

Consideration on the term of “NGFI (xhaul)”

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

3 perspectives to consider

1, WG brand

2, specification writing

3, terminology sharing with outside SDOs e.g. ITU-T

Opinions

- 1, from WG brand perspective, should keep “NGFI”. It has been our WG brand for a long time. No change should be made.
- 2, we admit the tight coupling relationship b/w “Interface” and “haul” and therefore agreed to introduce the word of “NGFI (xhaul)”, i.e. putting “xhaul” in the parenthesis after “NGFI”. however,
- 3, we also agree that “NGFI (xhaul)” is NOT a term and thus,
- 4, based on 2 and 3, we suggest to reflect the wording of “NGFI (xhaul)” where appropriate in the spec. document. The action is then up to the editor to make the change.

Opinions

5, meantime, we agree that for the LS back to ITU-T, we need to be careful of using the word of “NGFI (xhaul)” since it is not a terminology. It is suggested not to mention it at all in the LS. (Note: currently the WG have not discussed the LS back to ITU-T but one thing is sure: the ToC of 1914.1 should be put there)

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.

Motion #1

- To agree on the description of NGFI (xhaul) as on page 6 in “tf1_201708_huang_terminology.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 $\geq 2/3$)

Thank you!