

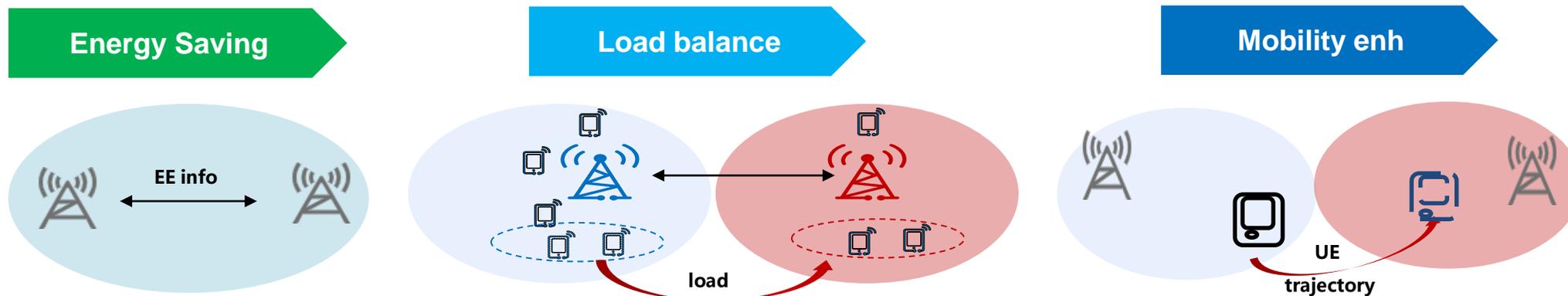
# Views on AI/ML NG-RAN enhancement in Rel-19

China Unicom

# Background on AI/ML for NG-RAN

## Work in Rel-18:

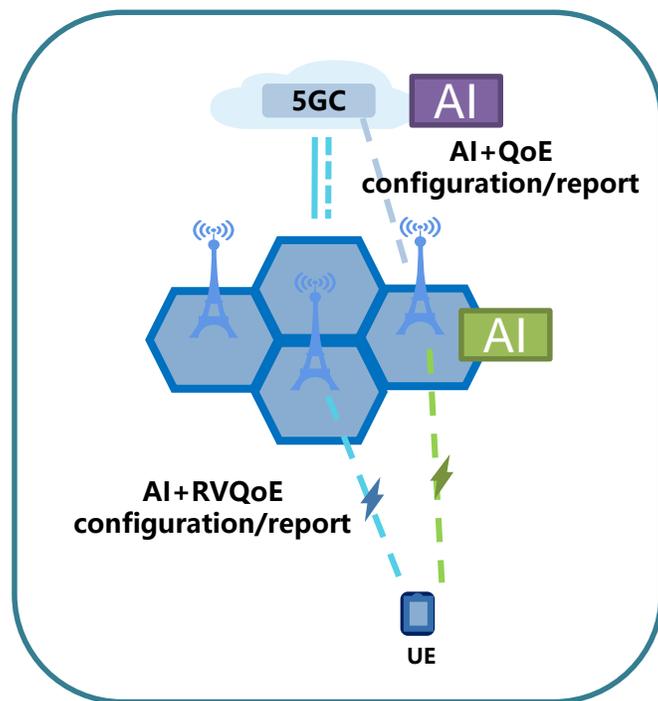
The 3GPP R18 AI/ML for NG-RAN WI focuses on three use cases of load balancing, mobility optimization, and energy saving to carry out standard research work. Based on TR 37.817, R18 AI/ML for NG-RAN specify the data information required by AI functions and corresponding procedure.



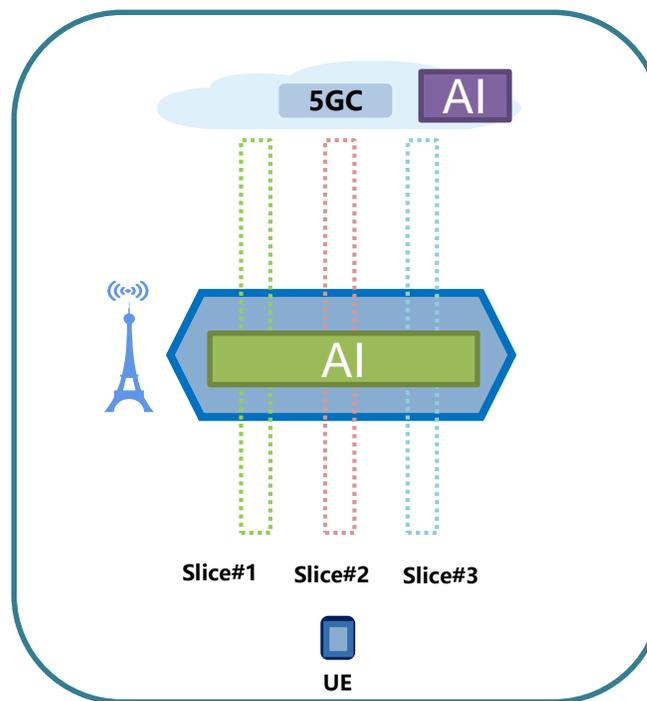
# Motivation on AI/ML for NG-RAN higher layer in Rel-19

## □ Motivation:

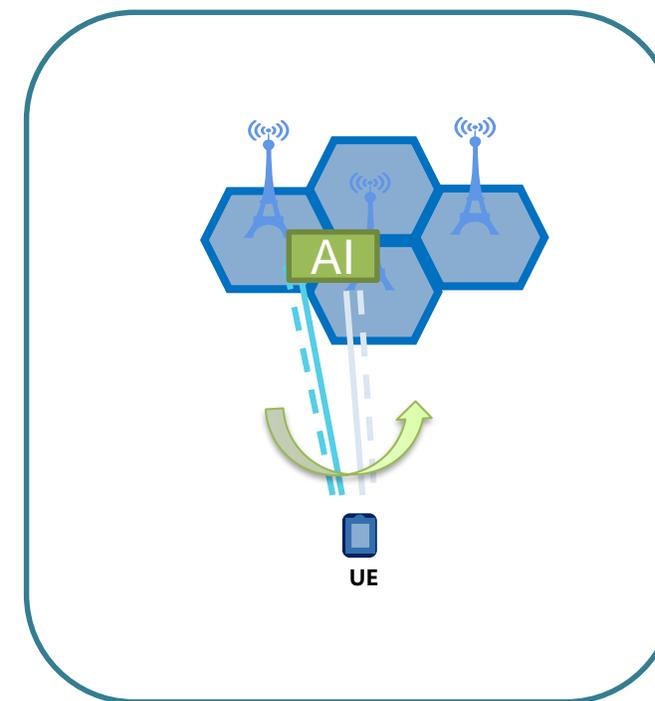
With the evolution of 5G network intelligence, AI has been considered as a key technology for improving network performance. In the next release, other potential use cases could be further discussed to identify the AI enabling features on the basis of Rel-18, e.g. QoE, network slicing, etc. Meanwhile NR-DC scenario can be supported for latency reduction and performance optimization during NR-DC setup/release procedure.



AI + QoE



AI + RAN slicing



AI in NR-DC

# Objective on AI/ML for NG-RAN higher layer

- Study on new use cases to improve network performance in different scenarios:
  - For AI-based network slicing use cases
    - Predict user traffic, resource status, and other information, intelligently and dynamically allocate network resources to different network slices.
  - For AI-based QoE use cases
    - Predict the QoE requirements of each service type, optimize resource allocation of each service type, and improve user experience.
  
- Specify support for AI feature in NR-DC:
  - Assist in DC establishment and update with UE trajectory prediction.

Thanks