CLAIMS

[Claim 1]

A terminal device (1) comprising:

transmission unit (107) configured and/or programmed to transmit first channel state information report for a first serving cell, second channel state information report for a second serving cell, and a scheduling request,

in a certain subframe, in a case that there is only the first channel state information report, the first channel state information report being transmitted on a first physical uplink control channel, PUCCH, resource using PUCCH format 2b, and in a case that there are the first channel state information report and the second channel state information report, the first channel state information report and the second channel state information report being transmitted on a second PUCCH resource using PUCCH format 4, the second PUCCH resource being different from the first PUCCH resource,

the second PUCCH resource being used for transmission of the scheduling request, the first channel state information report, and the second channel state information report.

[Claim 2]

The terminal device (1) according to claim 1, wherein

a first PUCCH format used in the first PUCCH resource is different from a second PUCCH format used in the second PUCCH resource.

[Claim 3]

The terminal device (1) according to claim 1, wherein

the first channel state information report and the second channel state information report are channel state information reports for CSI processes different from each other.

[Claim 4]

The terminal device (1) according to claim 1, wherein

the first channel state information report and the second channel state information report are channel state information reports for subframe sets different from each other.

[Claim 5]

A base station device (3) comprising:

reception unit (305) configured and/or programmed to receive first channel state information report for a first serving cell, second channel state information report for a second serving cell, and a scheduling request from a terminal device (1),

in a certain subframe, in a case that there is only the first channel state information report, the first channel state information report being received on a first physical uplink control channel, PUCCH, resource using PUCCH format 2b, and in a case that there are the first channel state information report and the second channel state information report, the first channel state information report and the second channel state information report being received on a second PUCCH resource using PUCCH format 4, the second PUCCH resource being different from the first PUCCH resource,

the second PUCCH resource being used for reception of the scheduling request, the first channel state information report, and the second channel state information report.

[Claim 6]

The base station device (3) according to claim 5, wherein

a first PUCCH format used in the first PUCCH resource is different from a second PUCCH format used in the second PUCCH resource.

[Claim 7]

The base station device (3) according to claim 5, wherein

the first channel state information report and the second channel state information report are channel state information reports for CSI processes different from each other.

[Claim 8]

The base station device (3) according to claim 5, wherein

the first channel state information report and the second channel state information report are channel state information reports for subframe sets different from each other.

[Claim 9]

A communication method of a terminal device (1), the communication method comprising:

transmitting first channel state information report for a first serving cell, second channel state information report for a second serving cell, and a scheduling request; and

in a certain subframe, in a case that there is only the first channel state information report, transmitting the first channel state information report on a first physical uplink control channel, PUCCH, resource using PUCCH format 2b, and in a case that there are the first channel state information report and the second channel state information report, transmitting the first channel state information report and the second channel state information report on a second PUCCH resource using PUCCH format 4, the second PUCCH resource being different from the first PUCCH resource,

the second PUCCH resource being used for transmission of the scheduling request, the first channel state information report, and the second channel state information report.

[Claim 10]

The communication method according to claim 9, wherein

a first PUCCH format used in the first PUCCH resource is different from a second PUCCH format used in the second PUCCH resource.

[Claim 11]

A communication method of a base station device (3), the communication method comprising:

receiving first channel state information report for a first serving cell, second channel state information report for a second serving cell, and a scheduling request from a terminal device (1); and

in a certain subframe, in a case that there is only the first channel state information report, receiving the first channel state information report on a first physical uplink control channel, PUCCH, resource using PUCCH format 2b, and in a case that there are the first channel state information report and the second channel state information report, receiving the first channel state information report and the second channel state information report on a second PUCCH resource using PUCCH format 4, the second PUCCH resource being different from the first PUCCH resource,

the second PUCCH resource being used for reception of the scheduling request, the first channel state information report, and the second channel state information report.

[Claim 12]

The communication method according to claim 11, wherein

a first PUCCH format used in the first PUCCH resource is different from a second PUCCH format used in the second PUCCH resource.