



oneM2M Smart Cities in Korea

SeungMyeong Jeong

Korea Electronics Technology Institute (KETI)

2022.12.15

oneM2M International Hackathon (2021)

6 countries and 26 teams

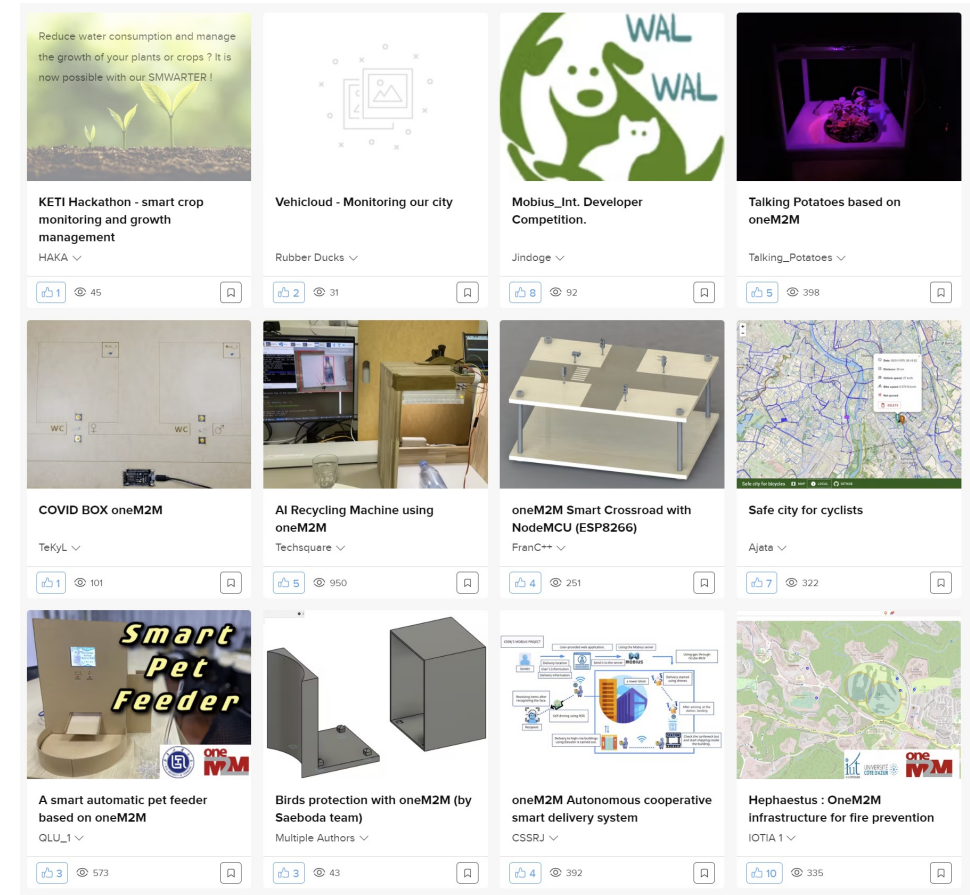
- Spain, France, India, China, USA and Korea

Award Winners

- (1st) CSSRJ, Korea, Autonomous cooperative smart delivery
- (2nd) PSU_1, USA – Cellular IoT irrigation system
- (2nd) QLU_1, China – A smart automatic pet feeder



awards ceremony (<https://youtu.be/WZw-Xb0NwNA>)



hackster.io projects

oneM2M International Hackathon (2022)

6 countries and 12 teams

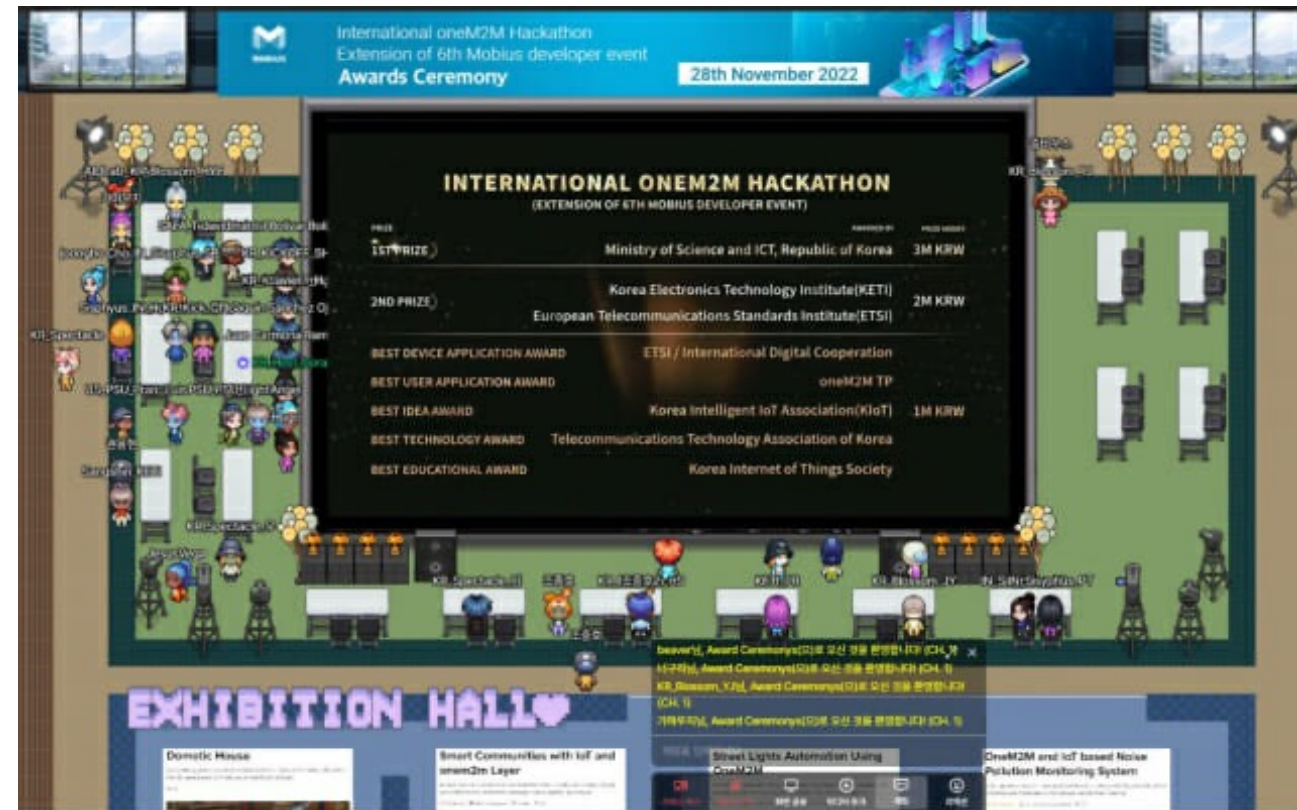
- Spain, France, India, Austria, USA and Korea

Award Winners

- (1st) Blossom, Korea, Fire monitoring system with Digital Twin
- (2nd) MIO:AID, Austria – Air Quality Monitoring System
- (2nd) Spectacle, Korea – Smart School Bus



Awards Ceremony



Awards ceremony at the metaverse platform



oneM2M Products in Korea

AIoT Handbook

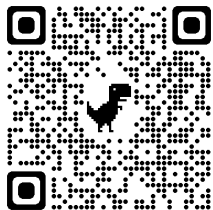
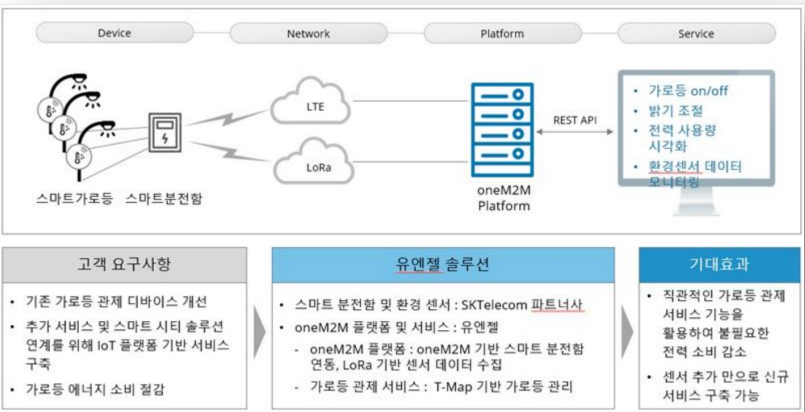
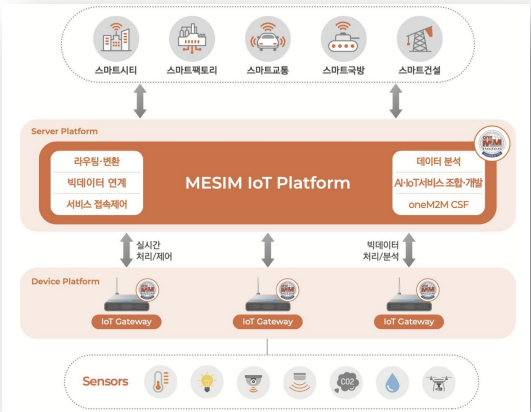
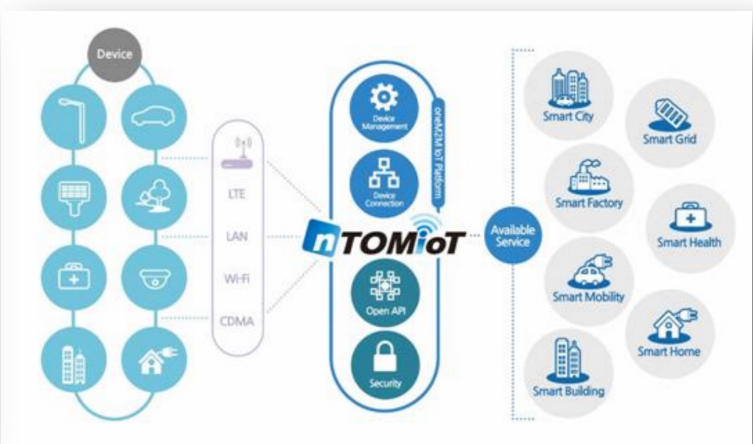
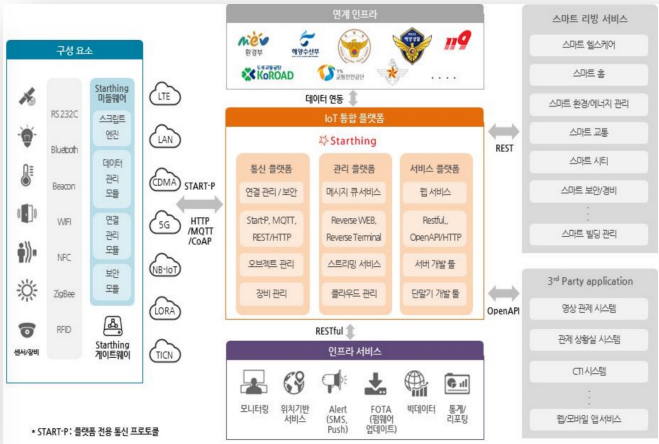


2023

The AIoT Products & Services of Major Korea Companies



nipa National IT Industry Promotion Agency Korea Intelligent IoT Association



ENG



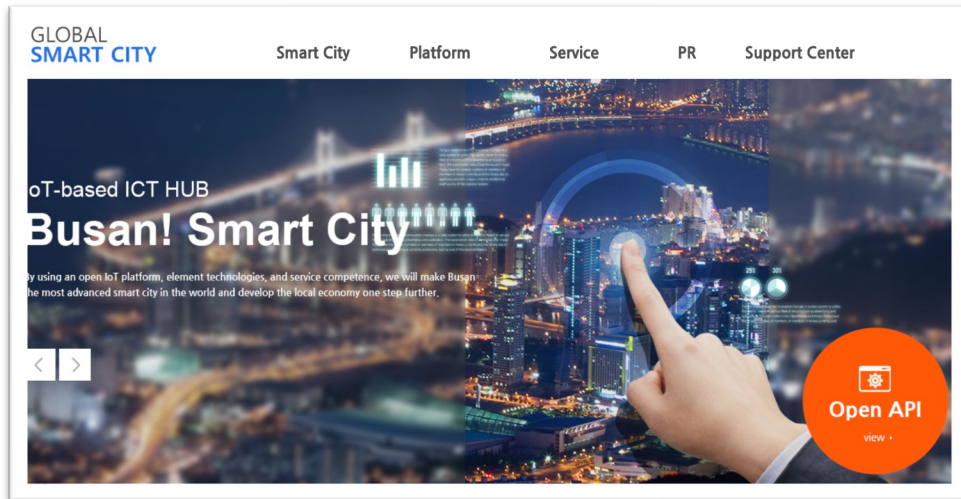
KOR

oneM2M frontier cities in Korea

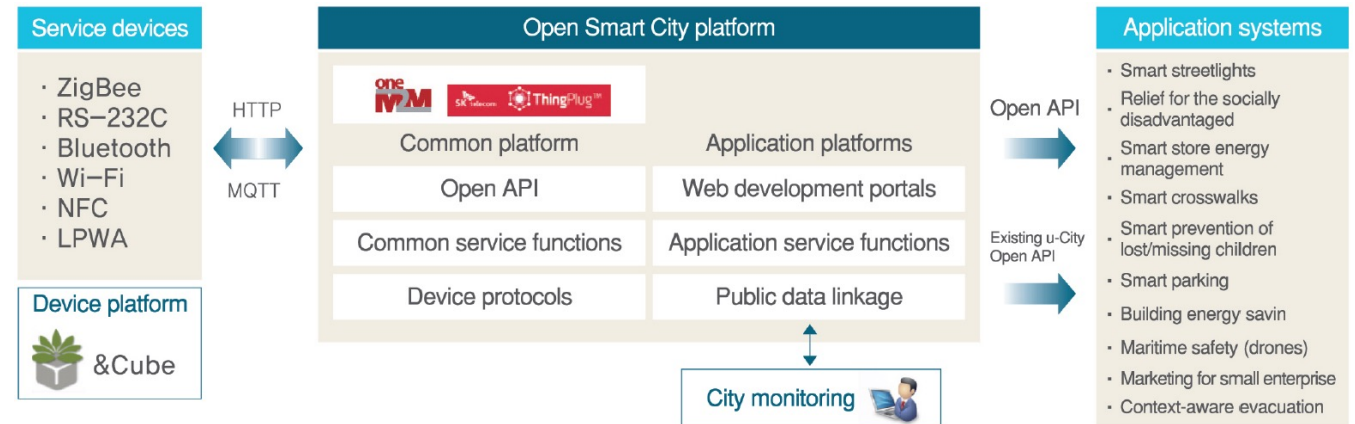
Busan Global Smart City

- Type: Pilot Project
- Duration: '15.01 ~ '17.12
- Coordinator: SK Telecom
- Testbed: Haewoondae-gu (district)

Testing prospective city services (26 services)					
COMMUNITY SAFETY			TRAFFIC IMPROVEMENT	URBAN LIVING	ENERGY CONSERVATION
Smart streetlights	Relief services for the socially disadvantaged	Smart prevention services for lost/missing children	Smart crosswalks	Proximity beacons for small business location-based marketing services	Smart building energy conservation
Smart Maritime safety service (utilizing drones)	Situation-aware evacuation information system	Smart safety service for subway/LRT platforms	Smart parking	Mist-spraying at traditional markets	Smart store energy management
Smart subway ventilation management system	Trial of Smart City disaster prevention system	Smart traffic safety service in school zones	Pedestrian-responsive smart directional information signage service	Testing of situation-aware Smart Home service	Development of urban energy-self-sufficient smart farm service, linked with Smart City platform
Secure location management service based on smart LED streetlights	Smart City platform-based safety advisory service for wet road conditions	SDDeveloping & testing 'soft' smart ship service platform for passenger safety & convenience, using wireless integrated IoT sensor technology	CCTV video analytics for traffic data collection & alternative route info	Social care services utilizing IoT smart mirrors	
Development of smart marine leisure services deploying IoT-based weather data collection devices			Enhanced image-based smart parking service	Visitor access control and monitoring system	



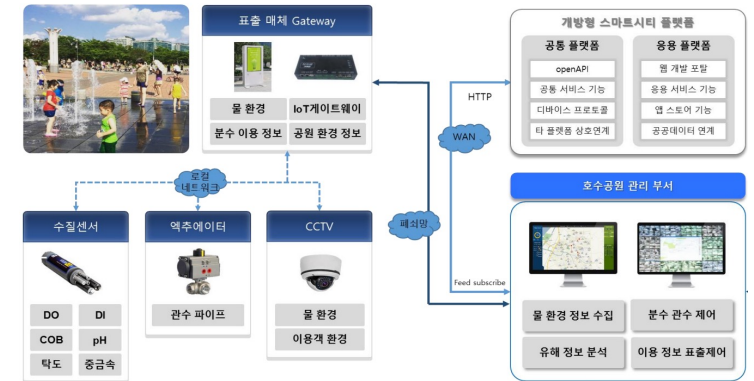
<https://k-smartcity.kr/english>



oneM2M frontier cities in Korea

Goyang - IoT Convergence Smart City

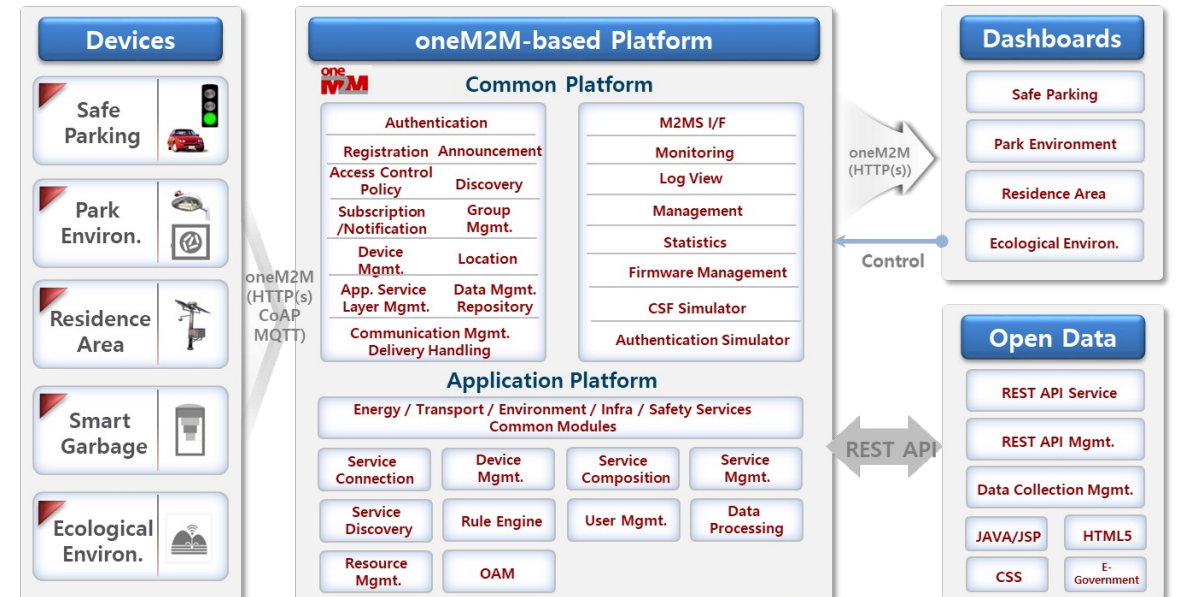
- Type: Pilot Project
- Duration: '16.01 ~ '17.12
- Coordinator: LG U+
- Environment-friendly Smart City Services



<Smart ECO City service>



<https://www.smartcitygoyang.kr/>

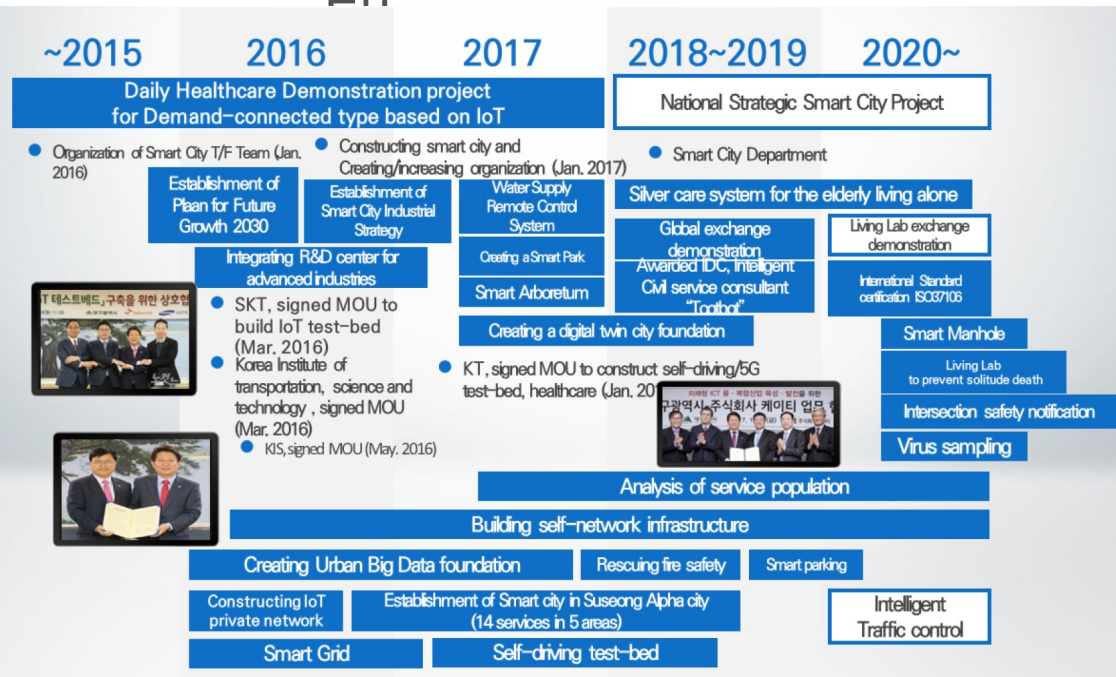


Commercial follow-ups

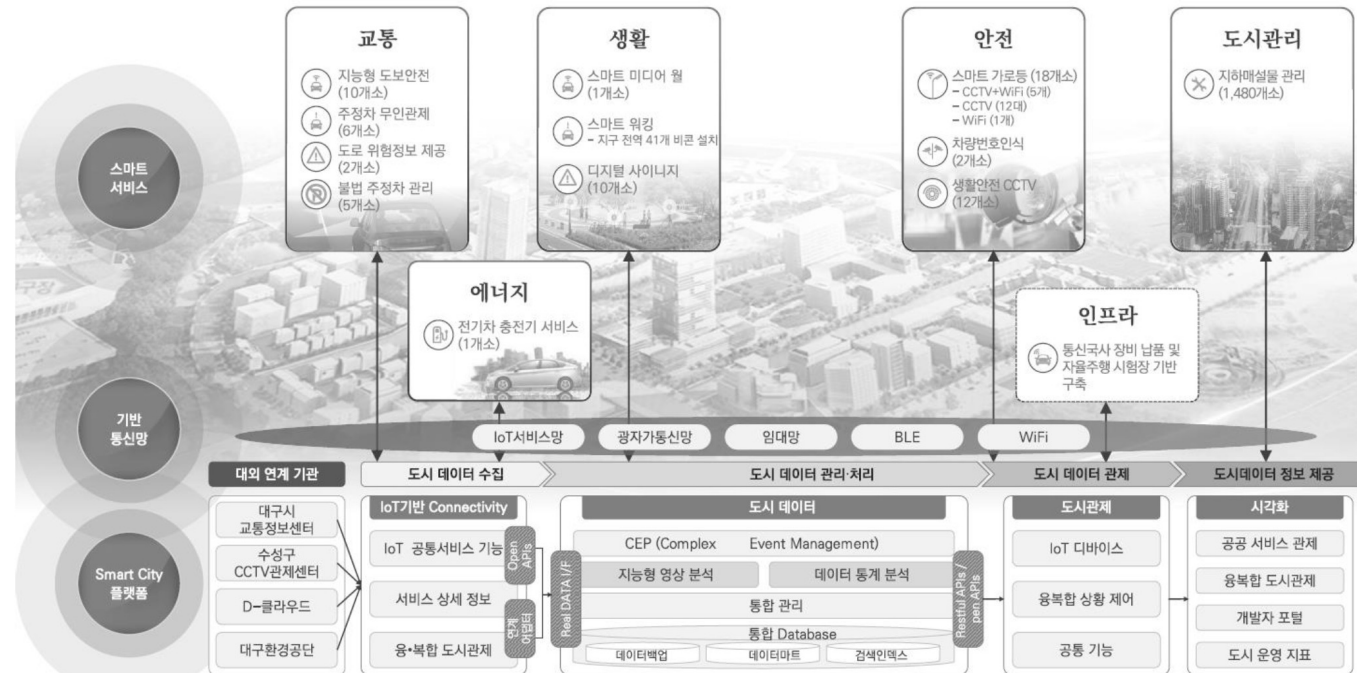
Daegu Suseong Alpha City ('18)

- Strategies of Daegu: Testbed & PPP
- Smart city systems have been deployed w/ and w/o IoT standards
- Services: pedestrian safety, illegal parking mngmt., smart walking, EV charging.

source: Daegu TechnoPark



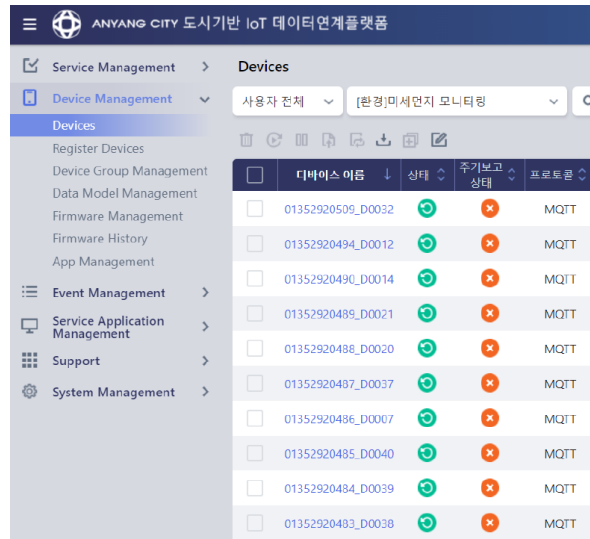
Daegu Smart City Roadmap



Commercial follow-ups

Anyang City ('21)

- Sensor data integration with oneM2M-based platform
- Platform features: service mgmt. device mgmt. event mgmt. application mgmt. system mgmt. (e.g. user, system resource)
- Services: smart street lights, water metering, fine dust monitoring, etc.
- PS-LTE and Cat. M1 networks



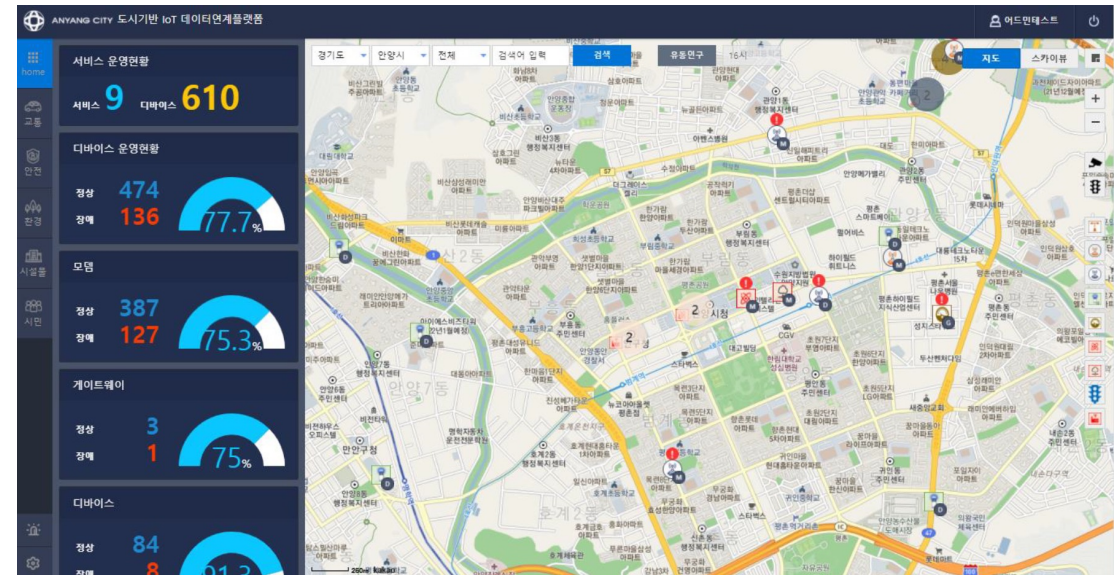
ANYANG CITY 도시 기반 IoT 데이터연계플랫폼

Service Management > Devices

Device Management > [환경/미세먼지 모니터링]

선택	디바이스 이름	상태	주기보고 상태	프로토콜
☐	01352920509_D0032	ON	OFF	MQTT
☐	01352920494_D0012	ON	OFF	MQTT
☐	01352920490_D0014	ON	OFF	MQTT
☐	01352920489_D0021	ON	OFF	MQTT
☐	01352920488_D0020	ON	OFF	MQTT
☐	01352920487_D0037	ON	OFF	MQTT
☐	01352920496_D0007	ON	OFF	MQTT
☐	01352920485_D0040	ON	OFF	MQTT
☐	01352920484_D0039	ON	OFF	MQTT
☐	01352920483_D0038	ON	OFF	MQTT

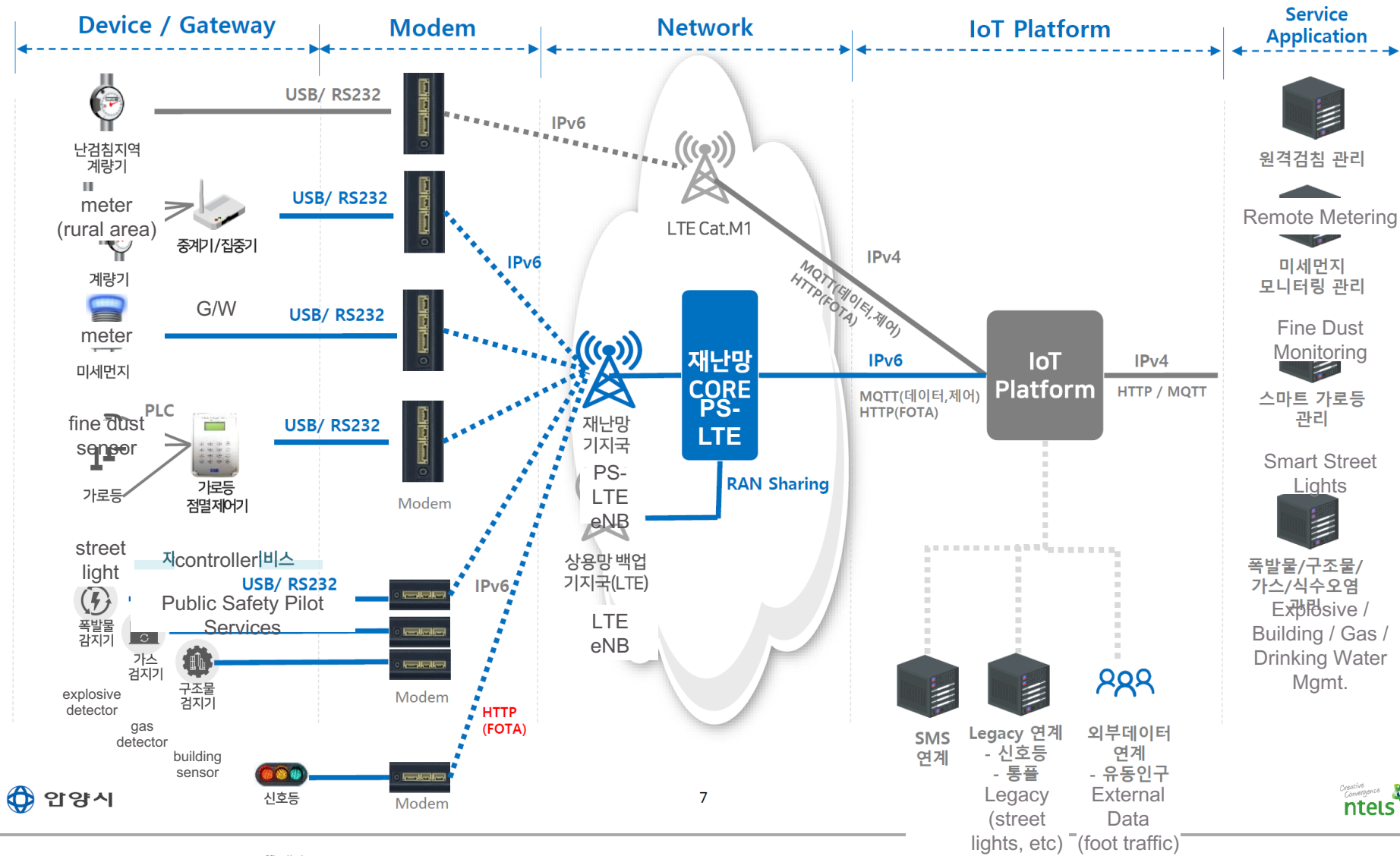
Management Portal



GIS Monitoring Application

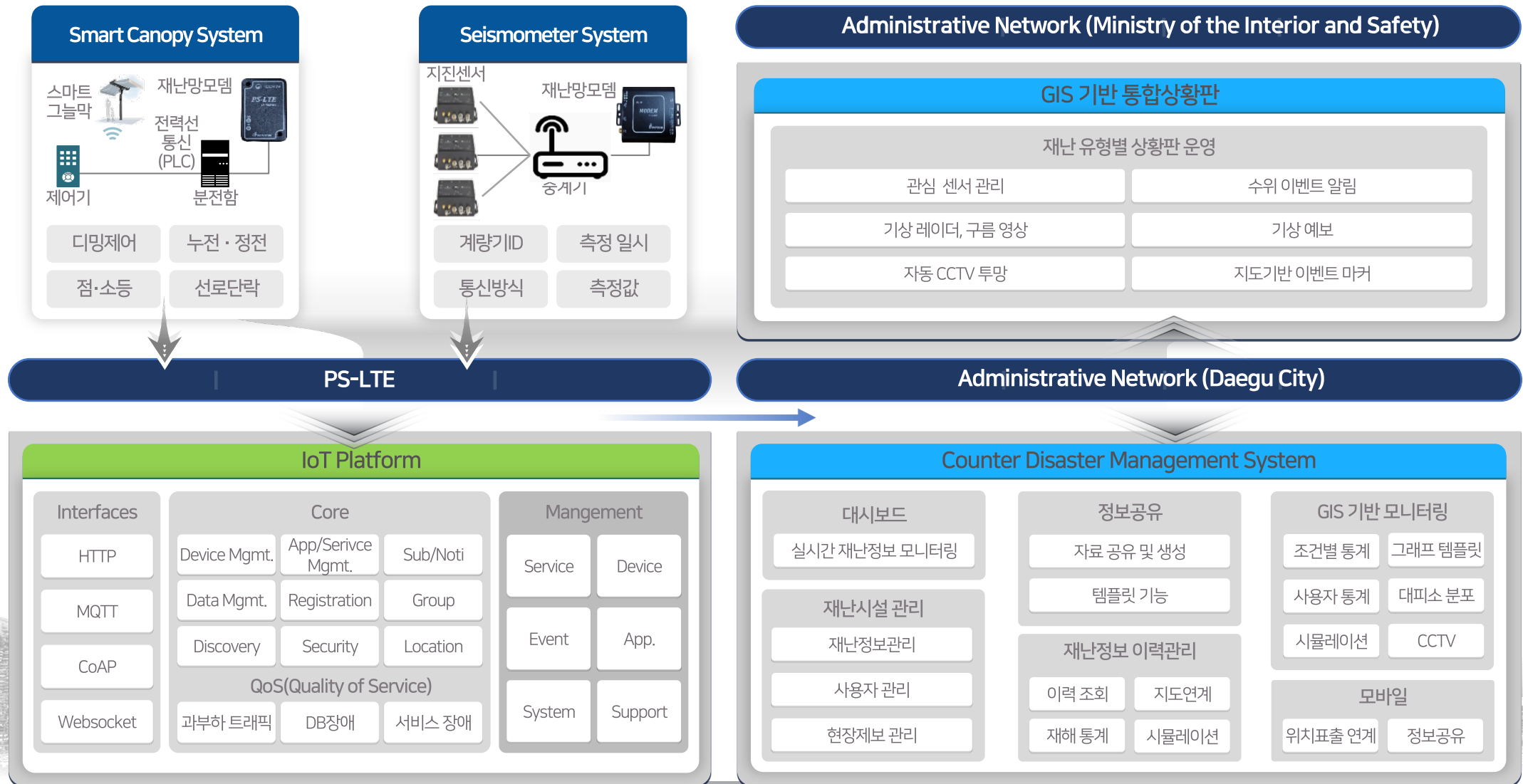
Commercial follow-ups

Anyang City ('21)



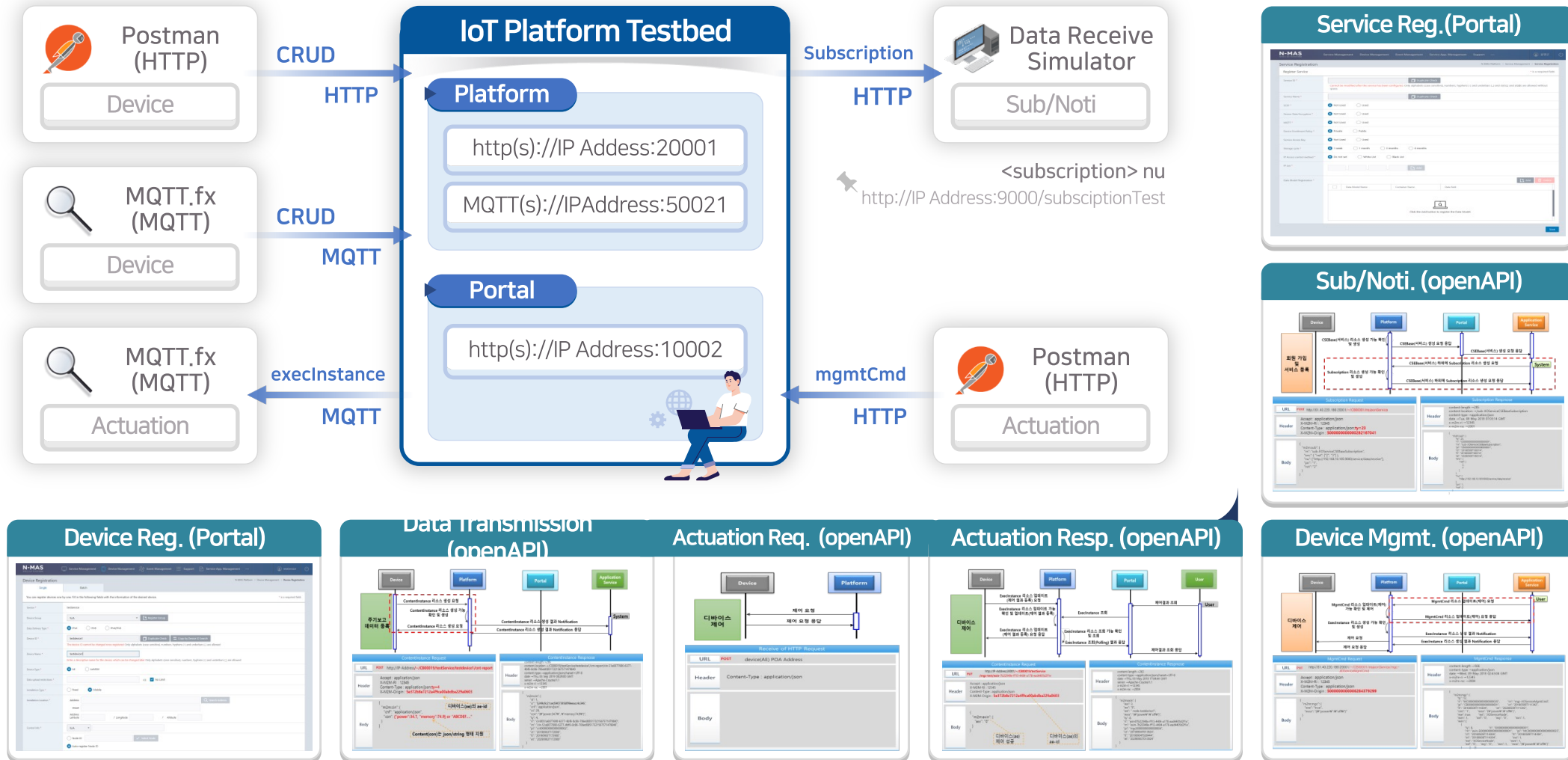
Commercial follow-ups

Daegu City ('22~'23) – Disaster Monitoring with PS-LTE



Commercial follow-ups

Daegu City ('22~'23) – Developer supports





Thank You

