



The Standards People

ETSI MTS Open Session on TTCN-3 new major release

Presented by: **TTF T040**

For: **TTCN-3 experts**

28.01.2025

Agenda

1. Welcome and review of the Open Sessions
2. Migration of the CR handling
3. Update of the TTF discussion
 - Details within the core notation (part 1)
 - Planned status for TRI/TCI and the other parts 7 - 11
 - Planned changes for the extensions
4. Discussion and feedback from the participants
5. Next steps

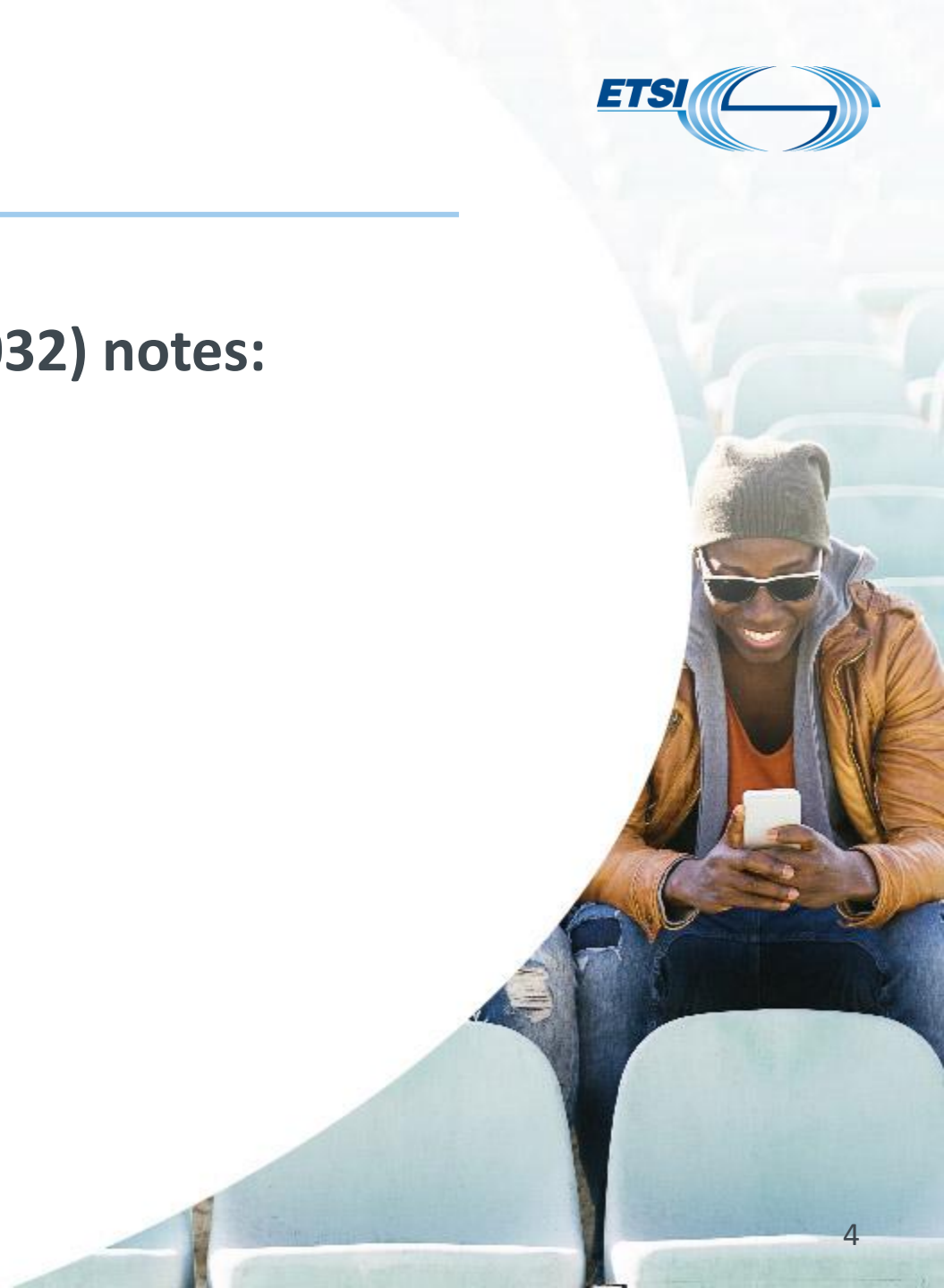




Motivation and Introduction

Motivation and history

- **TTCN-3 workshop 23. January 2024 (TTF T032) notes:**
 - Detailed view on documents and features
 - Maintain compatibility as far as possible
 - Guidelines are important (e.g. using t3q)
 - Initiate questionnaire



Motivation and history

- **Questionnaire started with TTF T040 in summer 2024**
 - Promotion via ETSI, Eclipse, LinkedIn & mailings
 - Feedback from tool provider and user groups
 - Still open:

https://ttcn-3.etsi.org/files/ETSI-TTCN-3-questionnaire_empty_simplified_for_users.zip



Motivation and history

- **TTCN-3 Open Session 9. September 2024 (TTF T040) notes:**
 - Presentation and discussion of the questionnaire results from tool provider and users
https://ttcn-3.etsi.org/files/ETSI-TTCN-3-questionnaire-results_v3_anonymized.zip
 - Part 4 (Operational Semantics) and part 8 (IDL mapping) to be shifted into historic status

Motivation and history

- **TTF working session in November**
 - Migration of CR handling from Mantis to Gitlab
 - Detailed review and discussion of the questionnaire results from tool provider and users
 - Work on open CRs
(three new drafts in preparation for 2025)





Migration of CR handling


From Mantis to Gitlab

- No new CRs at Mantis (frozen)
- Old CRs still readable
- All open CR at Mantis have been copied to Gitlab:

<https://labs.etsi.org/rep/mts/ttcn3/standard/-/issues>

New issue dashboard:

The image shows a screenshot of the ETSI Labs issue dashboard. The dashboard is divided into several columns representing different stages of the issue workflow. Six large blue ovals are overlaid on the dashboard, each containing a label for a stage: OPEN, TODO, Work in progress, review, done, and closed. The background shows a sidebar with navigation options like 'Project', 'Standard', 'Manage', 'Plan', 'Issues', 'Issue boards', 'Milestones', 'Iterations', 'Code', 'Build', 'Deploy', 'Monitor', and 'Analyze'. The main area displays several issue boards with various issues listed, including titles like 'Support for...', 'Allow UTF...', 'Clarif...', 'Support of...', 'Length of...', and 'Length of n...'. The dashboard also includes a search bar, a 'Show Labels' toggle, and a 'View scope' button.

A close-up photograph of a hand typing on a silver laptop keyboard. The laptop is on a white surface. In the foreground, four miniature figures of people are walking towards the laptop. The scene is framed by a large, semi-transparent white circle on the right side.

Update of TTF discussion (overview)

Part 1 (core) - overview

- get rid of: **fuzzy, lazy**
- under discussion: **anytype, open type, operators, decoded field references, controlling** communication, **with** statement
- move to extension: **automatic type, not-implemented, call test component, trigger, external action, retrieve/encode attributes**
- Candidate for being deprecated: **groups** of definitions, **display** attribute
- Candidate for simplification: **import** from modules, **check**
- Candidate for removal: **procedure-based** communication

Part 5 (TRI) and part 6 (TCI)

- Remove C++ language mapping
- Remove C# language mapping
- TCI: only abstract interface should be described

Other parts

- Part 7 (**ASN.1**): kept as it is
- **Part 8 (IDL): *historic, not maintained in future***
- Part 9 (**XML**): kept as it is
- Part 10 (**documentation**): kept as it is
- Part 11 (**JSON**): kept as it is

Extensions

- **Configuration and deployment:** to be discussed with users
- **Performance and Real-time:** wait/timestamp candidates for core or extension package
- **Advanced parametrization:** in use (keep)!
- **Behaviour types:** function pointer and deferred behaviour under discussion
- **Continuous signals:** historic, not maintained in future
- **Extended TRI:** only abstract interfaces
- **Advanced matching, OO:** to be discussed



Discussion

Discussion and feedback from participants

- Veto for removals or historic status?
- Further simplifications?
- Combinations (number of extensions?)
- Questions?

➤ **Deeper look into Excel files**

Notes from the discussion (core)

- „group“ is used (e.g. with types)
- „check“ is used, but simplify the syntax
- „external action“ is used
- „anytype“ is used, could become part of an extension
- „controlling“ communication is used
- „attributes“ used with groups
- introduce namespaces with „group“?

Notes from the discussion (extensions)

- TCI/TRI/ext.TRI may become one document
- Extension „Adv. Parameterization“ used with extension „behaviour type“
- Extension OO: exception handling is in use



Next steps


Next steps

1. **Resolution of open CRs**
(with new publication in 2025 for MTS#95:
draft available/uploaded for: core, XML, behaviour types)
2. TTF **draft proposal** for new structure and contents
(for the 2026 version)
3. Drafting **Migration guide** (for the 2026 version)
4. **Follow-up** ETSI MTS Open Session on TTCN-3

Time schedule

- April 2025: **UCAAT'25** presentation
- Further **TTF T040 sessions** planned in 2025 (meetings before and after MTS#95)
- **MTS#96** in May 2025 (with next Open Session?)
- Start of **2nd TTF** in 01/2026



A circular inset image showing a close-up of blue network cables plugged into a server rack. The cables are bundled and connected to multiple ports on the rack. The background is a blurred server room.

Thanks for
your
participation!

Participants organizations

- ETSI TTF 040 members
- ETSI STF 160 participants
- Nokia, Poland
- Devoteam Germany
- Rohde&Schwarz, Germany

