CLAIMS

1. A method of wireless communications, comprising:

determining, by a base station, that an indication message is to be transmitted within an enhanced Mobile Broadband (eMBB) slot, the indication message indicating at least a portion of a mini-slot of the eMBB slot previously assigned to one or more user equipments (UEs) for eMBB communication is to be punctured for an Ultra-Reliable Low latency Communication (URLLC) transmission;

allocating one or more resources to an indication channel based on the determination, the allocated one or more resources being in a same mini-slot as the portion of the mini-slot to be used for the URLLC transmission; and

transmitting the indication message to the one or more UEs during the mini-slot on the indication channel using the allocated one or more resources.

2. The method of claim 1, further comprising transmitting the URLLC transmission during at least the portion of the mini-slot.

3. The method of claim 2, wherein the URLLC transmission punctures a transmission for eMBB using at least the portion of the mini-slot of the eMBB slot.

4. The method of claim 1, wherein at least the portion of the mini-slot to be used for the URLLC transmission is to be transmitted by a neighbor cell, and wherein the indication message provides information to assist with addressing interference from the URLCC transmission from the neighbor cell.

5. The method of claim 1, further comprising transmitting configuration information indicating which mini-slots of the eMBB slot are to be monitored for the indication channel.

6. The method of claim 5, wherein the transmitting the configuration information comprises transmitting cell-specific information or UE-specific information.

7. The method of claim 1, wherein the allocating the one or more resources to the indication channel comprises allocating the one or more resources within a sub-set of mini-slots within the eMBB slot.

8. The method of claim 1, wherein the indication message uses a same numerology as the eMBB slot that is different than a numerology for the URLLC transmission.

9. The method of claim 1, wherein transmitting the indication message includes at least one of:

transmitting the indication message to a specific UE or a specific group of UEs; or broadcasting a cell-specific indication message.

10. The method of claim 1, wherein the indication message indicates whether the URLLC transmission is present on a per resource block or per sub-band basis.

11. A method of wireless communications, comprising:

monitoring, by a user equipment (UE), an indication channel during a mini-slot of an enhanced Mobile Broadband (eMBB) slot;

determining whether an indication message is received over the indication channel, the indication message indicating at least a portion of the mini-slot is used for an Ultra-Reliable Low latency Communication (URLLC) transmission;

determining, based on the indication message, whether at least the portion of the mini-slot was previously assigned to the UE for eMBB communication and is punctured by the URLLC transmission; and

processing at least the portion of the mini-slot based on whether the portion of the mini-slot previously assigned to the UE for eMBB communication is punctured.

12. The method of claim 11, wherein the processing comprises zeroing log likelihood ratios (LLRs) corresponding to at least the portion of the mini-slot when the indication message declares that the URLLC transmission is present in the mini-slot.

13. The method of claim 11, wherein the processing comprises stopping processing of the mini-slot when the indication message declares that the URLLC transmission is present in the mini-slot.

14. The method of claim 11, wherein the processing comprises storing LLR values corresponding to at least the portion of the mini-slot for decoding the eMBB slot when the indication message was not received in the mini-slot.

15 The method of claim 11, wherein the monitoring comprises monitoring a configured sub-set of mini-slots.

16. The method of claim 11, wherein at least the portion of the mini-slot to be used for the URLLC transmission is to be transmitted by a neighbor cell, and wherein the indication message provides information to assist with addressing interference from the URLCC from the neighbor cell.

17. The method of claim 11, wherein the monitoring comprises monitoring the indication channel based on a radio network temporary identifier (RNTI) of a base station for the indication channel.

18. The method of claim 17, wherein the monitoring comprises blind decoding the indication channel for multiple RNTI associated with a set of neighbor cells.

19. The method of claim 11, wherein the indication message indicates that a future mini-slot is to be used for another URLLC transmission, the method further comprising: refraining from transmitting a previously scheduled transmission during the future mini-slot.

20. A base station for wireless communication, comprising:
a transceiver;
a memory configured to store instructions; and

one or more processors communicatively coupled with the transceiver and the memory, wherein the one or more processors are configured to execute the instructions to:

determine that an indication message is to be transmitted within an enhanced Mobile Broadband (eMBB) slot, the indication message indicating at least a portion of a mini-slot of the eMBB slot previously assigned to one or more user equipments (UEs) for eMBB communication is to be punctured for a Ultra-Reliable Low latency Communication (URLLC) transmission;

allocate one or more resources to an indication channel based on the determination, the allocated one or more resources being in a same mini-slot as at least the portion of the mini-slot to be used for the URLLC transmission; and

transmit the indication message to the one or more UEs during the mini-slot on the indication channel using the allocated one or more resources.

21. The base station of claim 20, wherein the transceiver is configured to transmit the URLLC transmission during the at least the portion of the mini-slot.

22. The base station of claim 21, wherein the URLLC transmission punctures a transmission for eMBB using at least the portion of the mini-slot of the eMBB slot.

23. The base station of claim 20, wherein the transceiver is configured to transmit configuration information indicating which mini-slots of the eMBB slot are to be monitored for the indication channel.

24. A user equipment (UE) for wireless communication, comprising:

a transceiver;

a memory configured to store instructions; and

one or more processors communicatively coupled with the transceiver and the memory, wherein the one or more processors are configured to execute the instructions to:

monitor an indication channel during a mini-slot of an enhanced Mobile Broadband (eMBB) slot;

determine whether an indication message is received over the indication channel, the indication message indicating at least a portion of the mini-slot is used for an Ultra-Reliable Low latency Communication (URLLC) transmission;

determine, based on the indication message, whether at least the portion of the mini-slot was previously assigned to the UE for eMBB communication and is punctured by the URLLC transmission; and

process at least the portion of the mini-slot based on whether the portion of the mini-slot previously assigned to the UE for eMBB communication is punctured.

25. The UE of claim 24, wherein the one or more processors are configured to zero log likelihood ratios (LLRs) corresponding to at least the portion of the mini-slot when the indication message declares that the URLLC transmission is present in the mini-slot.

26. The UE of claim 24, wherein the one or more processors are configured to stop processing of the mini-slot when the indication message declares that the URLLC transmission is present in the mini-slot.

27. The UE of claim 24, wherein the one or more processors are configured to store LLR values corresponding to at least the portion of the mini-slot for decoding the eMBB slot when the indication message was not received in the mini-slot.