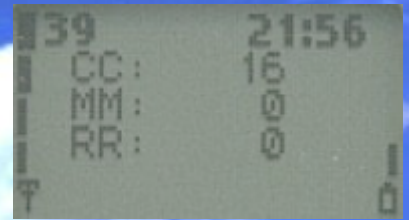


Test 39



■ Reason from the CallControl-Layer [displayed in Test 2 and Test 63 too]

◆ from the GSM specifications :

- **1** unassigned (unallocated) number
- **3** no route to destination
- **8** operator determined barring
- **16** normal end of call (*you were speaking or you heard some text - that dialled number was busy or something similiar*)
- **17** user busy
 - if it was outgoing call, dialled number was busy (phone even displayed "Number busy")
 - if it was incoming call, a man, who dialled to you, heard busy signal - you were speaking or you rejected it (*in Nokia 5110 or 5130 to make it you have to press C key, in Nokia 6110, 6130 or 6150 red receiver*)
- **18** no user responding
- **19** user alerting (from specification - I had it with normal connection too (phone displayed "No answer") or when incoming call was diverted to voice mailbox), no answer. The called user's equipment responded, but the user failed to answer it
- **21** call rejected
 - phone wasn't in network coverage (message 'No coverage network'), when you tried to make call
 - you tried to call to non existing phone number or you heard busy signal
- **22** number changed
- **25** Preemption : the network released the call in order to free resources for a call of higher priority
- **27** destination out of order. The called party cannot be released because of a technical failure at the destination user's end of the connection

- **28** invalid number format/number incomplete. Phone displayed "Invalid phone number"
- **31** unspecified. It seems, that with this error connection is end by network (for example, when it's overcharged). Shown sometimes too, when you call for not supported for some tariffs numbers.
- **34** no circuit/channel available to make call. Phone displayed "**Network busy**". I noticed too, that in my network RR value changed to 1 with this error. More about situations, when network is busy, I write in TS description.
- **38** network out of order. A failure in the network stopped the call, and it is likely to last for a while, such as that re-attempting the call is not likely to work
- **41** temporary failure. A failure in the network stopped the call, but it is likely to last only a short time, suggesting to re-attempt the call
- **42** switching equipment congestion (message "Network busy")
- **44** requested channel not available. No resources available to the remote user.
- **47** resource unavailable. I had it, when connection was "brutal" broken. Concrete : during call phone of my interlocutor disabled because of empty battery. My phone displayed 'Error in connection'
- **49** Quality of Service not available
- **50** requested facility not subscribed (you must subscribe it to use it). In some networks shown too, when you set not supported by network function (for example, "Own number sending" in Era-GSM network). Message "*Check operator services*"
- **65** bearer service not implemented. The equipment sending the cause doesn't support bearer capability requested.
- **68** ACM equal to or greater than ACMmax
- **69** requested facility not implemented. The equipment sending the cause doesn't support supplementary service requested.
- **88** incompatible destination

◆ *from mine (and not only) experiences:*

- **28** I had it, when phone number was too long
- **57** no asynchronous data transmission allowed (concrete: phone wasn't able to connect to WAP from this concrete SIM card)
- **79** error with message 'Check operator services'. You have it, when you enable ALS (**A**lternative **L**ine **S**ervice) function, don't have second number on SIM card, select it and try to make call
- **111** « Error in connection »

■ Reason from the MobilityManagement-Layer [shown *Test64* too]

- **0** No error
- **2** IMSI unknown in HLR (SIM card not active in network)
- **3** illegal phone
- **4** IMSI unknown in VLR
- **5** phone's IMEI was not accepted (network doesn't allow emergency calls using IMEi as identification)
- **6** illegal ME
- **11** PLMN not allowed (you tried to log into network, which doesn't have roaming convention with your home network - your phone displays 'No access', when you try to select it manually; I don't know only, if this code is displayed only, when this network is saved on forbidden list on SIM card (*see Test 6*))
- **12** Location Area not allowed
- **13** roaming not allowed in this Location Area
- **17** network failure (the network send this if a fault has developed in the network)
- **22** network congestion (if the network is too congested to proceed)
- **32** service option not supported
- **33** service option not subscribed (i.e. not enabled on subscriber account)
- **34** service temporarily out of order (when the MS requests a service that is temporarily unavailable due to technical failure)
- **38** call cannot be identified (call RE). This cause is sent when the MS attempts to re-establish an MM connection after a radio-link failure, however the network was unable to associate the request with the failed connection

■ Reason from RadioResourceManagement-Layer

- **0** normal release
- **1** unspecified
- **2** channel unacceptable
- **3** timer expired (one of timers expired, and the connection was released)
- **4** no activity on the radio path (the BTS doesn't detect transmission when there is supposed to be)
- **5** Pre-emptive release
- ***8** handover impossible, TA out of range
- ***9** channel mode unacceptable (MS cannot support the channel configuration assigned by network)

- **10** requery not implemented
- **65** call already cleared
- **97** message type not compatible with protocol state
- **101** no cell allocation available
- **111** protocol error, unspecified

*When you will see * before third parameter from this test, it means (the most often), that call is in progress.*

Sometimes phone displays different values - I don't know their meaning ☹