3GPP TSG SA WG3 Security — S3#14 1-4 August, 2000, Oslo

Source:	France Telecom	
Title:	Rejection of non ciphered calls	
Document for:		Approval
Agenda Item:		7.10

This is a document that was previously sent on the S3 mailing list. No comments were received.

Mechanism:

As noted in SMG9 liaison statement, for backward compatibility purposes we should have a flag in the terminal, in order to offer the service with old SIMs that would not have a flag in them. Therefore I propose the following mechanism:

There is a parameter in the ME, that can take two values: Value 0 (default) : The terminal rejects a non ciphered connection, inform the user and give the use the possibility to change the parameter value to 1. Value 1: The terminal accepts non ciphered connections.

Whenever a **ciphered** connection is established, the parameter value reverts to 0. This ensures that if the user has been roaming in a non-ciphering network and comes back to a ciphering network (the general case), rejection of non ciphered connections is activated again.

The rejection of a non ciphered connection is done in the terminal and implemented along the ciphering indicator. Terminals behave according to the value of the parameter, sending if needed information to the user and either proceeding with the connection or releasing it.

In case of the rejection of a non ciphered connection by the terminal, the terminal shall inform the network in order to avoid that the network keeps trying establishing a non ciphered connection with the terminal not knowing why the previous attempt failed. Whether this would require a new signaling message on the radio interface or could use an existing signaling message remains to be determined.

Control by the SIM/USIM

It should be possible to have the control of that parameter in the SIM/USIM. In the case where the SIM/USIM supports that parameter, it shall override the parameter in the terminal. When the terminal is powered up, or a SIM/UICC inserted in it, the parameter is sent to the terminal which shall behave accordingly to the value of that parameter.

Now I'm aware that this feature involves more work and might be more controversial. Note that the mechanism would work without having control in the SIM/USIM implemented. France Telecom's position is that having the mechanism defined in the terminal is a minimal solution and we would wish for having control possible from the SIM/USIM.

Work to be done and involved groups:

RAN(2?) needs to be involved to define a message of information indication that a connection has been rejected because it was not ciphered.

CN(1?) needs to be involved to define how the networks reacts when it is informed that a nonciphered connection has been rejected.

T2 needs to be involved to introduce the rejection of non ciphered connections by the terminal according to the parameter, for modifications of the SIM/ME and USIM/ME interfaces, and to allow the user to modify the parameter.

T3/SMG9 needs to be involved to define this new parameter and to include modifications necessary on the SIM/ME and USIM/ME interfaces.