

**Source:** SA WG3 (Security)

**Title:** CR to 33.310: Removal of unnecessary restriction on CA path length (Rel-6)

**Document for:** Approval

**Agenda Item:** 7.3.3

---

SA Doc number	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	SA WG3 Doc number	Workitem
SP-040394	33.310	002	-	Rel-6	Removal of unnecessary restriction on CA path length	F	6.0.0	S3-040267	SEC1-NDS-AF

## CHANGE REQUEST

⌘ **33.310 CR 002** ⌘ rev **-** ⌘ Current version: **6.0.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

**Proposed change affects:** UICC apps  ME  Radio Access Network  Core Network

<b>Title:</b>	⌘ Removal of unnecessary restriction on CA path length		
<b>Source:</b>	⌘ SA WG3		
<b>Work item code:</b>	⌘ SEC-NDS-AF	<b>Date:</b>	⌘ 30/04/2004
<b>Category:</b>	⌘ <b>F</b>	<b>Release:</b>	⌘ Rel-6
	Use <u>one</u> of the following categories: <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification) Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .		Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6)

<b>Reason for change:</b>	⌘ The specification in section 6.1.2 that the path length of the CA certificate should be at least 2 is unnecessarily restrictive since a path length of 1 would also be acceptable. In fact it should be possible to specify a path length of 1 in deployments to improve security.
<b>Summary of change:</b>	⌘ Change the path length of the CA certificate to "unlimited or at least 1".
<b>Consequences if not approved:</b>	⌘ Unnecessary restriction in the specification which could result in a lower level of security.

<b>Clauses affected:</b>	⌘ 6.1.2						
<b>Other specs affected:</b>	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> Other core specifications	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	⌘	
Y	N						
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> Test specifications	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	⌘	
Y	N						
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> O&M Specifications	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	⌘	
Y	N						
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
<b>Other comments:</b>	⌘						

## 6.1.2 CA Certificate profile

In addition to clause 6.1.1, the following requirements apply:

- The RSA key length shall be at least 2048-bit;
- Extensions:
  - Optionally non critical authority key identifier;
  - Optionally non critical subject key identifier;
  - Mandatory critical key usage: At least keyCertSign and CRL Sign should be asserted;
  - Mandatory critical basic constraints: CA=True, path length unlimited or at least 21.