

**Source:** TSG-SA WG5  
**Title:** A new work item proposal for 3G system fault management  
**Document for:** For discussion and decision  
**Agenda Item:** 5.5.2

## 1. Introduction

A variety of components will make up an operator's actual 3G network. Since it is an explicit goal of the standardisation effort within 3GPP to allow mix and match of equipment from different vendors, it is expected that many networks will indeed be composed of multiple vendors' products with different implementation. For an operator to be able to properly manage such a diverse network, in order to provide the quality of service expected by his customers, it is essential to standardise the fault management for 3G systems at least to an extent that the operation of the multi-vendor network will be possible effectively and efficiently. Therefore, TSG-SA WG5 proposes a new work item for standardising the fault management of 3G systems as described below. Within the scope of this work item, a distinction has to be made between those aspects of the fault management targeting single network elements (NE management level) and those that are also, or exclusively, relevant for some part or all of the network (Network Management level).

## 2. Work Package Description

The new work item is proposed as described below:

- **Work item title**

Fault management of 3G systems

- **Intended output**

Technical Specification (TS) 32.111: 3G fault management

- **Impact on other Technical Specification and Technical Report**

Synchronization with TS 32.106 (3G configuration management)\* also handled by SA5.

Note: it is assumed that other related work item proposals by SA5 in this TSG-SA meeting are approved.

- **Technical scope**

A new technical specification is generated based on the available technical specification GSM TS 12.11 to address new 3G fault management needs covering the following management functions:

- Alarm surveillance / detection in real time in the NEs.
- Real-time and bulk transfer of alarms from the NE to the management system(s).
- Retrieval of current alarms from the NEs by the management system(s).
- Clearing / Resetting of alarms.
- Fault isolation and defence mechanisms in the NEs.
- Test management.
- Alarm filtering.
- Management of alarm severity levels.

- **Impact on other 3GPP Work Items**

The contents of the proposed new specification 32.111 will be required to be synchronized with the contents of TSs 32.106 to be generated under the work items also proposed in this TSG-SA meeting.

- **Schedule of tasks to be performed**

The work item will produce a first approved draft by the end of Q4, 1999.

- **Supporting Individual Members**

T-Mobil, Italtel, Lucent, Telia

- **Identity of the Work Item Rapporteurs**

(TBD)