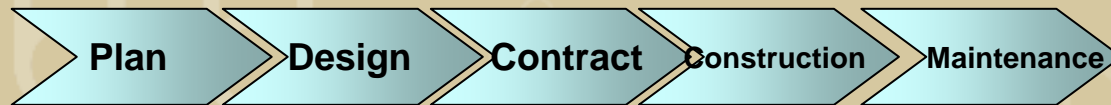
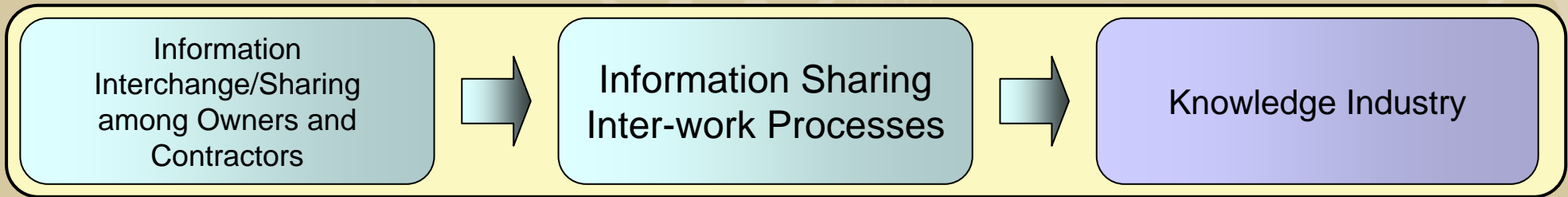
- Water resources information systems
- Waterworks information systems
- RIMGIS (river information management GIS)
- Groundwater information systems

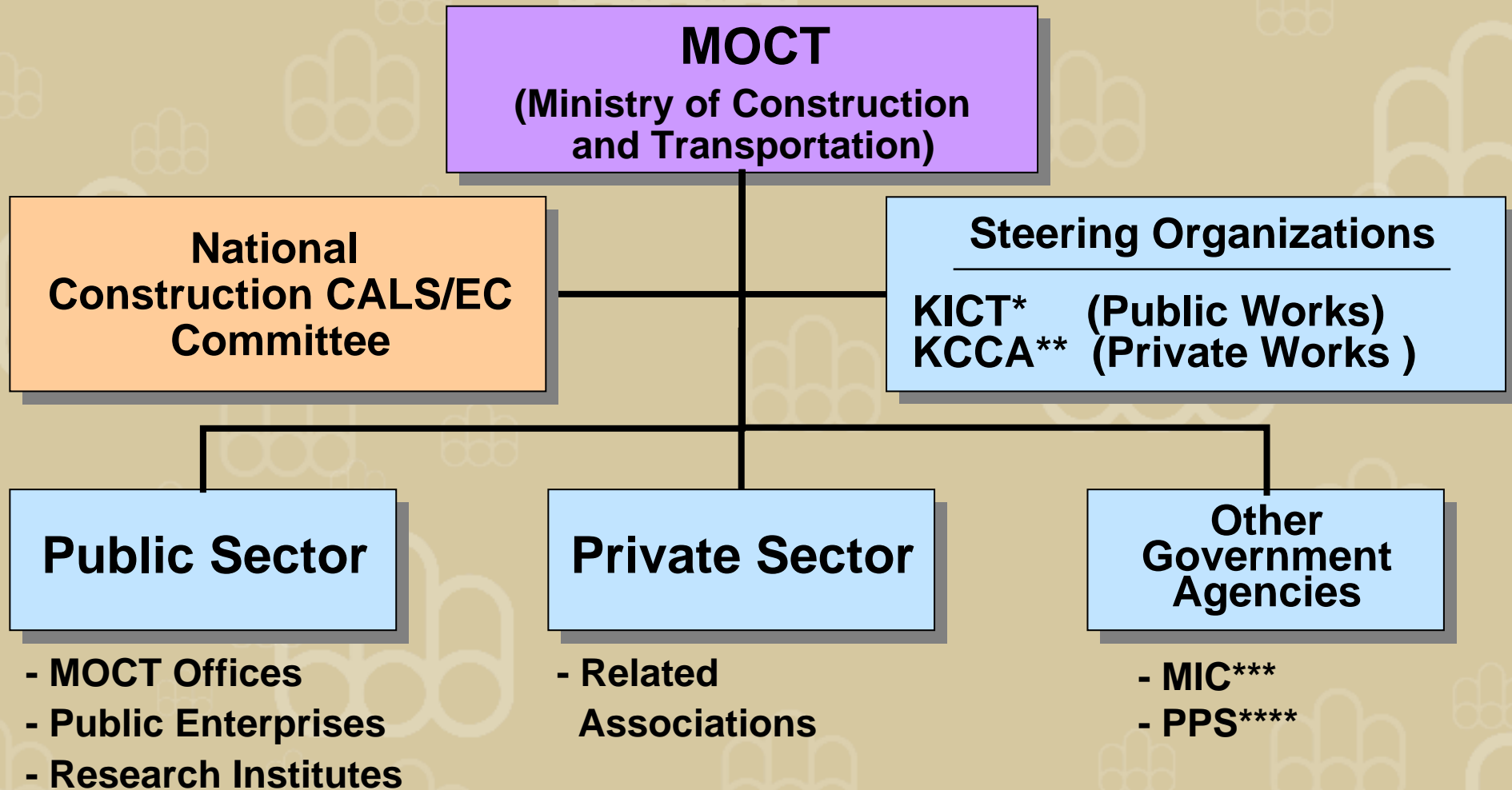
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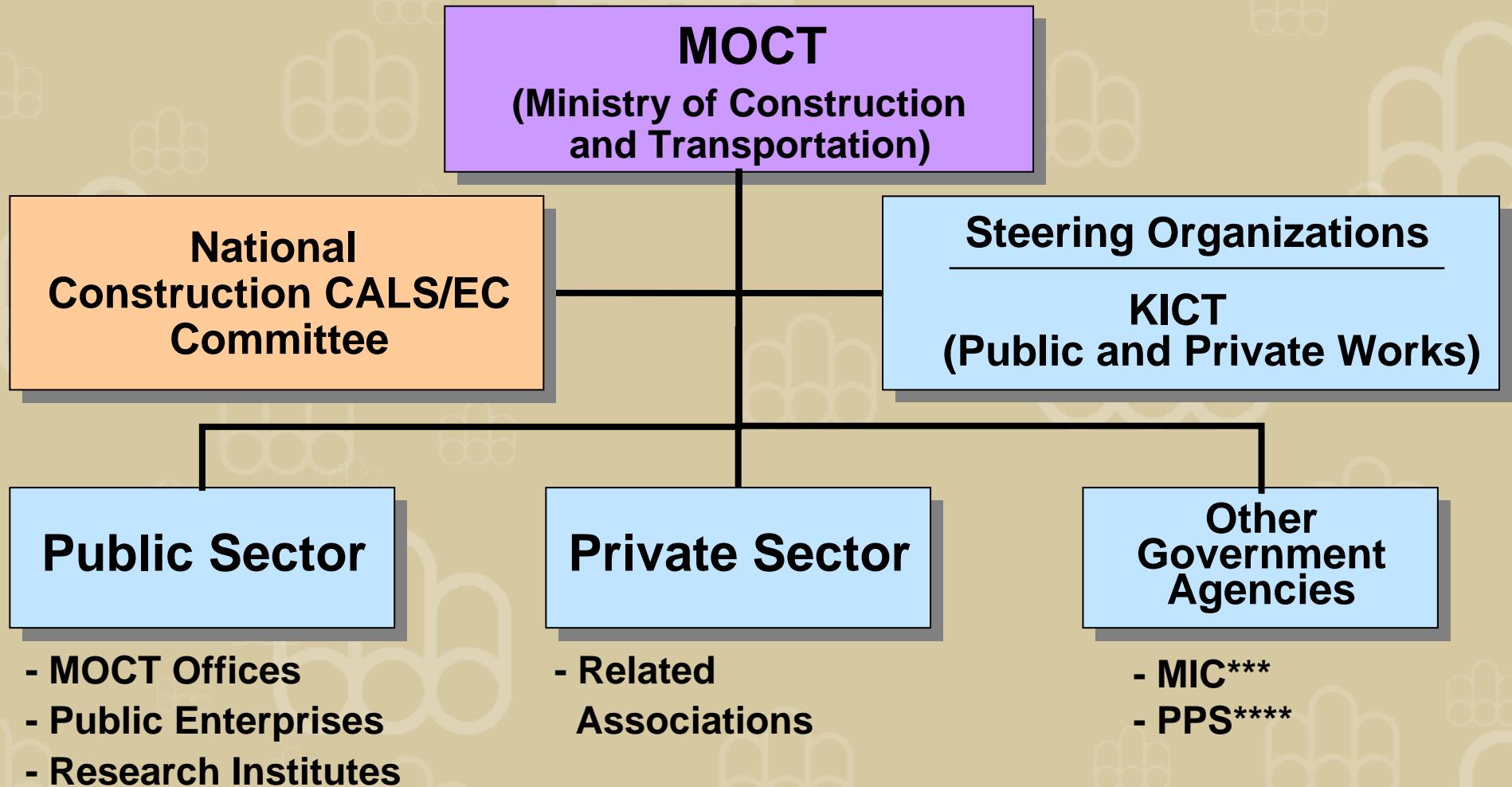
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. Construction CALS in Korea





* KICT: Korea Institute of Construction Technology
** KCCA: Korea Construction CALS Association
*** MIC: Ministry of Information and Communication
**** PPS: Public Procurement Service

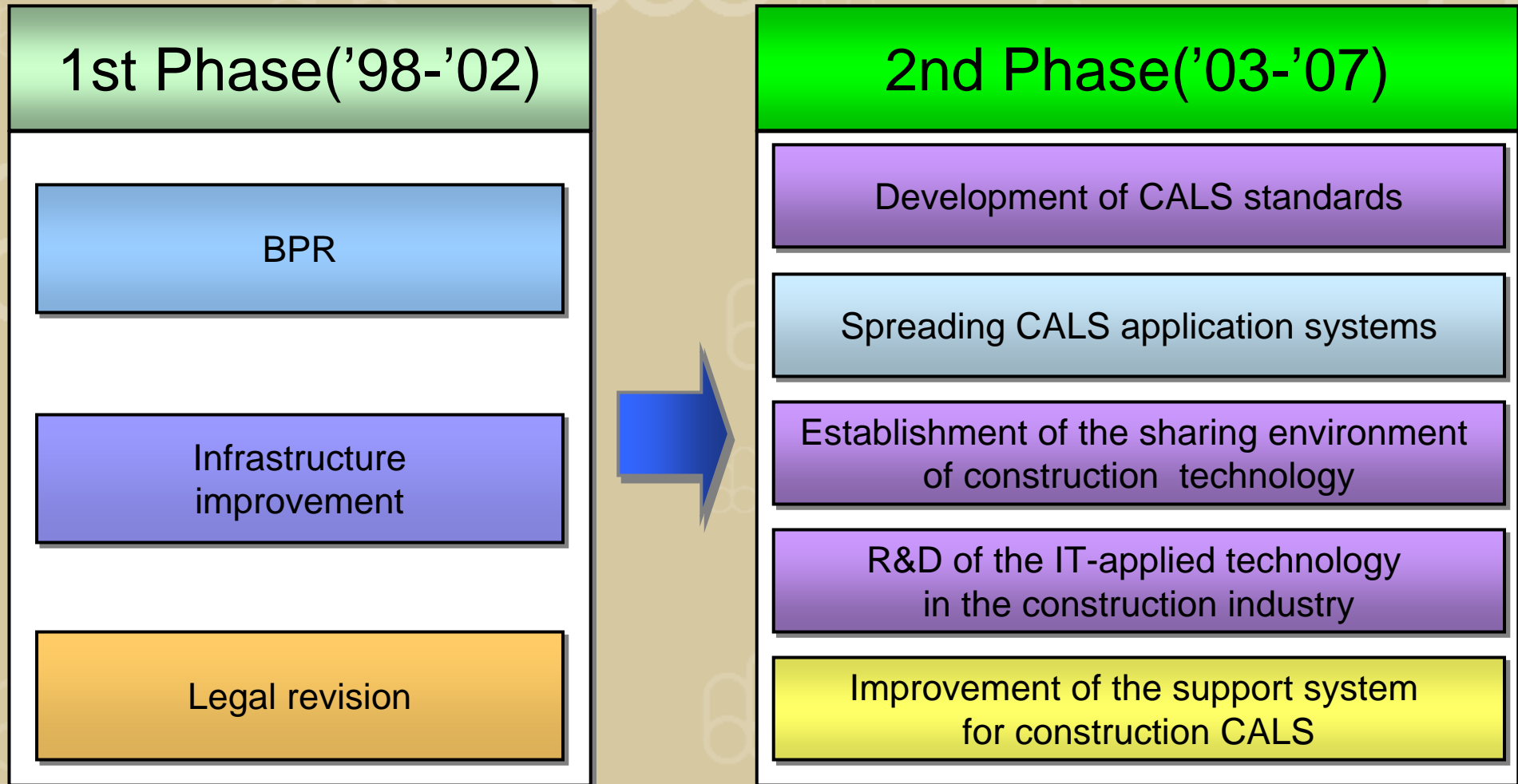


* **KICT**: Korea Institute of Construction Technology
** **MIC**: Ministry of Information and Communication
*** **PPS**: Public Procurement Service

	1998	1999	2000	2001	2002
BPR*		Administrative Services			
			Electronic Procurement		
			Construction Project Management		
			Construction CITIS**		
				Infrastructure Management	
Infrastructure Improvement		CALS Standards			
Legal revision		Re-establishment of Organizations & Regulations			
		Education and Public Relations			

* **BPR** : Business Process Re-engineering

* **CITIS** : Contractor Integrated Technical Information Services



1. Development of CALS Standards

- Classification systems for construction information
- Electronic document standards
- Drawing information standards
- Standards for interoperability

2. Spreading Construction CALS Application Systems

- Construction project management systems
- Construction CITIS
- Infrastructure management systems
- Construction authorization and permission
- Operation and management of construction CALS systems and enhancement of their functions

3. Establishment of the Sharing Environment of Construction Technology

- Establishment of knowledge management network for construction technology
- Development of database for EVMS*
- Development of construction CALS portal

* **EVMS** : Earned Value Management Systems

4. R&D of the IT-applied Technology in the Construction Industry

- Development of core information technology for construction sites
- Development of automation and robot technology for construction sites
- Development of mobile and ubiquitous application technology
- Development of virtual reality and multimedia application technology
- Development of product models

5. Improvement of the Support System for Construction CALS

- Establishment of construction e-BIZ infrastructures
- Education for construction IT
- Support for private sectors
- Change related laws and regulations

- Establishment of the third phase plan for construction CALS
- Expansion and operation of construction CALS
- Enhancement of the functions of construction CALS systems
- Continual development of construction CALS standards



Thank you

