# Aerial-Ground Cooperative Vehicular Networks

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Autonomous driving has received remarkable attention both in the academia and industry.

- In the current autonomous driving systems, in-vehicle equipment (radars, cameras, CPU, and sensors) increases the cost of automated vehicles.

- Autonomous driving is able to improve our city life by being much more environmentally friendly, time saving and being much safer for the drivers and pedestrians alike.
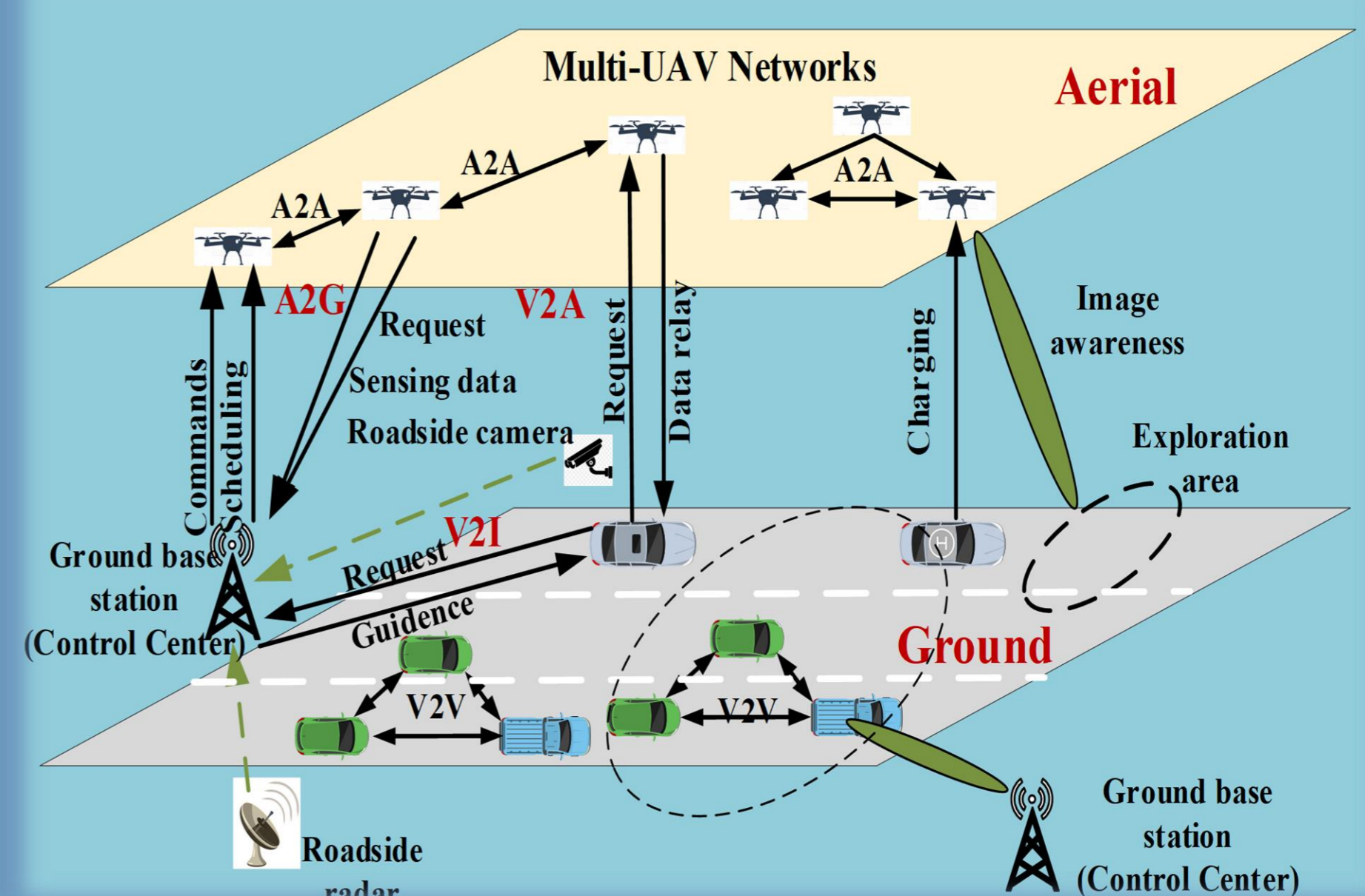
- **Multiple UAVs**, forming an aerial subnetwork, aid the ground autonomous vehicles subnetwork by serving up-to-date information about the neighbor vehicle dynamics and other traffic information.

- UAVs can act as **intermediate relays** due to their flexible mobility when network partitions happen in the ground vehicular subnetwork.

- **Reinforcement learning** algorithm is invoked for obtaining the optimal motions of autonomous vehicles by exploring the environment in an iterative manner and by learning from their mistakes.