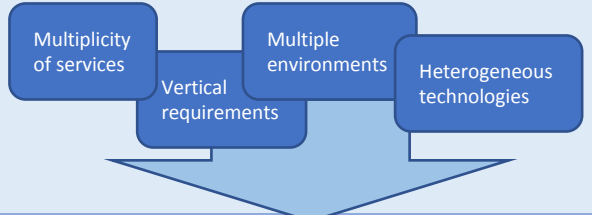




# E2E-aware Optimizations and advancements for the Network Edge of 5G New Radio



- ONE5G objectives**
- Prepare next phases of 5G, beyond Rel. 15, with solutions addressing scenarios Megacities and Underserved Areas, from cost and performance viewpoint
  - Link optimizations for multi-service operation and enablers towards practical implementation
  - Improve E2E performance through RAN enhancements
  - Validation through simulations and proof-of-concepts
  - Dissemination and IPR

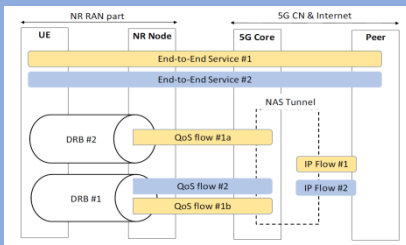
## Multi-service performance optimization solutions for improved E2E performance

### RRM for Improved E2E Performance

Optimized RRC State Handling and DRX

Multi-Service Resource Allocation

Optimizations Signaling and Control Plane Optimizations

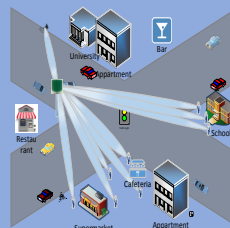


**Multi-link Management for Improved E2E Performance**  
 Dynamic Multi-Connectivity  
 Spectrum Management  
 Mobility and Load Balancing Optimizations  
 Performance Optimization for UEs with D2D Schemes

## Multi-antenna access and link enhancements

### Future proof multiservice access solutions

Design of non-orthogonal multiple access  
 Solutions for ultra-reliable and low latency communication



### Massive MIMO enablers towards practical implementation

Flexible hardware architecture and multi-service support

Efficient CSI acquisition in TDD/FDD and feedback compression in FDD

Analog and/or Digital Beamforming/Precoding

**Advanced link coordination based on CRAN/DRAN and massive MIMO**  
 Physical layer techniques and procedures for CRAN/DRAN  
 Resource allocation and traffic management in CRAN/DRAN

## Methodology

