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Presentation to TSG-T#10

Bangkok, 6-8 December 2000

Comments on (U)SIM issues, architecture and interfaces of a Terminal

TP-000253

Source: Siemens

Contact: Peter.Neumann@mch.siemens.de

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Comments on (U)SIM issues, architecture and interfaces of a Terminal

There are 4 major items to be addressed

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- **(U)SIM specifications**

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- **(U)SIM specifications**
- **(U)SIM issues**

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- **(U)SIM specifications**
- **(U)SIM issues**
- **Terminal architecture and interfaces**

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Comments on (U)SIM issues, architecture and interfaces of a Terminal

There are 4 major items to be addressed

- **(U)SIM specifications**
- **(U)SIM issues**
- **Terminal architecture and interfaces**
- **Possible Terminal - (U)SIM combinations**

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1 (U)SIM specifications

TC SMG
SMG 9

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1 (U)SIM specifications

TC SMG
SMG 9

GSM
SIM
11.11

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1 (U)SIM specifications

TC SMG
SMG 9

GSM
SIM
11.11

3GPP
TSG-T3

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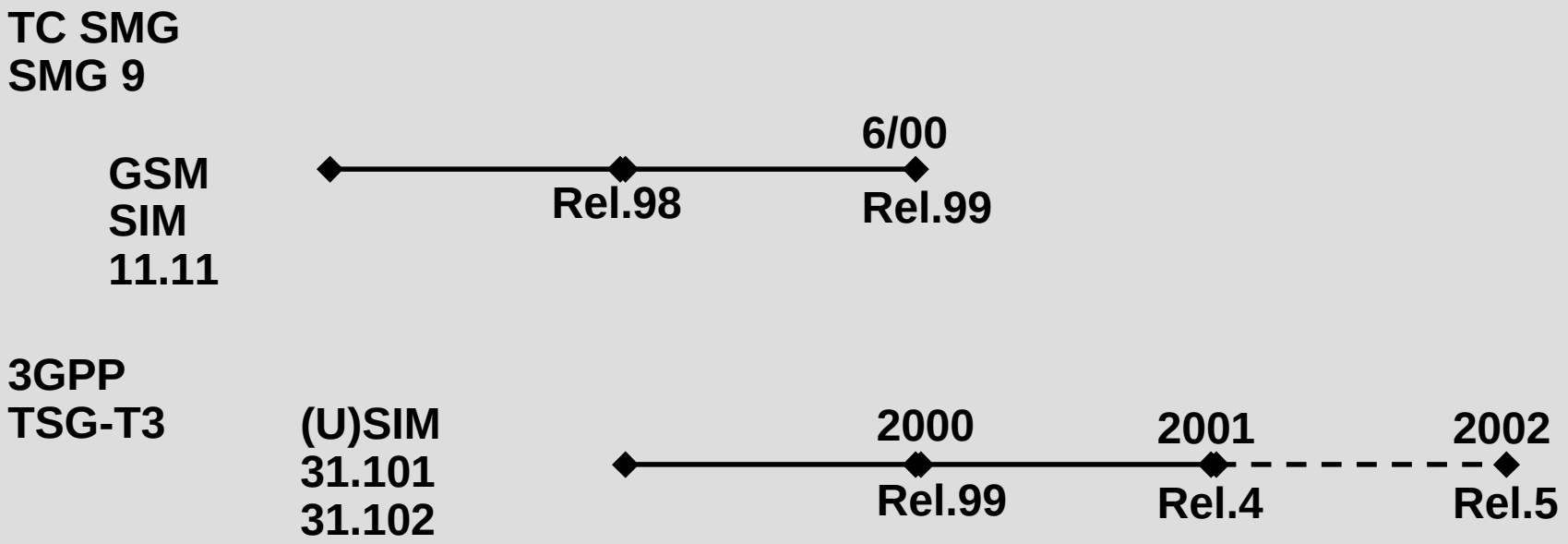
1 (U)SIM specifications



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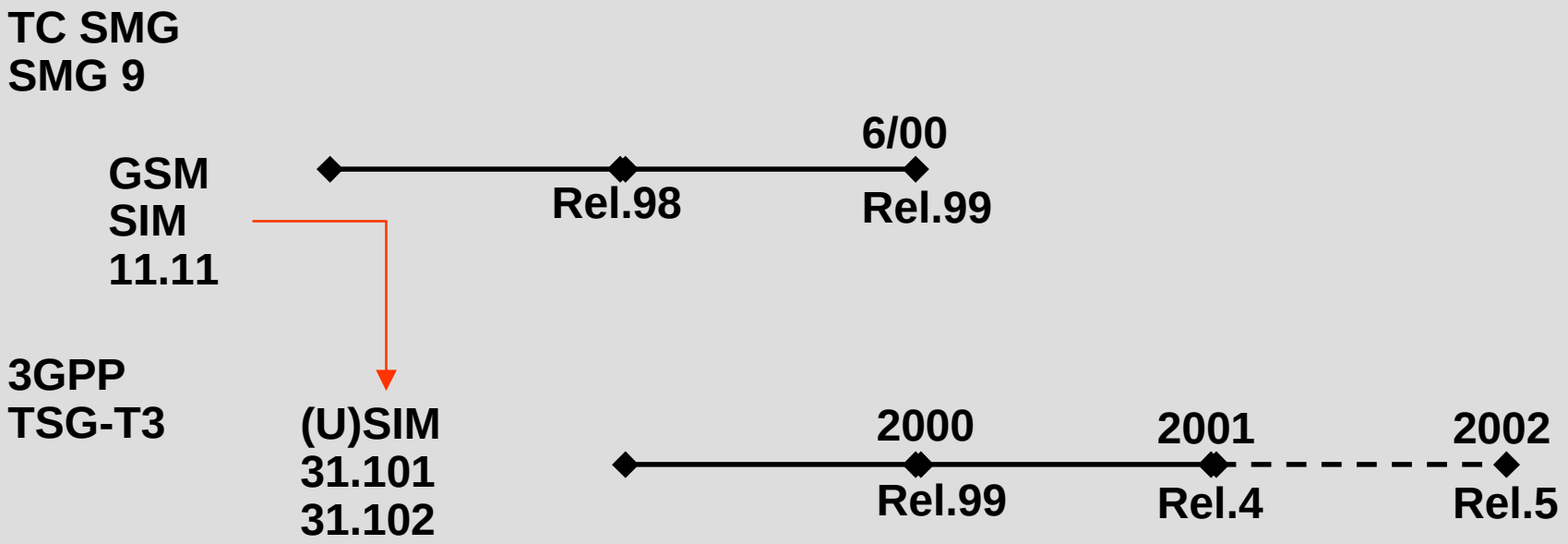

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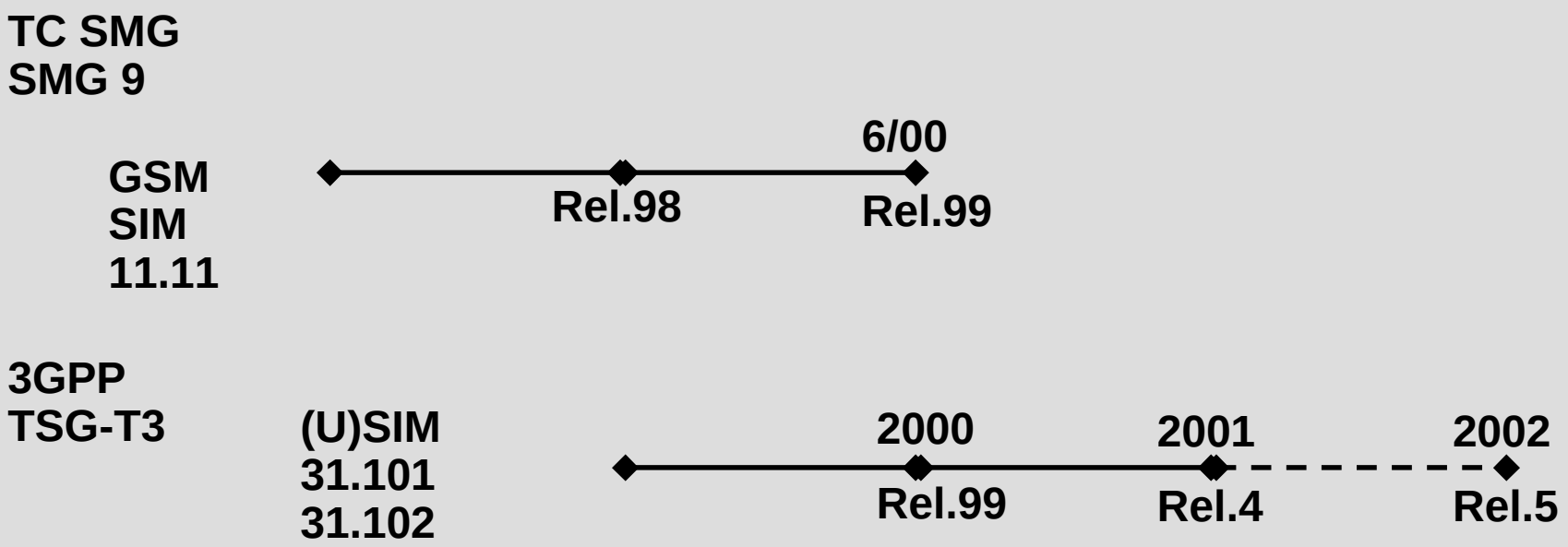

new SMG9 => EP SCP

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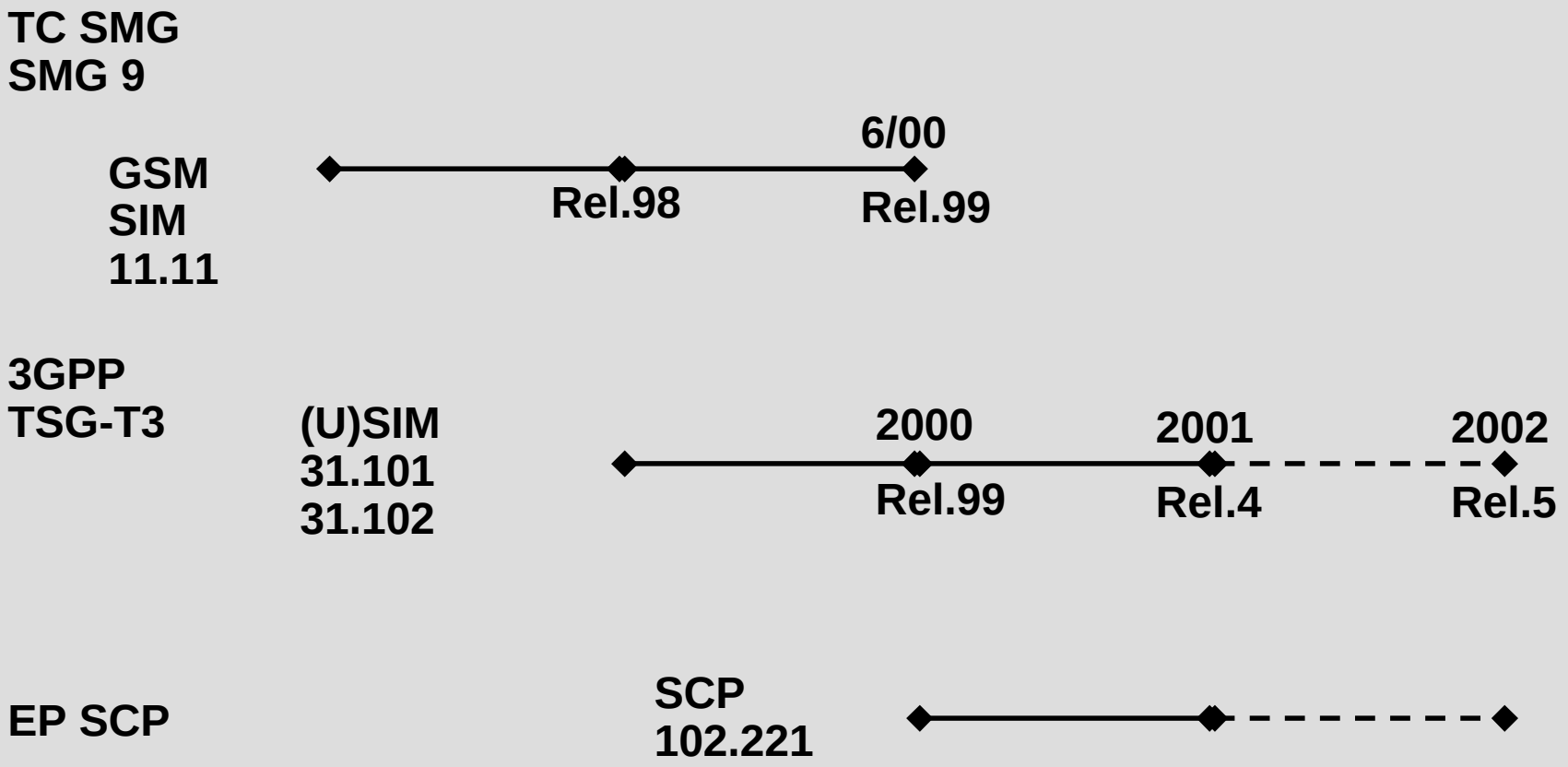
1 (U)SIM specifications



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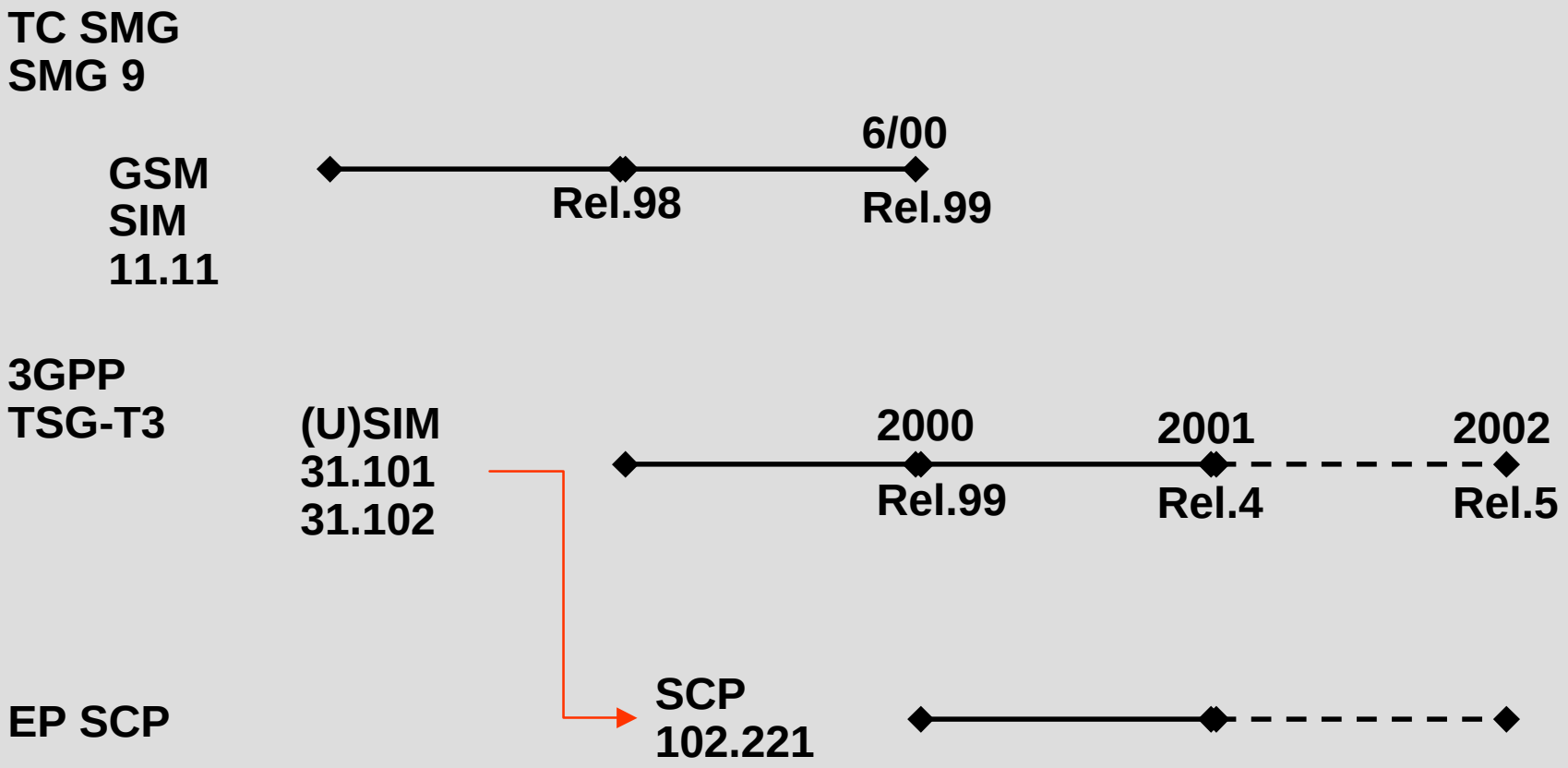

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1 (U)SIM specifications

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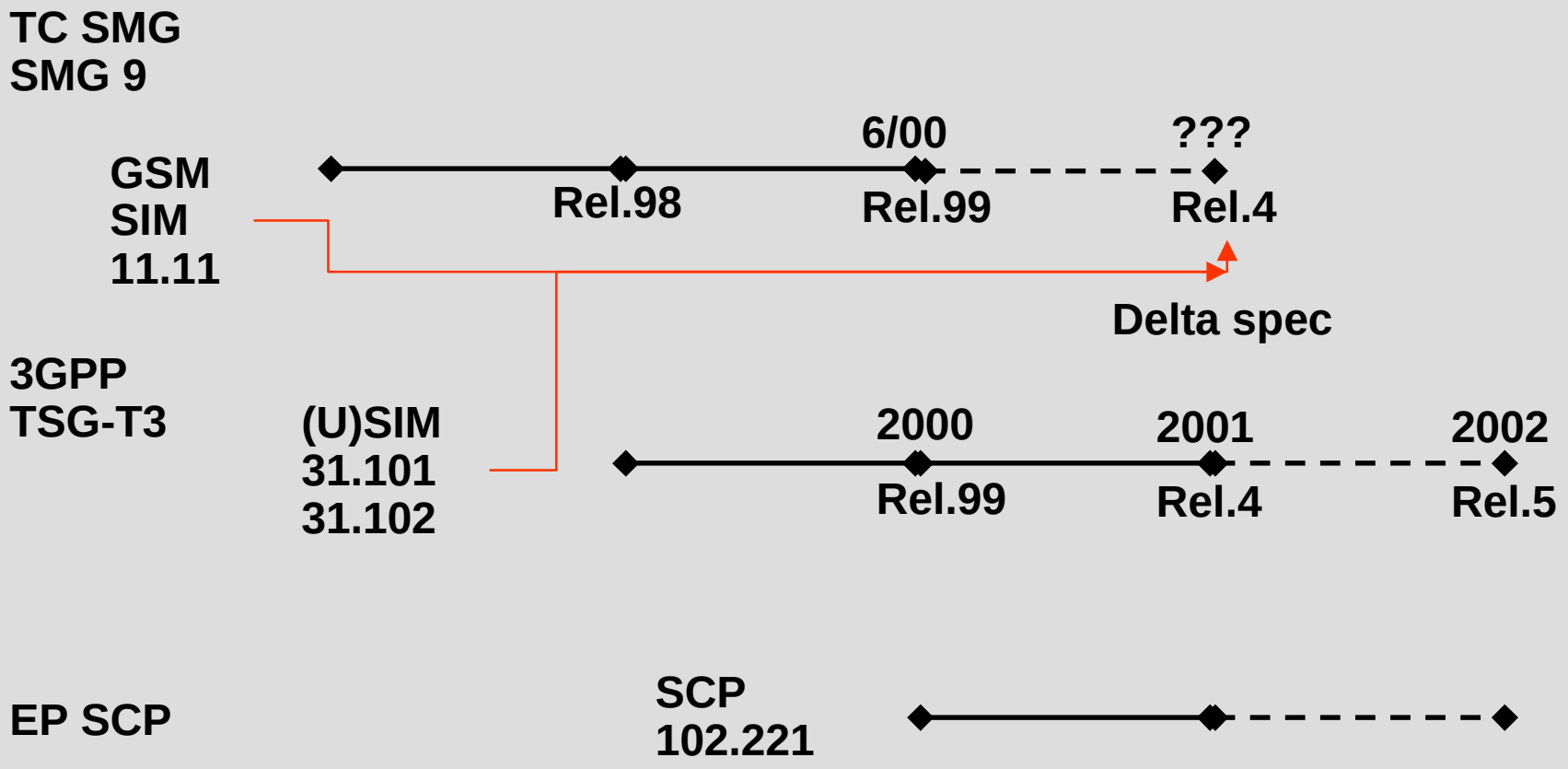
1 (U)SIM specifications



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2 (U)SIM issues

GSM SIM

Physical GSM 11.11

Logical GSM 11.11

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2 (U)SIM issues

GSM SIM

Physical GSM 11.11

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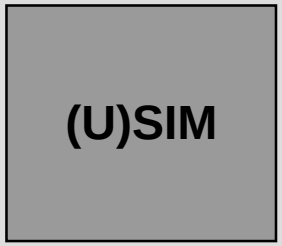
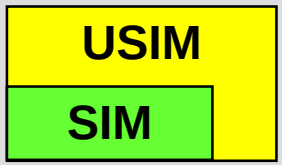
3GPP USIM

Physical UMTS 31.101



Logical UMTS 31.102



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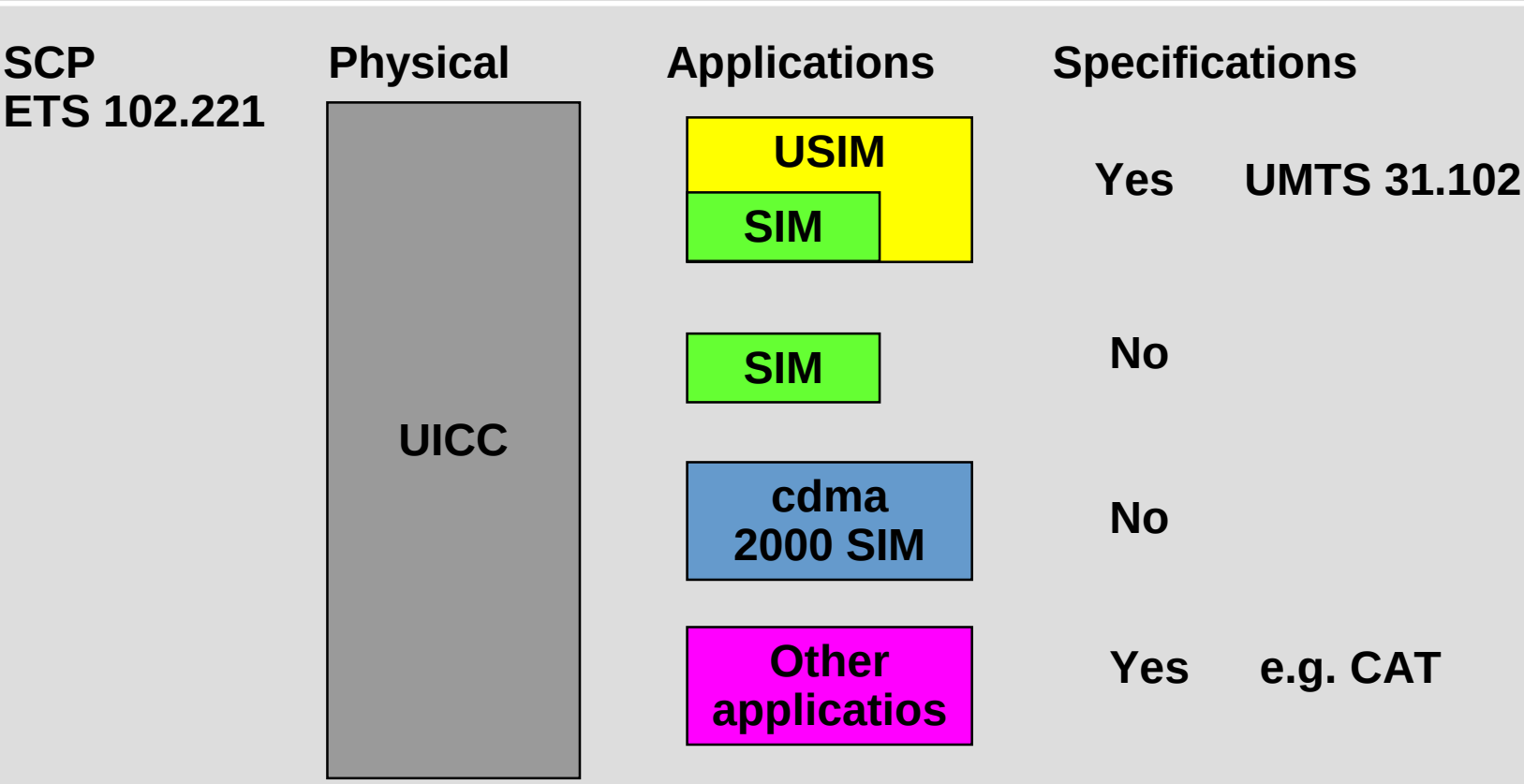
2 (U)SIM issues



CAT = Card Application Toolkit

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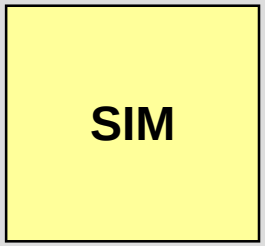
3 Terminal architecture and interfaces

Example on a physical configuration (based on SP-99493)

SIM as described in GSM 11.11



SIM = Subscriber Identity Module

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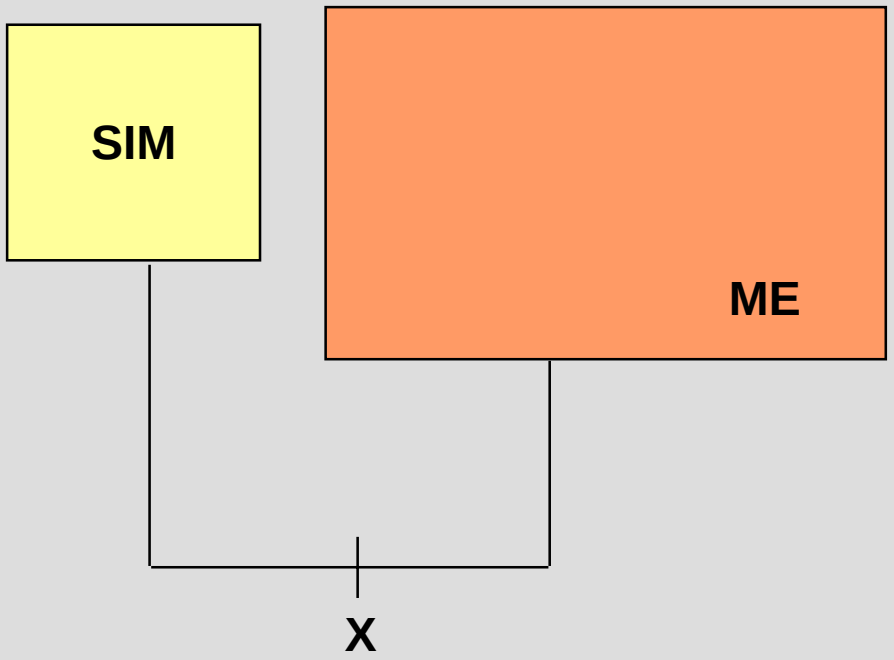
3 Terminal architecture and interfaces

Example on a physical configuration 2G SIM and 3G Terminal

SIM as described in GSM 11.11



X = SIM/ME interface

ME = Mobile Equipment

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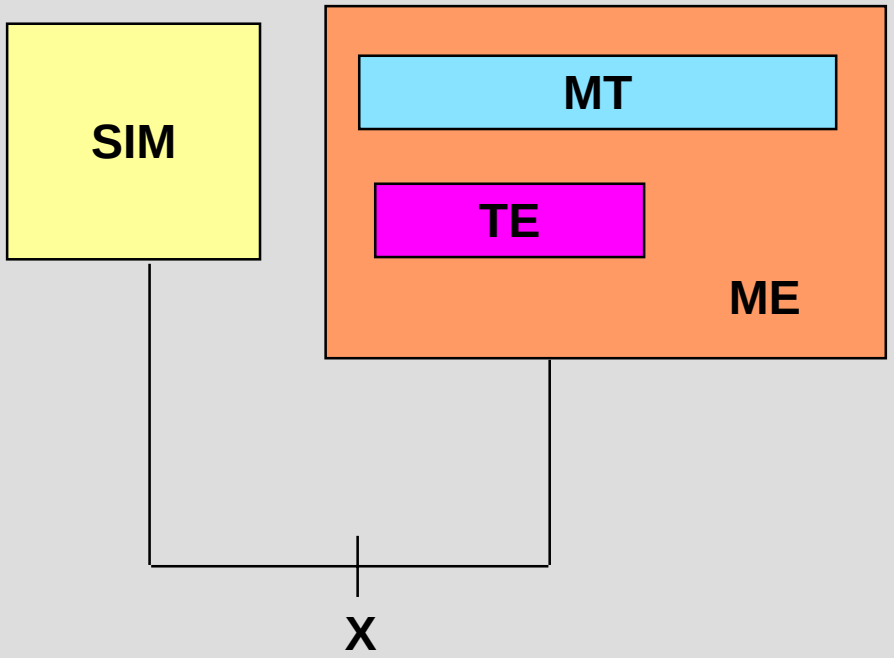
3 Terminal architecture and interfaces

Example on a physical configuration 2G SIM and 3G Terminal

SIM as described in GSM 11.11



ME = MT + TE

MT = Mobile Termination

TE = Terminal Equipment

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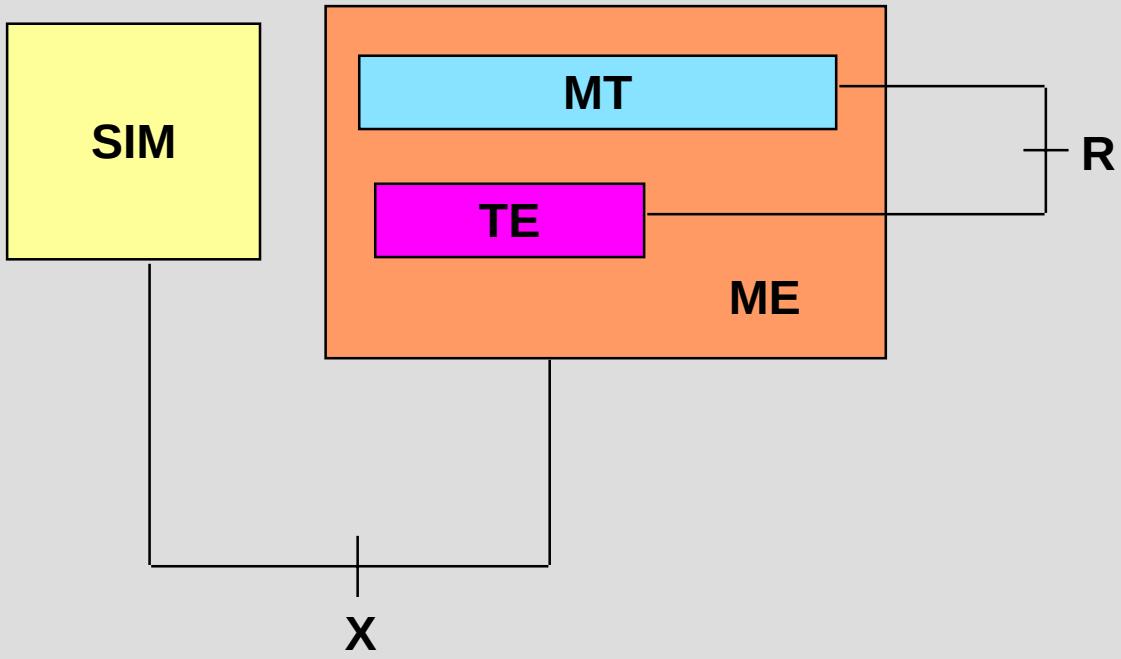
3 Terminal architecture and interfaces

Example on a physical configuration 2G SIM and 3G Terminal

SIM as described in GSM 11.11



R = MT/TE interface

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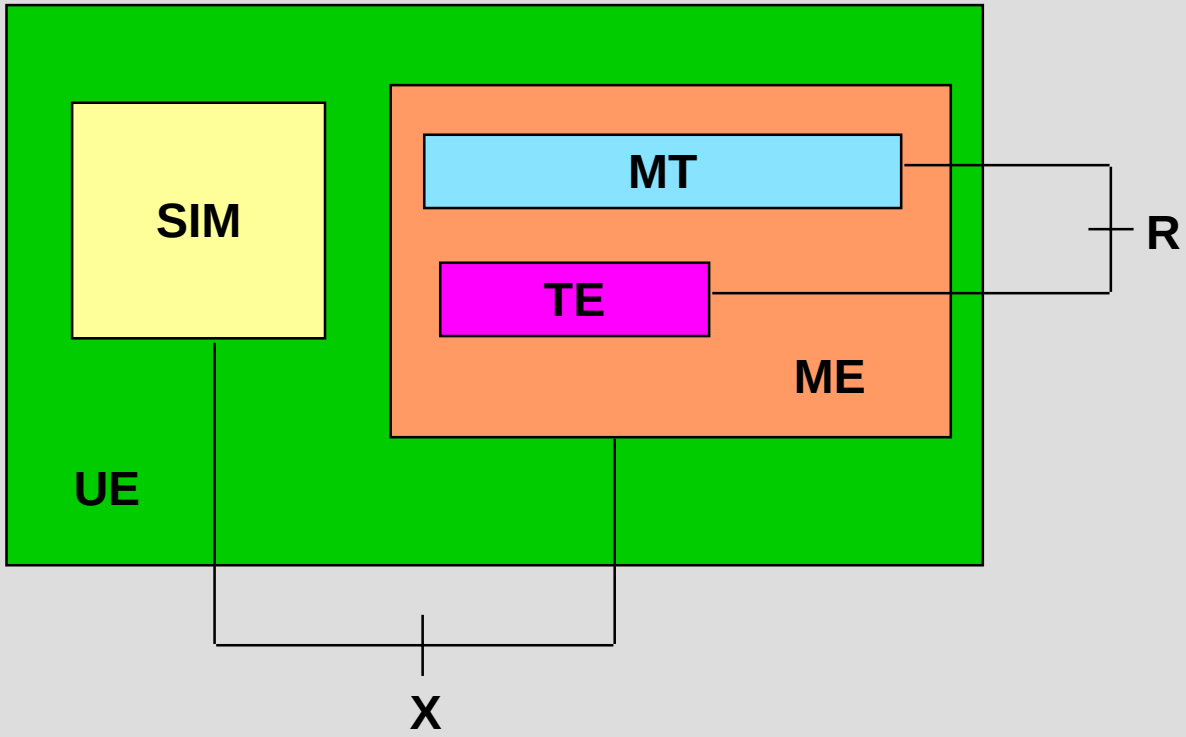
3 Terminal architecture and interfaces

Example on a physical configuration 2G SIM and 3G Terminal

SIM as described

in ETSI GSM 11.11



UE = SIM + ME

UE = SIM + MT + TE

UE = User Equipment

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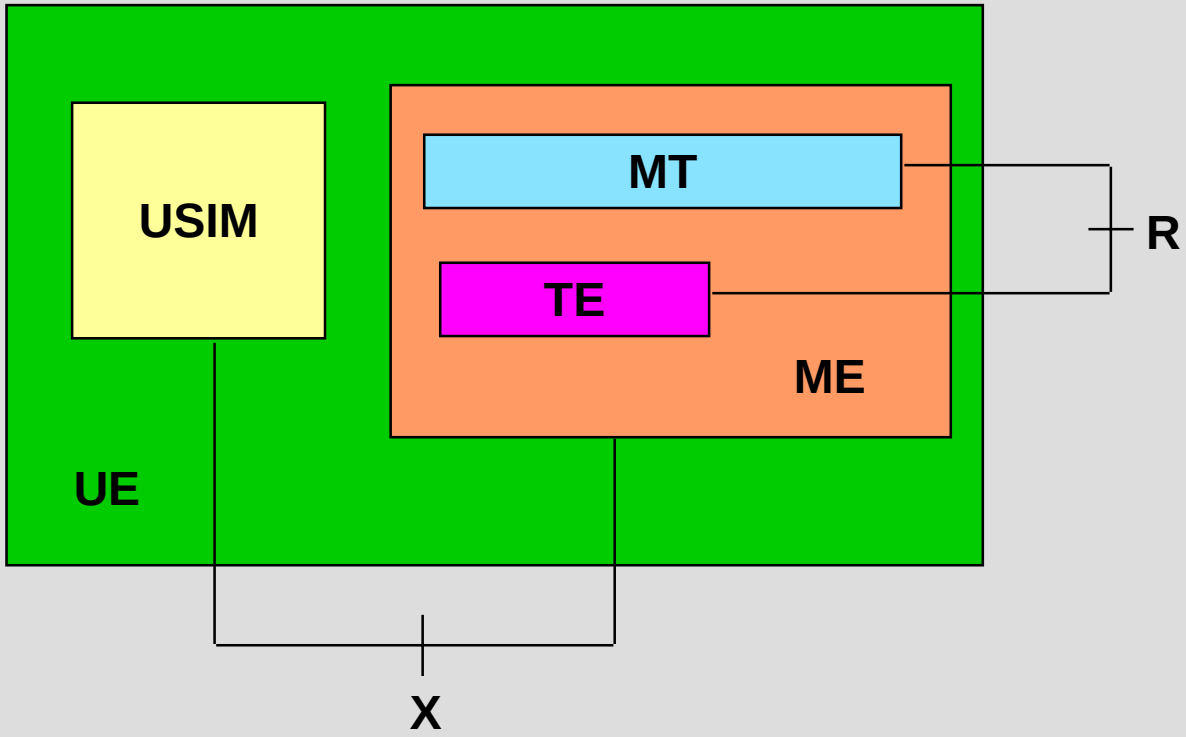
3 Terminal architecture and interfaces

Example on a physical configuration 3G SIM and 3G Terminal

USIM as described in 3GPP UMTS 31.101



USIM = Universal SIM

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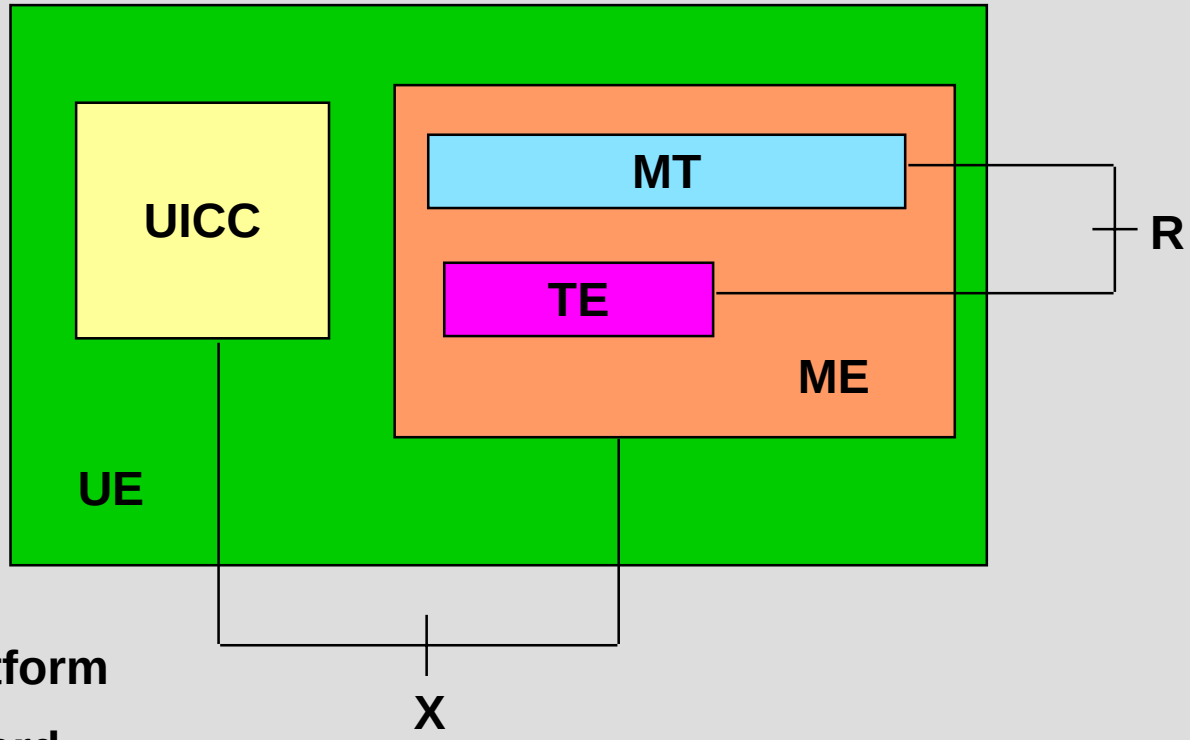
3 Terminal architecture and interfaces

Example on a physical configuration UICC and 3G Terminal

UICC as described in SCP ETS 102.221



SCP = Smart Card Platform

UICC = Universal IC Card

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4 Possible Terminal - (U)SIM combinations

What we need is a table for the supported combinations (example):

Platform	Application	GSM R98-	GSM R99+	UMTS R99+
SIM 11.11	SIM 11.11	SIM	SIM	SIM
USIM 31.101	(U)SIM 31.102	?	SIM	USIM
SCP 102.221	(U)SIM 31.102	?	SIM	USIM
USIM 31.101	GSM * (delta)	?	?	?
SCP 102.221	GSM * (delta)	?	?	?
SCP 102.221	Other app	?	?	?
SCP 102.221	Other app's	?	?	?

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5 Proposals

1) TSG-T tasks TSG-T3 to investigate the items and come back with solutions and detailed proposals for the further work

2) TSG-T & T3 widen its scope and also includes the GSM 11.11 transformation from ETSI SMG into a real 3G specification aligned with the USIM 31.102 and SCP spec 102.221

3) TSG-T informs TSG-SA plenary about the procedure of developing of new UICC applications based on the SCP platform spec ETS 102.221

4) TSG-SA sends liaisons to other technology camps to inform about the new approach and the specifications for information

5) TSG-T2 provides a better description about the interfaces and protocols being used e.g. for the terminal architecture, the supported combinations which could be part of the Terminal local model specification

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