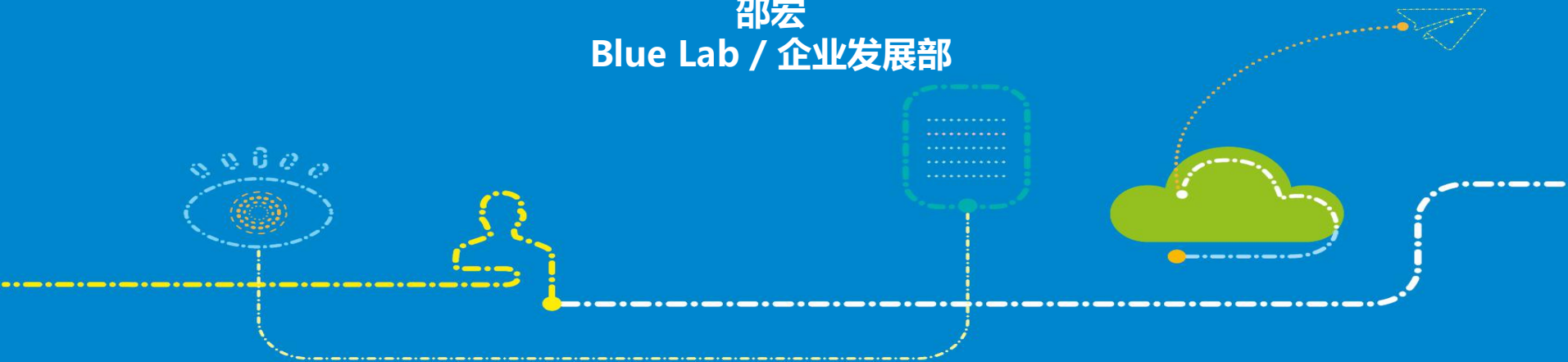


新一代智能汽车电子架构

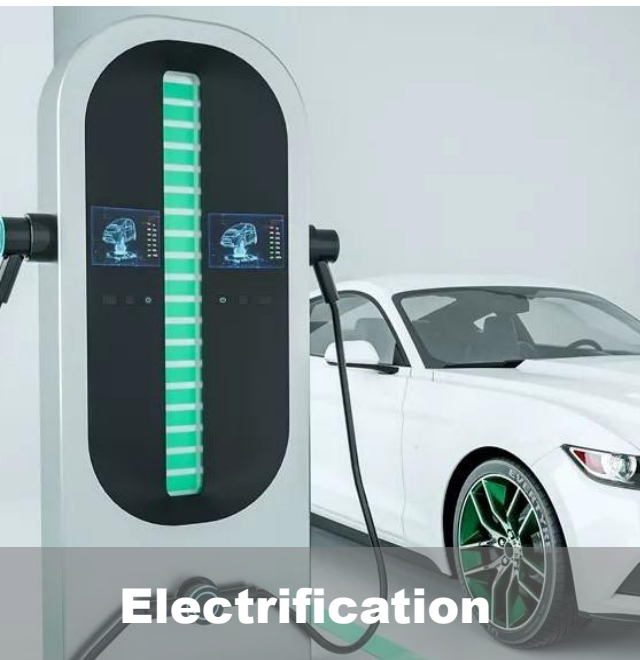
Transformation of New generation Automotive E/E Architecture

邵宏

Blue Lab / 企业发展部

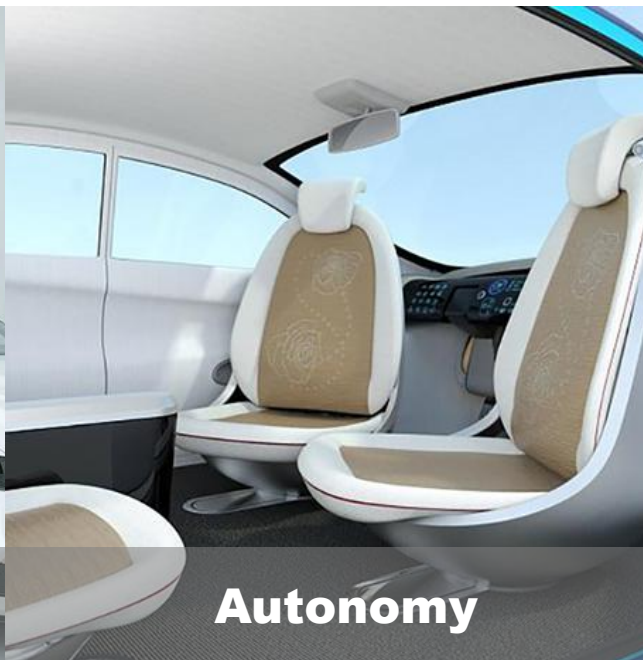


软件和整车电子架构重塑汽车电动化、智能化、网联化



Electrification

从燃油、混动到纯电
废气零排放



Autonomy

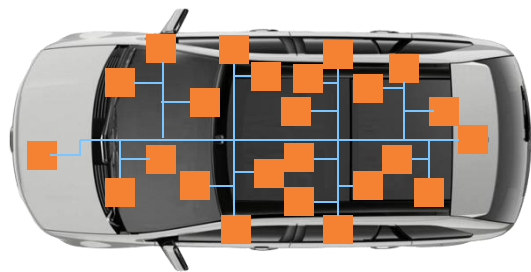
Level 1-2 辅助驾驶
Level 3-5 自动驾驶



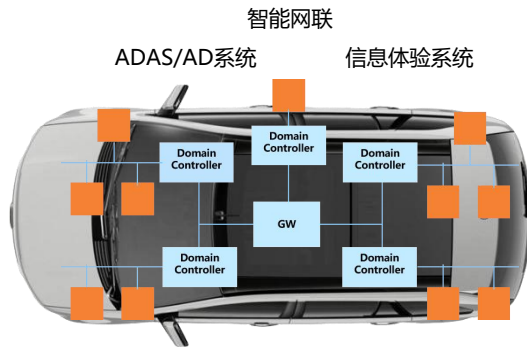
Connectivity

传统车内通信、4G-LTE V2X
5G+APP 软件定义汽车

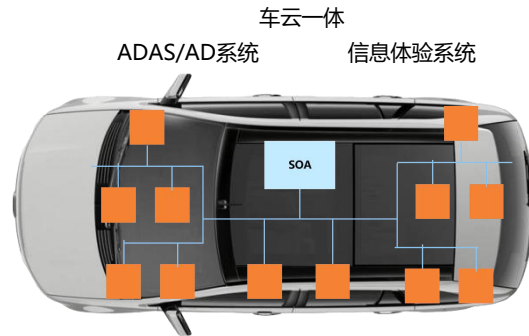
汽车电子E/E架构：从模块化、分布式向中央集中式架构变化



传统
Distributed
分布式ECU架构

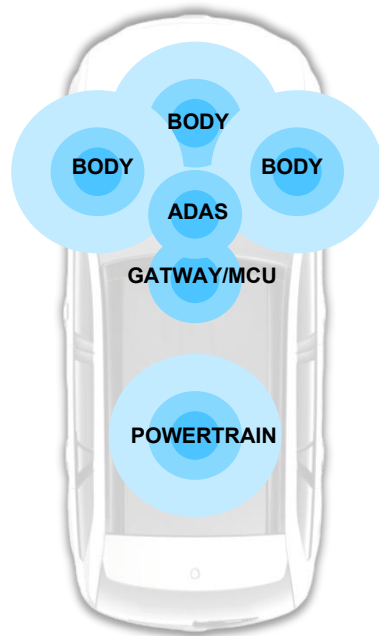
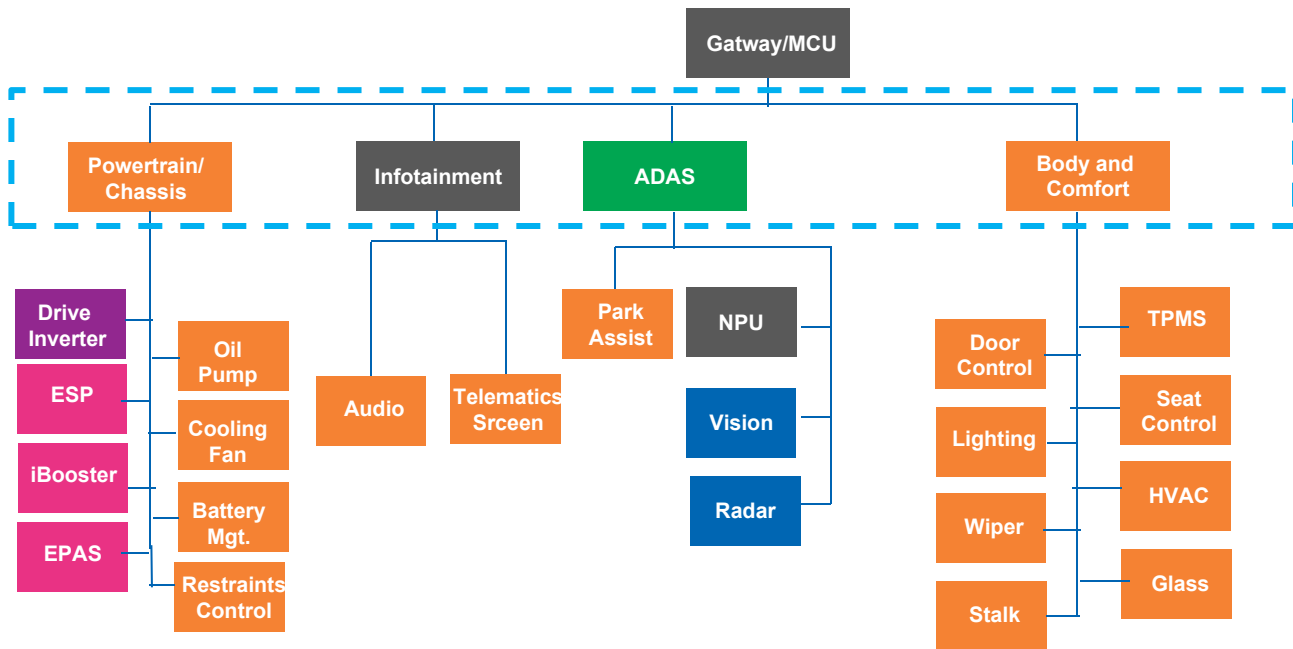


当前
Domain
域控制器架构



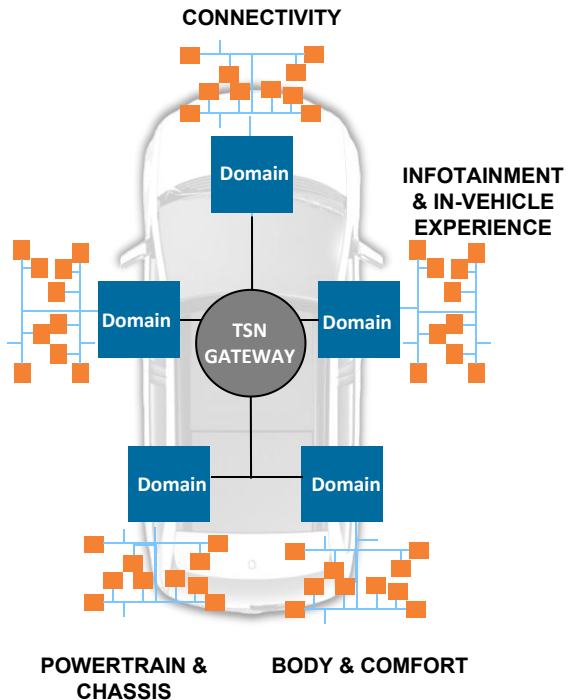
未来
Centralized
中央计算架构

高性能车内网络协调多域

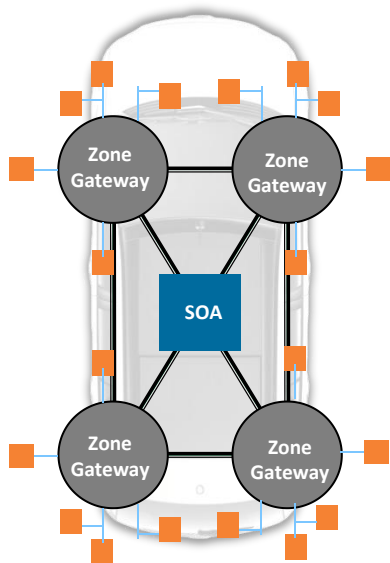


在物理约束下优化汽车电子架构

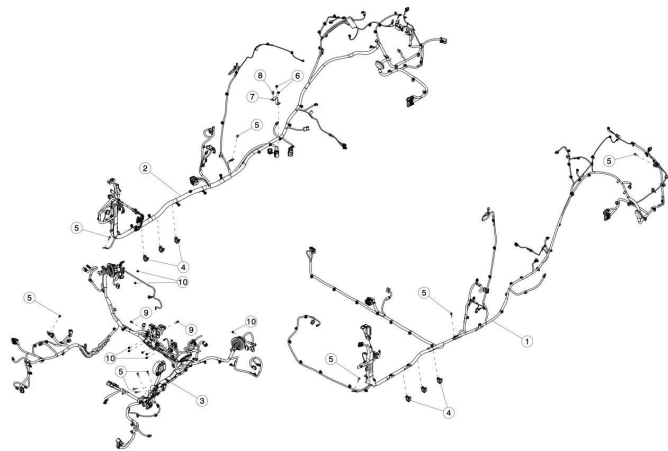
DOMAIN 架构



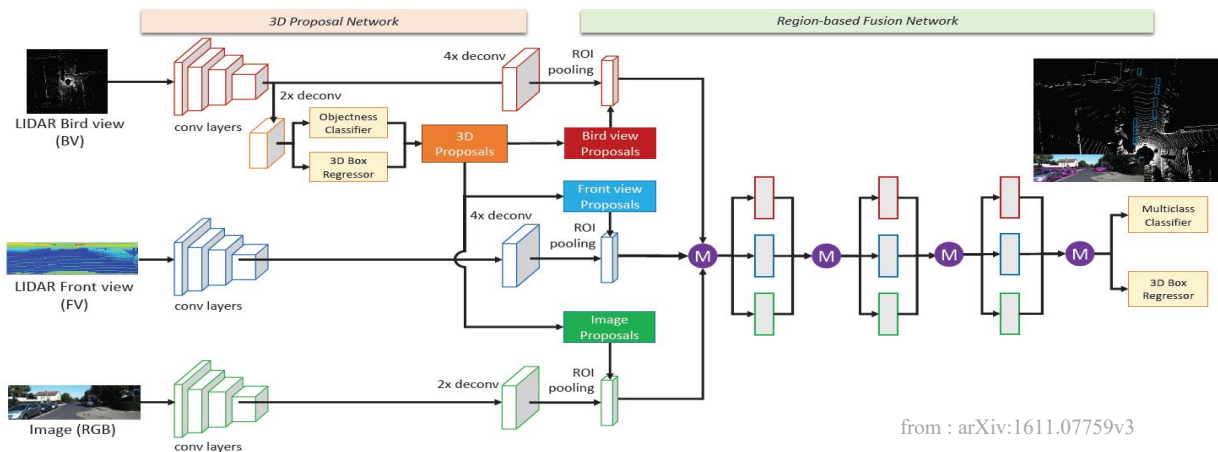
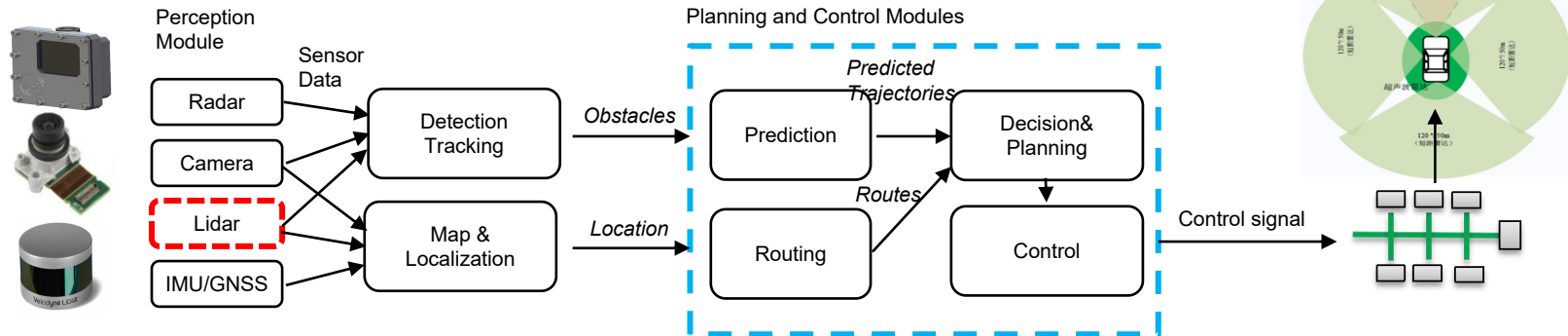
ZONE 架构



物理上优化线束
逻辑上分域隔离



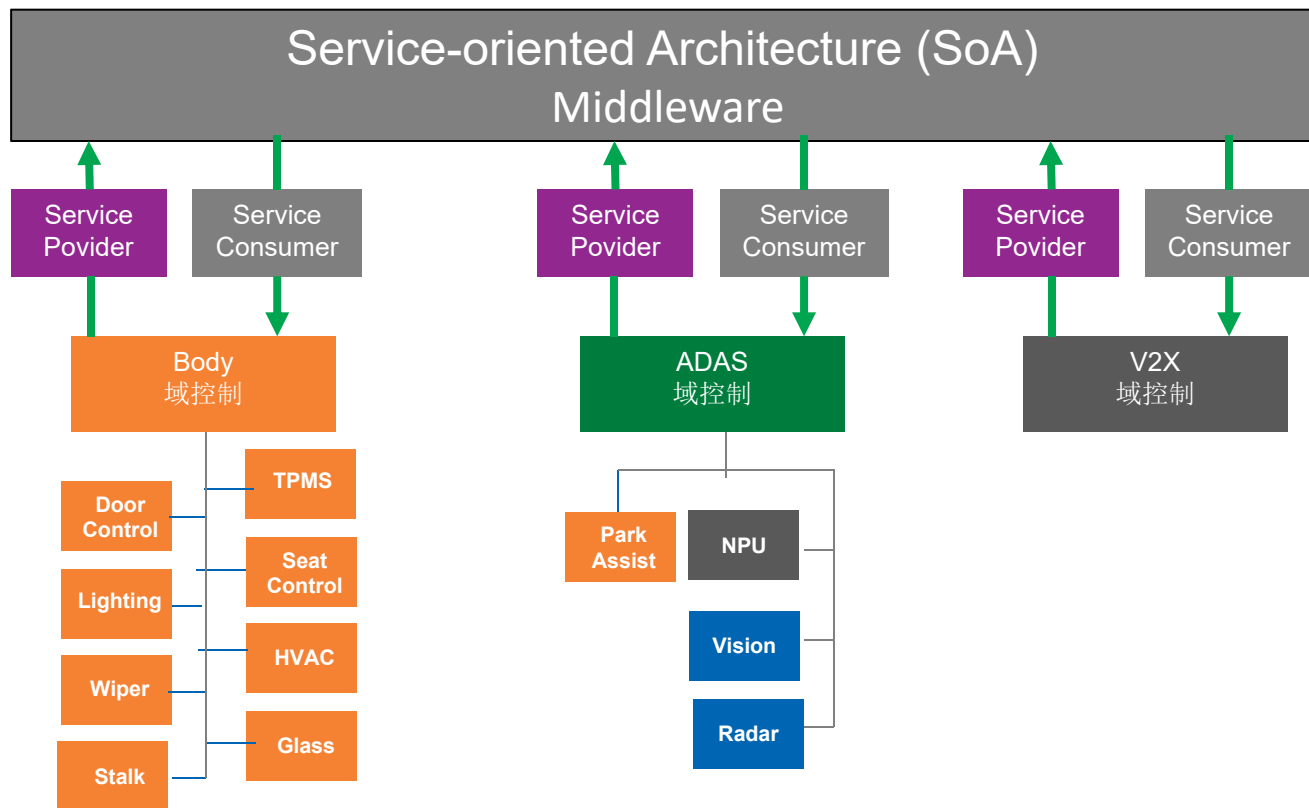
以视觉为中心的自动驾驶 vs 激光雷达



from : arXiv:1611.07759v3

软件定义汽车

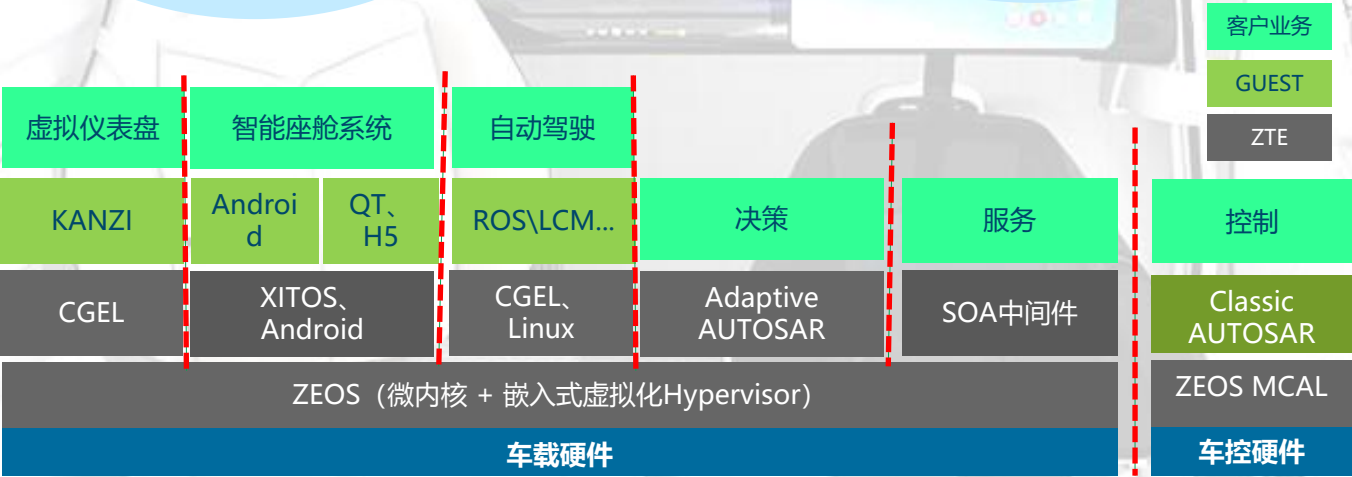
- 通过OTA升级ECU
软件和快速部署新
业务
- Mobility-as-a-
Service , 带来新
的用户体验和创新
商业模式
- 对域进行管理
- 增强安全性
- 高容错
- 高数据带宽



集中式架构下ZEOS操作系统

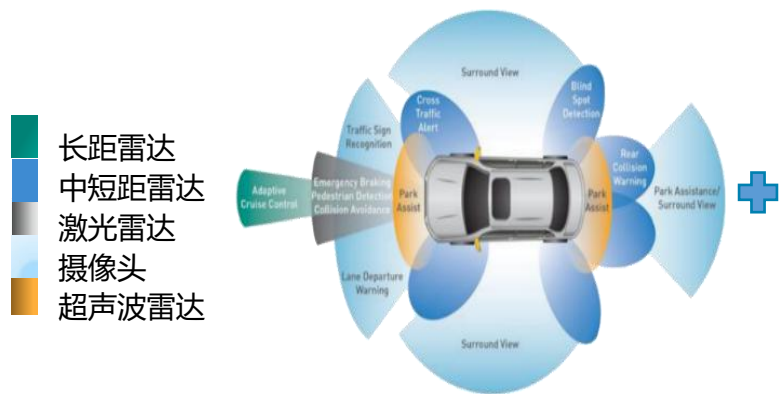
智能座舱解决方案

自动驾驶解决方案



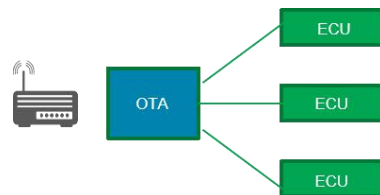
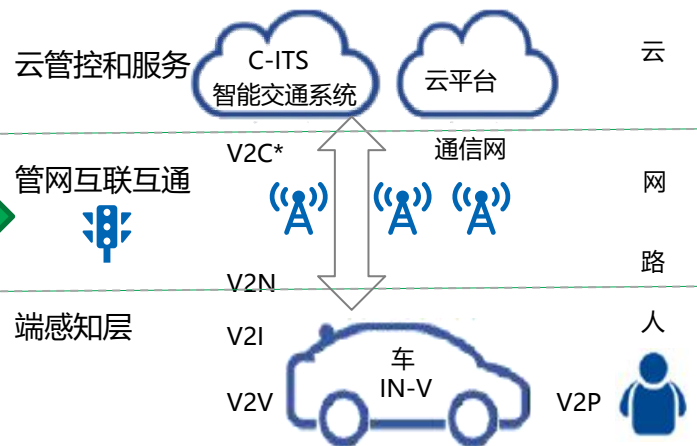
和5G深度融合，智能网联汽车的新机遇

智能化

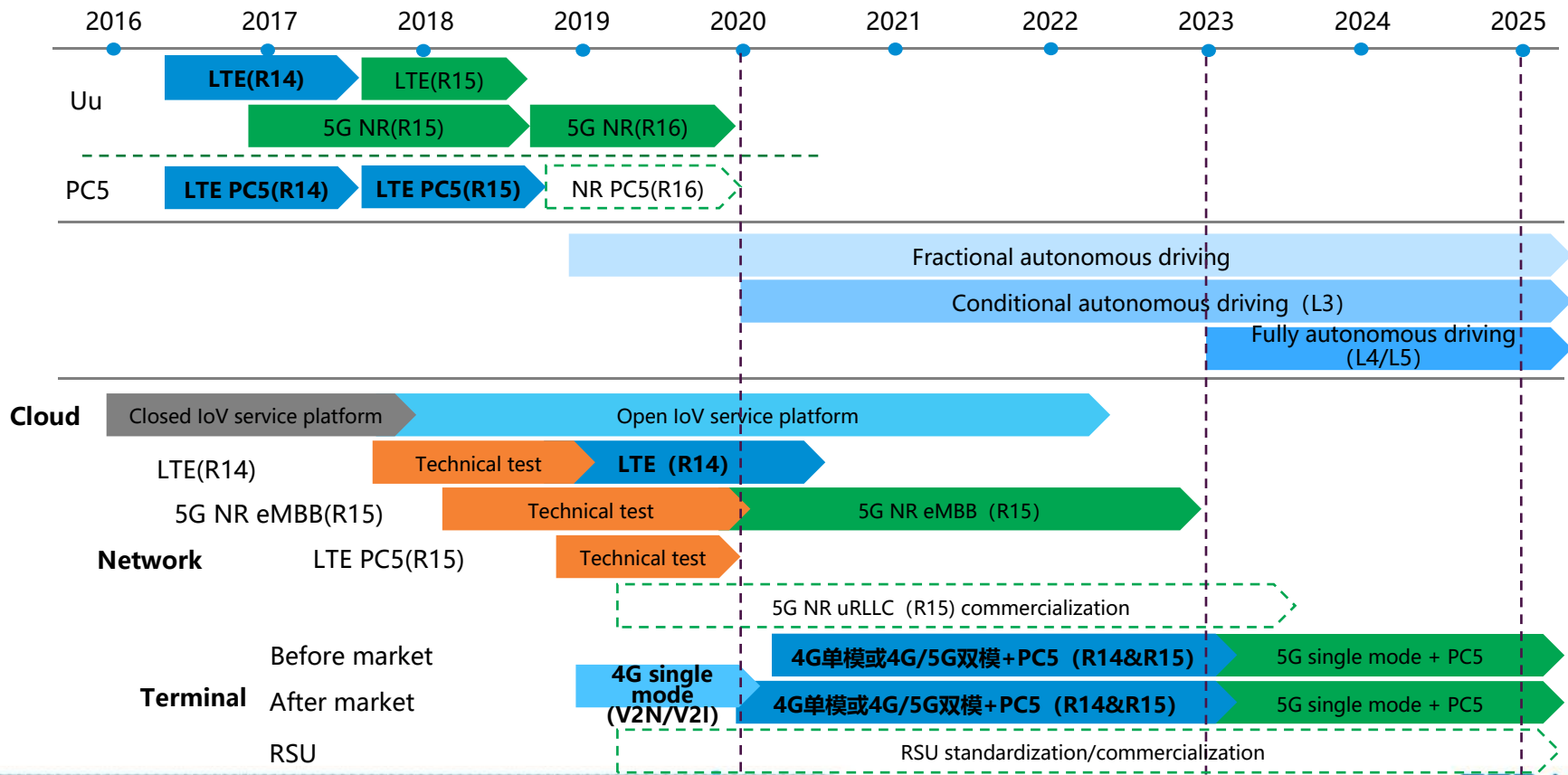


Mobility-as-a-Service

网联化(5G+V2X)



5G部署与自动驾驶应用基本同步



中兴通讯积极推动车联网标准化与产业化



谢谢!

5G 先锋

