

**TSG-RAN meeting #18**  
**New Orleans, US 3-6 December 2002**

**RP-020684**

**3GPP TSfG-SA WG2 meeting #27**  
**Beijing, China, 14<sup>th</sup> – 18<sup>th</sup> October 2002**

**Tdoc S2-023102**  
**rev of S2-023101**

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**Title:** LS on proposed TR for the architectural aspects of early UE handling  
**Source:** SA WG2  
**To:** RAN 2, RAN 3, CN 4, GERAN 2, TSG RAN  
**Cc:** CN 1, TSG SA, GSMA TWG

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**Attachments:** S2-022922

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**1. Overall Description:**

At the last RAN and SA plenary meetings, it seems to have been agreed that SA 2 should be requested to study the network aspects of the “handling of early UEs”.

Consequently SA 2 has started work on an “800” series (i.e. 3GPP internal) Technical Report that can help to enable the 3GPP TSG plenaries to decide on the relative merits of the different architectures.

The planned skeleton of the TR is attached. SA 2 aims to finish their work on this TR in time for the December TSG meetings. Hopefully the December TSG meetings will then decide upon a route forward. Depending upon the TSG decision, CRs would then be raised against any necessary specifications and, possibly, the selected architecture would be copied into a new TS or a “900” series TR (i.e. a TR that 3GPP gets published).

In line with SA 2’s duties, SA 2 is considering the benefits and impacts of any changes on the GERAN and the CN as well as on the UTRAN.

The current draft of the “800” series TR is under email review. Once an update is available, SA 2 delegates will distribute it on to your email reflectors.

**Questions**

**1) To RAN 3 and RAN 2**

Does UE capability/fault information need to be sent across the Iur interface? If so, does the Iur interface impose any particular requirements?

**2) To CN 4**

At inter-MSC location updating, can the MAP signalling between MSC/VLRs that obtains the IMSI be easily extended to also obtain an IMEISV stored in the old VLR?

**3) To GERAN 2, RAN 2 and RAN 3**

For the case of a dual mode GSM/UMTS mobile, how many bytes can be added to the A interface Handover Required and Handover Request messages before the maximum size for A interface messages is reached?

**3. Actions:**

**To: RAN 2, RAN 3, GERAN 2, and CN 4**

SA 2 would be pleased if you could answer the above questions by  
Wednesday 13th November 2002.

**To: CN 1 and TSG-RAN:**

To note this activity.

**4. Date of Next SA2 Meetings:**

SA2 #28      11 – 15 November 2002      Bangkok, Thailand

**Source:** Vodafone Ltd  
**Title:** Proposed Skeleton for TR on early UE handling  
**Agenda item:** 6: R'99 and earlier  
**Document for:** Decision

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## Introduction

Attached is a draft skeleton for a TR on early UE handling.

## Proposal

It is proposed that this skeleton is agreed as the basis for further work.

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**3rd Generation Partnership Project**  
**Technical Specification Group Services and**  
**System Aspects;**  
**Provision of UE Capability Information to Network**  
**Entities;**  
**(Release 6)**



The present document has been developed within the 3<sup>rd</sup> Generation Partnership Project (3GPP™) and may be further elaborated for the purposes of 3GPP.

The present document has not been subject to any approval process by the 3GPP Organizational Partners and shall not be implemented.

This Specification is provided for future development work within 3GPP only. The Organizational Partners accept no liability for any use of this Specification.

Specifications and reports for implementation of the 3GPP™ system should be obtained via the 3GPP Organizational Partners' Publications Offices.

Keywords

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<keyword[, keyword]>

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# Contents

<a href="#">Foreword</a> .....	5
<a href="#">1</a> <a href="#">Scope</a> .....	6
<a href="#">2</a> <a href="#">References</a> .....	6
<a href="#">3</a> <a href="#">Definitions, symbols and abbreviations</a> .....	6
<a href="#">3.1</a> <a href="#">Definitions</a> .....	6
<a href="#">3.2</a> <a href="#">Symbols</a> .....	6
<a href="#">3.3</a> <a href="#">Abbreviations</a> .....	6
<a href="#">4</a> <a href="#">Network Entities that could use UE capability information</a> .....	7
<a href="#">5</a> <a href="#">Architectures</a> .....	7
<a href="#">5.1</a> <a href="#">Architecture 1: full IMEI-SV distribution</a> .....	7
<a href="#">5.2</a> <a href="#">Architecture 2: Iu interface bitmap derived from IMEI-SV</a> .....	7
<a href="#">5.3</a> <a href="#">Architecture 3: ??</a> .....	7
<a href="#">6</a> <a href="#">Comparison of Different Techniques</a> .....	7
<a href="#">A.1</a> <a href="#">Heading levels in an annex</a> .....	7

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## Foreword

This Technical Report has been produced by the 3<sup>rd</sup> Generation Partnership Project (3GPP). The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

where:

- x the first digit:
  - 1 presented to TSG for information;
  - 2 presented to TSG for approval;
  - 3 or greater indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

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# 1 Scope

The 3GPP system has many features and it is impractical to fully test all combinations of mobile features with network or test equipment. As a consequence, it may become desirable that particular network elements adapt or constrain the features that they use with specific types of UE.

This report documents one or more possible signalling mechanisms that can be used to provide UE capability information to network entities.

A comparison of the pros and cons of the different architectures is included, however, the TR is not expected to make a decisive conclusion. Instead, the TSG plenary meetings are expected to use this TR to recommend how to proceed with further work.

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# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TR 41.001: "GSM Release specifications".

[2] 3GPP TR 21 912 (V3.1.0): "Example 2, using fixed text".

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# 3 Definitions, symbols and abbreviations

## 3.1 Definitions

For the purposes of the present document, the following terms and definitions given in TS 21.905 and the following apply.

<keyword>      <Definition>

## 3.2 Symbols

For the purposes of the present document, the following symbols apply:

<symbol>      <Explanation>

## 3.3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

<ACRONYM>    <Explanation>



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## 4 Network Entities that could use UE capability information

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## 5 Architectures

### **5.1 *Architecture 1: full IMEI-SV distribution***

#### 5.1.1 General description

### **5.2 *Architecture 2: lu interface bitmap derived from IMEI-SV***

### **5.3 *Architecture 3: ??***

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## 6 Comparison of Different Techniques

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Annex <A>:  
<Annex title>

### A.1 Heading levels in an annex

Heading levels within an annex are used as in the main document, but for Heading level selection, the "A.", "B.", etc. are ignored. e.g. **A.1.2** is formatted using *Heading 2* style.

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Annex <X>:  
Change history

Change history							
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New