



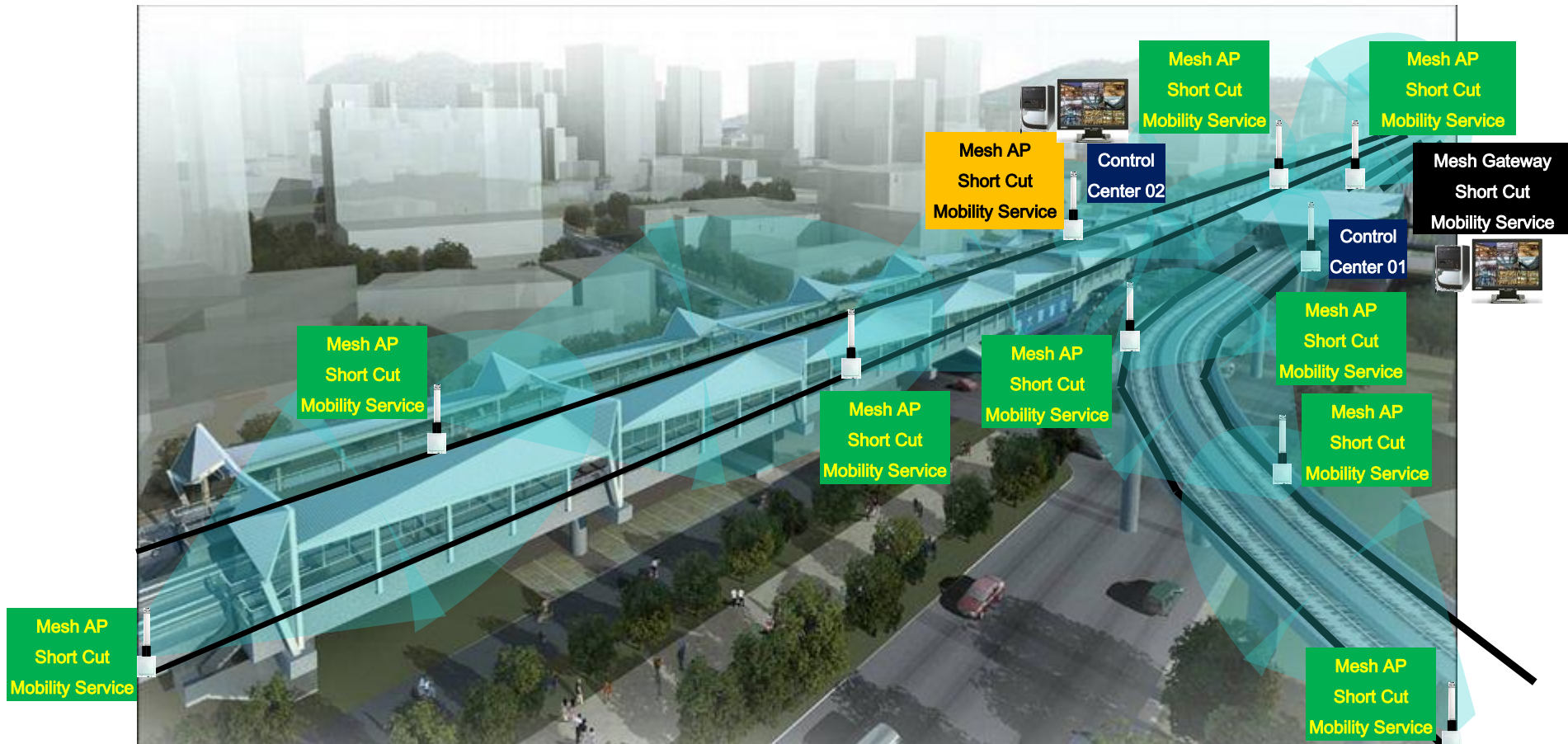
## Outdoor WiFi MIMO Mesh Network Hi-mobility System **Solution 1-1** for **Subway/MRT/Highway** **Design based on Fiber-optic Network Backhaul**, used in Elevated Metro Transit Train Hi-mobile System





## Outdoor WiFi MIMO Mesh Network Hi-mobility System **Solution 1-2** for **Subway/MRT/Highway**

**Design based on Fiber-optic Network Backhaul, in Mesh AP enables Ethernet Short Cut Function**



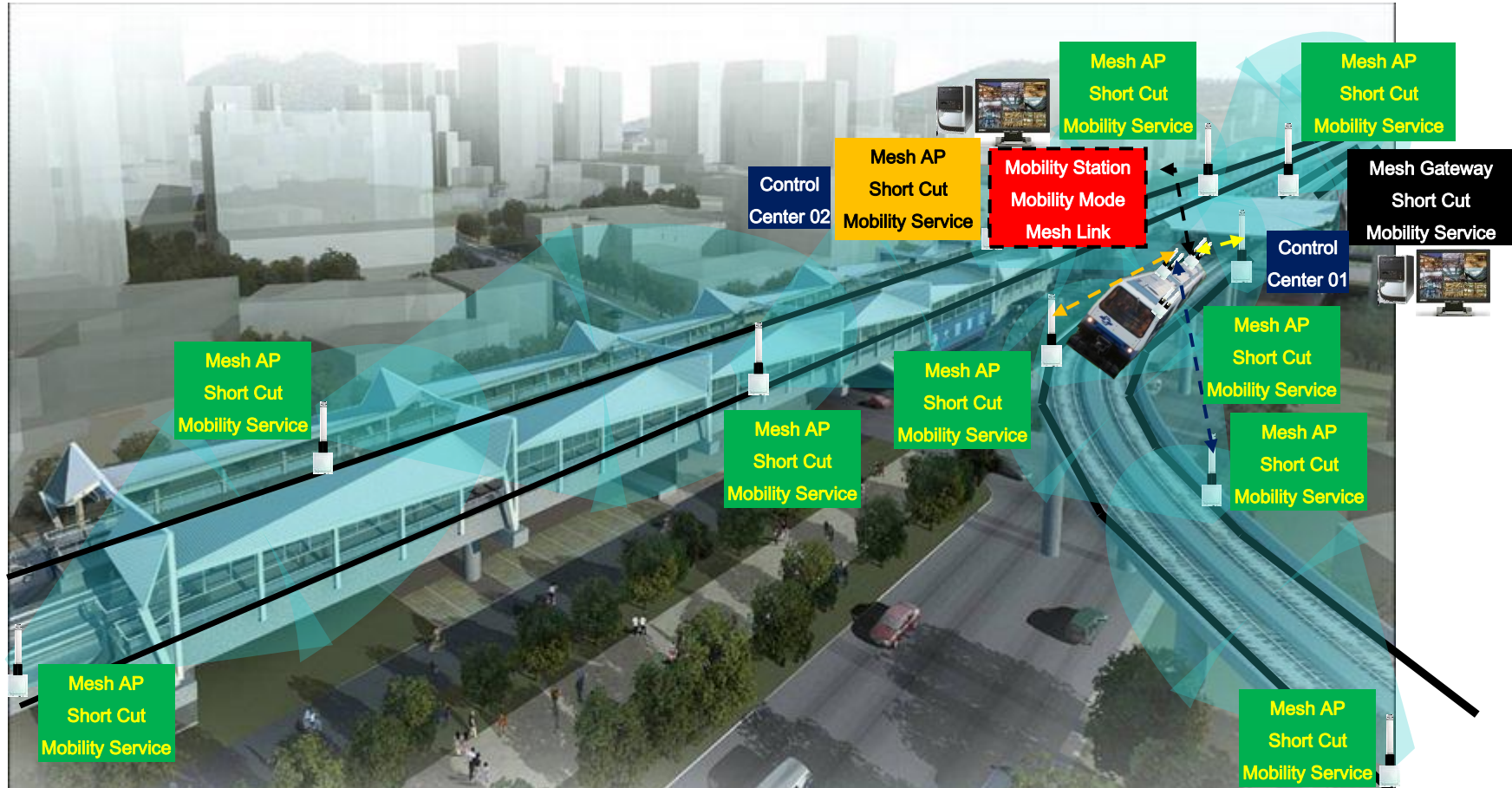
### High-speed mobile wireless transmission system design specification:

1. In the fiber-optic network backhaul, each Mesh AP startup Ethernet Short Cut function, all packets will directly transmit to Mesh Gateway.
2. In addition to Mesh wireless devices set to the Mesh Gateway of the control center place, other wireless devices that track the wireless signal coverage area, all set to the Mesh AP and starting Mobility Service.
3. Each Mesh AP wireless devices Mobility Service wireless signal need for 30% wireless signal overlap area.
4. If the erection of environmental permits, crossing takes cover as possible way of double directions and use single device have double network card interface for wireless double signal coverage.



## Outdoor WiFi MIMO Mesh Network Hi-mobility System **Solution 1-3** for **Subway/MRT/Highway**

Designed with multiple MSTA wireless mobile devices, operating on Hi-mobile wireless surveillance system

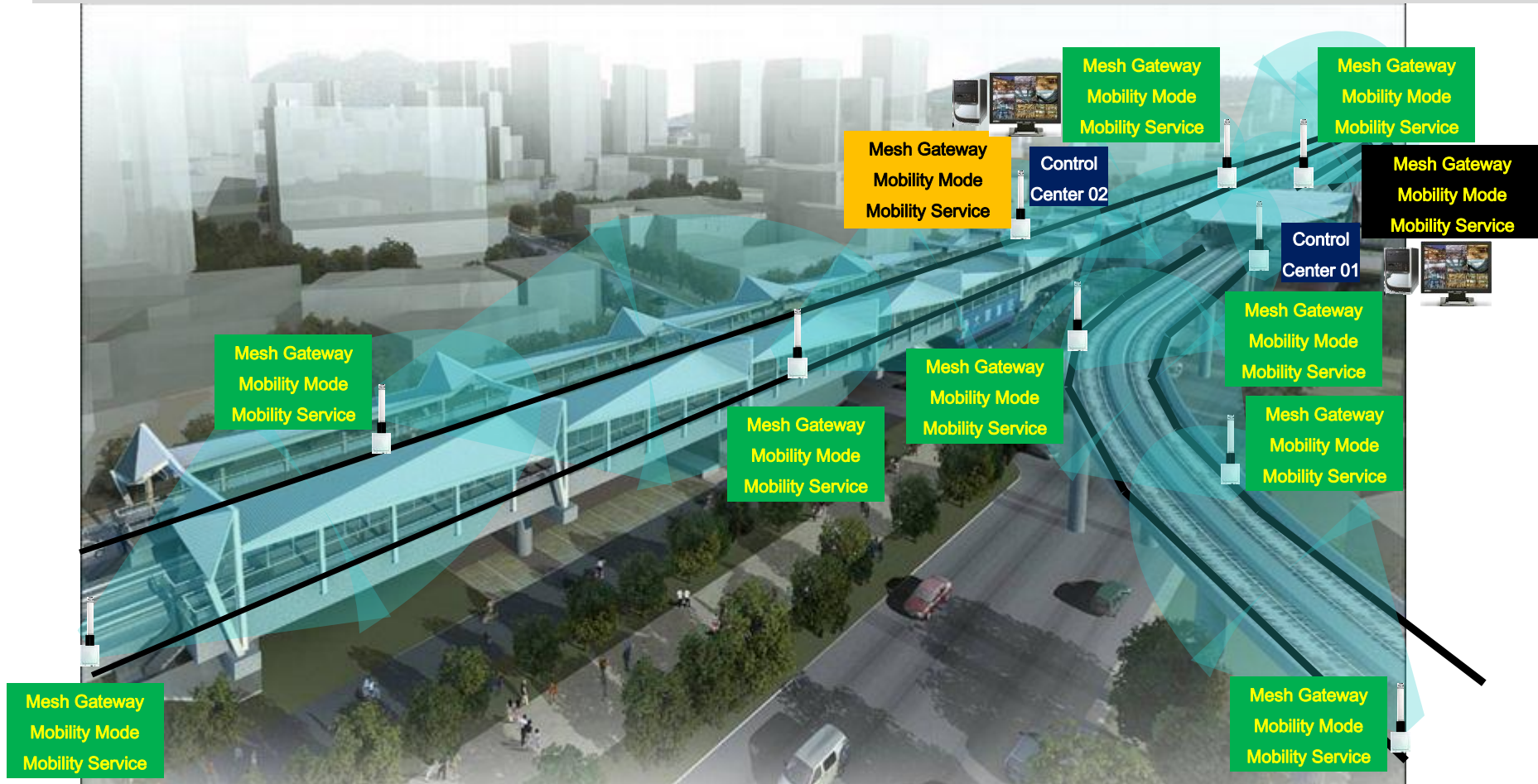


1. More rail cars to take into account the two rail systems, bulge in intersection car double SMTA car wireless clients to double the bandwidth requirements and get online, grab each other bandwidth and interfere with each other ... Issues such as.
2. More rail cars to consider both Tunnels or Subways or elevated train or highs and lows ... Environments, such as variation shall take special targeted programmers to solve Mesh wireless coverage and the MSTA wireless line transfer applications.
3. Multi compartment rail cars must take into account the changes of interoperability, it is recommended that multiple sets of MSTA multi compartments-vehicle wireless system designed to address special circumstances and use; many MSTA can also be designed into many frequency-receiving mode to upgrade special applications and bandwidth.
4. If the car want to offer WiFi Internet service, optional dual-radio MSTA device, one for backbone online + another one as WiFi signal coverage, can achieve high-speed mobile Internet service.



## Outdoor WiFi MIMO Mesh Network Hi-mobility System **Solution 2-1** for **Subway/MRT/Highway**

**Design based on Fiber-optic Network Backhaul, all wireless devices are set to the Mesh Gateway**

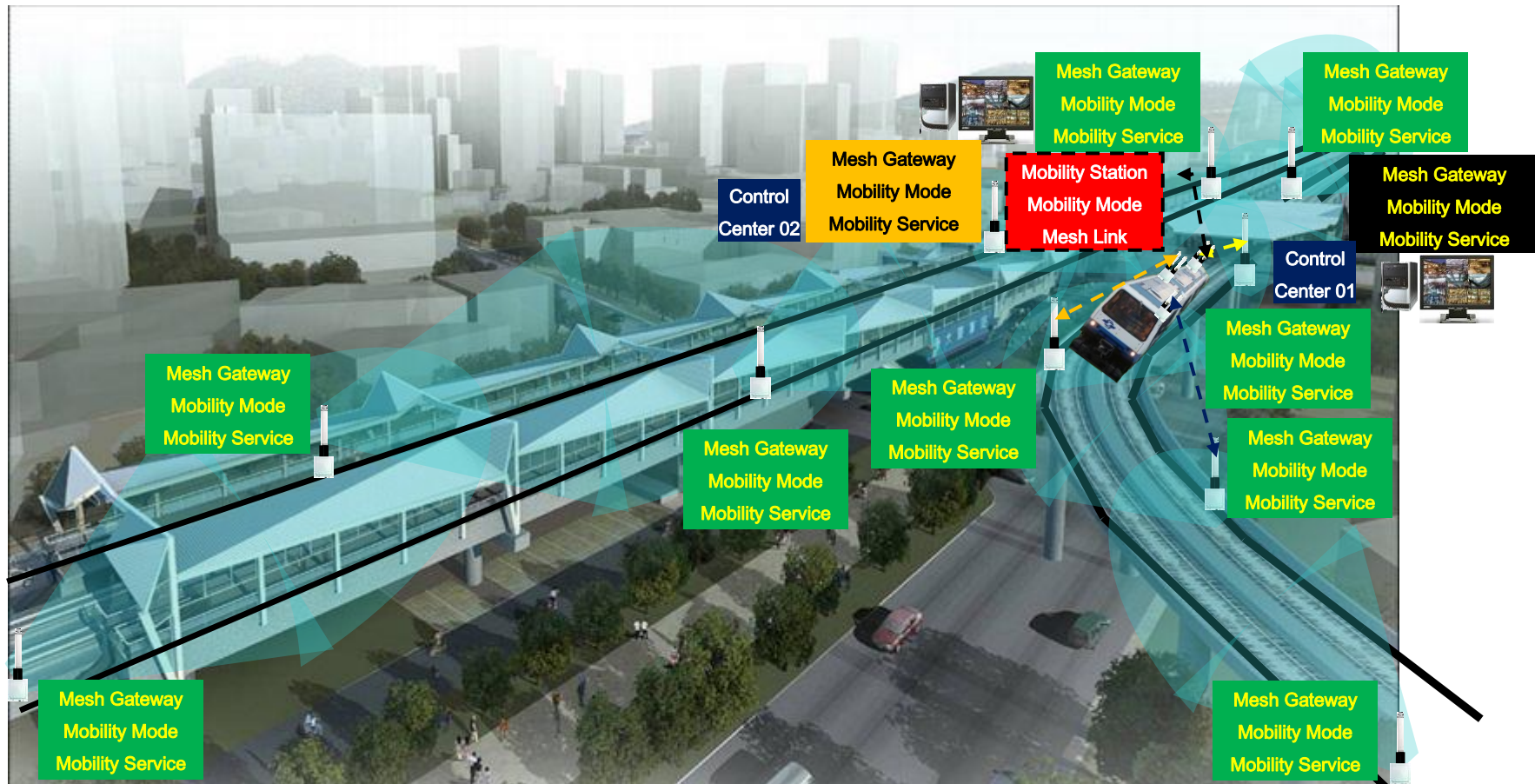


1. In the fiber-optic network backhaul, each Mesh Mobility AP set Mesh Gateway mode of operation, MSTA-vehicle wireless high-speed moving and handover between different Gateway, it will be a simplistic effect of mobile systems.
2. All Mesh Gateway setting for Mobility Mode and starting Mobility Service function, but could not enable Ethernet Short Cut function.
3. Mobility Service for each Mesh Gateway wireless device, the wireless signal need for 30% overlap area for MSTA link handover.
4. If the erection of environmental permits, crossing takes cover as possible way of double directions and use single device have double network card interface for wireless double signal coverage.



## Outdoor WiFi MIMO Mesh Network Hi-mobility System **Solution 2-2** for **Subway/MRT/Highway**

Designed with multiple MSTA wireless mobile devices, operating on Hi-mobile wireless surveillance system

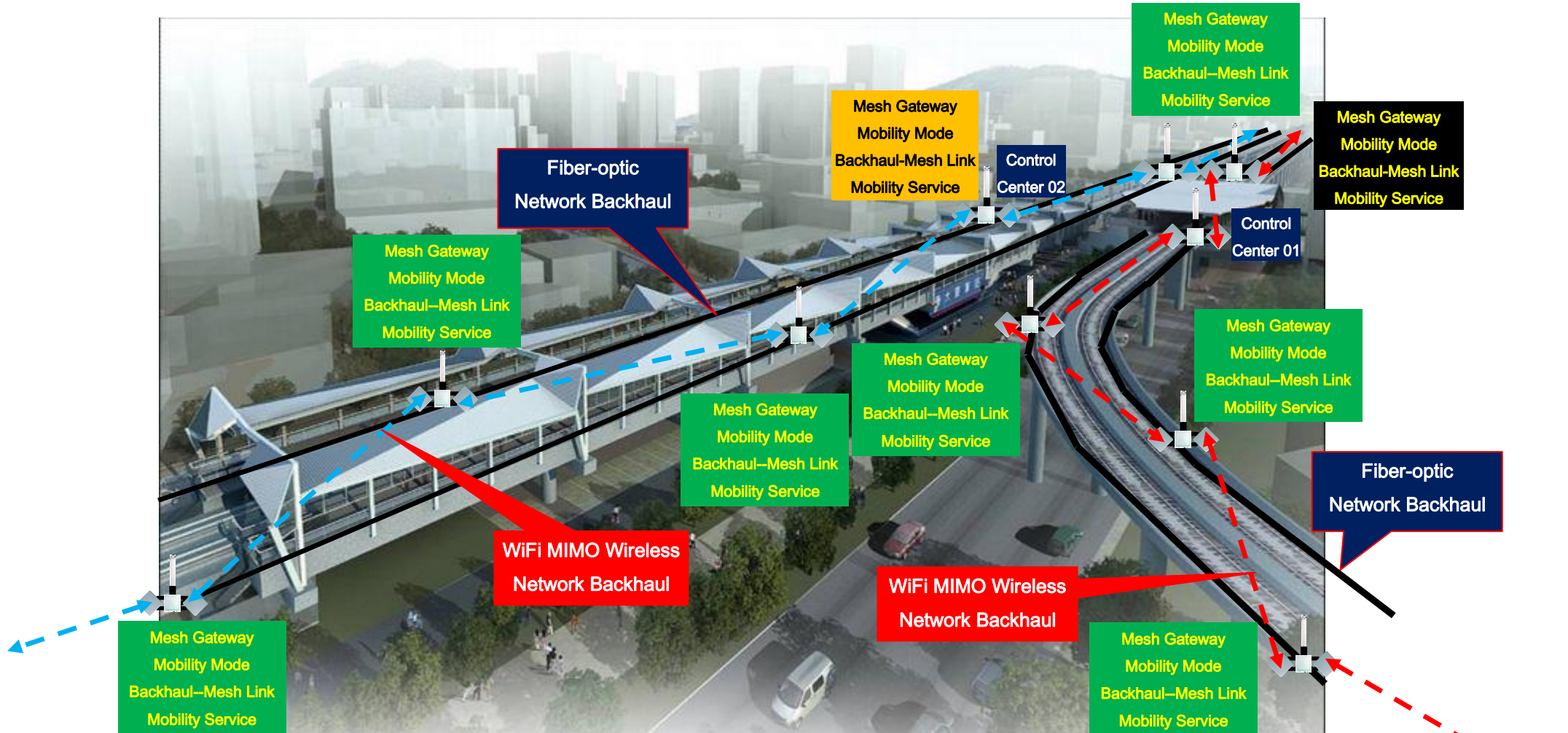


1. High Speed MSTA-vehicle wireless equipment shall set the operation mode of the Mobility Station and starting Mobility Mode, and then set to the Mesh Link function to connect signal coverage of Mesh AP to online transfers.
2. For rail cars and cars of the highly volatile changes hanging, consider cross-cover and dual-frequency coverage scheme, changes in addition to resolve carriage hanging problem can also be solved by bi-directional passing and sudden bandwidth needs.
3. Recommends that each coach should integrate the surveillance cameras inside train compartments to influx into the DVR or NVR hosts, and then by the MSTA car wireless transmit the images through Wireless Mesh AP flowing Mesh Gateway.



## Outdoor WiFi MIMO Mesh Network Hi-mobility System **Solution 3-1** for **Subway/MRT/Highway**

**Designed Fiber-optic + Wireless Network Backhaul as Backup System, all wireless devices are set to the Mesh Gateway**

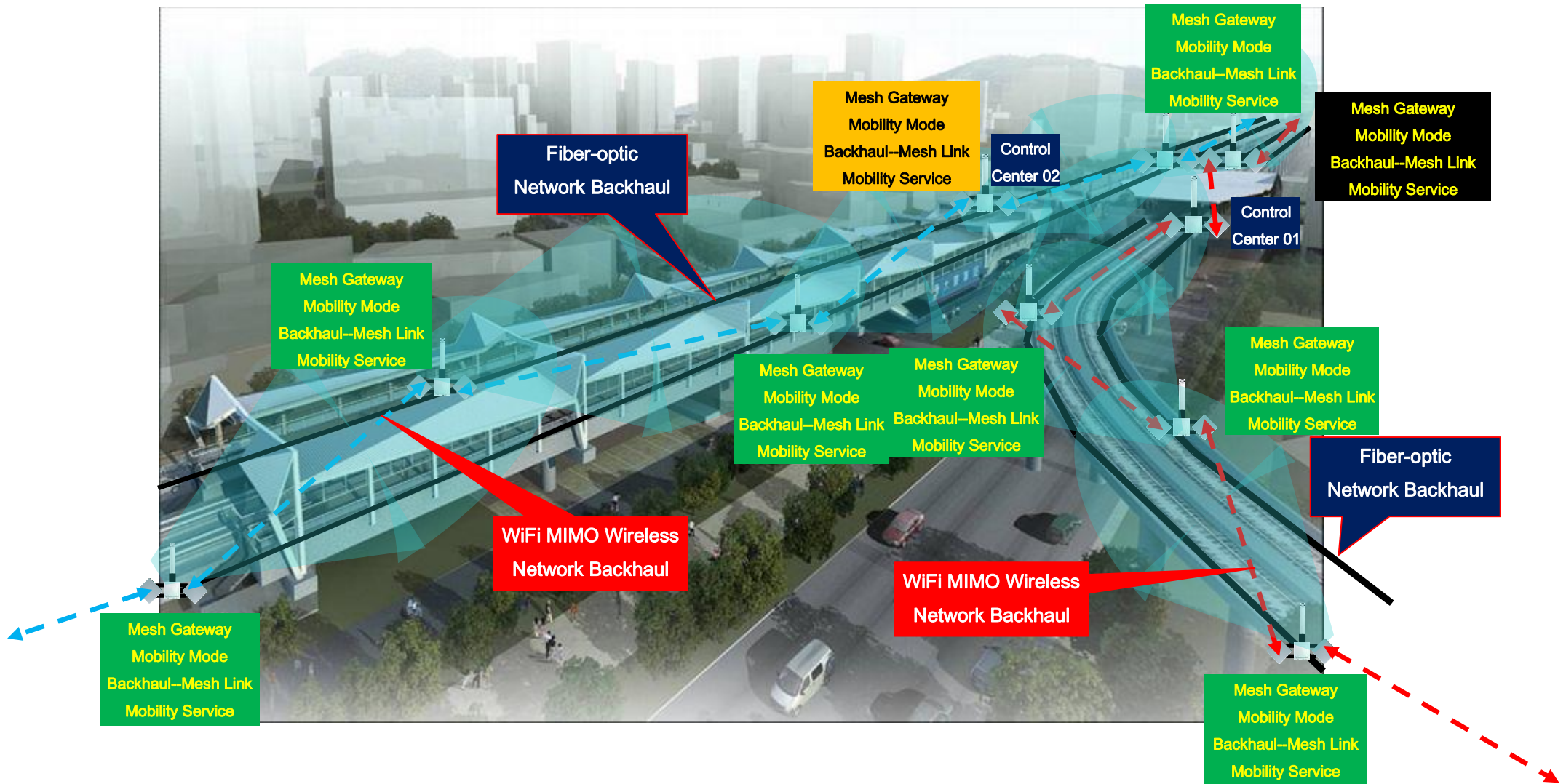


1. Design based on fiber-optic networks for the transmission main backhaul, the wireless networks for the transmission deputy backbone, when fiber-optic network interrupt, Wi-Fi networks can act to backup link and provide maintain service, this system work as redundant backhaul system.
2. All the Mesh network devices using the same Gateway settings schema, with a Mobility operation Mode, start the Mesh Link function to connection as backhaul and enable Mobility Service for covered services.



## Outdoor WiFi MIMO Mesh Network Hi-mobility System **Solution 3-2** for **Subway/MRT/Highway**

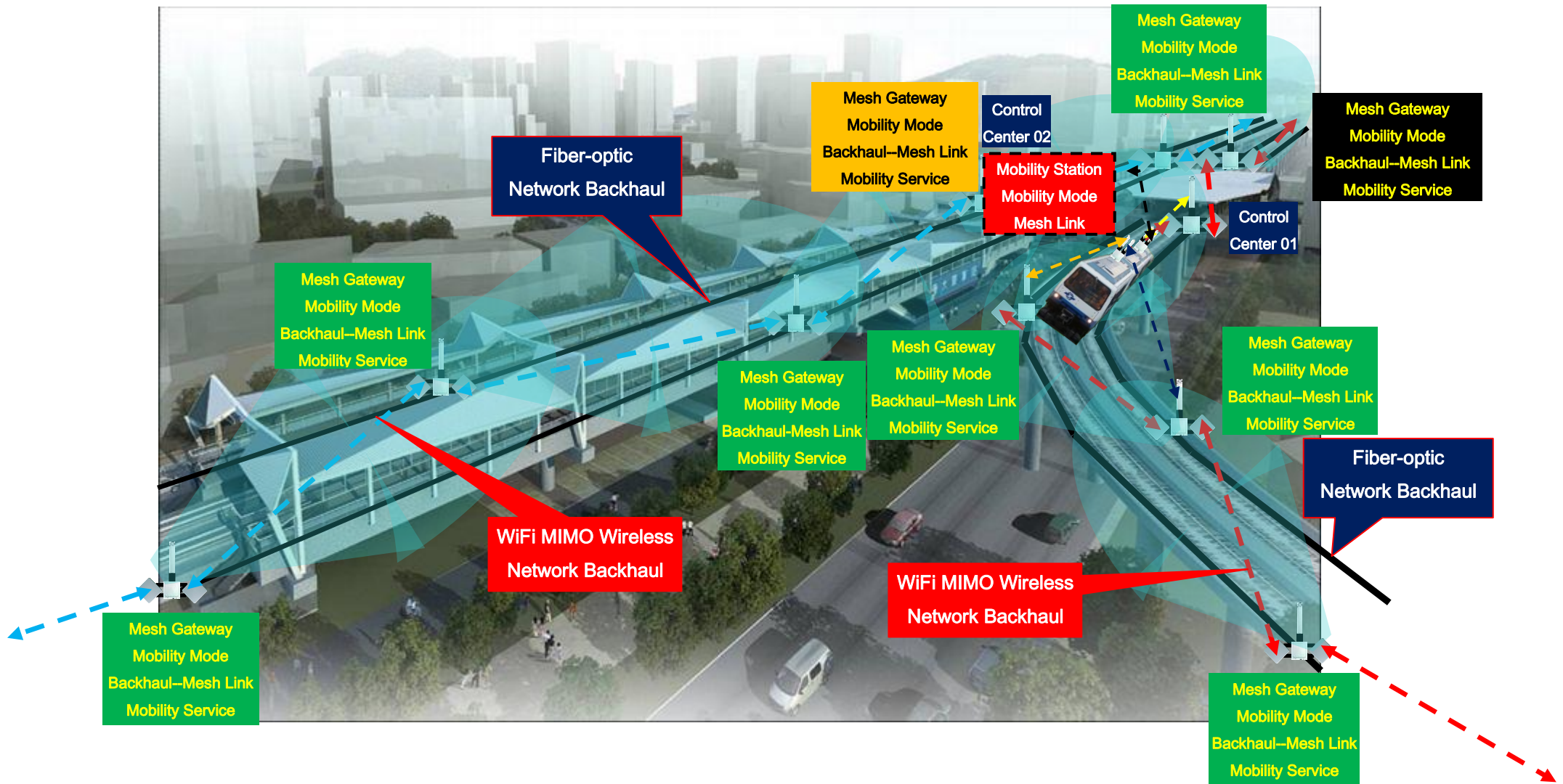
**Designed Fiber-optic + Wireless Network Backhaul as Backup System, used in Elevated Metro Transit Train Hi-mobile System**





## Outdoor WiFi MIMO Mesh Network Hi-mobility System **Solution 3-3** for **Subway/MRT/Highway**

Designed with multiple MSTA wireless mobile devices, operating on Hi-mobile wireless surveillance system







## Outdoor WiFi MIMO Mesh Network Hi-mobility System **Solution 4-1** for **Subway/MRT/Highway**

**Design based on Wireless Network Backhaul**, used in Elevated Metro Transit Train Hi-mobile System



High-speed mobile wireless transmission system design specification:

1. Design for wireless networks as the backhaul transmission using Mesh AP setting for Mobility Mode operation, start the Mesh Link function to connection as backhaul and starting Mobility Service to do track high-speed mobile signal coverage.
2. This system is designed for unpaved fiber-optic backbone project, the proposed high-speed transmission solutions; the same can be applied to a road or public bus or automobile driver school or fire engines or ambulances, and other special projects.



## Outdoor WiFi MIMO Mesh Network Hi-mobility System **Solution 4-2** for **Subway/MRT/Highway**

Design based on **Wireless Network Backhaul**, in **Mesh AP Setup Mesh Link for Backhaul**, Setup **Mobility Service for Signal Coverage**



1. Design for wireless networks as the backhaul transmission using Mesh AP setting for Mobility Mode operation, start the Mesh Link function to connection as backhaul and starting Mobility Service to do track high-speed mobile signal coverage.
2. Designed for unpaved fiber-optic backbone of the project, the proposed high-speed transmission solutions, through Multiple Gateway system design, double export Mesh Gateway redundancy system, but the two gateways to be daisy-chained together.



## Outdoor WiFi MIMO Mesh Network Hi-mobility System **Solution 4-3** for **Subway/MRT/Highway**

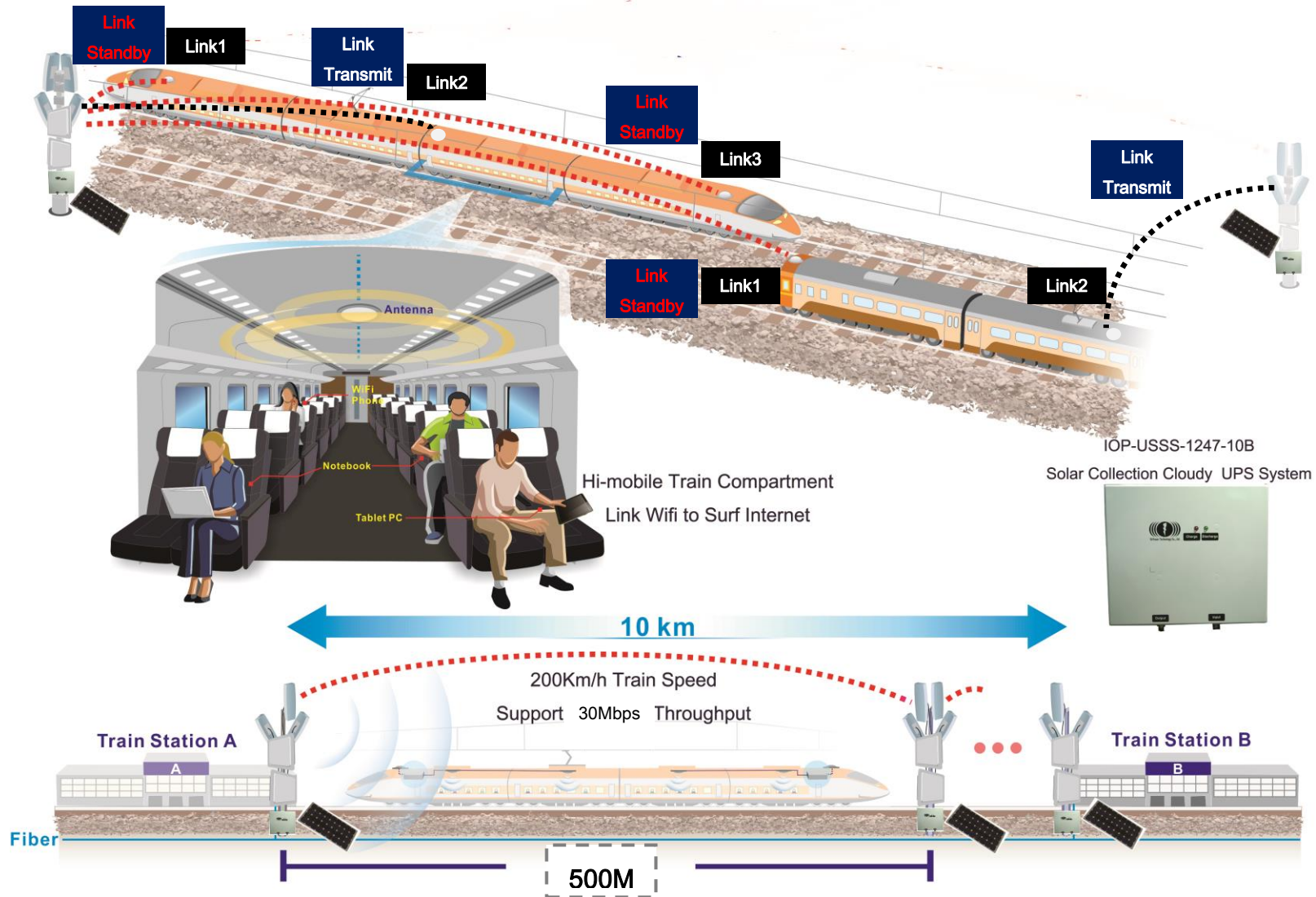
Designed with multiple MSTA wireless mobile devices, operating on Hi-mobile wireless surveillance system





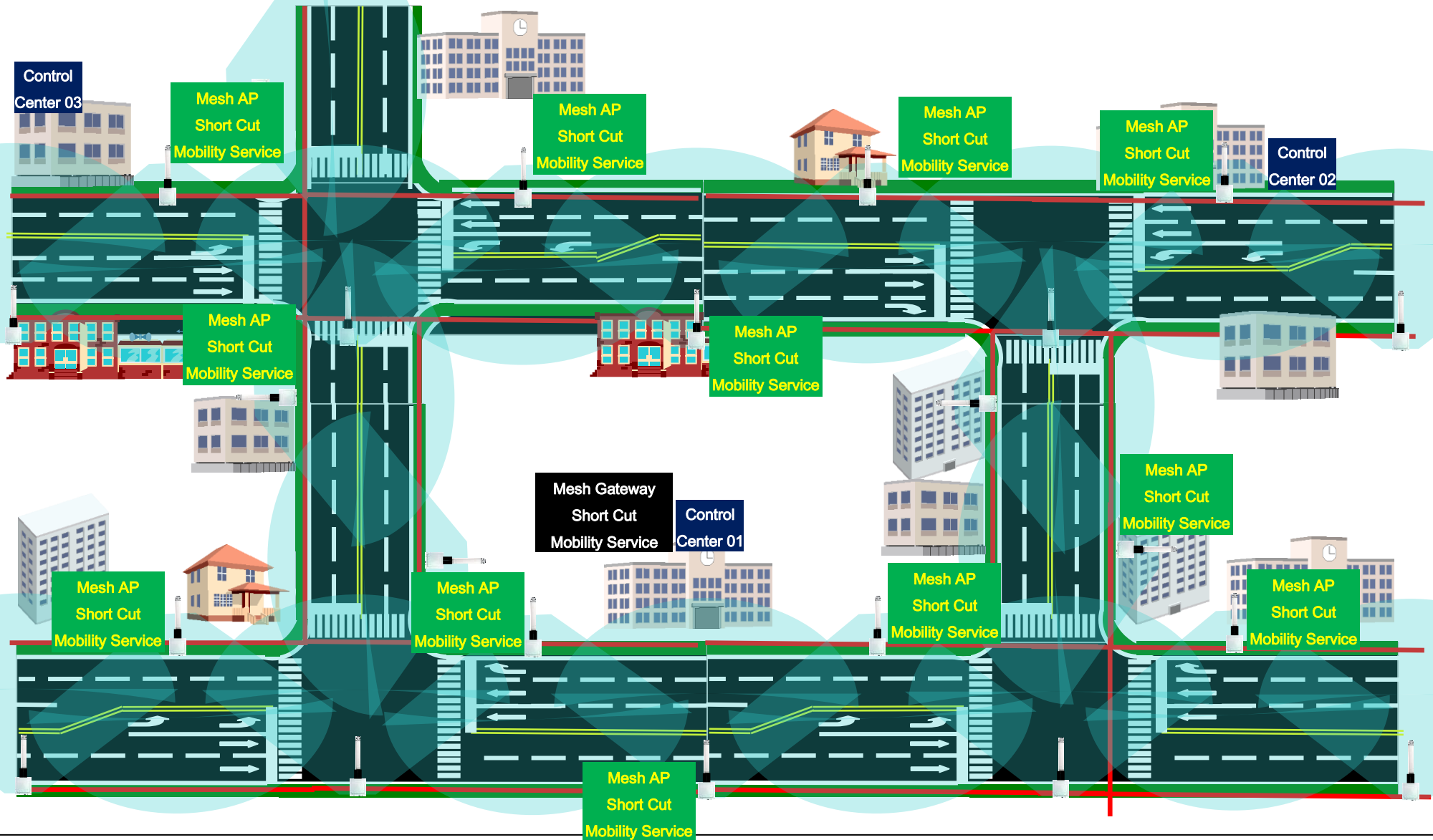
# Outdoor WiFi MIMO Mesh Hi-mobile Network System for Subway/MRT/Highway

Designed with MSTA wireless mobile device, operating on 3 sets of online MSTA features, implementation of best routing





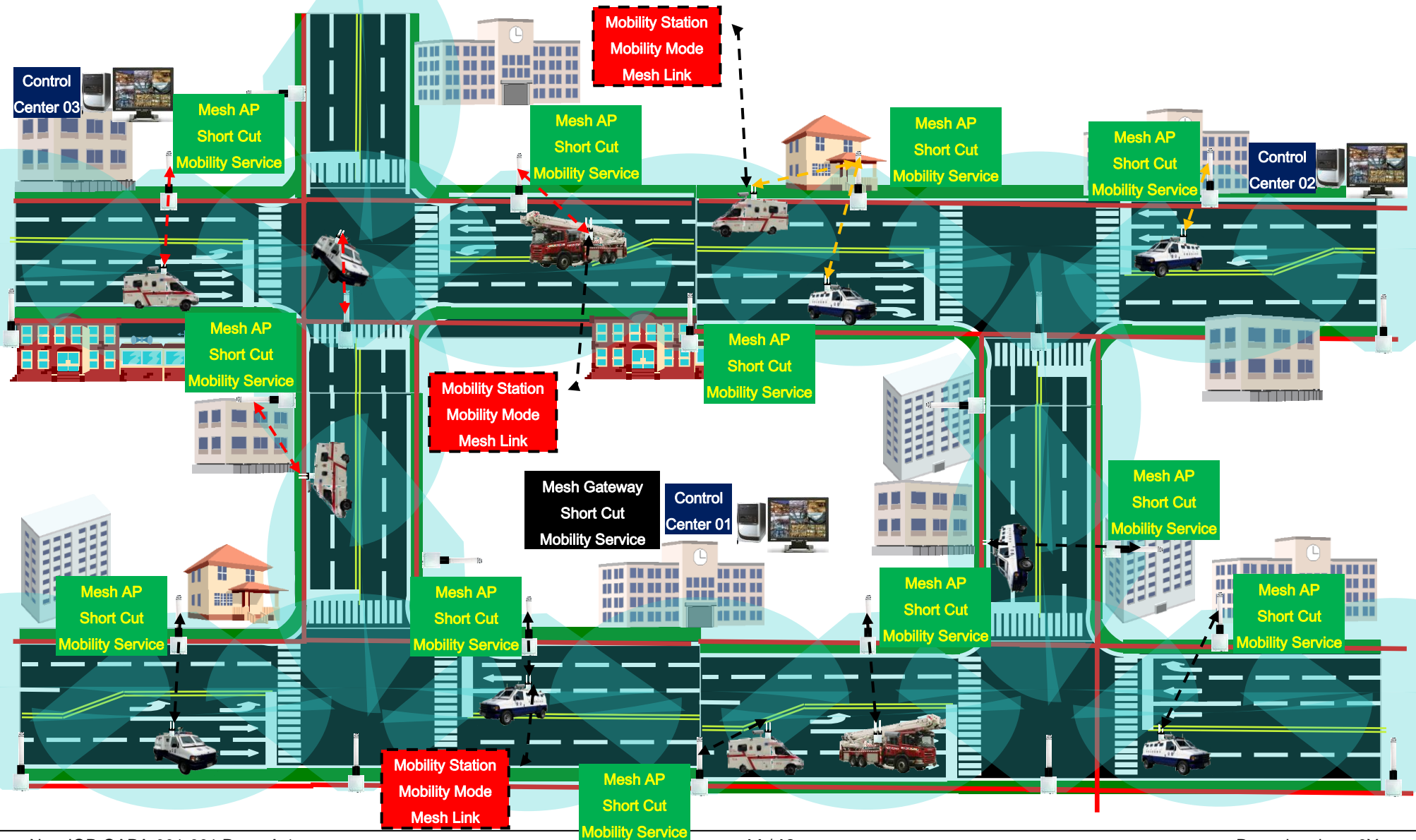
# Outdoor WiFi MIMO Mesh Network Hi-mobility System **Solution 5-1** for **Urban Roads / General Highway** **Design based on Fiber-optic Network Backhaul, in Mesh AP enables Ethernet Short Cut Function**





## Outdoor WiFi MIMO Mesh Network Hi-mobility System **Solution 5-2** for **Urban Roads / General Highway**

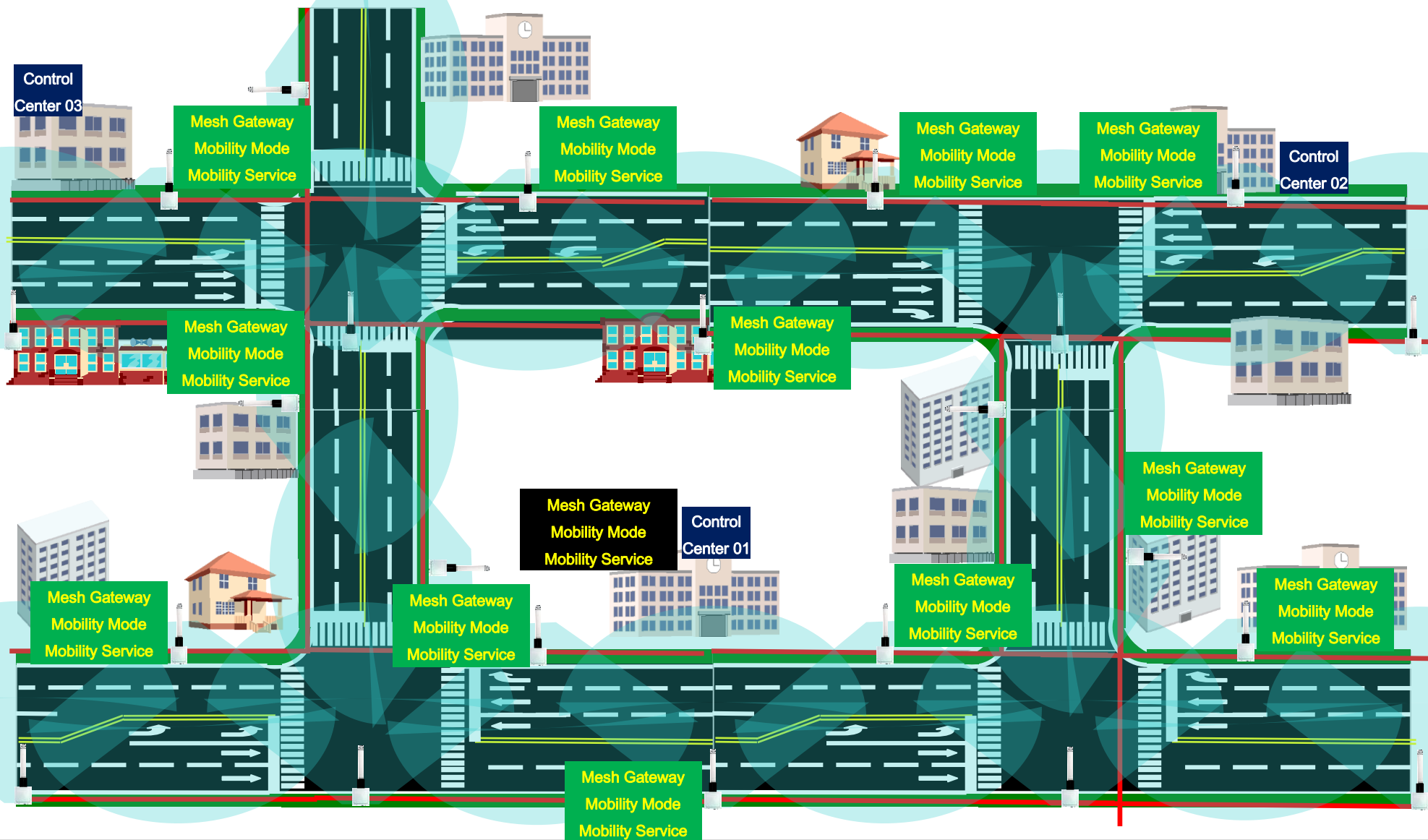
Designed with multiple MSTA wireless mobile devices, operating on Hi-mobile wireless surveillance system





# Outdoor WiFi MIMO Mesh Network Hi-mobility System **Solution 6-1** for **Urban Roads / General Highway**

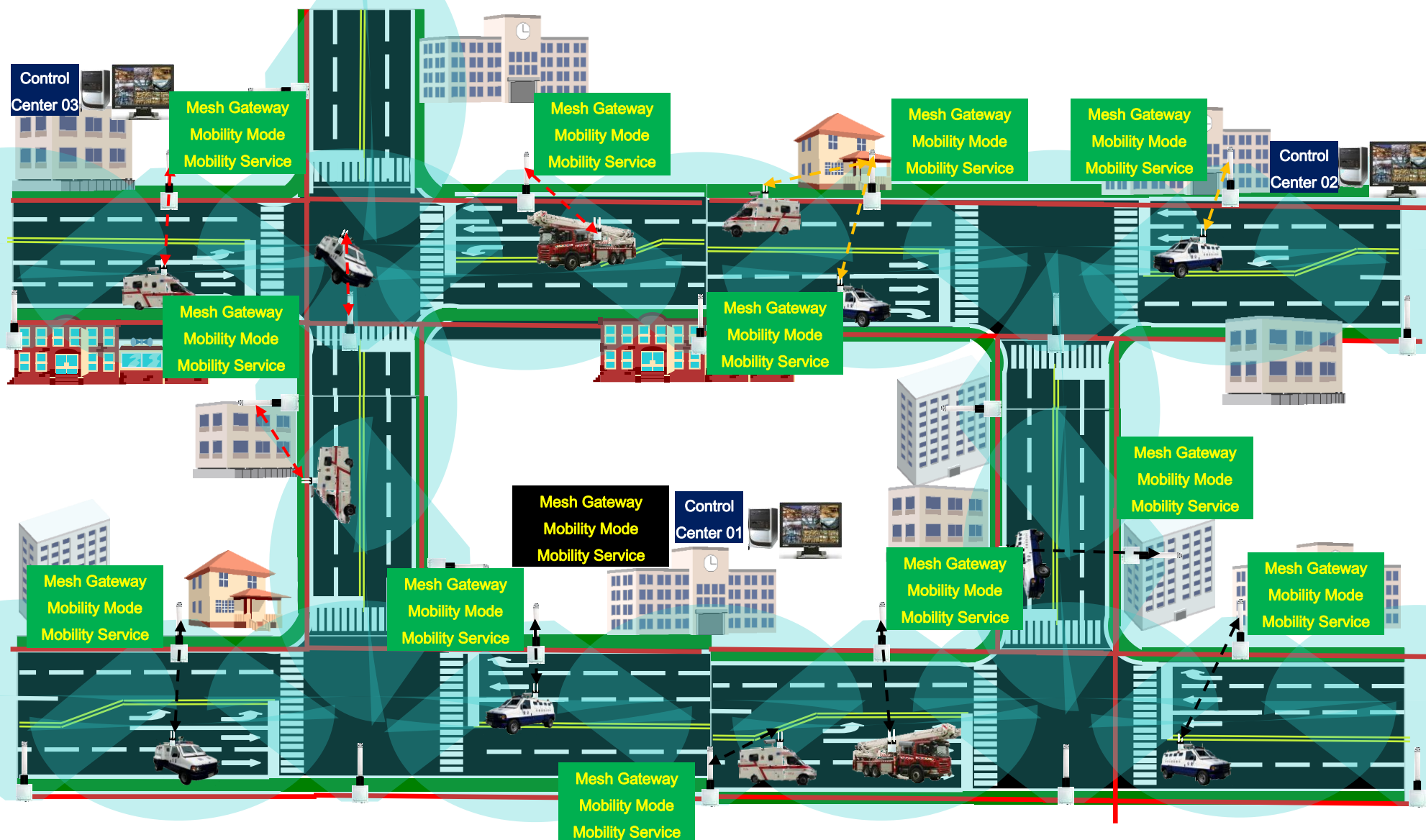
**Design based on Fiber-optic Network Backhaul, all wireless devices are set to the Mesh Gateway**





## Outdoor WiFi MIMO Mesh Network Hi-mobility System **Solution 6-2** for **Urban Roads / General Highway**

Designed with multiple MSTA wireless mobile devices, operating on Hi-mobile wireless surveillance system







# Outdoor WiFi MIMO Mesh Network Hi-mobility System **Solution 7-1** for Urban Roads / General Highway

Design based on **Wireless Network Backhaul**, in Mesh AP Setup Mesh Link for Backhaul, Setup Mobility Service for Signal Coverage





## Outdoor WiFi MIMO Mesh Network Hi-mobility System **Solution 7-2** for **Urban Roads / General Highway**

Designed with multiple MSTA wireless mobile devices, operating on Hi-mobile wireless surveillance system

