CLAIMS

What is claimed is:

Claim 1: An information transmission method, applied to a user equipment (UE), comprising:

transmitting first information, wherein the first information is related to measurement or a measurement gap;

and/or,

receiving second information, wherein the second information is related to measurement or a measurement gap.

Claim 2: The method according to claim 1, wherein the transmitting first information, indicates:

transmitting the first information to a network;

wherein the first information includes:

a measurement gap; and/or,

purpose of the measurement gap; and/or,

priority.

Claim 3: The method according to claim 2, wherein

the measurement gap represents relevant information of the measurement gap that the user equipment expects to use;

the purpose of the measurement gap represents the purpose of the measurement gap that the user equipment expects to use; and

the priority is the UE's measurement gap priority preference.

Claim 4: The method according to claim 2, wherein

the measurement gap represents relevant information of the measurement gap requested by the user equipment;

the purpose of the measurement gap represents the purpose of the measurement gap requested by the user equipment; and

the priority represents the priority of the measurement gap requested by the user equipment.

Claim 5: The method according to claim 1, wherein the receiving second information, includes:

receiving second information sent by a network;

wherein the second information includes:

a measurement gap; and/or,

purpose of the measurement gap; and/or,

priority;

wherein

the measurement gap represents relevant information of the measurement gap configured by the network for the user equipment;

the purpose of the measurement gap represents the purpose of the measurement gap configured by the network for the user equipment; and

the priority is the priority of the measurement gap configured by the network for the user equipment.

Claim 6: The method according to claim 2 or 5, wherein the purpose of the measurement gap includes:

reception of paging; and/or,

reception of broadcast; and/or,

reception of system message; and/or,

measurement for RRM; and/or,

intra-frequency measurement; and/or,

inter-frequency measurement; and/or,

measurement for handover; and/or,

layer 1 measurement;

or,

wherein in case that the same measurement gap is used for different purposes, the measurement gap has different priorities when using for the different purposes;

or,

wherein different measurement gaps have different priorities.

Claim 7: The method according to claim 1, wherein the first information is used to indicate the following information:

an aperiodic measurement gap; and/or,

an aperiodic measurement gap used for system message; and/or,

a measurement gap of longest period used for system message; and/or,

an aperiodic measurement gap used for paging; and/or,

a measurement gap of longest period used for paging;

or,

wherein the first information is used to indicate the following information:

an aperiodic measurement gap; and/or,

an aperiodic measurement gap of high priority; and/or,

a measurement gap with a longest period having high priority;

or,

wherein the first information is used to indicate the following information:

a measurement gap used for paging; and/or,

a measurement gap used for broadcasting; and/or,

a measurement gap used for system message; and/or,

a measurement gap used for RRM measurement; and/or,

a measurement gap used for intra-frequency measurement; and/or,

a measurement gap used for inter-frequency measurement; and/or,

a measurement gap used for handover measurement; and/or,

a measurement gap used for L1 measurement;

or,

wherein the first information is used to indicate the following information:

a priority of a measurement gap; and/or,

a measurement gap with a highest priority; and/or,

a priority of a measurement gap whose repetition period is greater than or equal to a first threshold; and/or,

a priority of a measurement gap whose repetition period is greater than or equal to the first threshold being a high priority; and/or,

a measurement gap whose repetition period is greater than or equal to a second threshold;

or,

wherein the second information is used to indicate the following information:

a measurement gap used for paging; and/or,

a measurement gap used for broadcasting; and/or,

a measurement gap used for system message; and/or,

a measurement gap used for RRM measurement; and/or,

a measurement gap used for intra-frequency measurement; and/or,

a measurement gap used for inter-frequency measurement; and/or,

a measurement gap used for handover measurement; and/or,

a measurement gap used for L1 measurement.

Claim 8: The method according to claim 1, wherein the second information is used to indicate the following information:

an aperiodic measurement gap being of high priority; and/or,

a measurement gap with a longest period being of high priority; and/or,

a measurement gap for intra-frequency measurements being of high priority; and/or,

a measurement gap used for paging being of high priority; and/or,

a measurement gap for system messages being of high priority; and/or,

keeping at least two measurement gaps; and/or,

keeping multi-universal subscriber identity module gaps.

Claim 9: The method according to claim 8, wherein the keeping multi-universal subscriber identity module gaps includes:

keeping multi-universal subscriber identity module gaps used for the same frequency.

Claim 10: The method according to claim 1, wherein the method further includes:

receiving third information transmitted by the network;

wherein the third information is used to instruct the user equipment to report the purpose and/or priority of the measurement gap;

or,

wherein the method further includes: resolving, by the user equipment, conflicts through at least one of the following methods:

if aperiodic measurement gap is collided with other measurement gaps, the aperiodic measurement gap is unconditionally kept and/or other measurement gaps are dropped;

if there is a measurement gap with a longest period in the measurement gaps where there is a conflict, the user equipment keeps the measurement gap with the longest period and/or drops other measurement gaps;

in the measurement gaps where there is a conflict, the measurement gap used for the intra-frequency measurement is kept;

if the colliding measurement gaps are MUSIM gaps, the user equipment keeps all colliding measurement gaps;

if the colliding measurement gaps are MUSIM gaps and the colliding MUSIM gaps are used for related measurements or receptions at the same frequency, the user equipment keeps all colliding measurement gaps;

in the measurement gap where there is a conflict, the measurement gap used for paging is kept;

in the measurement gap where there is a conflict, the measurement gap used for system messages is kept;

in the measurement gap where there is a conflict, a MUSIM gap used for aperiodic is kept;

in the measurement gap where there is a conflict, a MUSIM gap with a highest priority is kept.

Claim 11: The method according to claim 1, wherein the second information is used to indicate the following information:

if aperiodic measurement gap is collided with other measurement gaps, the aperiodic measurement gap is unconditionally kept and/or other measurement gaps are dropped; and/or,

if there is a measurement gap with a longest period in the measurement gaps where there is a conflict, the user equipment keeps the measurement gap with the longest period and/or drops other measurement gaps; and/or,

in the measurement gaps where there is a conflict, the measurement gap used for the intra-frequency measurement is kept; and/or,

if the colliding measurement gaps are multi-universal subscriber identity module (MUSIM) gaps, the user equipment keeps all collided measurement gaps; and/or,

if the colliding measurement gaps are MUSIM gaps and the colliding MUSIM gaps are used for related measurements or receptions at the same frequency, the user equipment keeps all colliding measurement gaps; and/or,

in the measurement gap where there is a conflict, the measurement gap used for paging is kept; and/or,

in the measurement gap where there is a conflict, the measurement gap used for system messages is kept.

Claim 12: An information transmission method, applied to a network device, comprising:

receiving first information, wherein the first information is related to measurement or a measurement gap;

and/or,

transmitting second information, wherein the second information is related to measurement or a measurement gap.

Claim 13: The method according to claim 12, wherein the receiving first information, includes:

receiving the first information transmitted by a user equipment;

wherein the first information includes:

a measurement gap; and/or,

purpose of the measurement gap; and/or,

priority;

or,

wherein the transmitting second information, includes:

transmitting the second information to the user equipment;

wherein the second information includes:

measurement gap; and/or,

purpose of the measurement gap; and/or,

priority.

Claim 14: A user equipment, comprising: a processor and a memory for storing a computer program executable on the processor;

wherein the processor is used to, when executing the computer program, perform steps of the method according to any one of claims 1 to 11.

Claim 15: A network device, comprising: a processor and a memory for storing a computer program executable on the processor;

wherein the processor is used to, when executing the computer program, perform steps of the method according to any one of claims 12 to 13.