CLAIMS

1. A mobile station comprising an MMTEL function unit, an NAS function unit, and an RRC function unit, wherein

the RRC function unit is configured to receive~~s~~ from a mobile communication network notification information including access control information for data call to control call origination of a data call other than an urgent call and access control information for VoLTE call to control call origination of a VoLTE call,

the MMTEL function unit is configured to,

upon detecting a call origination request for the VoLTE call, determine~~s~~, based on the access control information for VoLTE call acquired from the RRC function unit, possibility of call origination of the VoLTE call, and

upon determining that the call origination of the VoLTE call is possible, transmit~~s~~ to the NAS function unit a bearer request to request establishment of a bearer for the VoLTE call,

the NAS function unit is configured to, in accordance with the bearer request, transmit~~s~~ to the RRC function unit a service request to notify that the call origination is from the MMTEL function unit, and

the RRC function unit is further configured to, in accordance with the service request, based on one of the access control information for data call and a control timer, transmit~~s~~ an RRC connection request to the mobile communication network without determining the possibility of the call origination of the VoLTE call.

2. The mobile station as claimed in claim 1, wherein the RRC function unit is further configured to,

when a predetermined bit is included in the notification information, in accordance with the service request, based on one of the access control information for data call and the control timer, transmits the RRC connection request to the mobile communication network without determining the possibility of the call origination of the VoLTE call, and

when the predetermined bit is not included in the notification information, in accordance with the service request, based on one of the access control information for data call and the control timer, determines the possibility of the call origination of the VoLTE call.

3. A mobile station comprising an MMTEL function unit, an NAS function unit, and an RRC function unit, wherein

the RRC function unit is configured to receives from a mobile communication network notification information including access control information for VoLTE call to control call origination of a VoLTE call,

the MMTEL function unit is configured to,

upon detecting a call origination request for the VoLTE call, determines, based on the access control information for VoLTE call acquired from the RRC function unit, possibility of call origination of the VoLTE call, and

upon determining that the call origination of the VoLTE call is possible, transmits to the NAS function unit a bearer request to request establishment of a bearer for the VoLTE call,

the NAS function unit is configured to, in accordance with

the bearer request, transmits to the RRC function unit a service request to notify that the call origination is from the MMTEL function unit, and

the RRC function unit is further configured to, in accordance with the service request, based on a wait timer, transmits to the mobile communication network an RRC connection request to notify that the call origination is from the MMTEL function unit without determining the possibility of the call origination of the VoLTE call.

4. A mobile communication system including a mobile station comprising an MMTEL function unit, an NAS function unit, and an RRC function unit, and a mobile communication network, wherein

the RRC function unit is configured to receives from the mobile communication network notification information including access control information for VoLTE call to control call origination of a VoLTE call,

the MMTEL function unit is configured to,

upon detecting a call origination request for the VoLTE call, determines, based on the access control information for VoLTE call acquired from the RRC function unit, possibility of call origination of the VoLTE call, and

upon determining that the call origination of the VoLTE call is possible, transmits to the NAS function unit a bearer request to request establishment of a bearer for the VoLTE call,

the NAS function unit is configured to, in accordance with the bearer request, transmits to the RRC function unit a service request to notify that the call origination is from the MMTEL

function unit,

the RRC function unit is further configured to, in accordance with the service request, based on a control timer, transmits an RRC connection request to the mobile communication network without determining the possibility of the call origination of the VoLTE call, and

the mobile communication network is configured to, even if a radio access from the mobile station is controlled, upon receiving the RRC connection request, transmits an RRC connection setting to the mobile station without transmitting an RRC connection reject.

5. A mobile station comprising an application function unit, an NAS function unit, and an RRC function unit, wherein

the application function unit is configured to transmits a call origination request for a predetermined service to the NAS function unit,

the NAS function unit is configured to transmits to the RRC function unit a service request including a call origination service value indicating that the call origination request originated from the predetermined service, and

the RRC function unit is configured to, when the call origination service value is included in the service request received from the NAS function unit, even if an access control has been invoked by a mobile communication network, transmits an RRC connection request to the mobile communication network.

6. The mobile station as claimed in claim 5, wherein the RRC function unit is further configured to, even if a control timer that specifies a time to control the call origination based on

the access control is active, transmit~~s~~ the RRC connection request to the mobile communication network.

7. The mobile station as claimed in claim 5, wherein the RRC function unit is further configured to, when it has been notified from the mobile communication network that the predetermined service is to be excluded from performing the access control, transmit~~s~~ the RRC connection request to the mobile communication network.

8. A network device included in a mobile communication network, the network device being configured to notify ~~and that notifies~~ a mobile station of an access control to the mobile communication network, wherein the network device is further configured to, when the access control has been invoked, ~~notifies~~notify the mobile station that a predetermined service is to be excluded from the access control.

9. A mobile station comprising an application function unit, an NAS function unit, and an RRC function unit, wherein

the application function unit is configured to transmit~~s~~ a call origination request for a predetermined service to the NAS function unit,

the NAS function unit is configured to transmit~~s~~ to the RRC function unit a service request including a call origination service value indicating that the call origination request originated from the predetermined service,

the RRC function unit is configured to, when the call origination service value is included in the service request received from the NAS function unit, even if a wait timer based

on a wait value notified of by an RRC connection reject from a mobile communication network is active, transmits an RRC connection request to the mobile communication network.

10. The mobile station as claimed in claim 9, wherein the RRC function unit is further configured to transmits the RRC connection request that includes the call origination service value to the mobile communication network.

CLAIMS

1. A mobile station comprising an MMTEL function unit, an NAS function unit, and an RRC function unit, wherein

the RRC function unit is configured to receive from a mobile communication network notification information including access control information for data call to control call origination of a data call other than an urgent call and access control information for VoLTE call to control call origination of a VoLTE call,

the MMTEL function unit is configured to,

upon detecting a call origination request for the VoLTE call, determine, based on the access control information for VoLTE call acquired from the RRC function unit, possibility of call origination of the VoLTE call, and

upon determining that the call origination of the VoLTE call is possible, transmit to the NAS function unit a bearer request to request establishment of a bearer for the VoLTE call,

the NAS function unit is configured to, in accordance with the bearer request, transmit to the RRC function unit a service request to notify that the call origination is from the MMTEL function unit, and

the RRC function unit is further configured to, in accordance with the service request, based on one of the access control information for data call and a control timer, transmit an RRC connection request to the mobile communication network without determining the possibility of the call origination of the VoLTE call.

2. The mobile station as claimed in claim 1, wherein the RRC function unit is further configured to,

when a predetermined bit is included in the notification information, in accordance with the service request, based on one of the access control information for data call and the control timer, transmit the RRC connection request to the mobile communication network without determining the possibility of the call origination of the VoLTE call, and

when the predetermined bit is not included in the notification information, in accordance with the service request, based on one of the access control information for data call and the control timer, determine the possibility of the call origination of the VoLTE call.

3. A mobile station comprising an MMTEL function unit, an NAS function unit, and an RRC function unit, wherein

the RRC function unit is configured to receive from a mobile communication network notification information including access control information for VoLTE call to control call origination of a VoLTE call,

the MMTEL function unit is configured to,

upon detecting a call origination request for the VoLTE call, determine, based on the access control information for VoLTE call acquired from the RRC function unit, possibility of call origination of the VoLTE call, and

upon determining that the call origination of the VoLTE call is possible, transmit to the NAS function unit a bearer request to request establishment of a bearer for the VoLTE call,

the NAS function unit is configured to, in accordance with

the bearer request, transmit to the RRC function unit a service request to notify that the call origination is from the MMTEL function unit, and

the RRC function unit is further configured to, in accordance with the service request, based on a wait timer, transmit to the mobile communication network an RRC connection request to notify that the call origination is from the MMTEL function unit without determining the possibility of the call origination of the VoLTE call.

4. A mobile communication system including a mobile station comprising an MMTEL function unit, an NAS function unit, and an RRC function unit, and a mobile communication network, wherein

the RRC function unit is configured to receive from the mobile communication network notification information including access control information for VoLTE call to control call origination of a VoLTE call,

the MMTEL function unit is configured to,

upon detecting a call origination request for the VoLTE call, determine, based on the access control information for VoLTE call acquired from the RRC function unit, possibility of call origination of the VoLTE call, and

upon determining that the call origination of the VoLTE call is possible, transmit to the NAS function unit a bearer request to request establishment of a bearer for the VoLTE call,

the NAS function unit is configured to, in accordance with the bearer request, transmit to the RRC function unit a service request to notify that the call origination is from the MMTEL

function unit,

the RRC function unit is further configured to, in accordance with the service request, based on a control timer, transmit an RRC connection request to the mobile communication network without determining the possibility of the call origination of the VoLTE call, and

the mobile communication network is configured to, even if a radio access from the mobile station is controlled, upon receiving the RRC connection request, transmit an RRC connection setting to the mobile station without transmitting an RRC connection reject.

5. A mobile station comprising an application function unit, an NAS function unit, and an RRC function unit, wherein

the application function unit is configured to transmit a call origination request for a predetermined service to the NAS function unit,

the NAS function unit is configured to transmit to the RRC function unit a service request including a call origination service value indicating that the call origination request originated from the predetermined service, and

the RRC function unit is configured to, when the call origination service value is included in the service request received from the NAS function unit, even if an access control has been invoked by a mobile communication network, transmit an RRC connection request to the mobile communication network.

6. The mobile station as claimed in claim 5, wherein the RRC function unit is further configured to, even if a control timer that specifies a time to control the call origination based on

the access control is active, transmit the RRC connection request to the mobile communication network.

7. The mobile station as claimed in claim 5, wherein the RRC function unit is further configured to, when it has been notified from the mobile communication network that the predetermined service is to be excluded from performing the access control, transmit the RRC connection request to the mobile communication network.

8. A network device included in a mobile communication network, the network device being configured to notify a mobile station of an access control to the mobile communication network, wherein the network device is further configured to, when the access control has been invoked, notify the mobile station that a predetermined service is to be excluded from the access control.

9. A mobile station comprising an application function unit, an NAS function unit, and an RRC function unit, wherein

the application function unit is configured to transmit a call origination request for a predetermined service to the NAS function unit,

the NAS function unit is configured to transmit to the RRC function unit a service request including a call origination service value indicating that the call origination request originated from the predetermined service,

the RRC function unit is configured to, when the call origination service value is included in the service request received from the NAS function unit, even if a wait timer based

on a wait value notified of by an RRC connection reject from a mobile communication network is active, transmit an RRC connection request to the mobile communication network.

10. The mobile station as claimed in claim 9, wherein the RRC function unit is further configured to transmit the RRC connection request that includes the call origination service value to the mobile communication network.