WHAT IS CLAIMED IS:

1. A method for multiplexing transmission of information, applicable to User Equipment (UE), the method comprising:

selecting a Physical Uplink Shared Channel (PUSCH) for multiplexing transmission of Uplink Control Information (UCI) carried in a Physical Uplink Control Channel (PUCCH) based on a selection criterion when the PUCCH and a plurality of PUSCHs are within a slot and have an overlapping portion in time-domain; and

performing multiplexing transmission by multiplexing the UCI and transmission content of the selected PUSCH in the selected PUSCH,

characterized in that the method comprising:

the step of selecting the PUSCH for the multiplexing transmission of the UCI carried in the PUCCH based on the selection criterion comprises:

determining the selection criterion according to a type of the UCI and pre-stored corresponding relationships between types of UCI and different selection criteria; and

selecting a PUSCH as the PUSCH for the multiplexing transmission of the UCI according to the determined selection criterion.

2. The method according to claim 1, further comprising:

receiving the selection criterion or the corresponding relationships between types of UCI and different selection criteria from a base station; or

agreeing the selection criterion or the corresponding relationships between types of UCI and different selection criteria with a base station.

3. A method for receiving information, applicable to a base station, the method comprising:

receiving a plurality of Physical Uplink Shared Channel (PUSCH) transmissions;

determining a PUSCH for multiplexing transmission of Uplink Control Information (UCI) carried in a Physical Uplink Control Channel (PUCCH) based on a selection criterion when the PUCCH and the plurality of PUSCHs are within a slot and have an overlapping portion in time domain; and

receiving the UCI from the determined PUSCH,

characterized in that the method comprising:

the selection criterion is determined according to a type of the UCI and pre-stored corresponding relationships between types of UCI and different selection criteria; and

a PUSCH is selected as the PUSCH for the multiplexing transmission of the UCI according to the determined selection criterion.

4. The method according to claim 3, further comprising:

determining the selection criterion and sending the selection criterion to User Equipment (UE); or

determining corresponding relationships between types of UCI and different selection criteria and sending the corresponding relationships between types of UCI and different selection criteria to UE; or

agreeing the selection criterion or corresponding relationships between types of UCI and different selection criteria with UE.

5. An apparatus for multiplexing transmission of information, applicable to User Equipment (UE), the apparatus comprising:

a selection module, configured to select a Physical Uplink Shared Channel (PUSCH) for multiplexing transmission of Uplink Control Information (UCI) carried in a Physical Uplink Control Channel (PUCCH) based on a selection criterion when the PUCCH and a plurality of PUSCHs are within a slot and have an overlapping portion in time-domain; and

a transmission module, configured to perform multiplexing transmission by multiplexing the UCI and transmission content of the selected PUSCH in the selected PUSCH,

characterized in that the selection module is further configured to:

determine the selection criterion according to a type of the UCI and pre-stored corresponding relationships between types of UCI and different selection criteria; and

select a PUSCH as the PUSCH for the multiplexing transmission of the UCI according to the determined selection criterion.

6. The apparatus according to claim 5, further comprising:

a receiving module, configured to receive the selection criterion or the corresponding relationships between types of UCI and different selection criteria from a base station; or

an agreeing module, configured to agree the selection criterion or the corresponding relationships between types of UCI and different selection criteria with a base station.

7. An apparatus for receiving information, applicable to a base station, the apparatus comprising:

a first receiving module, configured to receive a plurality of Physical Uplink Shared Channel (PUSCH) transmissions;

a determining module, configured to determine, from the plurality of PUSCHs received by the first receiving module, a PUSCH for multiplexing transmission of Uplink Control Information (UCI) carried in a Physical Uplink Control Channel (PUCCH) based on a selection criterion when the PUCCH and the plurality of PUSCHs are within a slot and have an overlapping portion in time domain; and

a second receiving module, configured to receive the UCI from the PUSCH determined by the determining module,

characterized in that,

the selection criterion is determined according to a type of the UCI and pre-stored corresponding relationships between types of UCI and different selection criteria; and

a PUSCH is selected as the PUSCH for the multiplexing transmission of the UCI according to the determined selection criterion.

8. The apparatus according to claim 7, further comprising:

a first determining and sending module, configured to determine the selection criterion and send the selection criterion to User Equipment (UE); or

a second determining and sending module, configured to determine corresponding relationships between types of UCI and different selection criteria and send the corresponding relationships between types of UCI and different selection criteria to UE; or

an agreeing module, configured to agree the selection criterion or corresponding

relationships between types of UCI and different selection criteria with UE.

9. User Equipment (UE), comprising:

a processor; and

a memory, configured to store instructions executable by the processor;

wherein the processor is configured to:

select a Physical Uplink Shared Channel (PUSCH) for multiplexing transmission of Uplink Control Information (UCI) carried in a Physical Uplink Control Channel (PUCCH) based on a selection criterion when the PUCCH and a plurality of PUSCHs are within a slot and have an overlapping portion in time-domain; and

perform multiplexing transmission by multiplexing the UCI and transmission content of the selected PUSCH in the selected PUSCH,

the user equipment, UE, being further characterized in that

the processor is further configured to:

determine the selection criterion according to a type of the UCI and prestored corresponding relationships between types of UCI and different selection criteria; and

select a PUSCH as the PUSCH for the multiplexing transmission of the UCI according to the determined selection criterion.

10. A base station, comprising:

a processor; and

a memory, configured to store instructions executable by the processor;

wherein the processor is configured to:

receive a plurality of Physical Uplink Shared Channel (PUSCH) transmissions;

determine a PUSCH for multiplexing transmission of Uplink Control Information (UCI) carried in a Physical Uplink Control Channel (PUCCH) based on a selection criterion when the PUCCH and the plurality of PUSCHs are within a slot and have an overlapping portion in time domain; and

receive the UCI from the determined PUSCH,

the base station being further characterized in that

the selection criterion is determined according to a type of the UCI and pre-stored corresponding relationships between types of UCI and different selection criteria; and

a PUSCH is selected as the PUSCH for the multiplexing transmission of the UCI according to the determined selection criterion.

11. A computer-readable storage medium, storing computer instructions thereon that, when executed by a processor, implement operations of the method for multiplexing transmission of information according to claim 1 or 2.

12. A computer-readable storage medium, storing computer instructions thereon that, when executed by a processor, implement operations of the method for receiving information according to claim 3 or 4.