What is claimed is:

1. A method for a reduced capability (REDCAP) device~~access in a communication network~~, the method comprising:

receiving~~, by at least one processor of a user equipment (UE),~~ system information associated with ~~from at least one first base station serving~~ a ~~first~~ cell, the system information including information specific to ~~a~~ the REDCAP device ~~category associated with the UE~~; and

determining, based on the information specific to the REDCAP device~~by the at least one processor~~, whether access to the ~~first~~ cell by the REDCAP device ~~UE~~ is permitted ~~based on the system information~~.

2. The method of claim 1, further comprising:

receiving~~, by the UE, authorization information including~~ configuration data for ~~reduced capability (~~REDCAP~~)~~ devices in the cell ~~communication network~~, and wherein

the determining determines whether access to the ~~first~~ cell by the ~~UE~~ REDCAP device is permitted based on the configuration data ~~authorization information~~ and the system information.

~~3. The method of claim 2, wherein the determining comprises:~~

~~determining access information for the first cell based at least in part on the authorization information and the system information; and~~

~~determining whether access to the first cell by the UE is permitted based on the access information.~~

~~4. The method of claim 1, wherein the determining comprises:~~

~~determining access information for the first cell based at least in part on the system information; and~~

~~determining whether access to the first cell by the UE is permitted based on the access information.~~

~~5~~3. The method of claim 1, further comprising:

accessing~~, by the UE,~~ the ~~first~~ cell in a case that the ~~response to~~ determining determines that access to the ~~first~~ cell by the ~~UE~~ REDCAP device is permitted, or

~~identifying, by the UE, a second~~selecting a different cell ~~in response to~~ in a case that the determining determines that access to the ~~first~~ cell by the ~~UE~~ REDCAP device is not permitted.

~~6. The method of claim 2, wherein the configuration data includes a configuration of the communication network that allows access to network resources for REDCAP devices, the network resources including at least one of a public land mobile network (PLMN), a radio access network, a frequency or a frequency range.~~

~~7~~4. The method of claim 1, wherein the system information identifies capabilities of the ~~first~~ cell for REDCAP devices.

~~8. The method of claim 3, wherein the determining access information for the first cell comprises:~~

~~determining whether the first cell is configured to allow access to the UE, based on an identified type of device that has been assigned to the UE.~~

~~9. The method of claim 8, wherein the identified type of device includes information on a REDCAP functionality of the UE.~~

~~10. The method of claim 5, wherein~~

~~the identifying the second cell includes performing a search of the communication network to find the second cell, the second cell being configured to allow access by the UE based on a REDCAP functionality of the UE, and the second cell being served by at least one second base station, and~~

~~the method further includes accessing the second cell by the UE.~~

~~11. The method of claim 2, wherein~~

~~the authorization information is received from a mobility management function, and~~

~~the system information is received from the at least one first base station.~~

5. The method of any of claims 1 to 4, wherein the determining further comprises determining, based on a number of antennas of the REDCAP device, whether access to the cell by the REDCAP device is permitted.

6. The method of any of claims 1 to 5, further comprising receiving information indicating at least one frequency on which access is permitted for the REDCAP device.

7. The method of claim 6, wherein the determining further comprises determining, based on the information indicating the at least one frequency, whether access to the cell by the REDCAP device is permitted.

~~12. The method of claim 1, wherein the UE is a REDCAP device.~~

~~13. The method of claim 5, wherein~~

~~at least one second base station serves the second cell, and~~

~~the at least one first base station and the at least one second base station include one of,~~

~~a common base station that is common to both the at least one first base station and the at least one second base station, or~~

~~unique base stations that do not include a base station that is common between the at least one first base station and the at least one second base station.~~

~~14~~8. A reduced capability (REDCAP) device ~~user equipment (UE) in a communication network, the UE~~ comprising:

a memory containing computer-readable instructions; and

at least one processor configured to ~~read and~~ execute the computer-readable instructions to cause the ~~UE~~ REDCAP device to

receive system information associated with ~~from at least one first base station serving~~ a ~~first~~ cell, the system information including information specific to ~~a~~ the REDCAP device ~~category associated with the UE~~, and

determine, based on the information specific to the REDCAP device, whether access to the ~~first~~ cell by the ~~UE~~ REDCAP device is permitted ~~based on the system information~~.

~~15~~9. The ~~UE~~ REDCAP device of claim ~~14~~8, wherein the at least one processor is configured to ~~read and~~ execute the computer-readable instructions to cause the UE to

receive ~~authorization information including~~ configuration data for ~~reduced capability (~~REDCAP~~)~~ devices in the cell~~communication network~~, and

determine whether access to the ~~first~~ cell by the ~~UE~~ REDCAP device is permitted based on the configuration data~~authorization information~~ and the system information.

~~16. The UE of claim 15, wherein the at least one processor is configured to read and execute the computer-readable instructions to cause the UE to~~

~~determine access information for the first cell based at least in part on the authorization information and the system information, and~~

~~determine whether access to the first cell by the UE is permitted based on the access information.~~

~~17. The UE of claim 14, wherein the at least one processor is configured to read and execute the computer-readable instructions to cause the UE to~~

~~determine access information for the first cell based at least in part on the system information, and~~

~~determine whether access to the first cell by the UE is permitted based on the access information.~~

~~18~~10. The ~~UE~~ REDCAP device of claim ~~14~~8, wherein the at least one processor is configured to ~~read and~~ execute the computer-readable instructions to cause the UE to

access the ~~first~~ cell in a case that the ~~response to~~ determining determines that access to the ~~first~~ cell by the ~~UE~~ REDCAP device is permitted~~, or~~

~~identify a second cell in response to determining that access to the first cell by the UE is not permitted~~.

11. The REDCAP device of claim 8, wherein the at least one processor is configured to execute the computer-readable instructions to cause the UE to

select a different cell in a case that the determining determines that access to the cell by the REDCAP device is not permitted.

~~19. The UE of claim 15, wherein the configuration data includes a configuration of the communication network that allows access to network resources for REDCAP devices, the network resources including at least one of a public land mobile network (PLMN), a radio access network, a frequency or a frequency range.~~

~~20. The UE of claim 17, wherein the at least one processor is configured to read and execute the computer-readable instructions to cause the UE to determine the access information by:~~

~~determining whether the first cell is configured to allow access by the UE based on an identified type of device that has been assigned to the UE.~~

~~21. The UE of claim 18, wherein the at least one processor is configured to read and execute the computer-readable instructions to cause the UE to~~

~~perform a search of the communication network to identify the second cell, the second cell being configured to allow access by the UE based on a REDCAP functionality of the UE, and the second cell being served by at least one second base station, and~~

~~access the second cell.~~

12. The REDCAP device of any of claims 8 to 11, wherein the system information includes information indicating whether a half-duplex functionality is allowed in the cell.

13. The REDCAP device of any of claims 8 to 12, wherein the at least one processor is configured to execute the computer-readable instructions to cause the REDCAP device to determine, based on a number of antennas of the REDCAP device, whether access to the cell by the REDCAP device is permitted.

14. The REDCAP device of any of claims 8 to 13, wherein the information specific to the REDCAP device comprises information relating to the number of antennas of the REDCAP device.

15. The REDCAP device of any of claims 8 to 14, wherein the at least one processor is configured to execute the computer-readable instructions to cause the REDCAP device to receive information indicating at least one frequency on which access is permitted for the REDCAP device.

16. The REDCAP device of claim 15, wherein the at least one processor is configured to execute the computer-readable instructions to cause the REDCAP device to determine, based on the information indicating the at least one frequency, whether access to the cell by the REDCAP device is permitted.

~~22~~17. The ~~UE~~ REDCAP device of any of claims 8 to 16~~14~~, including at least one of: a sensor; a video surveillance device; a wearable device; a user equipment; a cellular telephone; a smartphone; a tablet device; a computer; and a laptop computer~~ wherein the UE is a REDCAP device~~.

~~23~~18. A method for a base station~~access in a communication network~~, the method comprising:

transmitting, to a reduced capability (REDCAP) device~~by at least one first base station including at least one processor~~, system information associated with a cell~~to a user equipment (UE)~~, the system information including information specific to ~~a~~ the REDCAP device~~ category associated with the UE~~, and indicating whether access to the cell by the REDCAP device is permitted~~the at least one first base station serving a first cell~~; and

~~performing, by the at least one first base station, one of the following based on the system information~~

establishing a connection with the~~ UE~~ REDCAP device based on the information specific to the REDCAP device~~, or~~

~~sending a notification to the UE commanding the UE to identify a second cell~~.

~~24~~19. The method of claim ~~23~~18, further comprising:

transmitting~~, by the at least one first base station, authorization information to the UE, the authorization information including~~ configuration data for ~~reduced capability (~~REDCAP~~)~~ devices in the cell~~communication network~~; and ~~wherein~~

~~the performing performs one of the~~ establishing the connection with the REDCAP device ~~or the sending~~ based on the system information and the configuration data~~authorization information~~.

~~25. The method of claim 23, wherein the UE is a REDCAP device.~~

~~26. The method of claim 23, wherein the notification indicates that the first cell is not configured to provide resources for the device category associated with the UE.~~

~~27~~20. ~~At least one first~~ A base station ~~serving a first cell in a communication network, the at least one first base station~~ comprising:

a memory containing computer-readable instructions; and

at least one processor configured to ~~read and~~ execute the computer-readable instructions to cause the at least one first base station to

transmit, to a reduced capability (REDCAP) device, system information associated with a cell~~to a user equipment (UE)~~, the system information including information specific to ~~a~~ the REDCAP device~~ category associated with the UE~~, and indicating whether access to the cell by the REDCAP device is permitted; and

~~perform one of the following based on the system information~~

establish~~ing~~ a connection with the ~~UE~~ REDCAP device based on the information specific to the REDCAP device~~, or~~

~~sending a notification to the UE commanding the UE to identify a second cell served by at least one second base station~~.

~~28~~21. The ~~at least one first~~ base station of claim ~~27~~20, wherein the at least one processor is configured to ~~read and~~ execute the computer-readable instructions to cause the ~~at least one first~~ base station to

transmit ~~authorization information to the UE, the authorization information including~~ configuration data for ~~reduced capability (~~REDCAP~~)~~ devices in the cell~~communication network~~, and

~~perform one of the establishing or the sending~~ establish the connection with the REDCAP device based on the system information and the configuration data~~authorization information~~.

~~29. The at least one first base station of claim 27, wherein the UE is a REDCAP device.~~

~~30. The at least one first base station of claim 27, wherein the notification indicates that the first cell is not configured to provide resources for the device category that is associated with the UE.~~