

The 5th ASEAN-Japan Smart Cities Network High Level Meeting in Tsukuba

NEC Global Smart City Experience, Solution and Case Study

26th October 2023

NEC at a **Glance**

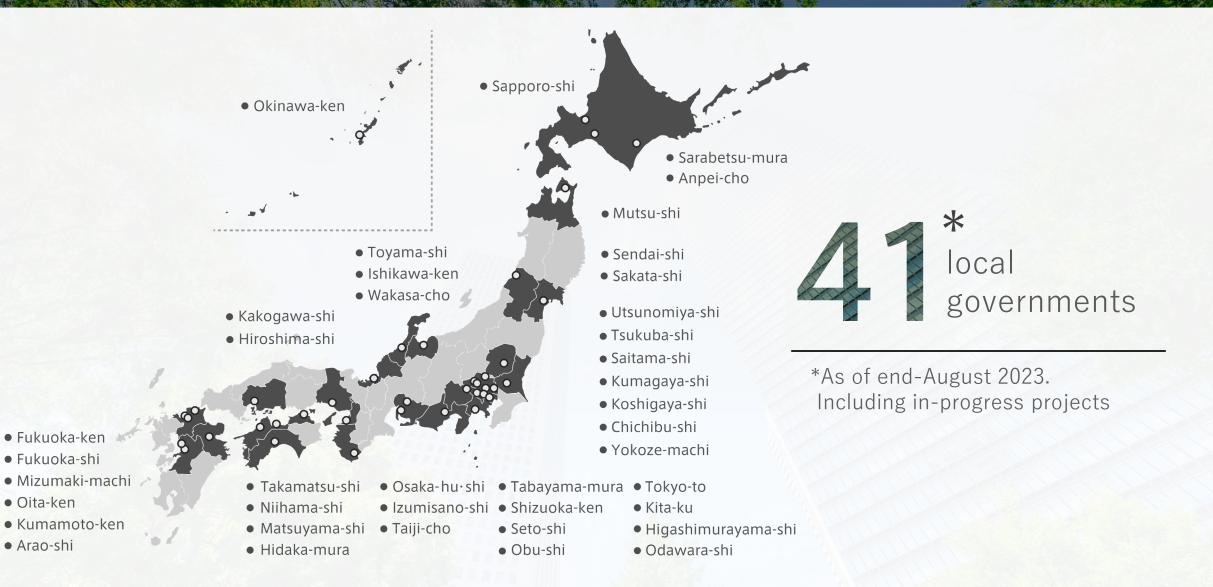


NEC Global Smart City Experience



Smart Cities in Japan supported by NEC

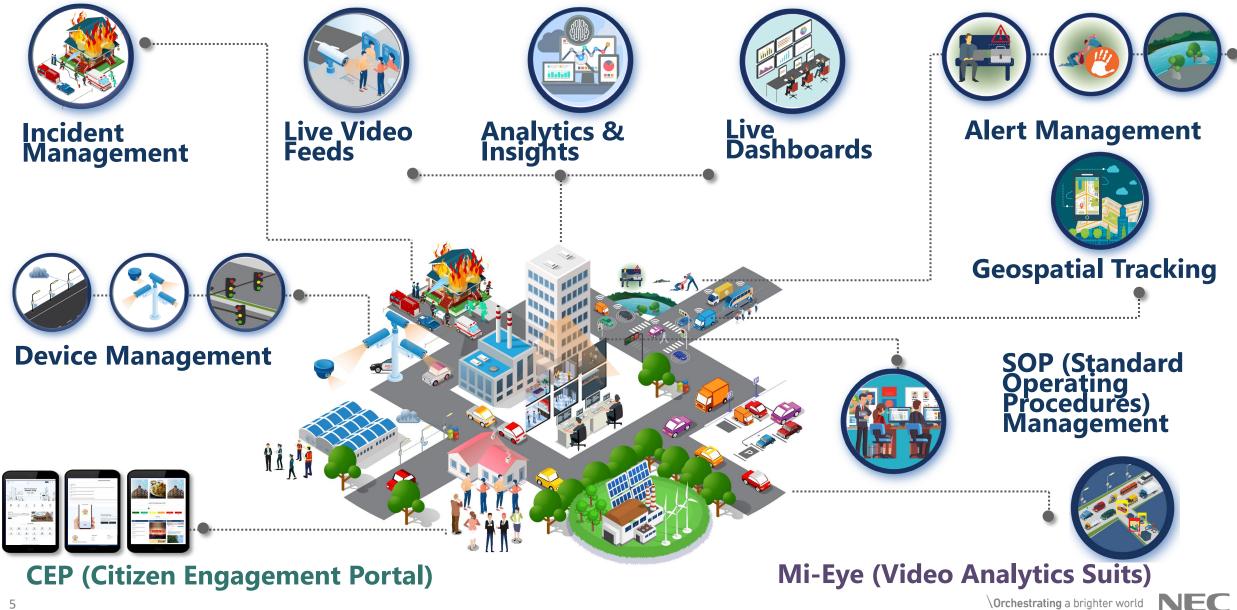
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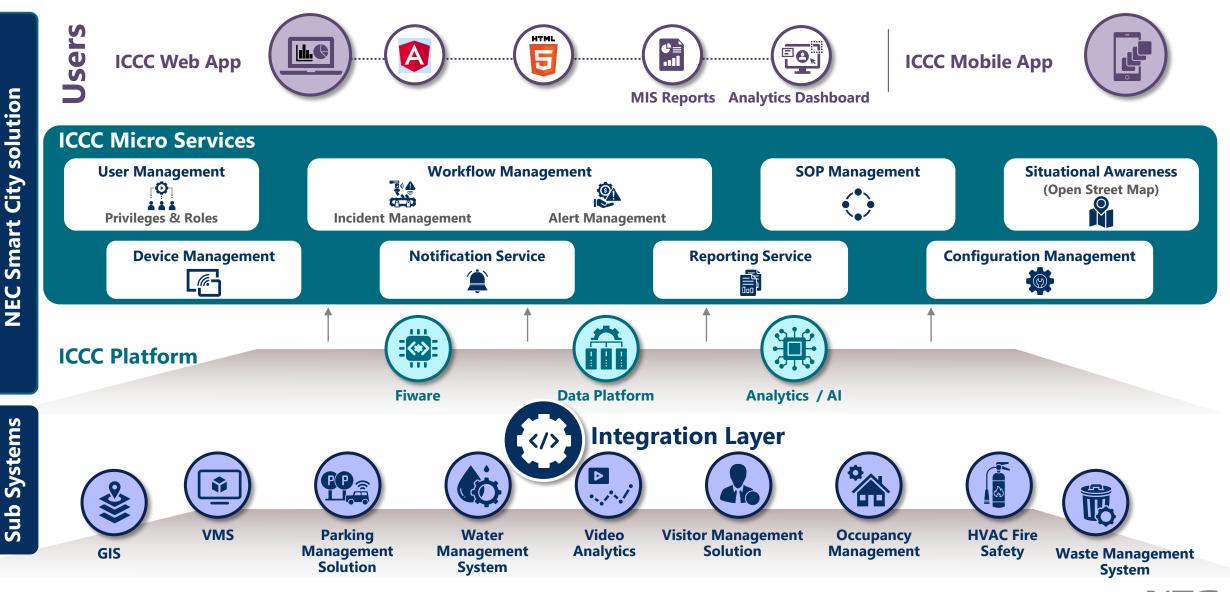
• Oita-ken

• Arao-shi

NEC Smart City Solution Overview – ICCC, CEP, Mi-Eye



NEC Smart City Technology Overview



Smart City,Enhanced city operations through collaborative and Intelligent Management Platform integrationLisbonwith orchestrating 200+ data sets from 140+ external systems including 16,000 sensors



- Information spread across applications
- Limited collaboration between institutions
- Reactive and sporadic city management
 - Implementation of the Lisbon
 Intelligent Management Platform
 - Collects, stores and analyzes data sources via AI, IoT and open APIs
 - Open architecture platform



Efficient Improved Management Air Quality of the city operations



mproved Reduced ir Quality Traffic Congestion



tisboa ≡

Geral - Cartografi

Improved emergency response times NEC helped Lisbon Council aggregate, manage and optimize data from internal information systems and 30+ public and private institutions to improve transport safety, resource management and sustainability. **NEC Solutions Smart City, Region Portugal**



https://www.nec.com/en/case/lisbon_council/index.html https://www.youtube.com/watch?v=fEcy8q_642s



Smart City,

City OS and Digital Government systems for

Córdoba Province 77 local governments in the region for realization of digital transformation in Cordoba Province

Key Challenge

- Sustainable and efficient **Digital Transformation**
- Become a truly sustainable city to cope with rapid urbanization for the future is a common long-term goal for each municipality.

NEC Solution

- Multi-tenant Province **Platform** based on **FIWARE**, which collects real-time data from around the city through various sensors as well as cross data analysis leveraging Al technology.
- Vertical solutions such as Waste Management, Energy/ Water management, Incident Management System, etc.



Impact Delivered



Digital transformation for municipalities of Cordoba



Comprehensive and holistic approach to the city's operational challenges

Enhancement of city operations and services for residents

NEC helped Cordoba Province by providing Cloud City Operation Centre" (CCOC) as a Smart City platform which is capable of multi-tenancy for 77 local governments as well as intelligent AI analytics for enhancement of city operations and services for residents in the various vertical areas.

NEC Solutions Smart City, **Region Spain**

Links

https://www.nec.com/en/press/201907/global_20190725_03.html

Smart City,Transforming Delhi into a safer, smarter city with10000 CameraCity SurveillanceDelhiSystem multi-level command center and enhanced public safety & security solutions.

Key Challenges NEC Solution Impact Delivered S

- **Safety Concerns** Rising crime rates and security challenges.
- Infrastructure Gaps Inadequate public services and civic amenities
- **Emergency Response** Inefficient medical and emergency services
 - **City Surveillance System:** 10,000 cameras with Video Analytics for real-time monitoring
 - Multi-level Command and Control Centre: Centralized hub for efficient incident monitoring
 - **Data Centre**: Robust data management for system reliability.



Swift response coordination for improved security

Enhanced

security through

advanced video

technology.

Use Case Implemented

- Identify and track personnel & vehicles under watch list
- Automatic Crowd Detection
- Women in Distress
- Gunshot Detection
- Video Synopsis
- Detecting Unidentified Objects

Key Elements of the Project



Cameras

(~10000)

Mobile Command

Control Vehicle (2)

& Mobile Devices

(222)

PA System/ Loudspeakers

Gunshot Sensors **(200)**





Community

Surveillance

(300)





Quick and Effective Emergency Response System

oonseEfficient datationhandling,ovedanalysis, and

retrieval



Smart City, Silvasa Smart City Project with ICCC in Silvassa

One of the most important manufacturing hubs in Western India.

> Impact Delivered



Key

Challenges

NEC

Solution

Enhanced Security Infrastructure for ensuring safety and security



Enhancement of Resident's Access to Public Services and Utilities

- **Improve convenience** in accessing public services and civic amenities,
- Supporting efficient traffic control and public safety
- Strengthening the city's preparedness for natural disasters
- Integrated Command and Control Centre, which will bring civic amenities under a unified platform, accessible to residents of Silvassa through a mobile application
 Big data and AI technology such as video analysis will be utilized for safer and security

The Silvasa smart city project facilitates convenience in accessing public services and civic amenities, supporting efficient traffic control and management, public safety, and strengthening the city's preparedness for natural disasters.

NEC Solutions Smart City, Region India

Links NEC Corporation India selected by the Government of Silvassa for its Smart City Project | NEC



Orchestrating a brighter world

