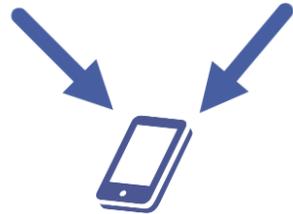


# High-level overview on Rel-19 package

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KDDI corporation

# Prioritized Rel-19 items

<h3>MIMO</h3>  <ul style="list-style-type: none"><li>• Larger antenna array</li><li>• Beam management</li><li>• Enhancement for CJT</li></ul>	<h3>Duplex</h3>  <ul style="list-style-type: none"><li>• WI conversion</li><li>• Sub band full duplex</li><li>• Interference mng</li></ul>	<h3>AI/ML for air</h3>  <ul style="list-style-type: none"><li>• WI conversion</li><li>• Performance test &amp; interoperability</li></ul>	<h3>RIS</h3>  <ul style="list-style-type: none"><li>• Channel model</li><li>• Architecture design</li><li>• Control signaling</li></ul>
<h3>Mobility</h3>  <ul style="list-style-type: none"><li>• Inter CU scenario</li><li>• Early TA acquisition</li><li>• Leftovers</li></ul>	<h3>NES</h3>  <ul style="list-style-type: none"><li>• Adapting common CH</li><li>• SSB less operation</li><li>• Power domain study</li></ul>	<h3>SON/MDT</h3>  <ul style="list-style-type: none"><li>• Data collection</li><li>• Overhead reduction</li><li>• Inter RAT improvement</li></ul>	<h3>Non-collocated</h3>  <ul style="list-style-type: none"><li>• Leftovers from Rel-18, non-contiguous and contiguous</li></ul>

Functionalities with backward compatibility are prioritized but Functionalities without backward compatibility having enough gains are not precluded.



# Motivation and expectations

- **MIMO** : Enhancement for larger antenna array, latency reduction for beam management, and enhancement for joint transmission with more TRP
- **Duplex** : Conversion to WI from Rel-18 study. Increase the UL resources and reduce latency using sub band full duplex
- **AI/ML for air interface** : Conversion to WI from Rel-18 study. Feasible objectives including performance test and interoperability aspects
- **RIS** : An alternative solution to address the dead spot issue. Study on channel model, architecture design, control signaling
- **Mobility** : In Rel-18, 3GPP RAN work on basic functionalities for LTM(L1/L2 based inter-cell mobility), but still areas to be enhanced for Rel-19
- **NES** : In Rel-18, more focuses on connected mode UE, so, there are some area to be enhanced for idle mode UE. Also, some power domain techniques having efficient power saving gains can be studied further
- **SON/MDT** : Data collection for Rel-18 features. Improvements on overhead and NW data storage capacity and inter RAT use case
- **Non-located(RAN4)** : Leftovers from Rel-18, Intra-band non-contiguous (Type 3 and Type 4 UE) and Intra-band contiguous (Type 2, Type 3 and Type 4 UE)

「つなぐチカラ」を進化させ、  
誰もが思いを実現できる社会をつくる。

# KDDI VISION 2030

