



3GPP TSG RAN#102
11th – 15th, December 2023

Agenda: 9.1.1.9

RP-233863

Views on Network-Controlled Repeaters (NCR) Enhancements

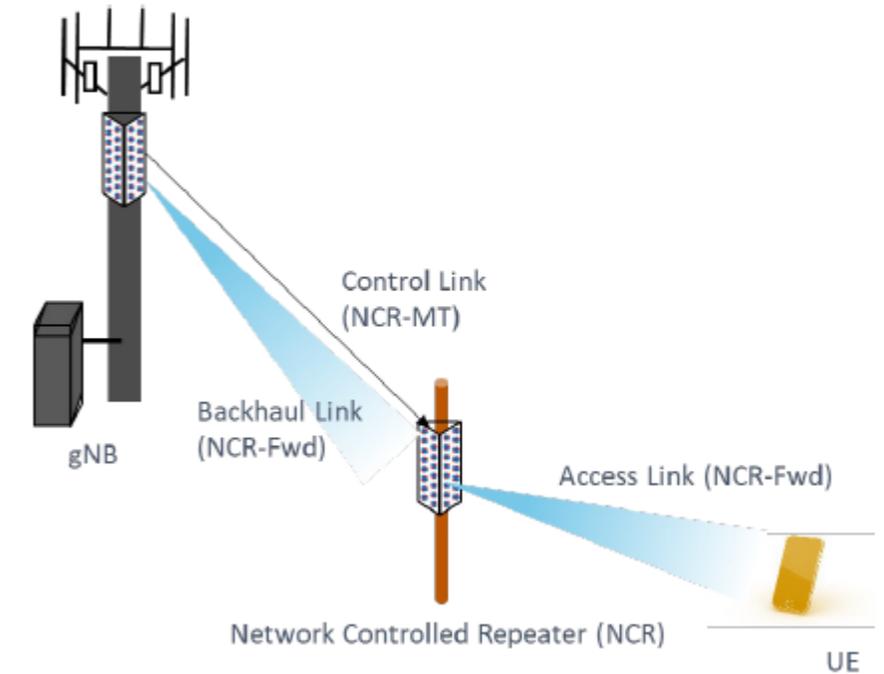
Source: AT&T, FirstNet

Background & General Observations

- 📶 Per endorsed, [RP-231540](#) NCR enhancements are one of the additional candidate topics for further enhancements in Rel-19
- 📶 A significant number of companies have expressed interest in NCR enhancements for Rel-19 including
 - Aspects downselected in Rel-18 due to time constraints
 - Real world commercial deployment considerations

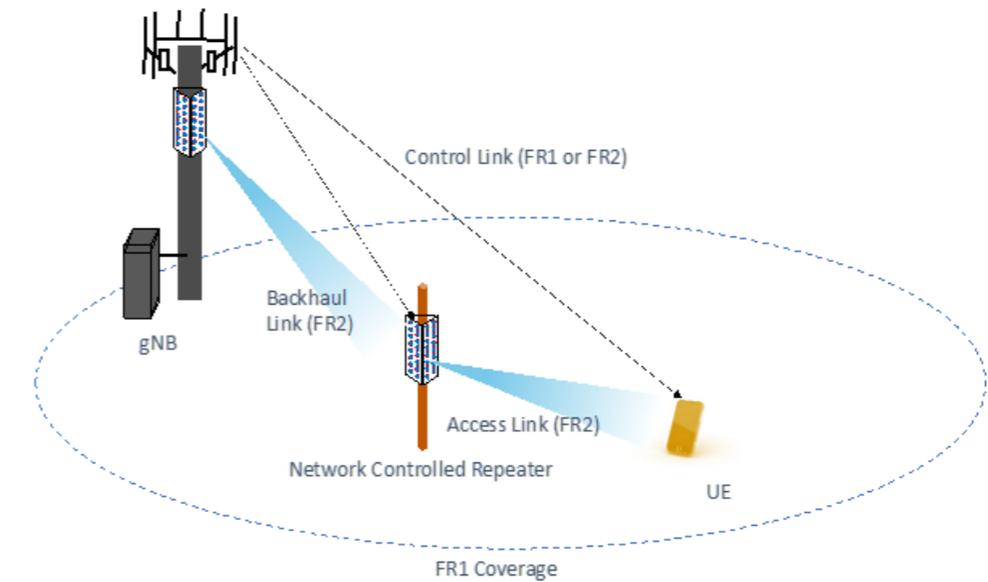
Observations/discussion (1)

- 📶 Operators need a variety of network nodes to increase flexibility for their network deployments
- 📶 NCR represents a cost-effective means of extending network coverage (including indoors)
- 📶 3GPP solutions support multi-vendor interoperability and simplify management solutions (e.g. SON/OAM)



Observations/discussion (2)

- 📶 NCR Motivation and Justification
 - NCR portability: Public Safety and special-event use cases
 - Deployment flexibility: Scalable and user-deployed (e.g., in-building NCR)
- 📶 Potential small objectives for NCR enhancements
 - CONNECTED mode RRM measurement reports for NCR
 - OTA access/backhaul power control signalling
 - Multi-frequency support for NCR-MT (e.g., NR-DC/EN-DC/CA)
- 📶 Due to perceived lack of available time in the Rel-19 scope, NCR enhancements seem unlikely to be a part of the initial Rel-19 package.



Proposal

1. NCR enhancements to be revisited in Rel-19 as either:
 - TEI-19 proposals given enhancements that are small in scope, but essential for commercial deployments
 - Revisit a potential WID for NCR enhancements in 3Q2024 (RAN#105)



Thank you!