



MIC's Recent Activities on ITS

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TRANSFORMATION BY TRANSPORTATION | #ITSWC2022

In Partnership With:



Built By:



In the business of
building businesses

MIC's Role: Communications Policy

- MIC promotes ITS radiocommunications in coordination with the other ministries and agencies

International Standardization

Joining and leading standardization processes in international organizations such as ITU

Regulation

Frequency allocation

Promoting efficient use of radio wave

International Cooperation

Promoting global use of ITS

to address social issues

R&D and FOT

Conducting R&D and technical studies for new technologies

Evolution of ITS

Advanced Driver Assistance

Information Provision/ Toll Collection

Highway radio



Optical beacon

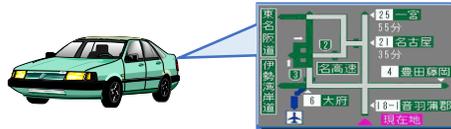


Radio beacon



FM multiplex broadcasting

VICS*

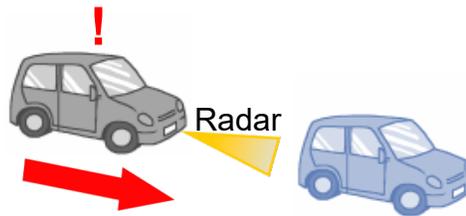


ETC**

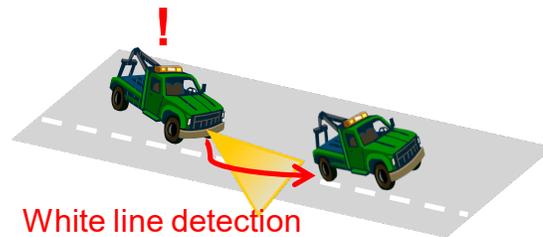


Autonomous Self driving

On-Board Sensors



Autonomous Emergency Braking



Lane Departure Prevention System



Cooperative Self driving

V2X Communication***



Connected Car



Automated Driving Systems



*Vehicle Information and Communication System

**Electric Toll Collection System

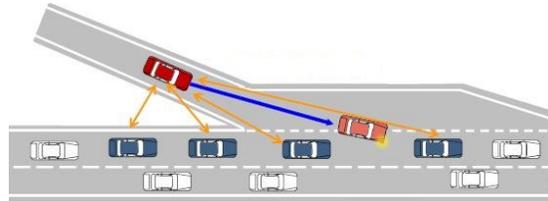
***vehicle-to-everything

Advanced Use Cases of Connected Car

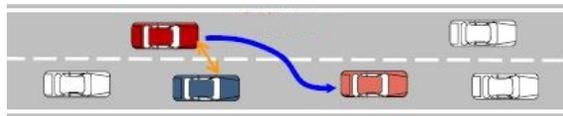
- Developed 25 use cases and a roadmap towards advancement of connected and automated driving

25 Use Cases

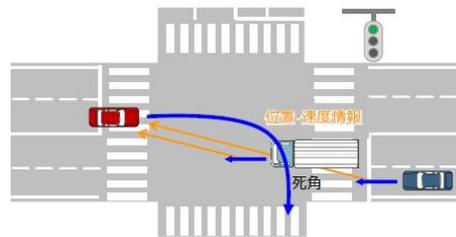
Joining the main lane on the highway



Lane-changing in a traffic jam

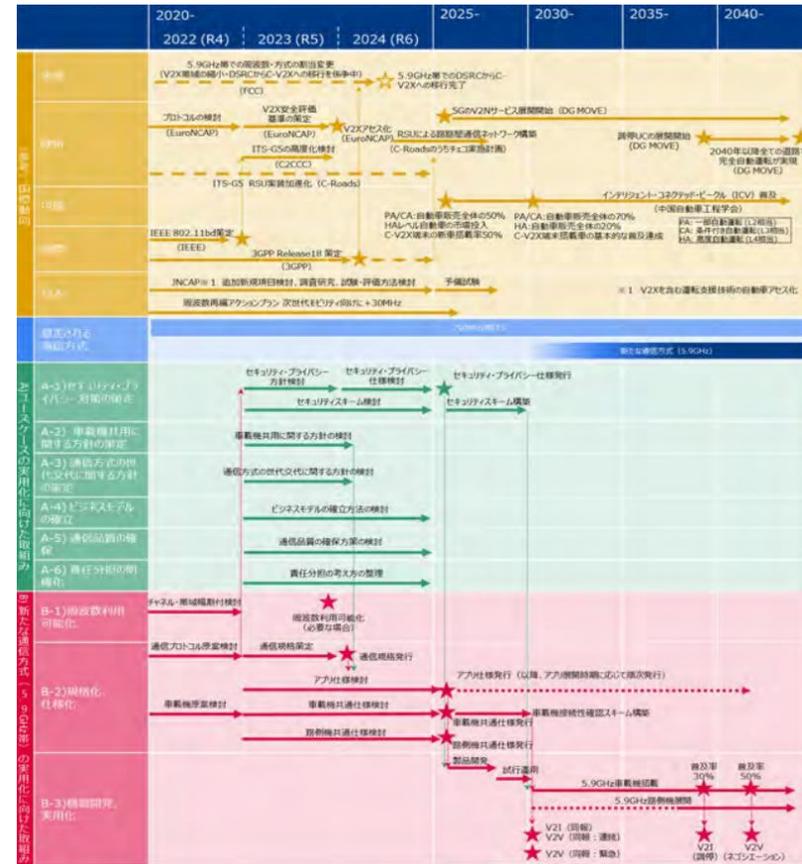


Turning right



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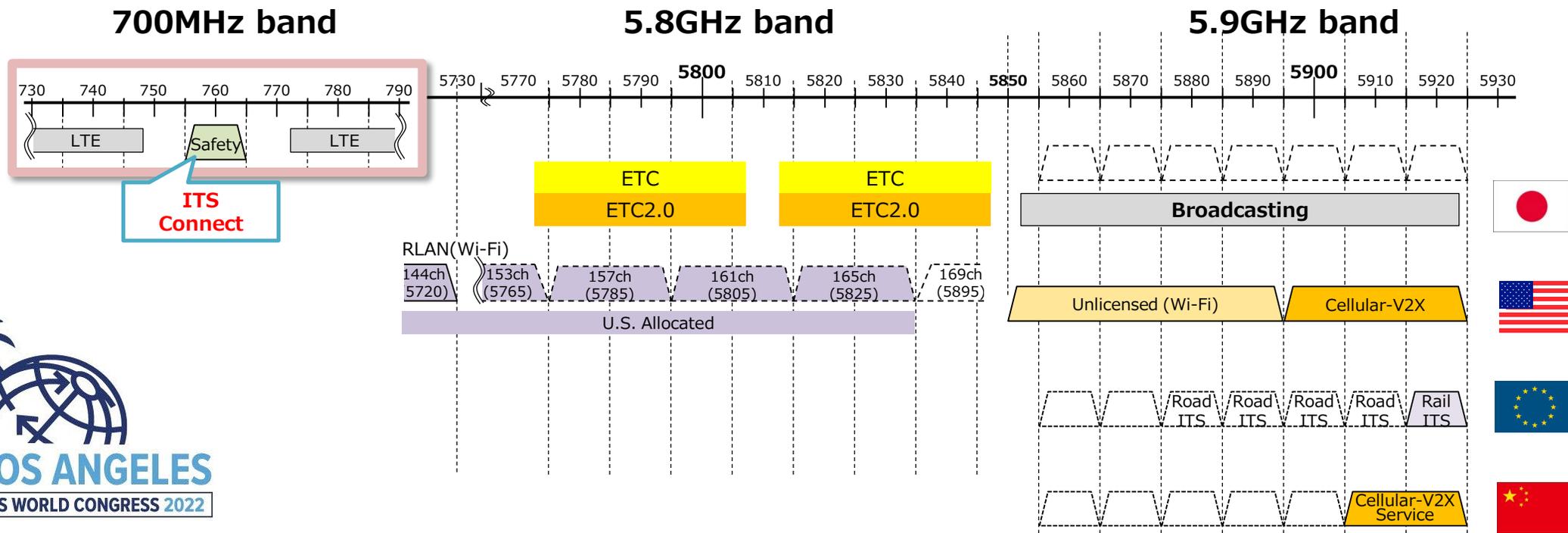
Roadmap



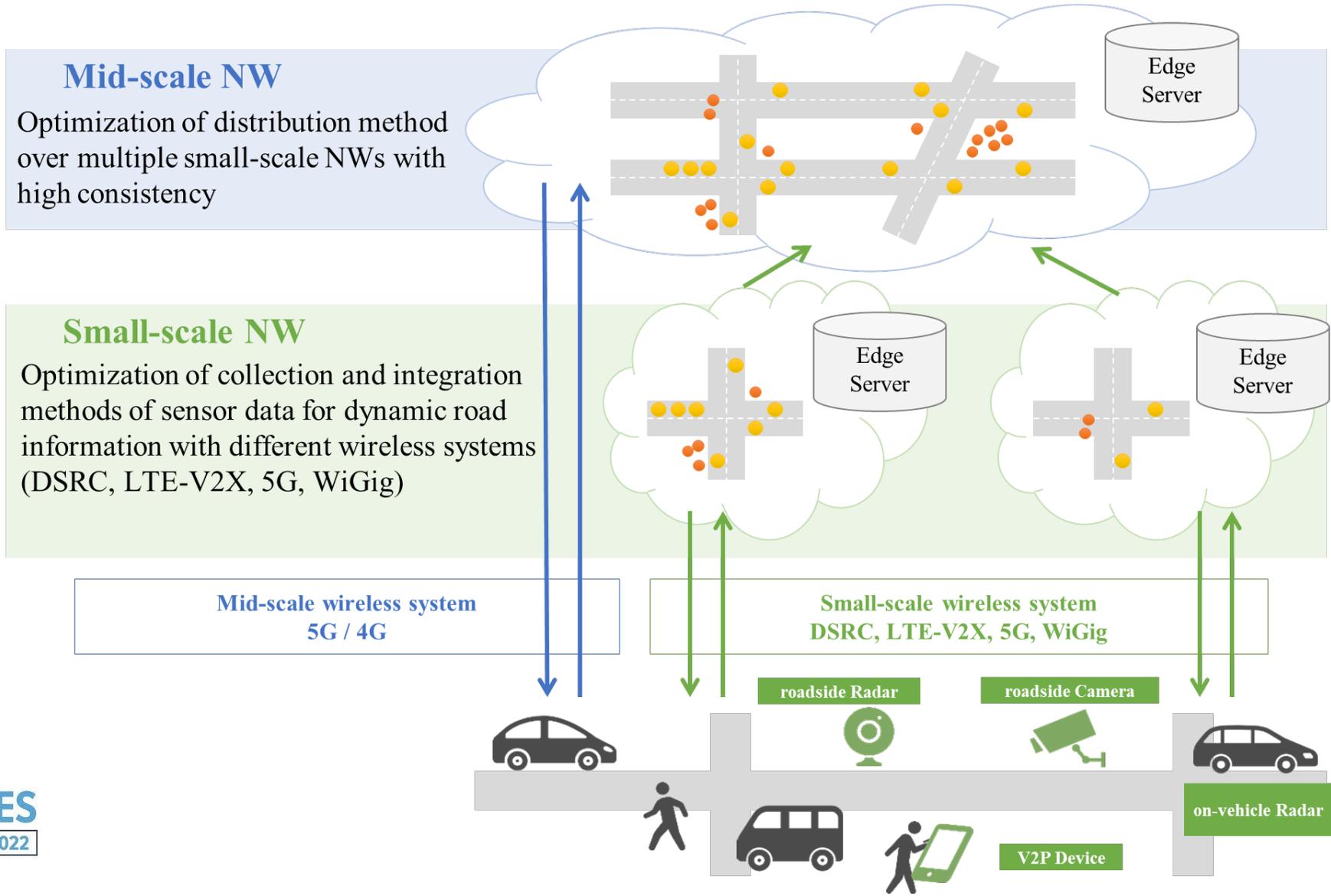
V2X Communications in 5.9 GHz under consideration

Frequency Reorganization Action Plan (November, 2021)

- Consideration on technical conditions for sharing with existing radio services in case of introducing V2X system into 5.9 GHz band will be finished by the end of March 2022
- If V2X system is allocated to 5.9 GHz band, the allocation will be done around 2024 with the consideration of existing radio services

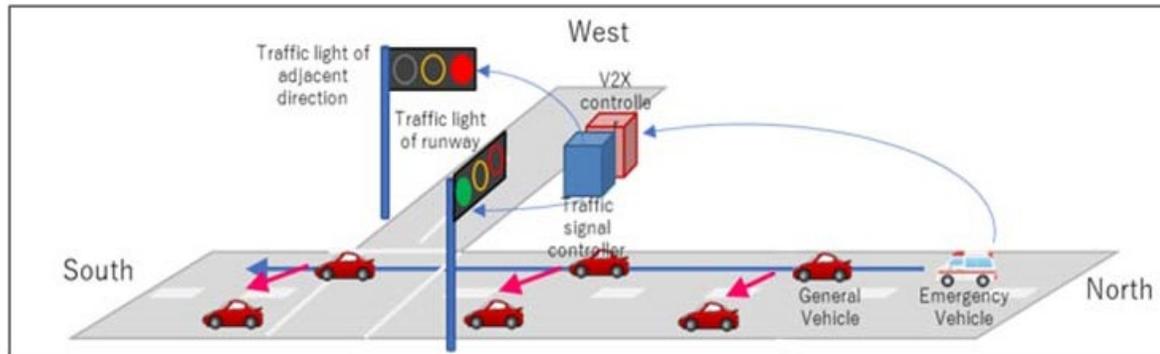


R&D on combining small-scale NW and mid-scale NW

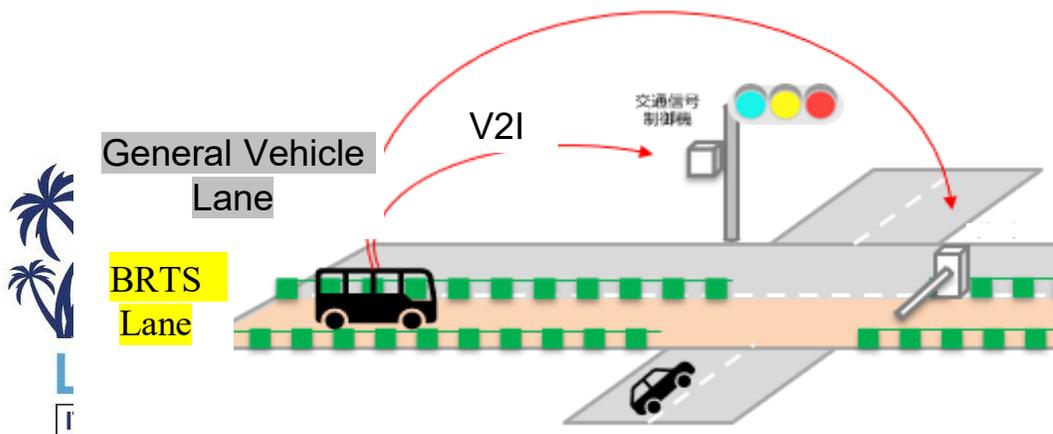


International cooperation in Asia

1. Emergency Vehicle Priority System



2. BRTS (Bus Rapid Transit System) Priority System



Antenna Box



V2X device on roadside

Thank you for listening!

If you have any questions, please contact us.

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総務省

Ministry of Internal Affairs and Communications