CLAIMS:

1. A method comprising:

detecting, by a user device, a network slice or an application associated with an access attempt by the user device to access a wireless network;

determining, by the user device, an access category based on the detected network slice or detected application; and

making, by the user device, a barring decision for the access attempt based on the determined access category.

2. A method of claim 1, wherein the making a barring decision comprises:

making, by the user device based on the determined access category, a decision that the access attempt is not barred; and

the method further comprising performing, by the user device based on the decision, the detected access attempt to the wireless network.

3. The method of claim 2, wherein the performing the detected access attempt comprises:

sending, by the user device, a radio resource control (RRC) connection request message to request a connection to the wireless network.

4. The method of any of claims 1-3 and further comprising:

receiving, by the user device, a non-access stratum message that indicates a respective access category associated with one or more applications; and

wherein determining the access category based on the detected application includes:

determining, by the user device, the access category for the access attempt based on the application that is associated with the access attempt and the one or more access category definitions.

5. The method of any of claims 1-3 and further comprising:

receiving, by the user device, one or more access category definitions that indicate a respective access category associated with one or more network slices; and

wherein determining the access category based on the detected network slice includes:

determining, by the user device, the access category for the access attempt based on the network slice that is associated with the access attempt and the one or more access category definitions.

6. The method of any of claims 1-5, further comprising:

receiving, by the user device, a barring configuration that indicates a set of barring parameters for one or more of the access categories; and

wherein the making the barring decision for the access attempt includes making, by the user device, a barring decision for the access attempt based on the barring configuration and the access category for the access attempt.

7. The method of claim 6, wherein said barring configuration indicates whether a particular access category should be barred with a certain barring factor and barring timer, and wherein said making a barring decision for the access attempt based on the barring configuration and the access category for the access attempt comprises, when said barring configuration indicates that the determined access category should be barred with a certain barring factor and barring time:

generating a random number; and

deciding that the access attempt is not barred when the random number is less than the certain barring factor, otherwise deciding that the access attempt is at least temporally barred.

8. The method of any of claims 6-7, wherein the set of barring parameters includes at least a barring rate and a barring timer.

9. The method of any of claims 6-8, wherein the barring configuration is based on a network slice-specific load information that indicates a network load for each of one or more network slices.

10. The method of any of claims 6-9, wherein the barring configuration that indicates a set of barring parameters for one or more of the access categories provides a different prioritization of one or more access attempts based on access categories of the access attempts.

11. The method of any of claims 1-10, wherein the network slice associated with the access attempt is identified by one or more of the following:

a slice/service type (SST); and

a slice/service type (SST) and slice differentiator (SD).

12. The method of any of claims 1-11, wherein the application associated with the access attempt is identified by one or more of the following:

operating system identity; and

operating system application identity.

13. The method of any of claims 1-12, and further comprising:

receiving a compensation parameter for a user device in Inactive mode;

determining, by the user device, that the user device is in Inactive mode; and

wherein the making a barring decision comprises:

applying, by the user device, the compensation parameter to the making a barring decision for the user device to adjust a barring rate of the access attempt of the user device that is in Inactive mode.

14. A method comprising:

receiving, by a base station from one or more core network entities within a wireless network, network slice-specific load information that indicates a load for each of one or more network slices;

determining, by the base station based on the received network slice-specific load information, a barring configuration that indicates a set of barring parameters for one or more access categories; and

sending, by the base station to a user device, the barring configuration to reduce a load on the wireless network.

15. The method of claim 14, wherein the barring configuration that indicates a set of barring parameters for one or more access categories indicates whether an access attempt with which a network slice is associated is triggered by radio access network (RAN)-level paging.

16. The method of claim 15, wherein the sending comprises sending, by the base station to a user device, the barring configuration, to allow the user device to make a barring decision for an access attempt based on a network slice associated with the access attempt by the user device.

17. The method of any of claims 14-15, wherein the set of barring parameters includes at least a barring rate and a barring timer.

18. The method of any of claims 14 to 17, wherein said barring configuration indicates whether a particular access category should be barred with a certain barring factor and barring timer.

19. The method of any of claims 14-18, wherein the one or more network slices are identified by one or more of the following:

a slice/service type (SST); and

a slice/service type (SST) and slice differentiator (SD).

20. A method comprising:

determining, by a core network entity, network slice-specific load information that indicates a load for each of one or more network slices; and

sending, by the core network entity to a base station, the network-slice specific load information.

21. The method of claim 20, where the core network entity comprises a first core network entity, and wherein the network slice-specific load information is determined by the first core network entity from one or more of the following:

network slice-specific load information determined or gathered by the first core network entity; and

network slice-specific load information received from a second core network entity.

22. The method of any of claims 20-21, and further comprising:

sending, by the core network entity to a user device, one or more access category definitions that indicate an access category associated with one or more network slices.

23. The method of any of claims 20-22, wherein the one or more network slices are identified by or associated with one or more of the following:

a slice/service type (SST); and

a slice/service type (SST) and slice differentiator (SD).

24. A user device, comprising,

means for detecting a network slice or an application associated with an access attempt by the user device to access a wireless network;

means for determining an access category based on the detected network slice or detected application; and

means for making a barring decision for the access attempt based on the determined access category.

25. The user device of claim 24, wherein the means for making a barring decision making are configured to make, based on the determined access category, a decision that the access attempt is not barred; and wherein the user device comprises

means for perfoming, based on the decision, the detected access attempt to the wireless network.

26. The user device of claim 25, wherein the means for perfoming, based on the decision, the detected access attempt to the wireless network are configured to:

send a radio resource control (RRC) connection request message to request a connection to the wireless network.

27. The user device of any of claims 24-26, further comprising:

means for receiving a non-access stratum message that indicates a respective access category associated with one or more applications; and

wherein said determining the access category based on the detected application includes:

determining the access category for the access attempt based on the application that is associated with the access attempt and the one or more access category definitions.

28. The user device of any of claims 24-26, further comprising:

means for receiving one or more access category definitions that indicate a respective access category associated with one or more network slices; and

wherein said determining the access category based on the detected network slice includes:

determining the access category for the access attempt based on the network slice that is associated with the access attempt and the one or more access category definitions.

29. The user device any of claims 24-28, further comprising:

means for receiving a barring configuration that indicates a set of barring parameters for one or more of the access categories; and

wherein said means for making a barring decision for the access attempt based on the determined access category is configured to make the barring decision based on the barring configuration and the access category for the access attempt.

30. The user device of claim 29, wherein said barring configuration indicates whether a particular access category should be barred with a certain barring factor and barring timer, and wherein said means for making a barring decision based on the determined access category is configured to, when said barring configuration indicates that the determined access category should be barred with a certain barring factor and barring time:

generate a random number; and

decide that the access attempt is not barred when the random number is less than the certain barring factor, otherwise decide that the access attempt is at least temporally barred.

31. The user device of any of claims 29-30, wherein the set of barring parameters includes at least a barring rate and a barring timer.

32. The user devic of any of claims 29-31, wherein the barring configuration is based on a network slice-specific load information that indicates a network load for each of one or more network slices.

33. The user device of any of claims 30-32, wherein the barring configuration that indicates a set of barring parameters for one or more of the access categories provides a different prioritization of one or more access attempts based on access categories of the access attempts.

34. The user device of any of claims 24-33, wherein the network slice associated with the access attempt is identified by one or more of the following:

a slice/service type (SST); and

a slice/service type (SST) and slice differentiator (SD).

35. The user device of any of claims 24-34, wherein the application associated with the access attempt is identified by one or more of the following:

operating system identity; and

operating system application identity.

36. The user device of any of claims 24-35, and further comprising:

means for receiving a compensation parameter in Inactive mode;

means for determining that the user device is in Inactive mode; and

wherein the means for making a barring decision for the access attempt based on the determined access category are configured to:

apply the compensation parameter to the making a barring decision for the user device to adjust a barring rate of the access attempt of the user device that is in Inactive mode.

37. A base station, comprising:

means for receiving from one or more core network entities within a wireless network, network slice-specific load information that indicates a load for each of one or more network slices;

means for determining based on the received network slice-specific load information, a barring configuration that indicates a set of barring parameters for one or more access categories; and

means for sending to a user device, the barring configuration to reduce a load on the wireless network.

38. The base station of claim 37, wherein the barring configuration that indicates a set of barring parameters for one or more access categories indicates whether an access attempt with which a network slice is associated is triggered by radio access network (RAN)-level paging.

39. The base station of claim 38, wherein the means for sending are configured to send to a user device the barring configuration, to allow the user device to make a barring decision for an access attempt based on a network slice associated with the access attempt by the user device.

40. The base station of any of claims 37 to 39, wherein the set of barring parameters includes at least a barring rate and a barring timer.

41. The base station of any of claims 37 to 40, wherein said barring configuration indicates whether a particular access category should be barred with a certain barring factor and barring timer.

42. The base station of any of claims 37-41, wherein the one or more network slices are identified by one or more of the following:

a slice/service type (SST); and

a slice/service type (SST) and slice differentiator (SD).

43. A core network entity, comprising:

means for determining network slice-specific load information that indicates a load for each of one or more network slices; and

means for sending the network-slice specific load information to a base station.

44. The core network entity of claim 43, where the core network entity comprises a first core network entity, and wherein the network slice-specific load information is determined by the first core network entity from one or more of the following:

network slice-specific load information determined or gathered by the first core network entity; and

network slice-specific load information received from a second core network entity.

45. The core network entity of any of claims 43-44, and further comprising:

means for sending one or more access category definitions that indicate an access category associated with one or more network slices to a user device.

46. The core network entity of any of claims 43-45, wherein the one or more network slices are identified by or associated with one or more of the following:

a slice/service type (SST); and

a slice/service type (SST) and slice differentiator (SD).

47. An apparatus comprising at least one processor and at least one memory including computer instructions that, when executed by the at least one processor, cause the apparatus to perform a method of any of claims 1-23.

48. An apparatus comprising a computer program product including a non-transitory computer-readable storage medium and storing executable code that, when executed by at least one data processing apparatus, is configured to cause the at least one data processing apparatus to perform a method of any of claims 1-23.