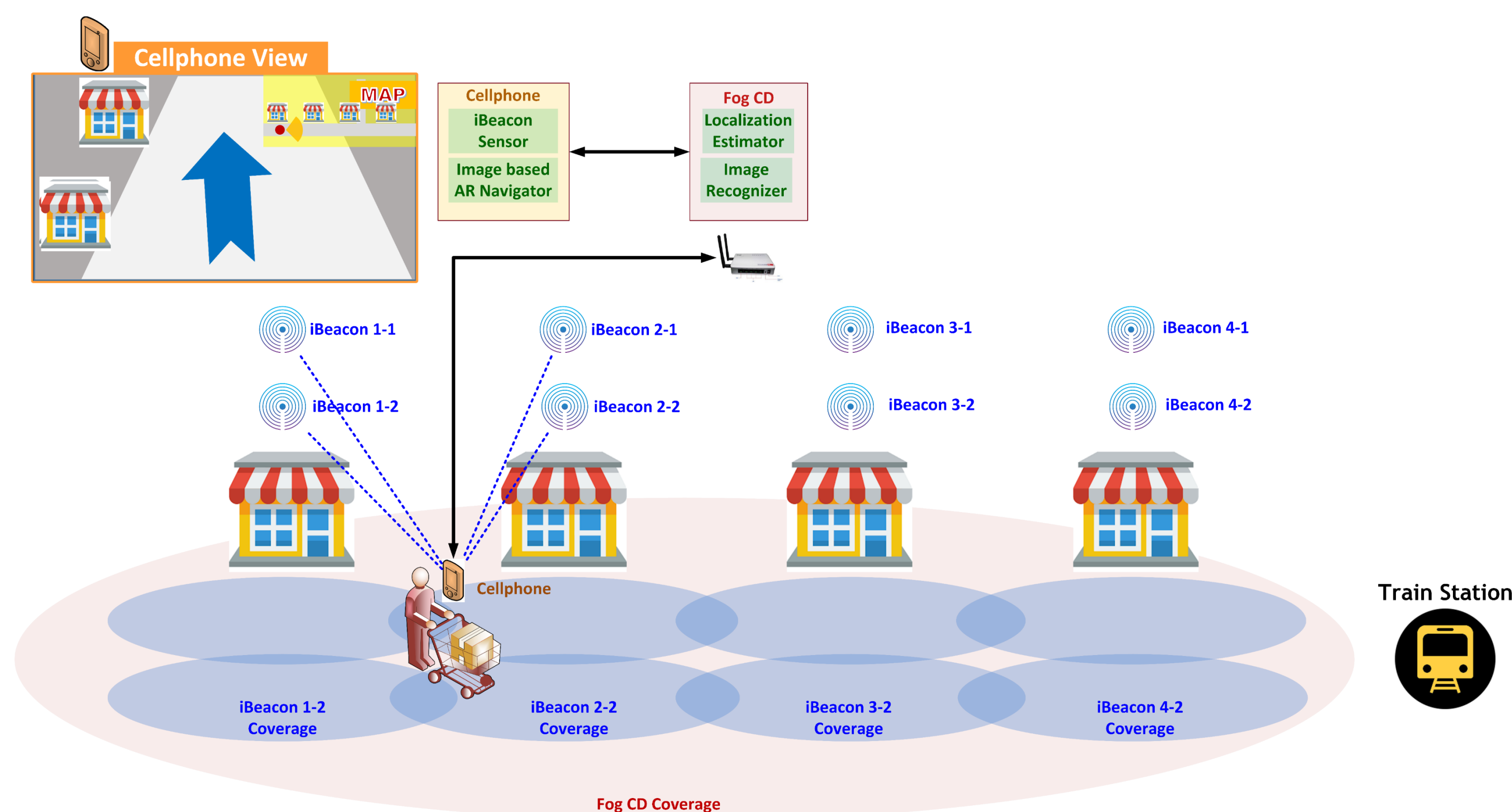


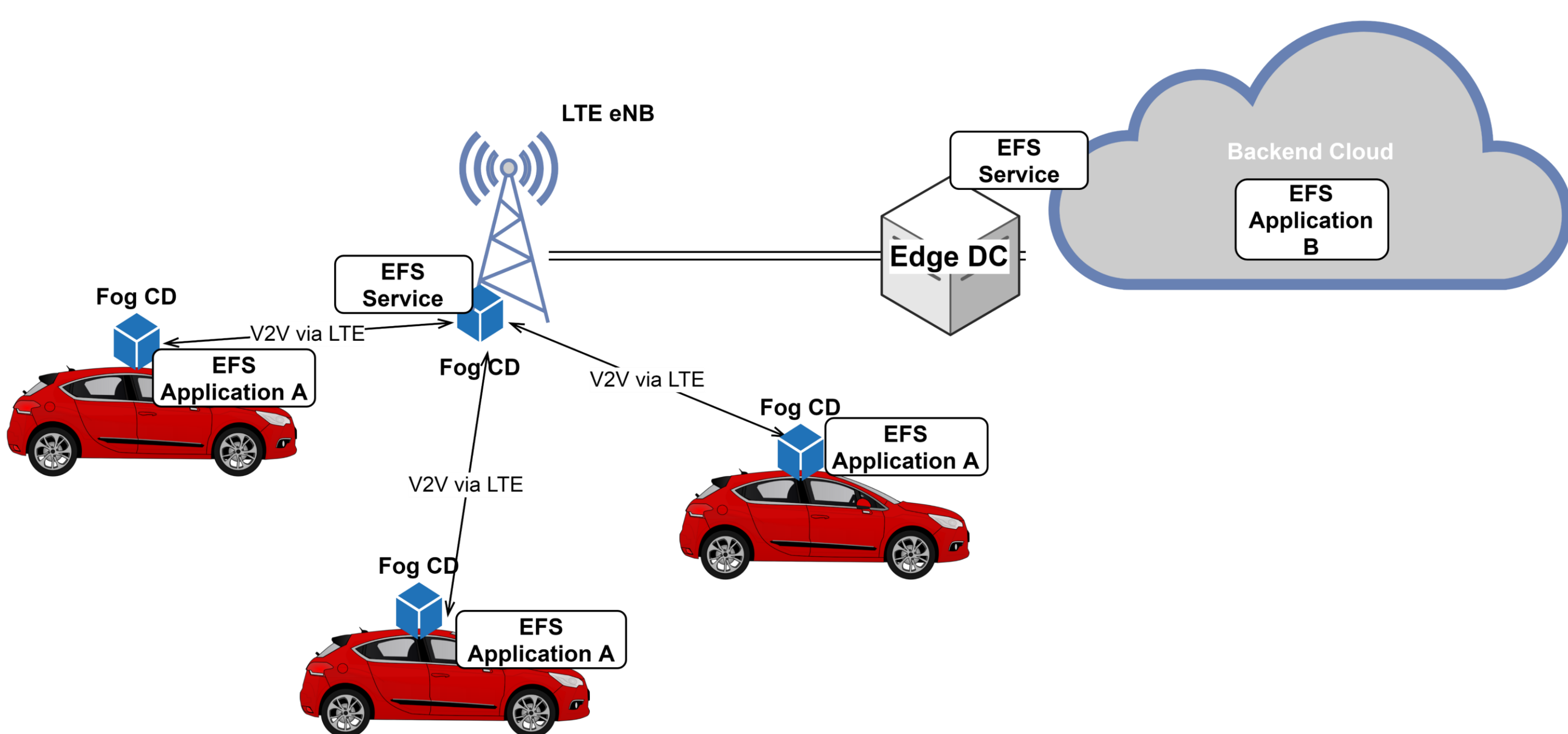
Augmented Reality Navigation

- **AR Navigation Application** – Navigates a user to its destination. User continuously captures and transmits the image frames to the Fog Node. The application utilizes localization service to obtain current user location.
- **Localization Service** – estimates current user location. User continuously transmits the collected iBeacon id list and g-sensor information to **Localization Function** hosted inside Fog CD to receive a response with an estimated user location.

Low-
mobility



Shopping Mall Testbed



Connected Cars

- **Drive Assisted System** – Realized by exploiting car infrastructure as a Fog CD. Data speed, direction and position, are collected from vehicles and can be used in different way for improving the cars safety. Within the suggested testbed setup, it could be possible to consider a number of different end-user applications such as roadworks reporting, weather conditions reporting, emergency vehicles approaching, position tracking and collision avoidance.

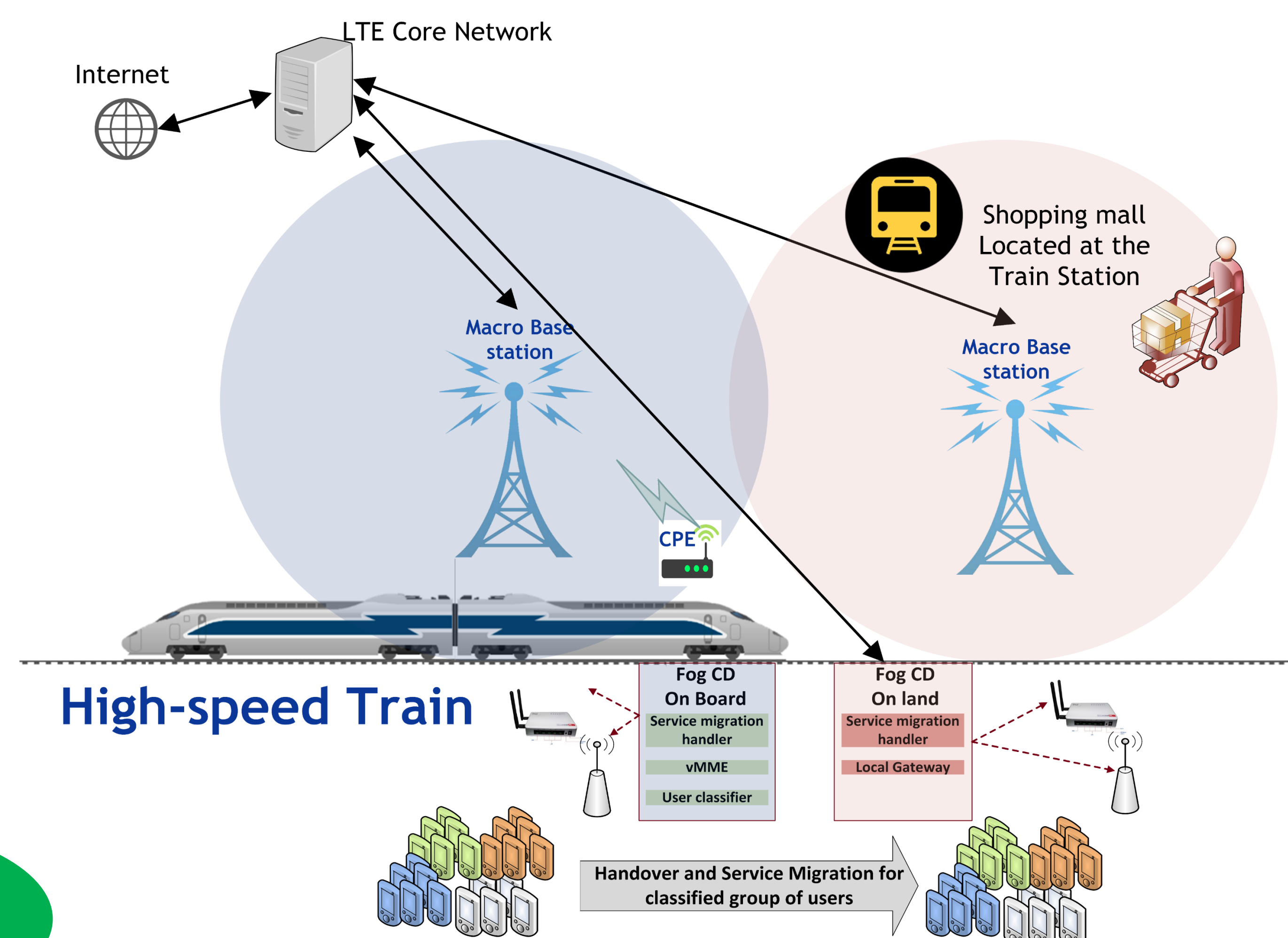
Medium -
mobility

Connected Car Testbed

Handover for hundreds of passengers

- **Virtual Mobility Management Entity** – Hosted in onboard Fog CD to cope with the huge amount of signaling resulted by hundred of passengers travelling especially when train approaches the train station. Also, Fog CD host **User Classification Function** which classify aforementioned passengers into groups based on context information obtained from multi-RATs (e.g. LTE, Wi-Fi) such as QCI (QoS Class indicator). Future work will focus on service migration for classified group.

High -
mobility



High-Speed Train Testbed