

# MTS

METHODS FOR TESTING AND SPECIFICATION

As Standards and interoperability become crucial factors in market success, the way that standards are written becomes increasingly important. ETSI's aim is always to produce documents that are clear and easy – easy to understand and easy to use. TC MTS (Technical Committee Methods for Testing and Specification) provides the frameworks and methodologies necessary to enable the other ETSI Technical Committees to achieve this goal. MTS meetings are attended by experts from the

major telecommunications companies of Europe. Most large international telecoms businesses operate their own competence centres or at least have dedicated staff responsible for testing and specification. These organizations make decisions about which specification languages to use, how to use them and how they are to be supported by various tools. They come to MTS meetings to ensure that ETSI develops complementary guidelines for the use of these languages within standards.

## PTCC

Protocol & Testing Competence Centre

The ETSI Protocol and Testing Competence Centre is a unique resource available to ETSI Technical Committees for the application of leading-edge specification, validation and testing techniques of ETSI deliverables. The task of the PTCC is to help the ETSI membership produce the very best standards and products possible.

Working closely with ETSI Technical Committee Methods for Testing and Specification (TC MTS), the PTCC assists with all aspects of protocol specification, validation and testing. This includes helping Technical Committees to define their testing strategy and running the Specialist Task Forces that produce test specifications.



ETSI is an independent, non-profit organization, whose mission is to produce telecommunications standards for today and for the future. Based in Sophia Antipolis (France), ETSI is officially responsible for standardization of Information and Communication Technologies (ICT). These technologies include telecommunications, broadcasting and related areas such as intelligent transportation and medical electronics.

ETSI unites more than 650 members from almost 60 countries inside and outside Europe, including manufacturers, network operators, administrations, service providers, research bodies and users - in fact, all the key players in the ICT arena.

ETSI plays a major role in developing a wide range of standards and other technical documentation as Europe's contribution to world-wide ICT standardization. This activity is supplemented by interoperability testing services and other specialisms. ETSI's prime objective is to support global harmonization by providing a forum in which all the key players can contribute actively.

ETSI's Members determine the Institute's work programme, allocate resources and approve its deliverables. As a result, ETSI's activities are closely aligned with market needs and there is wide acceptance of its products. ETSI's standards are built on consensus.



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## MAKING BETTER STANDARDS PRACTICAL WAYS TO SUCCESS



Practical Guidance for Standards Makers

## MAKING BETTER STANDARDS

ETSI has been producing communications standards for almost 20 years and, during that time, has developed methods of working that are based on its own experiences and best engineering practice. These methods include:

- Ensuring that each standard is complete and accurate;
- Using specification languages such as UML, ASN.1, MSC and SDL
- Developing test specifications
- Planning the development of standards and associated test specifications
- General protocol engineering

In order to make these methods available to a wide audience of standards developers, the Making Better Standards web site has been published. Based on the earlier successful book of the same name, this site acts as a portal to the whole range of useful guidance material which ETSI has produced.

## WHAT IS MAKING BETTER STANDARDS ?

### INTRODUCTION

- Introduction to the MBS (Making Better Standards) site
- Introduction to standardization

### MARKET EXPECTATIONS

- What is “The Market” in standardization terms?
- Market factors affecting the success of a standard

### WHAT MAKES A STANDARD “BETTER”

- Characteristics of a good standard

### PLANNING

- Planning Validation and Testing activities
- Which Validation method to choose
- How much Validation to include in the plan
- Estimating the effort involved
- Building a plan
- Some example scenarios

### NON-BEHAVIOURAL STANDARDS

- Physical characteristics
- Tolerances

### PROTOCOL STANDARDS

- Protocol engineering within a standards environment

### USING SPECIFICATION LANGUAGES

- SDL
- UML
- MSC
- TTCN(-3)
- ASN.1

### TEST SPECIFICATIONS

- Conformance Testing
- Interoperability Testing
- Comparison of Interoperability and Conformance Testing
- Development Cycle
- Certification
- The IP Testing Library

### VALIDATING STANDARDS

- Validation methods

### EUROPEAN REGULATORY REGIME

- R & TTE Directive and its implications for Operators and Manufacturers

>>Where to find  
**Making Better  
Standards**

<http://portal.etsi.org/mbs>

