

**3GPP TSG SA WG3 Security — S3#14**

**S3-000411**

**2-4 August, 2000**

**Oslo, Norway**

**TSG-RAN Working Group 2 (Radio L2 and Radio L3)  
Paris, France, 3 - 7 July 2000**

**R2-001541**

**Source: TSG-RAN WG2**

**To: TSG-T WG3**

**Cc: TSG-SA WG3**

**Title: Response to LS (T3-99304) on Parameters to be stored in the USIM**

**Contact:** Marko Mahkonen, Nokia  
Email: [Marko.Mahkonen@nokia.com](mailto:Marko.Mahkonen@nokia.com)  
Tel.: +358 40 768 2650

---

TSG-RAN WG2 would like to thank TSG-T WG3 for requesting information about network related parameters to be stored in the USIM.

For the time being, TSG-RAN WG2 has identified the following information that is relevant for the Access Stratum to store in the USIM. This information can be found in future as an Annex in the TS 25.331.

## Ciphering information

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Cipher key for each CN domain	MP	<1 to maxCNDomains>		Cipher key is described in 33.102.
> Old CK	MP		Bitstring (128)	
> New CK	MP		Bitstring (128)	
Integrity key for each CN domain	MP	<1 to maxCNDomains>		Integrity key is described in 33.102.
> Old IK	MP		Bitstring (128)	
> New IK	MP		Bitstring (128)	
START value for each CN domain	MP	<1 to maxCNDomains>		START value is described in 33.102.
> Old START	MP		Bitstring (20)	
> New START	MP		Bitstring (20)	
KSI, Key set identifier for each CN domain	MP	<1 to maxCNDomains>		Key set identifier is described in 33.102.
> Old KSI	MP		Bitstring (3)	
> New KSI	MP		Bitstring (3)	

## Frequency information

### Neighbour cell list

Information Element/Group name	Need	Multi	Type and reference	Semantics description
FDD cell list	OP	<1 to maxFDDFreqList>		
>UARFCN uplink (Nu)	MP		Integer(0..16383)	[25.101]
>UARFCN downlink (Nd)	OP		Integer(0 .. 16383)	[25.101] If IE not present, default duplex distance of 190 MHz shall be used.
> Primary scrambling code	MP	<1 to maxFDDFreqCellList>	Primary CPICH info 10.3.6.51	
TDD cell list	OP	<1 to maxTDDFreqList>		
>UARFCN (Nt)	MP		Integer(0 .. 16383)	[25.102]
> Cell parameters ID	MP	<1 to maxTDDFreqCellList>	Integer (0..127)	The Cell parameters ID is described in 25.223.
GSM Neighbour cell list	OP			
>GSM neighbour cell info	MP	<1 to maxGSMCellList>		
>> BSIC	MP			
>> BCCH ARFCN	MP			

## Multiplicity values and type constraint values

<b>Constant</b>	<b>Explanation</b>	<b>Value</b>
<b>Ciphering information</b>		
maxCNDomains	Maximum number of CN domains	4
<b>Frequency information</b>		
maxFDDFreqList	Maximum number of FDD carrier frequencies to be stored in USIM	4
maxTDDFreqList	Maximum number of TDD carrier frequencies to be stored in USIM	4
maxFDDFreqCellList	Maximum number of neighbouring FDD cells on one carrier to be stored in USIM	8
maxTDDFreqCellList	Maximum number of neighbouring TDD cells on one carrier to be stored in USIM	8
maxGSMCellList	Maximum number of GSM cells to be stored in USIM	8