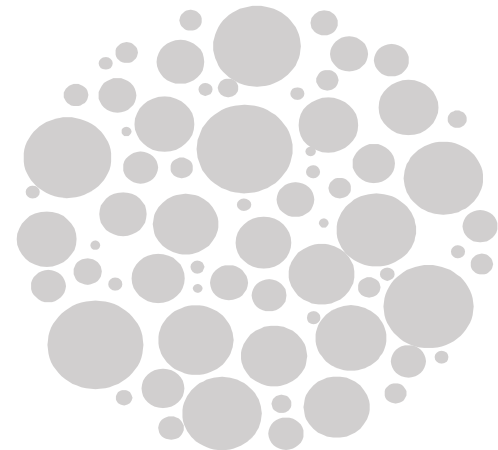
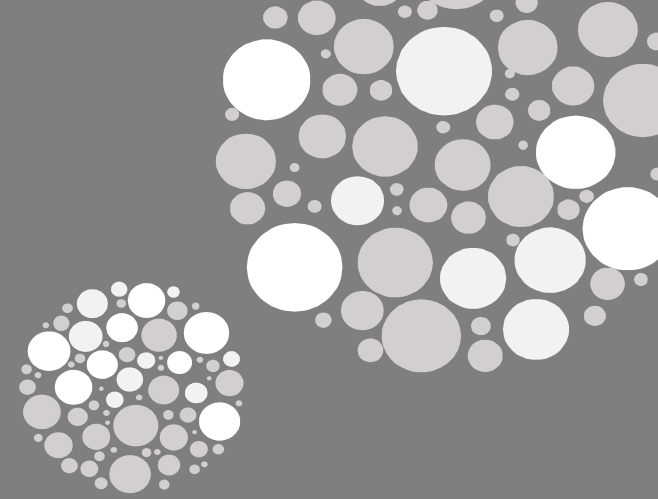


LG CNS

# Smart Transportation and e-Government Projects





WHO WE ARE  
**About LG CNS**

# LG CORP. OVERVIEW

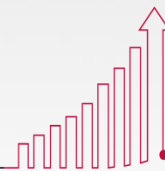
FOUNDED

1947

TOTAL  
SALES

\$130

Billions



CHAIRMAN &  
CEO

Bon-Moo Koo

EMPLOYEES

230,000+

GLOBAL  
LOCATIONS



280 Overseas  
Subsidiaries



# LG GROUP BUSINESS SEGMENTS



## Electronics

We develop world class products through innovative technologies, leading the global electronics industry

- LG Electronics
- LG Display
- LG Innotek
- ⋮



## Chemicals

Our business philosophy is "making essential products for customers"

- LG Chem
- LG Hausys
- LG Household & Health Care
- ⋮



## Telecommunication and Services

We provide customers with our services at anytime and anywhere for their smarter communication and living

- LG CNS
- LG U+
- LG International
- ⋮

# LG CNS OVERVIEW



**CEO**

Young-Shub Kim

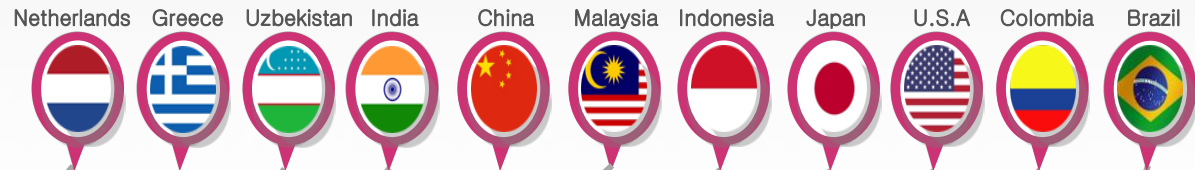
**Employees**

9,000+

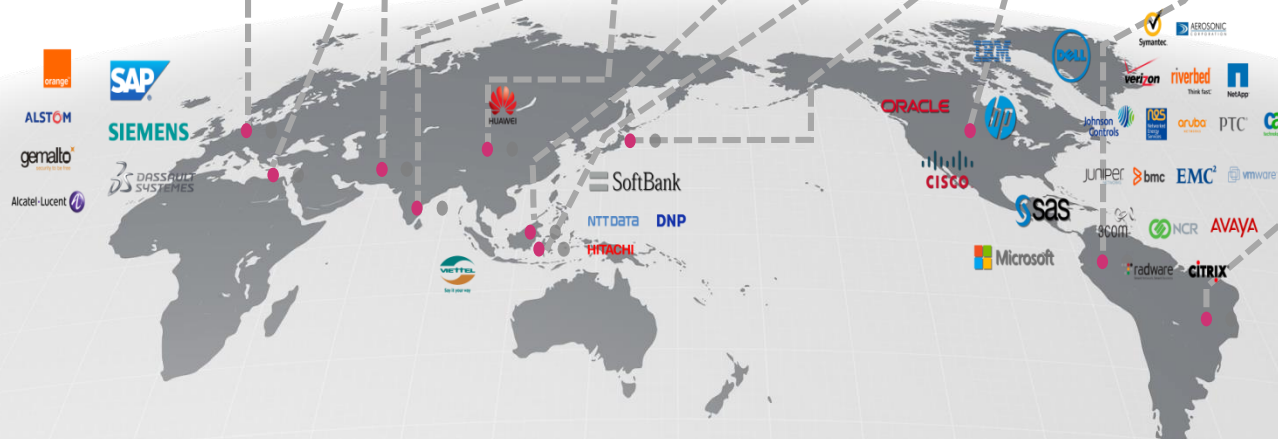
**Annual Sales**

\$3.2 Billions

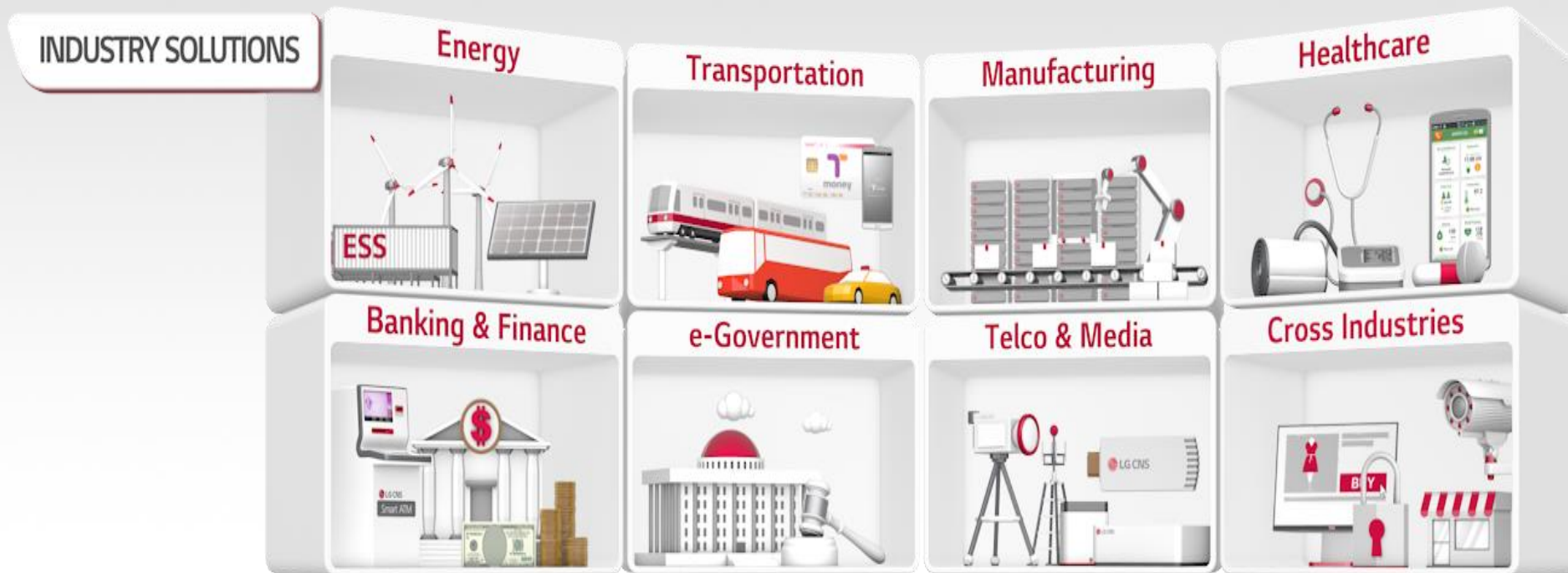
## Global Locations



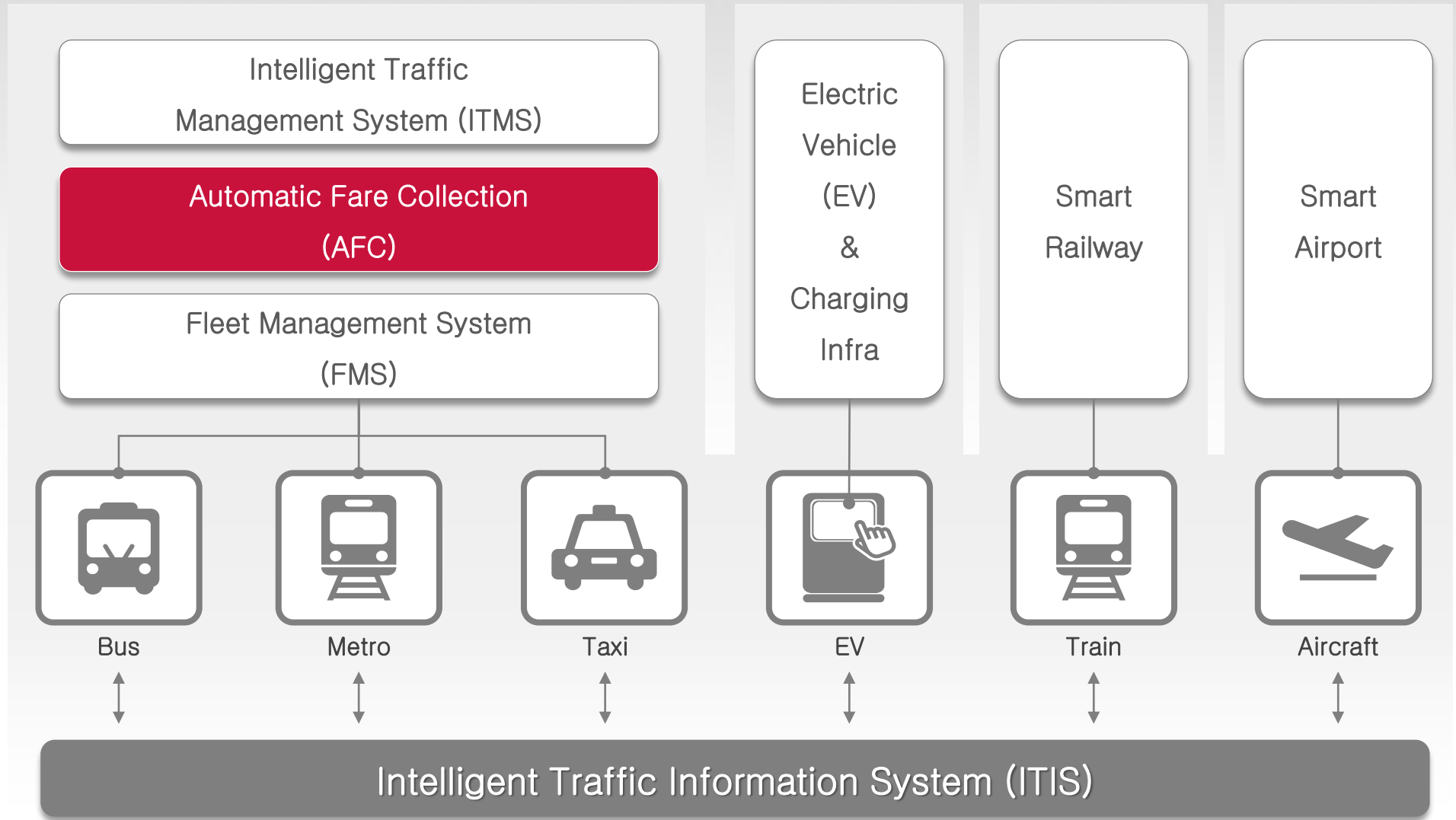
## Global Partners

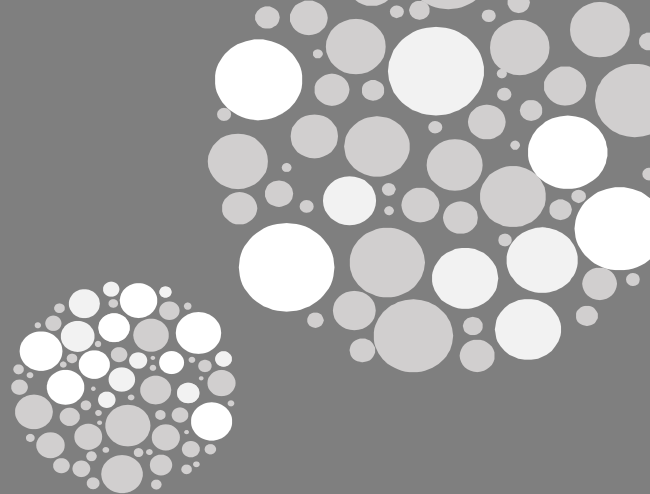


# LG CNS BUSINESS PORTFOLIO



# SMART TRANSPORTATION SERVICE



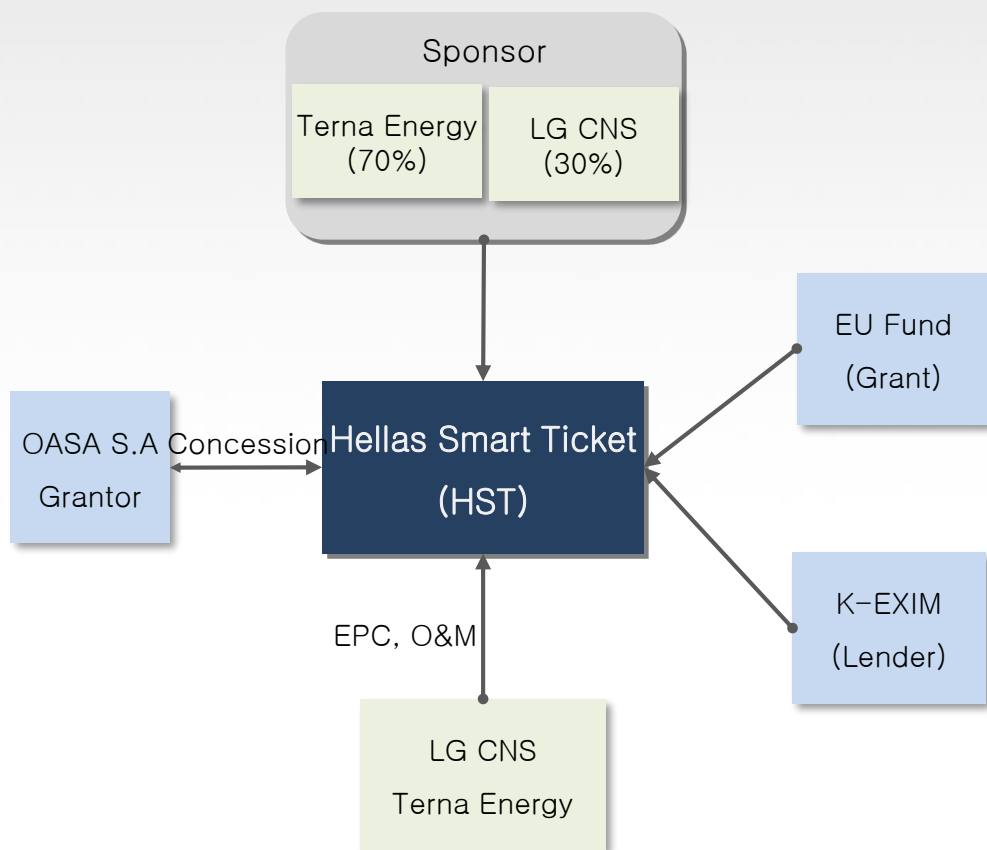


Athens Project  
**Athens AFC Service**



# PROJECT SUMMARY

## Project Structure



## Project Description

- The LG CNS–Terna consortium will build, operate, and maintain an integrated automatic fare collection system for the city of Athens, Greece.

Category	Remarks
Purchasing Authority	OASA S.A. (Athens Urban Public Transport Organization)
Sponsor	Terna (70%), LG CNS (30%)
Project Period	12.5 Years (including 31-month implementation)
EPC	LG CNS, Terna Energy
O&M	LG CNS, Terna Energy

# PROJECT SUMMARY

## Project Area

- The new AFC system will cover the urban Athens area, Suburban Railway to the Airport, and Suburban Railway connecting Piraeus and Agios Stefanos



## Transport Description



1,750

Thermal Bus

250

Trolley Bus

21

Suburban Bus Lines



61

Metro Stations

48

Tram Stations

1

Airport Rail (Aioport–Kiato)

1

North–South Rail  
(Piraeus–Aghios Stefanos)



1Bil/Yr

Ridership Estimated



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### Cost Savings Estimation for 10 Years of Operation

---



€13M savings on operating cost for changing to electric ticketing system



€ 100M savings from decrease of evasion

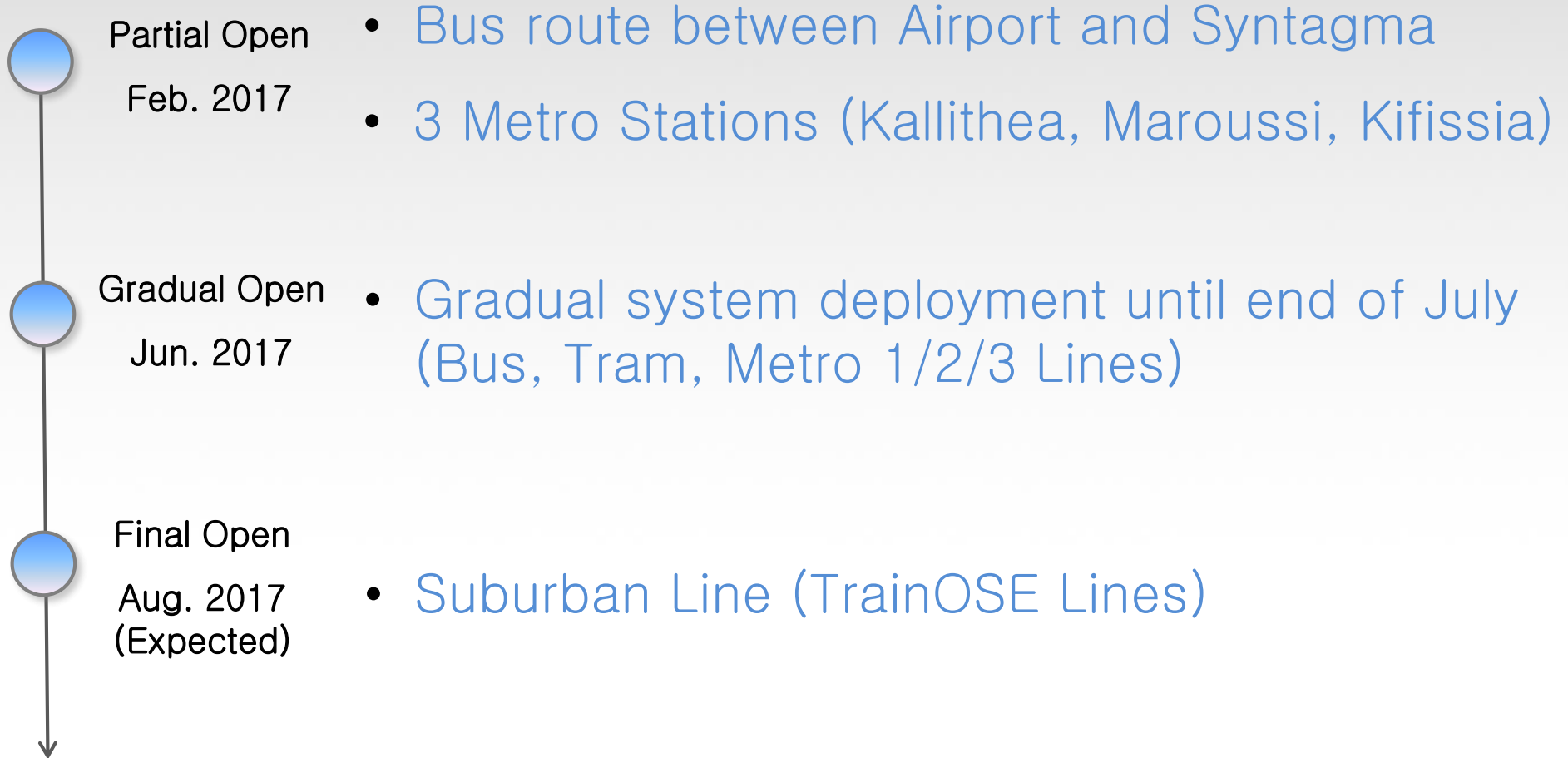


€ 1.2M savings from facilities maintenance



€ 0.6M savings from transport data analytics

# PROJECT OPENING





# LG CNS AFC Experience

# MULTI-MODAL & MULTI-FUNCTIONAL FARE COLLECTION SERVICE

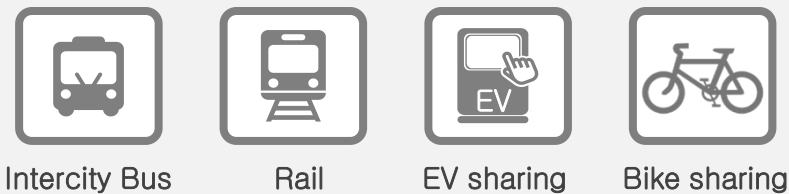


## Public Transportation

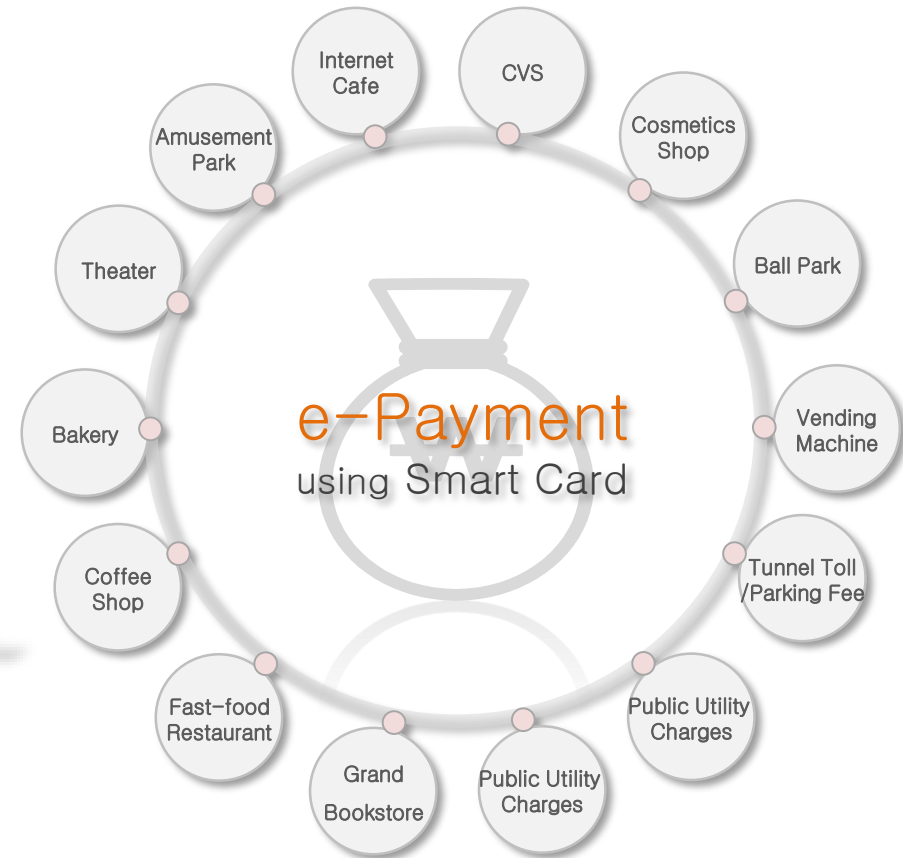
Initially ...



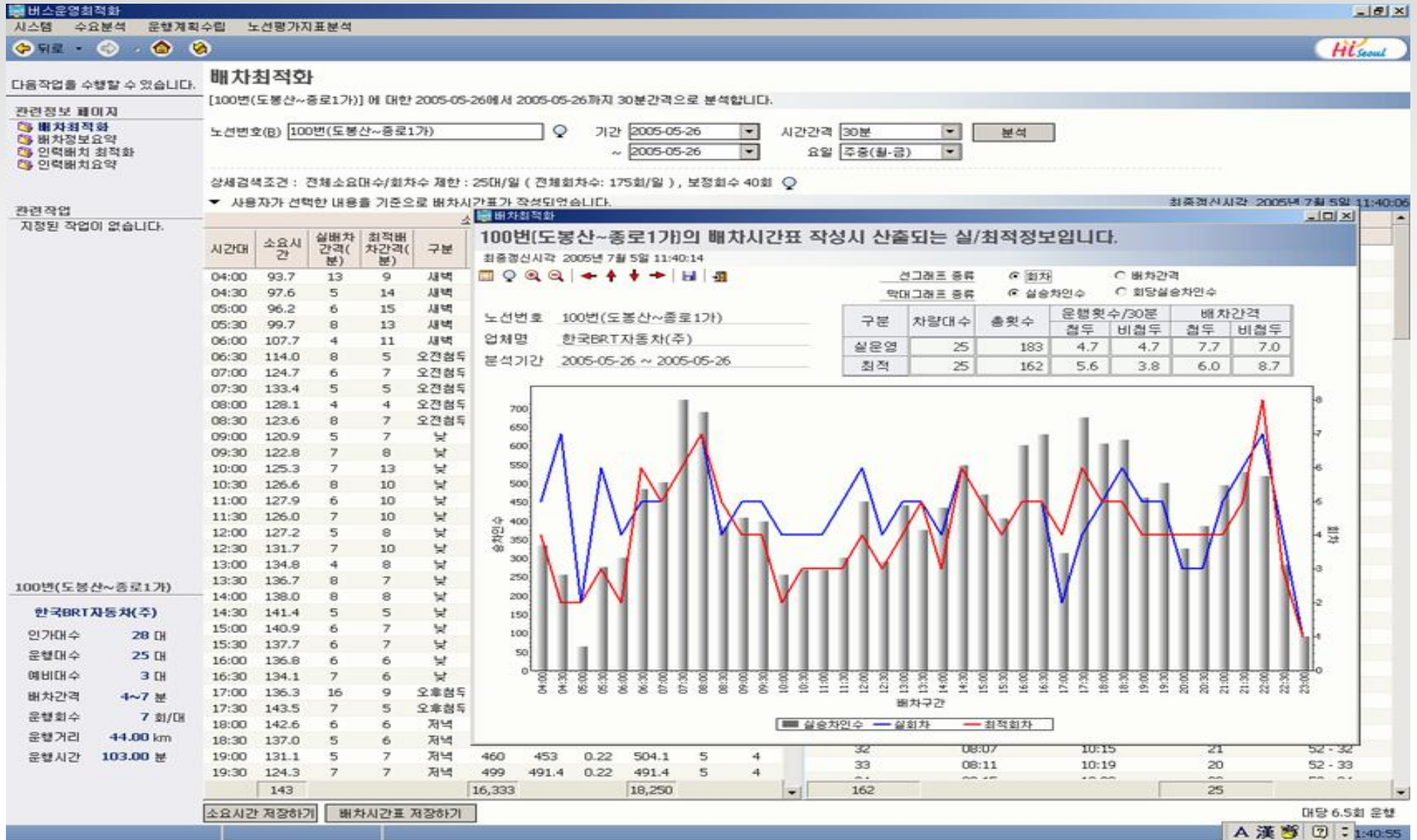
Modal expansion



## Non-transportation

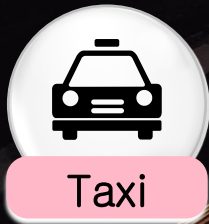


# OPTIMAL BUS DISPATCH





# Megacity Experiences in Seoul, Korea





# Megacity Experiences in Seoul, Korea

## Business Scale

**8,900 +**

Metro Gate

**9,500 +**

Bus

**72,000 +**

Taxi

**102,000 +**

Micropayment

**30 Mil+**

Transaction /day

**12 Mil + USD**

Fare Settlement /day



# Megacity Experiences in Bogota, Colombia

## Business Scale

- Target: 12,000 Buses+, 39 BRT stations

## Project Duration

- 24+ months of Implementation
- 15 years of O&M afterward

## Solutions Applied

- LG CNS AFC & LG CNS FMS



## Business Scale


- Population : 450,000 +
- More than 230 buses and 150 distribution franchises

## Service Features

- Cloud based Service  
Settlement data is transferred back to the clearing center located at the Seoul headquarter

Megacity Experiences  
in Wellington, New Zealand

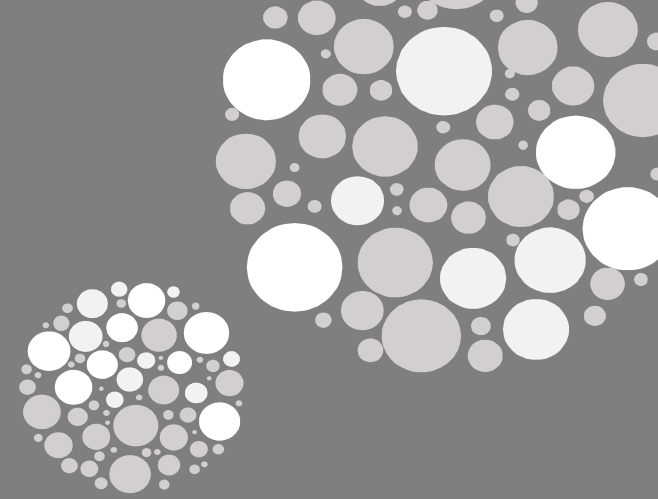


A photograph showing a man and a woman standing on a bus. The man, in the foreground, is wearing a light-colored striped shirt and a backpack, holding a black smart card reader device. The woman, to his left, is wearing sunglasses and a dark jacket. They are both looking towards the camera. The background shows a city street with trees, a bus stop shelter, and other people. A semi-transparent grey box contains text on the left, and another semi-transparent grey box contains a title and a list on the right.

## Megacity Experiences in Kuala Lumpur, Malaysia

### Characteristics

- Each bus is equipped with payment, reload and issuing functionalities for smart card
- Expected to increase to 2,000 buses in 2 years



# LG CNS e-Government Solutions

## Business Domains

### Legislative & Executive

Immigration

e-Passport

Digital Library /  
National Archive

Finance /Tax

Customs /  
Procurement

Government  
Data Center

### Judicial

Intellectual Property

Land  
Corporate Registration

e-Court  
Case Management

Online  
Civil Petition

### Public

Meteorological  
Information

Postal Information

National Security &  
Social Safety

Smart School

Healthcare

Online Lottery

## Core Competency

### UNITED NATIONS E-GOVERNMENT SURVEY 2014 E-GOVERNMENT FOR THE FUTURE WE WANT

*No. 1 in the  
UN e-Government Survey*

2010	2012	2014
1. KOREA	1. KOREA	1. KOREA
2. USA	2. Netherlands	2. Australia
3. Canada	3. United Kingdom	3. Singapore

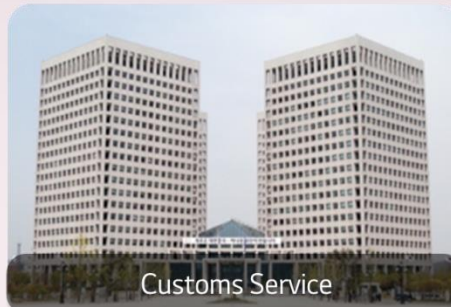
- Implemented **60%** of Korea's e-Government systems



# E-GOVERNMENT LG CNS

## Legislative & Executive

- Korea Immigration Service
- Ministry of Foreign Affairs, Korea
- Korea Customs Service
- Public Procurement Service, Korea
- National Digital Archive, Korea
- Government Internet Data Center(GIDC), Korea



## Judicial

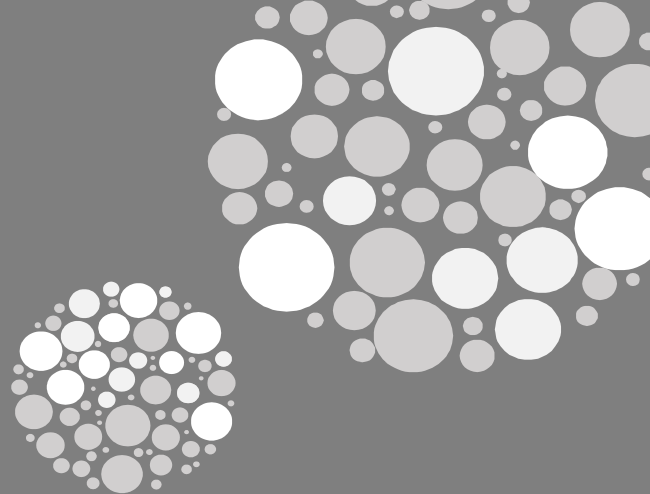
- Business Licensing Integrated System, Bahrain
- Intellectual Property Service, Mongolia
- Land Titling Computerization Project, Philippines



## Public

- National Crime Information Center, Indonesia
- Postal Services, Malaysia
- Cyber Security Center, Morocco
- Online Lottery System, Korea





Thank you