

**The 4th Asia-Pacific Regional Forum on Smart Sustainable  
Cities and e-Government 2018  
4-6 July 2018, Thanh Hoa city, Viet Nam**

**Smart Cities and e-Government  
in Korea**

**Gyu Myoung Lee**

ITU-T Q4/20 Rapporteur, FG-DPM Chair

LJMU UK/ KAIST Korea

[gmllee@kaist.ac.kr](mailto:gmllee@kaist.ac.kr)



# Smart Cities in Korea



# Smart City Seoul

New Connectivity, New Experience



Social City



Diginomics



Digital Social Innovation



Global Digital Leadership

Citizen-oriented Digital City

<b>Citizen-driven Digital Governance</b>
Participation
Cooperation

Digital Economy

<b>Business Incubation</b>
Digital Platform
Convergence

New Citizen Experience

<b>Solving Urban Challenges with Digital Tech.</b>
Improving Citizen Value

Global Digital Leading City

<b>Infrastructure</b>
Digital Business Ecosystem
Digital Events



# Seoul Open Data Plaza

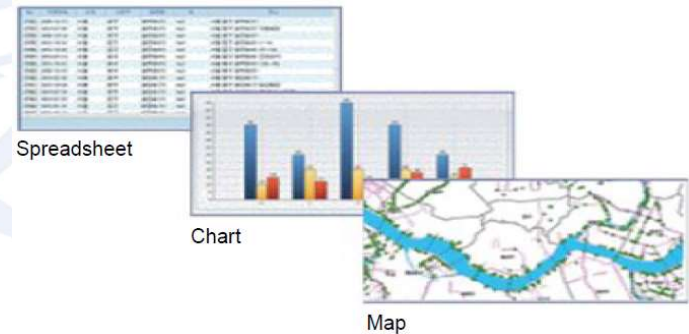
The screenshot shows the Seoul Open Data Plaza website. At the top, there is a logo and the text '서울 열린데이터 광장' (Seoul Open Data Plaza). Below this are three main navigation tabs: '오픈데이터' (Open Data), '데이터서비스' (Data Service), and '참여·소통' (Participation & Communication).

The main content area is divided into several sections:

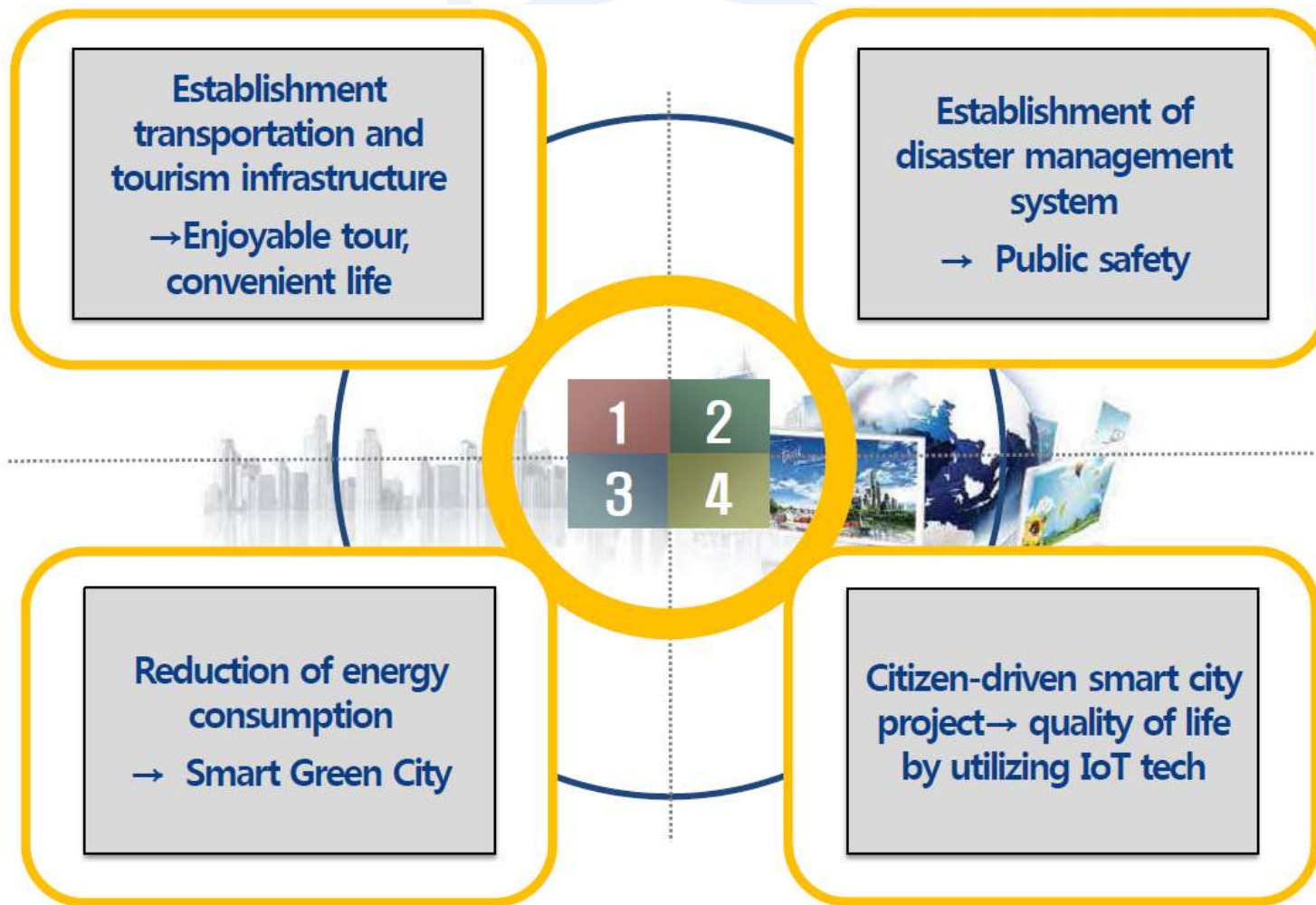
- 활용 갤러리 (Usage Gallery):** A section with the text '시민여러분이 만든 다양한 사례들 공유해주세요' (Please share the various cases created by citizens).
- 열린데이터를 검색하세요 (Search Open Data):** A search bar with a magnifying glass icon.
- 인기검색어 (Popular Search Terms):** A list of search terms with their respective counts:
 

1	통식점	- 0
2	지하철	- 0
3	범죄	- 0
4	유동인구	- 0
5	행정정보	- 0
6	상수도	- 0
- 시각화 서비스 (Visualization Service):** A section with a plus sign icon, containing four data visualization examples:
  - 통근 통학시 교통수단 ...**: A bar chart showing transportation modes for commuting and school.
  - 한국사학사 연구 사례 1**: A network graph showing research cases in Korean history.
  - 지하철 호선별 이용객 변화**: A line chart showing passenger changes by subway line.
  - 서울시 예산 변화 (기...**: A bar chart showing budget changes in Seoul.

Open **4,700 dataset** in **10 areas** such as general administration, culture & tourism, public health, and environment



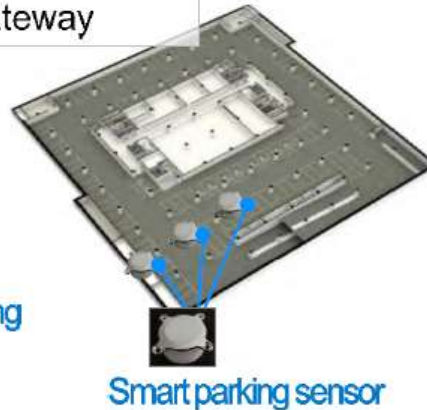
# Smart City **Busan**



# Busan – Smart Parking

## 1 Implement Infrastructure

- Installation of sensor, video camera and gateway



## 2 Search for lots

- Searching for the real-time information on available parking lot - location, distance, fee

Device for Android, iOS



## 3 Linkage with navigation

- linkage with Tmap
- Linkage with applications without input the destination



## 5 Monitor the parking lot

- Real-time video information
- Battery information for parking sensor



## 4 Inform the estimated parking fee

- Push service for the setting time/estimated fee
- Automated calculation with parking fee DB



# Songdo – Public transportation information providing service & fusion

### 1 Bus Information Provision

- Bus arrival
- Expected arrival
- weather
- Government promotion
- event

### 2 Connecting the subway

- Subway information provision near the bus stop
- Bus stop information provision at station

### 3 Multilingual Information Provision

버스정보  
잠시후 도착 버스

91	1분 후 도착	92	3분 후 도착
909	5분 후 도착	6405	10분 후 도착
1301	15분 후 도착		

### 4 BIT display monitoring and surveillance in shelter

BIT display evolution

Shock sensing monitoring

Connecting Call112 Center

- Connecting 112 center and Michuhol call center



### 6 Automatic power saving at night

### 5 Wireless Internet Provision(plan)

# Anyang - Pattern analysis of suspect vehicle through personal data



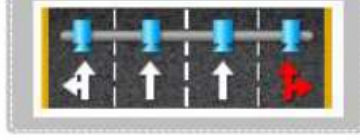
## 1 Identification Number Plate Recognition



## 2 Warning



## 3 Getaway route Recognition



## 4 Tracking vehicle



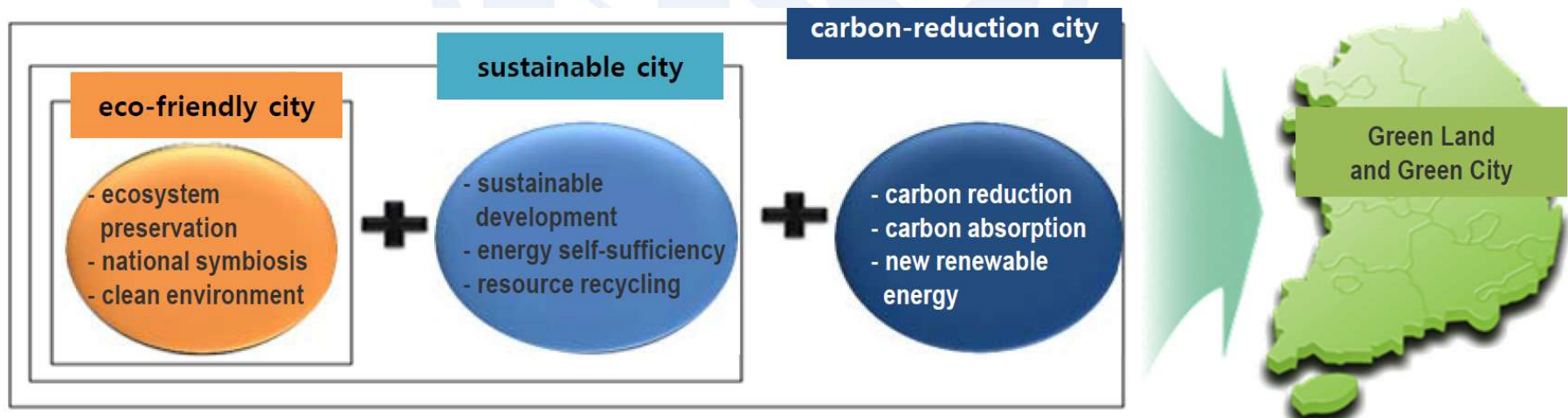
## 5 Arrest of Criminals





# Low-Carbon Green City

- A city designed to reduce potential carbon emissions and absorb emitted carbon to actively respond to climate change issues
- **Green City Projects in Korea** commissioned by central government and conducted by municipal governments are 9 projects in total



# Low-Carbon Green City - **Wonju**



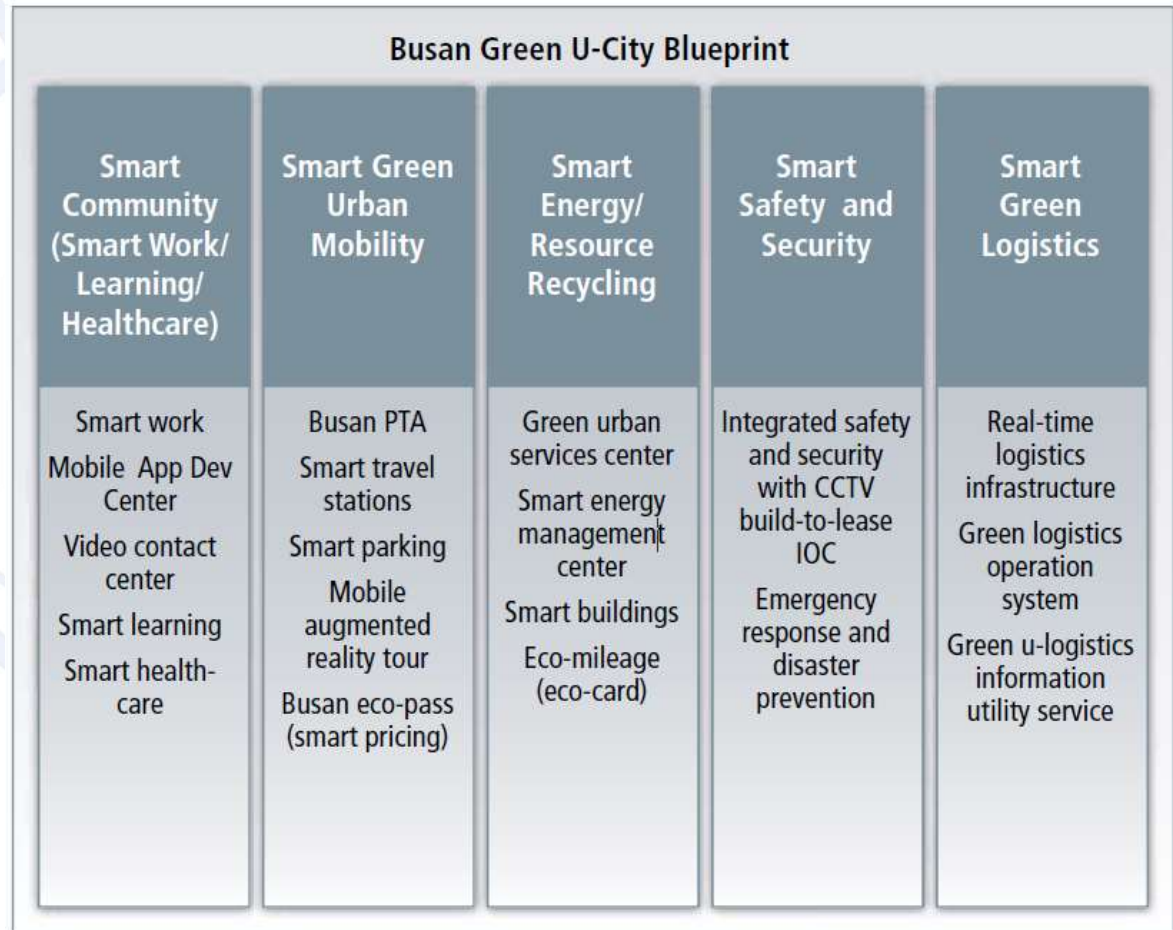
# Low-Carbon Green City - Busan

using a **cloud-based infrastructure** delivered by a successful collaboration between the local government, the global technology supplier, Cisco, and South Korea's largest telco, KT.

Population: 3.6 million people in Busan, 4.4 million in metropolitan area

Area: 760km<sup>2</sup>

Gross Regional Domestic Product (GRDP): USD 50 billion



# Sejong, Busan into Smart Cities

A meaningful platform where all the technologies and services born from the fourth industrial revolution can be realized.

- Test beds for the realization of smart cities by 2023
  - Sejong (the country's administrative hub)
  - Busan (the southeastern port city)
- Various innovative technologies
  - Ranging from autonomous vehicles to facial recognition systems



Press Release: January 2018



# World Cities Project



**World Cities**

EU – Third Countries Cooperation on  
Urban and Regional Development

- **Busan, Seoul, Suwon and Gangju**  
– ‘triple-helix cooperation’ between governments,  
research and business



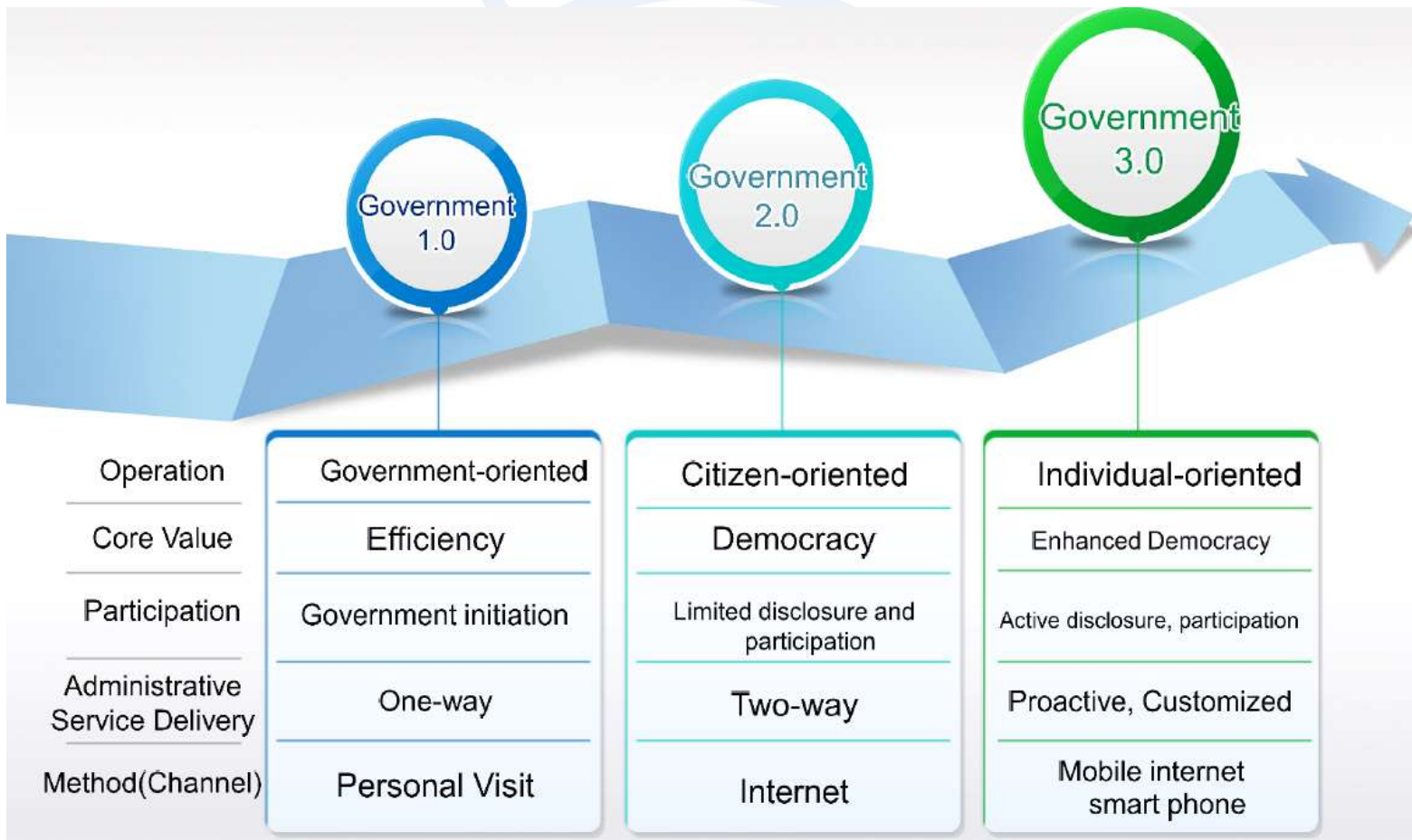
Press Release: March 2018



# e-Government of Korea



# The evolution of Government



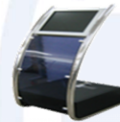
# Government 3.0 of Korea





# Smart Government in Korea

Realize a world-best e-Government that works for the people



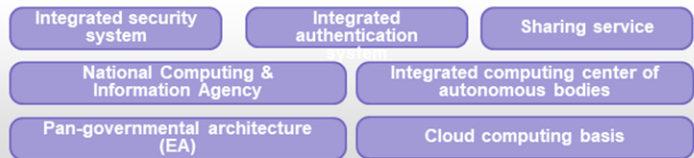
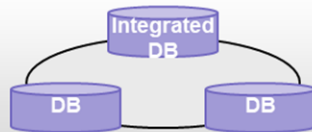
User-oriented multiple channel integration service

Information disclosure/Public participation

## Smart-work business environment



## e-Government infrastructure



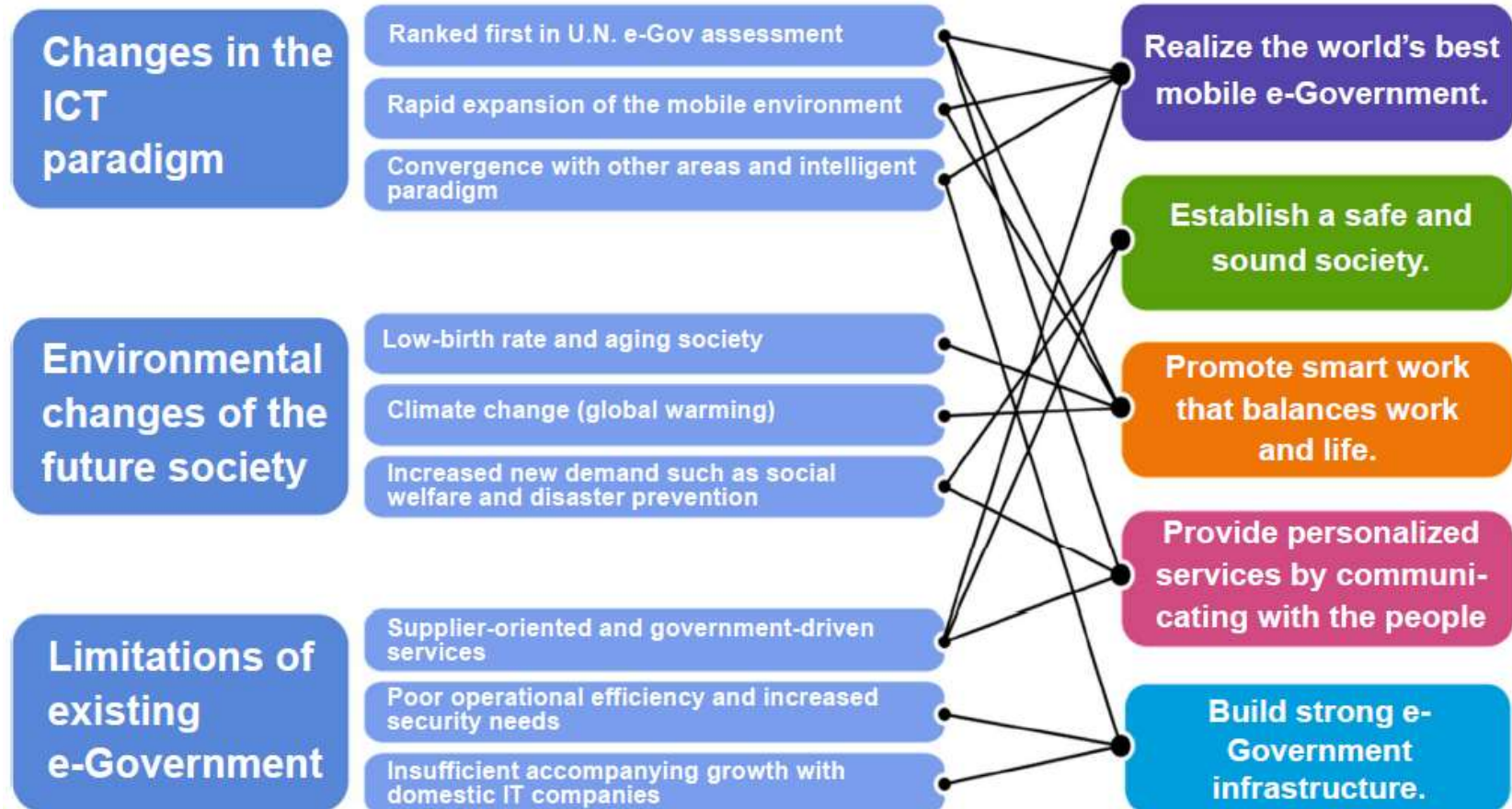
## Link with the related agencies



Collaboration/  
Information sharing



# Five Agendas



# e-Government Best Practices

- Government Integrated Data Center
- Government Information Sharing
- On-Nara Business Process System
- E-Procurement: KONEPS
- Online Civil Services: Minon24
- Information Network Village: INVIL



# Government Innovation Master Plan

- **Vision** – Realizing a Government of the People
- **Goal** – Promote the Public Interest through Citizen Participation and Trust-Building



Published in March 2018



# Key commitments

## Social Value

1. **REFORM** the financial systems to pursue social values.
2. **ESTABLISH** personnel, organizational and performance evaluation systems that make a difference in citizens' lives.
3. **WORK** with citizens to make policies that meet their needs.

## Participation and Cooperation

4. **PURSUE** an open government, fully disclosing information and sharing resources with the public.
5. **BREAK DOWN** silos for the government to work better.

## A Trustworthy Government

6. **WORK** toward a fair and transparent public service that citizens want.
7. **CARRY OUT** citizen-centered innovation in four areas of data, creativity, regulatory reform and zero waste of resources.



# Innovation in Government

- #1 – A shift toward a government which improves **the quality of people's lives**
- #2 – **Participatory democracy** where citizens are engaged in policymaking
- #3 – **Winning trust** from citizens through movement innovation

## Korea e-Government Master Plan 2020



