WHAT IS CLAIMED IS:

1. A method comprising:

receiving, at a first device, information indicating a plurality of configured grant resources and a plurality of hybrid automatic repeat request, HARQ, processes, the plurality of HARQ processes shared by the plurality of configured grant resources, wherein the plurality of configured grant resources are configured in one bandwidth part for the first device;

selecting a HARQ process from the plurality of HARQ processes based on at least a timer status of the HARQ process; and

transmitting the data on one of the plurality of configured grant resources using the selected HARQ process.

2. The method of claim 1, wherein the selecting the HARQ process from the plurality of HARQ processes comprises:

extracting from the information criteria for selection of the HARQ processes; and

selecting the HARQ process from the plurality of HARQ processes based on the criteria.

3. The method of claim 1, wherein the selecting the HARQ process from the plurality of HARQ processes comprises:

determining, from the plurality of HARQ processes, a set of available HARQ processes;

determining a priority of the data based on a number of HARQ processes in the set of the available HARQ processes; and

selecting the HARQ process from the set of available HARQ processes based on the priority of the data.

4. The method of claim 1, wherein the selecting the HARQ process from the plurality of HARQ processes comprises:

determining a first set of HARQ processes from the plurality of HARQ processes based on the information, the first set of HARQ processes is used for data with priorities higher than a threshold priority;

determining a priority of the data; and

in response to the priority exceeding the threshold priority, selecting the HARQ process from the first set of HARQ processes.

5. The method of claim 1, wherein the selecting the HARQ process from the plurality of HARQ processes comprises:

determining a second set of HARQ processes from the plurality of HARQ processes based on the information, data with priorities lower than a threshold priority being only allowed to using the second set of HARQ processes;

determining a priority of the data; and

in response to the priority being below the threshold priority, selecting the HARQ process from the second set of HARQ processes.

6. The method of any one of claims 3 to 5, wherein the priority of the data is determined based on at least one of:

a priority of a logical channel/logical channel group to which the data belongs,

a buffered time of the data, or

a priority of a traffic to which medium access control (MAC) control element (CE) contained in the data relates.

7. A method comprising:

generating, at a second device, information indicating a plurality of configured grant resources and a plurality of hybrid automatic repeat request, HARQ, processes, the plurality of HARQ processes shared by the plurality of configured grant resources, wherein the plurality of configured grant resources are configured in one bandwidth part for the first device;

transmitting the information to a first device; and

receiving data from the first device on one of the plurality of configured grant resources using a HARQ process from the plurality of HARQ processes.

8. The method of claim 7, wherein the generating the information comprises:

generating criteria for selection of the HARQ process; and

adding the criteria to the information.

9. The method of claim 7, wherein the information indicates at least one of:

a first set of HARQ processes from the plurality of HARQ processes, the first set of HARQ processes being used for data with priorities higher than a threshold priority;

a second set of HARQ processes from the plurality of HARQ processes, data with priorities lower than a threshold priority being only allowed to use the second set of HARQ processes;

a third set of HARQ processes from the plurality of HARQ processes based on the information, the third set of HARQ processes being used for one of the plurality of configured grant resources;

a threshold number of available HARQ processes in the plurality of HARQ processes; or

the threshold priority.

10. A first device comprising:

at least one processor; and

at least one memory including computer program codes;

the at least one memory and the computer program codes are configured to, with the at least one processor, cause the first device to:

receive information indicating a plurality of configured grant resources and a plurality of hybrid automatic repeat request, HARQ, processes, the plurality of HARQ processes shared by the plurality of configured grant resources, wherein the plurality of configured grant resources are configured in one bandwidth part for the first device;

select a HARQ process from the plurality of HARQ processes based on at least a timer status of the HARQ process; and

transmitting the data on the one of the plurality of configured grant resources using the HARQ process.

11. The first device of claim 10, wherein the at least one memory and the computer program codes are further configured to, with the at least one processor, cause the first device to:

extract from the information criteria for selection of the HARQ processes; and

select the HARQ process from the plurality of HARQ processes based on the criteria.

12. The first device of claim 10, wherein the at least one memory and the computer

program codes are further configured to, with the at least one processor, cause the first device to:

determine, from the plurality of HARQ processes, a set of available HARQ processes;

determine a priority of the data based on a number of HARQ processes in the set of the available HARQ processes; and

select the HARQ process from the set of available HARQ processes based on the priority of the data.

13. The first device of claim 10, wherein the at least one memory and the computer program codes are further configured to, with the at least one processor, cause the first device to:

determine a first set of HARQ processes from the plurality of HARQ processes based on the information, the first set of HARQ processes is used for data with priorities higher than a threshold priority;

determine a priority of the data; and

in response to the priority exceeding the threshold priority, select the HARQ process from the first set of HARQ processes.

14. The first device of claim 10, wherein the at least one memory and the computer program codes are further configured to, with the at least one processor, cause the first device to:

determine a second set of HARQ processes from the plurality of HARQ processes based on the information, data with priorities lower than a threshold priority being only allowed to use the second set of HARQ processes;

determine a priority of the data; and

in response to the priority being below the threshold priority, select the HARQ process from the second set of HARQ processes.

15. The first device of any one of claims 12 to 14, wherein the priority of the data is determined based on at least one of:

a priority of a logical channel/logical channel group to which the data belongs,

a buffered time of the data, or

a priority of a traffic to which medium access control (MAC) control element (CE) contained in the data relates.

16. A second device comprising:

at least one processor; and

at least one memory including computer program codes;

the at least one memory and the computer program codes are configured to, with the at least one processor, cause the second device to:

generate information indicating a plurality of configured grant resources and a plurality of hybrid automatic repeat request, HARQ, processes, the plurality of HARQ processes shared by the plurality of configured grant resources, wherein the plurality of configured grant resources are configured in one bandwidth part;

transmit the information to a first device; and

receive data from the first device on one of the plurality of configured grant resources using a HARQ process from the plurality of HARQ processes.

17. The second device of claim 16, wherein the at least one memory and the computer program codes are further configured to, with the at least one processor, cause the first device to:

generate criteria for selection of the HARQ process; and

add the criteria to the information.

18. The second device of claim 16, wherein the information indicates at least one of:

a first set of HARQ processes from the plurality of HARQ processes, the first set of HARQ processes being used for data with priorities higher than a threshold priority;

a second set of HARQ processes from the plurality of HARQ processes, data with priorities lower than a threshold priority being only allowed to use the second set of HARQ processes;

a third set of HARQ processes from the plurality of HARQ processes based on the information, the third set of HARQ processes being used for one of the plurality of configured grant resources;

a threshold number of available HARQ processes in the plurality of HARQ processes; or

the threshold priority.

19. A computer readable medium storing instructions thereon, the instructions, when executed by at least one processing unit of a machine, causing the machine to perform:

receiving information indicating a plurality of configured grant resources and a plurality of hybrid automatic repeat request, HARQ, processes, the plurality of HARQ processes shared by the plurality of configured grant resources, wherein the plurality of configured grant resources are configured in one bandwidth part for the first device;

selecting a HARQ process from the plurality of HARQ processes based on at least a timer status of the HARQ process; and

transmitting the data on the one of the plurality of configured grant resources using the selected HARQ process.

20. The computer readable medium of claim 19, wherein the computer readable medium further causes the machine to perform:

extracting from the information criteria for selection of the HARQ processes; and

selecting the HARQ process from the plurality of HARQ processes based on the criteria.

21. The computer readable medium of claim 19, wherein the computer readable medium further causes the machine to perform:

determining, from the plurality of HARQ processes, a set of available HARQ processes;

determining a priority of the data based on a number of HARQ processes in the set of the available HARQ processes; and

selecting the HARQ process from the set of available HARQ processes based on the priority of the data.

22. The computer readable medium of claim 21, wherein the computer readable medium further causes the machine to perform:

determining the priority of the data based on at least one of:

a priority of a logical channel/logical channel group to which the data belongs,

a buffered time of the data, or

a priority of a traffic to which medium access control (MAC) control element (CE) contained in the data relates.

23. A computer readable medium storing instructions thereon, the instructions, when executed by at least one processing unit of a machine, causing the machine to perform:

generating information indicating a plurality of configured grant resources and a plurality of hybrid automatic repeat request, HARQ, processes, the plurality of HARQ processes shared by the plurality of configured grant resources, wherein the plurality of configured grant resources are configured in one bandwidth part;

transmitting the information to a first device; and

receiving data from the first device on one of the plurality of configured grant resources using a HARQ process from the plurality of HARQ processes.

24. The computer readable medium of claim 23, wherein the computer readable medium further causes the machine to perform:

generating criteria for selection of the HARQ process; and

adding the criteria to the information.

25. The computer readable medium of claim 23, wherein the information indicates at least one of:

a first set of HARQ processes from the plurality of HARQ processes, the first set of HARQ processes being used for data with priorities higher than a threshold priority;

a second set of HARQ processes from the plurality of HARQ processes, data with priorities lower than a threshold priority being only allowed to use the second set of HARQ processes;

a third set of HARQ processes from the plurality of HARQ processes based on the information, the third set of HARQ processes being used for one of the plurality of configured grant resources;

a threshold number of available HARQ processes in the plurality of HARQ processes; or

the threshold priority.