

Title (en)

METHOD FOR CHECKING THE OPERATIONAL STATUS OF A CS OR PS DOMAIN IN AN UMTS NETWORK NODE

Title (de)

VERFAHREN ZUR PRÜFUNG DES BETRIEBSSTATUS EINER CS- ODER PS-DOMÄNE IN EINEM UMTS-NETZKNOTEN

Title (fr)

PROCEDE POUR VERIFIER LE STATUT DE FONCTIONNEMENT D'UN DOMAINE CS OU PS DANS UN NOEUD DE RESEAU UMTS

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Abstract (en)

[origin: EP1659811A1] In 3GPP UMTS networks the access to the CS and PS services of the camped UEs is controlled via System Information (SIB1, SIB3/SIB4) and Paging. For an efficient control of these accesses it is however important to know which Network Nodes inside the UTRAN and the Core Network (CN) are currently congested or out of service for the CS and PS domains. When the information on the unavailability of a remote node domain can not reach a local node, the known countermeasures cause indistinct interruption of all domain services running in the cell/s in spite the node is really out of service or in service. The present method is implemented by a local node to safely check the state of the remote node domains. When a local node perceives a congestion on its call processor/s or detect an internal alarm, sends a RANAP compliant connectionless STATUS REQUEST message to each involved remote node and for a specific domain; then waits for a respective acknowledgement within a first defined time interval #T1, after which the sending/waiting steps can be repeated up to N times. Each remote node domain at the reception of a STATUS REQUEST message shall reply with an acknowledgement within a second time interval #T2. The local node whether no acknowledgement is received to the last sent STATUS_REQUEST message, concludes that the enquired remote node domain is out of service and carries out preventive actions directed to inhibit the mobile terminals to access to the services provided by the remote unavailable node. Optionally, an alarm/warning indication is sent to the OMC. At periodical time intervals #T3 the local node sends the STATUS_REQUEST message to the out of service node domain. At the acknowledgement reception, the local node concludes that the remote node domain becomes available again and therefore restores the inhibited services and clears the alarm/warning at the OMC (fig.9).

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