Summary of Invention

[0004] There is room for study in a transmission method for a random access signal.

[0005] One non-limiting and exemplary embodiment of the present disclosure facilitates providing a terminal, a base station, and a communication method capable of appropriately transmitting a random access signal.

[0005A] According to an aspect, there is provided a terminal, comprising:

reception circuitry, which, in operation, receives information on configurations of a random access signal; and

transmission circuitry, which, in operation, transmits the random access signal based on the information, wherein

the configurations of the random access signal include:

a first configuration identifiable by a terminal of a first type, a terminal of a second type, and a terminal of a third type, and

any one of a second configuration identifiable by the terminal of the second type and the terminal of the third type and a third configuration identifiable by the terminal of the third type.

[0005B] According to an aspect, there is provided a base station, comprising:

transmission circuitry, which, in operation, transmits information on configurations of a random access signal; and

reception circuitry, which, in operation, receives the random access signal based on the information, wherein

the configurations of the random access signal include:

a first configuration identifiable by a terminal of a first type, a terminal of a second type, and a terminal of a third type, and

any one of a second configuration identifiable by the terminal of the second type and the terminal of the third type and a third configuration identifiable by the terminal of the third type.

[0005C] According to an aspect, there is provided a communication method for a terminal, comprising:

receiving information on configurations of a random access signal; and

transmitting the random access signal based on the information, wherein

the configurations of the random access signal include:

a first configuration identifiable by a terminal of a first type, a terminal of a second type, and a terminal of a third type, and

any one of a second configuration identifiable by the terminal of the second type and the terminal of the third type and a third configuration identifiable by the terminal of the third type.

[0005D] According to an aspect, there is provided a communication method for a base station, comprising:

transmitting information on configurations of a random access signal; and

receiving the random access signal based on the information, wherein

the configurations of the random access signal include:

a first configuration identifiable by a terminal of a first type, a terminal of a second type, and a terminal of a third type, and

any one of a second configuration identifiable by the terminal of the second type and the terminal of the third type and a third configuration identifiable by the terminal of the third type.

[0005E] According to an aspect, there is a provided an integrated circuit, comprising:

reception circuitry, which, in operation, receives information on configurations of a random access signal; and

transmission circuitry, which, in operation, transmits the random access signal based on the information, wherein

the configurations of the random access signal include:

a first configuration identifiable by a terminal of a first type, a terminal of a second type, and a terminal of a third type, and

any one of a second configuration identifiable by the terminal of the second type and the terminal of the third type and a third configuration identifiable by the terminal of the third type.

[0005F] According to an aspect, there is provided an integrated circuit, comprising:

transmission circuitry, which, in operation, transmits information on configurations of a random access signal; and

reception circuitry, which, in operation, receives the random access signal based on the information, wherein

the configurations of the random access signal include:

a first configuration identifiable by a terminal of a first type, a terminal of a second type, and a terminal of a third type, and

any one of a second configuration identifiable by the terminal of the second type and

the terminal of the third type and a third configuration identifiable by the terminal of the third type.

[0006] A terminal according to one exemplary embodiment of the present disclosure includes: reception circuitry, which, in operation, receives information on a second number of configurations of a random access signal for a terminal of a first number of types, the second number being less than the first number; and transmission circuitry, which, in operation, transmits the random access signal based on the information.

[0007] It should be noted that general or specific embodiments may be implemented as a system, an apparatus, a method, an integrated circuit, a computer program, a storage medium, or any selective combination thereof.

[0008] According to one exemplary embodiment of the present disclosure, it is possible to appropriately transmit a random access signal.

[0009] Additional benefits and advantages of the disclosed embodiments will become apparent from the specification and drawings. The benefits and/or advantages may be individually obtained by the various embodiments and features of the specification and drawings, which need not all be provided in order to obtain one or more of such benefits and/or advantages.

Brief Description of Drawings

[0010]

FIG. 1 illustrates an example of Physical Random Access Channel (PRACH) configurations;