# Suggestions on some terminologies

Jinri Huang, China Mobile

# Motivation

- ITU-T began their work on 5G transport, including FH

- Spec. writing just began, many new terms used: NGFI-I, NGFI-II, …


- => Need unified terminology
  - Not only for the spec.
  - But to facilitate future communication with outside SDOs, e.g. ITU-T

# First suggestion: NGFI -> NGFI (xhaul)

- Always have to clarify the frequently asked question: is the subject of 1914.1 the CU-DU interface? -> a bit misleading from the WG name "NGFI"

- Not change "NGFI": It is the WG name, our brand

- Rethink:
  - The essence of NGFI (WG motivation)
  - The way lies on split & various splits lead to various haul

  xhaul

- Tight coupling b/w the haul and splits(interface) => NGFI (xhaul)

- Furthermore
  - Imply fronthaul/midhaul/backhaul convergence

# Some suggested texts

- NGFI (xhaul): The essence of NGFI is to design the links and specify their requirements among geographically separated logical and functional entities of a BS. The nature of traffic on such link should be (network) load-dependent, #antenna-independent, packetized, and statistically multiplex-able. Key to achieve the above objectives depends on adequate functional reallocation among entities of BS. Various functional split options amount to their respective link/transport requirements. For example, a lower-layer split such as option 7 or 6 in 3GPP, a very small delay on the order of microseconds and a large bandwidth of several Gbps may be required; which is similar to, but not identical to the traditionally fronthaul link carrying TDM IQ data stream. On the other hand, with a higher-layer split such as option 2 in 3GPP, the requirement in terms of latency and bandwidth is much more relaxed; which is more like, but also not identical to traditional backhaul link. In other words, each of the split options leads to a respective set of requirements of the corresponding xhaul link. To explicitly emphasize the tight coupling between the xhaul option and the TBD link transport requirements, we suggest henceforth use the term "NGFI (xhaul)" instead of "NGFI" alone in the spec. wherever necessary.

# Second suggestion

- Fonthaul & midhaul: When it comes to 5G architecture, given that CU and DU has been defined in 3GPP, a gNB contains a CU and multiple DUs. We further define a new fronthaul as the transport between DU and RRU while midhaul as the transport between CU and DU. Collectively, they are referred to as NGFI (xhaul).

# Motion #1

- To agree on the definition of NGFI (xhaul), fronghual and midhaul as described on page 4 and page 5 in "tf1_201707_huang_terminology_1.pptx", and further adopt the texts in the spec. The project Editor has the right to make editorial changes if needed.

  - –Moved by:
  - –Seconded by:

- (technical, require >= 2/3)

# Motion #2

- To agree on the definition of NGFI (xhaul), fronghual and midhaul as described on page 4 and page 5 in "tf1_201707_huang_terminology_1.pptx", and further include them in the liaison with ITU-T in the future.

    – Moved by:

    – Seconded by:

- (procedural, require >= 2/3)

# Thank you!