



Smooth Introduction of Release 99

Source:

Alcatel, Ericsson, Lucent, Motorola,
Nokia, Nortel Network, T-Mobil,
Qualcomm

SP-010759



Smooth Introduction of Rel 99

- ◆ Discussions of how to have smooth commercial launch of release 99 has been ongoing in several 3GPP working groups
- ◆ The goal of this presentation is to identify the issues involved in ensuring timely availability of terminals. Further the aim is to reduce the risk of major malfunction and risk of need for recall of larger quantities of terminals with the associated bad publicity for the system and the involved parties



Smooth Introduction of Rel 99

- ◆ Issues involved in smooth introduction of Release 99 terminals
 - Complexity of the complete set of mandatory Release 99 features
 - Conformance testing
 - Handling of errors detected after commercial launch



Mandatory Release 99 features

- ◆ The core specifications defines which features and functionalities are mandatory
- ◆ The responsibility for any change to the mandatoriness of a function/feature is under the responsibility of the group responsible for the corresponding core specification
- ◆ Any modification to the core specification for this aspect follow the normal rules for handling of modification of the core specification



Conformance testing

- ◆ Friendly users – pre-commercial period
 - No guarantee for full interoperability of equipment
- ◆ Interim period
 - Launch of commercial market
 - Availability of independent third party testing limited to sub-set of Release 99
 - Need to ensure reasonable risk for the involved party
 - Initial testing should prioritise key functionality including forward compatibility for features/functions expected to be used in early network operation
- ◆ Final period
 - "Full" set of independent third party testing available for Release 99



Conformance testing

- ◆ Friendly users – pre-commercial period
 - No specific requirement on standards
- ◆ Interim period
 - Marking of "interim tested" terminals could be beneficial, ie. signalling support required
- ◆ Final period
 - Marking of "fully tested" terminals could be beneficial, ie. the opposite signalling value of "interim tested"



Terminal support

The terminal SHALL support all functions/features specified as being mandatory in the core specification. This is independent of coverage of conformance test specifications, availability of third party testing and potential marking as "interim tested".



Handling of errors

- ◆ Two categories of errors might be found after commercial launch
 - System/specification errors
 - Terminal implementation errors
- ◆ Procedures for handling and documenting the two categories of errors are proposed



System/specification errors

- ◆ When a problem is discovered which would require a modification of the core specification the following principle is suggested to be followed
 - Search for a solution as backwards compatible as possible
 - In a Technical Report document the issues which lead to the specifications being modified after commercial launch of compliant terminals and where possible recommend measures to ensure interoperability with these terminals



Terminal implementation errors

- ◆ When a significant problem is identified with a terminal, which the manufacturer has implemented with intention of being in compliance with the core specification the following process is suggested:
 - The manufacturer reveals the full information about the nature of the error
 - The error is analysed to identify a potential work around which do not negatively influence other implementations and system performance
 - Recommended work arounds and description of error are documented in a Technical Report