CLAIMS

1. A method for wireless communications by a user equipment (UE), comprising: identifying resources in a narrowband, the narrowband spanning no more than a single 180 kilohertz resource block in a transmission time interval (TTI); and communicating with a base station using the identified resources, wherein the narrowband supports frequency division multiplexing of multiple UEs, wherein the multiple UEs share a plurality of subcarriers of the narrowband and each of the multiple UEs is assigned one or more subcarriers from the plurality of subcarriers.

2. The method of claim 1, wherein: the UE is of a first type; and the narrowband is located within a wideband region of resources used for communications by UEs of a second type.

3. The method of claim 2, further comprising: receiving signaling of a resource block offset indicating a location of the narrowband.

4. The method of claim 1, wherein: the UE is of a first type; and the narrowband is located within a separate component carrier outside of a wideband region of resources used for communications by UEs of a second type.

5. The method of claim 1, wherein the communicating comprises: receiving at least one of synchronization signals, broadcast information, or cell-specific reference signals from the base station on the identified resources.

6. The method of claim 1, wherein the communicating comprises: transmitting a physical random access channel (PRACH) on the identified resources.

7. The method of claim 1, wherein the UE supports time division multiplexing of at least one narrowband downlink control channel and at least one narrowband downlink shared channel across multiple TTIs.

8. The method of claim 1, wherein at least one control channel and at least one data channel are time division multiplexed within a given TTI.

9. The method of claim 1, wherein at least one control channel and at least one data channel are frequency division multiplexed within a given TTI.

10. The method of claim 1, wherein the communicating comprises: receiving a physical downlink control channel (PDCCH) on the identified resources.

11. The method of claim 1, wherein the communicating comprises: receiving a physical downlink shared channel (PDSCH) on the identified resources.

12. The method of claim 1, wherein: at least some TTIs are available for physical uplink control channel (PUCCH) transmissions; and at least some TTIs are available for physical random access channel (PRACH) transmissions.

13. The method of claim 1, wherein the communicating comprises: performing at least one of system acquisition or access using the identified resources.

14. The method of claim 1, wherein communicating with the base station comprises sending one or more transmissions to the base station on a narrowband uplink shared channel.

15. A method for wireless communications by a base station (BS), comprising: identifying resources in a narrowband, the narrowband spanning no more than a single 180 kilohertz resource block in a transmission time interval (TTI); and communicating with at least one user equipment (UE) using the identified resources, wherein the narrowband supports frequency division multiplexing of multiple UEs, wherein the multiple UEs share a plurality of subcarriers of the narrowband and each of the multiple UEs is assigned one or more subcarriers from the plurality of subcarriers.

16. The method of claim 15, wherein: the at least one UE is of a first type; and the narrowband is located within a wideband region of resources used for communications by UEs of a second type.

17. The method of claim 16, further comprising: sending signaling, to the at least one

UE, of a resource block offset indicating a location of the narrowband.

18. The method of claim 15, wherein: the at least one UE is of a first type; and the narrowband is located within a separate component carrier outside of a wideband region of resources used for communications by UEs of a second type.

19. The method of claim 15, wherein the communicating comprises: transmitting at least one of synchronization signals, broadcast information, or cell-specific reference signals from the base station on the identified resources.

20. The method of claim 15, wherein the communicating comprises: receiving a physical random access channel (PRACH) on the identified resources.

21. The method of claim 15, wherein the UE supports time division multiplexing of at least one narrowband downlink control channel and at least one narrowband downlink shared channel across multiple TTIs.

22. The method of claim 15, wherein at least one control channel and at least one data channel are time division multiplexed within a given TTI.

23. The method of claim 15, wherein at least one control channel and at least one data channel are frequency division multiplexed within a given TTI.

24. The method of claim 15, wherein the communicating comprises: transmitting a physical downlink control channel (PDCCH) on the identified resources.

25. The method of claim 15, wherein the communicating comprises: transmitting a physical downlink shared channel (PDSCH) on the identified resources.

26. The method of claim 15, wherein: at least some TTIs are available for receiving physical uplink control channel (PUCCH) transmissions; and at least some TTIs are available for receiving physical random access channel (PRACH) transmissions.

27. The method of claim 15, wherein the communicating comprises: participating with

the at least one UE in at least one of system acquisition or access using the identified resources.

28. A user equipment (UE) for wireless communications, comprising: at least one processor; and a memory coupled to the at least one processor for storing instructions, the instructions executable by the at least one processor to cause the UE to: identify resources in a narrowband, the narrowband spanning no more than a single 180 kilohertz resource block in a transmission time interval (TTI); and communicate with a base station using the identified resources, wherein the narrowband supports frequency division multiplexing of multiple UEs, wherein the multiple UEs share a plurality of subcarriers of the narrowband and each of the multiple UEs is assigned one or more subcarriers from the plurality of subcarriers.

29. An apparatus for wireless communications, comprising: at least one processor; and a memory coupled to the at least one processor for storing instructions, the instructions executable by the at least one processor to cause the apparatus to: identify resources in a narrowband, the narrowband spanning no more than a single 180 kilohertz resource block in a transmission time interval (TTI); and communicate with at least one user equipment (UE) using the identified resources, wherein the narrowband supports frequency division multiplexing of multiple UEs, wherein the multiple UEs share a plurality of subcarriers of the narrowband and each of the multiple UEs is assigned one or more subcarriers from the plurality of subcarriers.

30. A user equipment (UE) for wireless communications, comprising: means for identifying resources in a narrowband, the narrowband spanning no more than a single 180 kilohertz resource block in a transmission time interval (TTI); and means for communicating with a base station using the identified resources, wherein the narrowband supports frequency division multiplexing of multiple UEs, wherein the multiple UEs share a plurality of subcarriers of the narrowband and each of the multiple UEs is assigned one or more subcarriers from the plurality of subcarriers.

31. An apparatus for wireless communications, comprising: means for identifying resources in a narrowband, the narrowband spanning no more than a single 180 kilohertz resource block in a transmission time interval (TTI); and means for

communicating with at least one user equipment (UE) using the identified resources, wherein the narrowband supports frequency division multiplexing of multiple UEs, wherein the multiple UEs share a plurality of subcarriers of the narrowband and each of the multiple UEs is assigned one or more subcarriers from the plurality of subcarriers.

32. A non-transitory computer-readable medium for wireless communications by a user equipment (UE), comprising: code to identify resources in a narrowband, the narrowband spanning no more than a single 180 kilohertz resource block in a transmission time interval (TTI); and code to communicate with a base station using the identified resources, wherein the narrowband supports frequency division multiplexing of multiple UEs, wherein the multiple UEs share a plurality of subcarriers of the narrowband and each of the multiple UEs is assigned one or more subcarriers from the plurality of subcarriers.

33. A non-transitory computer-readable medium for wireless communications, comprising: code to identify resources in a narrowband, the narrowband spanning no more than a single 180 kilohertz resource block in a transmission time interval (TTI); and code to communicate with at least one user equipment (UE) using the identified resources, wherein the narrowband supports frequency division multiplexing of multiple UEs, wherein the multiple UEs share a plurality of subcarriers of the narrowband and each of the multiple UEs is assigned one or more subcarriers from the plurality of subcarriers.