

RP-191876

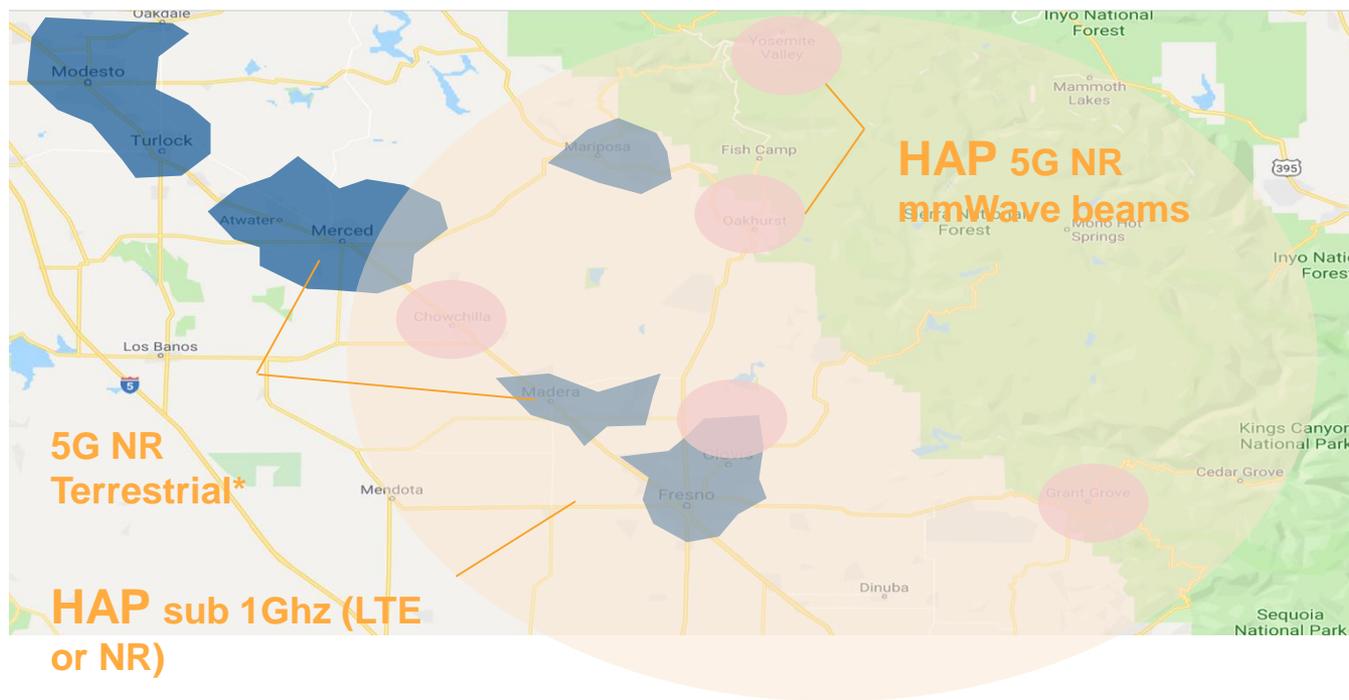


IAB with mobility and centralized coordination

3GPP TSG RAN meeting #85
Newport Beach CA
September 16-20, 2019

Introduction

HAPS platforms can be used to provide 5G services from the sky



5G megacell for enhanced coverage

The use case: IAB and HAPs

- Having the ability to treat the HAP 5G nodes as an IAB node allows for smooth service expansion
- HAPs can connect to terrestrial towers using regular IAB procedures. This deployment can be standardized and be transparent to the end user
- HAPs nodes can be LOS to dozens of terrestrial nodes which can significantly increase the opportunity around IAB for network and user experience optimization.
- Mobility of HAPS nodes is predictable, and this fact can be exploited for routing coordination
- The following items need to be handled to enable this use case
 - Mechanism for centralized coordination of routing across gNB-CUs
 - Support for mobile IAB nodes
 - Support for multi-connectivity
- **Proposal**
 - Explicitly include HAPS as mobile IAB use case in Rel-17 ambit