



SLOVENSKI STANDARD

SIST ES 203 119-1 V1.8.1:2025

01-september-2025

**Metode za preskušanje in specificiranje (MTS) - Jezik za opis preskusa (TDL) - 1.
del: Abstraktna skladnja in pripadajoče pomenoslovje**

Methods for Testing and Specification (MTS) - The Test Description Language (TDL) -
Part 1: Abstract Syntax and Associated Semantics

iTeh Standards
(<https://standards.iteh.ai>)

Ta slovenski standard je istoveten z: ETSI ES 203 119-1 V1.8.1 (2025-07)

SIST ES 203 119-1 V1.8.1:2025

<https://standards.iteh.ai/catalog/standards/sist/d6465ddb-6a62-45a4-9d40-78013d03ae86/sist-es-203-119-1-v1-8-1-2025>

ICS:

35.060

Jeziki, ki se uporabljajo v
informacijski tehniki in
tehnologiji

Languages used in
information technology

SIST ES 203 119-1 V1.8.1:2025

en

ETSI ES 203 119-1 V1.8.1 (2025-07)



Methods for Testing and Specification (MTS); The Test Description Language (TDL); Part 1: Abstract Syntax and Associated Semantics

Document Preview

[SIST ES 203 119-1 V1.8.1:2025](https://standards.iteh.ai/catalog/standards/sist/d6465ddb-6a62-45a4-9d40-78013d03ae86/sist-es-203-119-1-v1-8-1-2025)

<https://standards.iteh.ai/catalog/standards/sist/d6465ddb-6a62-45a4-9d40-78013d03ae86/sist-es-203-119-1-v1-8-1-2025>



Reference

RES/MTS-203119-1v1.8.1

Keywords

language, MBT, methodology, model, testing,
TSS&TP, TTCN-3, UML

ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - APE 7112B
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° w061004871

Important notice

The present document can be downloaded from the
[ETSI Search & Browse Standards](#) application.

The present document may be made available in electronic versions and/or in print. The content of any electronic and/or print versions of the present document shall not be modified without the prior written authorization of ETSI. In case of any existing or perceived difference in contents between such versions and/or in print, the prevailing version of an ETSI deliverable is the one made publicly available in PDF format on [ETSI deliver](#) repository.

Users should be aware that the present document may be revised or have its status changed, this information is available in the [Milestones listing](#).

If you find errors in the present document, please send your comments to the relevant service listed under [Committee Support Staff](#).

If you find a security vulnerability in the present document, please report it through our [Coordinated Vulnerability Disclosure \(CVD\)](#) program.

Notice of disclaimer & limitation of liability

The information provided in the present deliverable is directed solely to professionals who have the appropriate degree of experience to understand and interpret its content in accordance with generally accepted engineering or other professional standard and applicable regulations.

No recommendation as to products and services or vendors is made or should be implied.

No representation or warranty is made that this deliverable is technically accurate or sufficient or conforms to any law and/or governmental rule and/or regulation and further, no representation or warranty is made of merchantability or fitness for any particular purpose or against infringement of intellectual property rights.

In no event shall ETSI be held liable for loss of profits or any other incidental or consequential damages.

Any software contained in this deliverable is provided "AS IS" with no warranties, express or implied, including but not limited to, the warranties of merchantability, fitness for a particular purpose and non-infringement of intellectual property rights and ETSI shall not be held liable in any event for any damages whatsoever (including, without limitation, damages for loss of profits, business interruption, loss of information, or any other pecuniary loss) arising out of or related to the use of or inability to use the software.

Copyright Notification

No part may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm except as authorized by written permission of ETSI.

The content of the PDF version shall not be modified without the written authorization of ETSI.

The copyright and the foregoing restriction extend to reproduction in all media.

© ETSI 2025.
All rights reserved.

Contents

Intellectual Property Rights	7
Foreword.....	7
Modal verbs terminology.....	7
1 Scope	8
2 References	8
2.1 Normative references	8
2.2 Informative references.....	9
3 Definition of terms, symbols and abbreviations.....	9
3.1 Terms.....	9
3.2 Symbols.....	10
3.3 Abbreviations	10
4 Basic Principles	10
4.1 What is TDL?	10
4.2 Design Considerations.....	11
4.3 Principal Design Approach.....	12
4.4 Document Structure.....	13
4.5 Notational Conventions	14
4.6 Element Operations	14
4.7 Conformance	16
5 Foundation.....	16
5.1 Overview	16
5.2 Abstract Syntax and Classifier Description.....	16
5.2.1 Element	16
5.2.2 NamedElement	17
5.2.3 PackageableElement	18
5.2.4 Package	18
5.2.5 ElementImport	19
5.2.6 Comment	20
5.2.7 Annotation	21
5.2.8 AnnotationType	21
5.2.9 TestObjective.....	22
5.2.10 Extension	22
5.2.11 ConstraintType	23
5.2.12 Constraint.....	23
6 Data	25
6.1 Overview	25
6.2 Data Definition - Abstract Syntax and Classifier Description.....	25
6.2.1 DataResourceMapping.....	25
6.2.2 MappableDataElement.....	26
6.2.3 DataElementMapping	26
6.2.4 ParameterMapping.....	27
6.2.5 DataType	28
6.2.6 DataInstance	29
6.2.7 SimpleDataType	29
6.2.8 SimpleDataInstance	30
6.2.9 StructuredDataType	31
6.2.10 Member.....	31
6.2.11 StructuredDataInstance	32
6.2.12 MemberAssignment.....	33
6.2.13 CollectionDataType	34
6.2.14 CollectionDataInstance	34
6.2.15 ProcedureSignature	35
6.2.16 ProcedureParameter	36

6.2.17	ParameterKind	36
6.2.18	Parameter	37
6.2.19	FormalParameter.....	37
6.2.20	Variable	38
6.2.21	Action	38
6.2.22	Function	39
6.2.23	UnassignedMemberTreatment.....	39
6.2.24	PredefinedFunction.....	40
6.2.25	EnumDataType	40
6.3	Data Use - Abstract Syntax and Classifier Description.....	41
6.3.1	DataUse	41
6.3.2	ParameterBinding	42
6.3.3	MemberReference.....	44
6.3.4	StaticDataUse	44
6.3.5	DataInstanceUse	45
6.3.6	SpecialValueUse.....	46
6.3.7	AnyValue	46
6.3.8	AnyValueOrOmit	47
6.3.9	OmitValue.....	47
6.3.10	DynamicDataUse	48
6.3.11	FunctionCall	48
6.3.12	FormalParameterUse	49
6.3.13	VariableUse	49
6.3.14	PredefinedFunctionCall	50
6.3.15	LiteralValueUse	50
6.3.16	DataElementUse	52
6.3.17	CastDataUse	53
7	Time	54
7.1	Overview	54
7.2	Abstract Syntax and Classifier Description.....	54
7.2.1	Time.....	54
7.2.2	TimeLabel.....	55
7.2.3	TimeLabelUse.....	55
7.2.4	TimeLabelUseKind.....	56
7.2.5	TimeConstraint	56
7.2.6	TimeOperation	58
7.2.7	Wait	59
7.2.8	Quiescence	59
7.2.9	Timer	60
7.2.10	TimerOperation.....	61
7.2.11	TimerStart	61
7.2.12	TimerStop	61
7.2.13	TimeOut.....	62
8	Test Configuration.....	62
8.1	Overview	62
8.2	Abstract Syntax and Classifier Description.....	63
8.2.1	GateType	63
8.2.2	GateTypeKind.....	64
8.2.3	GateInstance	64
8.2.4	ComponentType	65
8.2.5	ComponentInstance	66
8.2.6	ComponentInstanceRole	66
8.2.7	GateReference.....	66
8.2.8	Connection	67
8.2.9	TestConfiguration	68
9	Test Behaviour	68
9.1	Overview	68
9.2	Test Description - Abstract Syntax and Classifier Description	69
9.2.1	TestDescription.....	69
9.2.2	BehaviourDescription	70

9.3	Combined Behaviour - Abstract Syntax and Classifier Description	71
9.3.1	Behaviour.....	71
9.3.2	Block.....	72
9.3.3	LocalExpression	73
9.3.4	CombinedBehaviour	73
9.3.5	SingleCombinedBehaviour	74
9.3.6	CompoundBehaviour	74
9.3.7	BoundedLoopBehaviour	75
9.3.8	UnboundedLoopBehaviour.....	76
9.3.9	OptionalBehaviour	76
9.3.10	MultipleCombinedBehaviour	77
9.3.11	AlternativeBehaviour.....	77
9.3.12	ConditionalBehaviour	79
9.3.13	ParallelBehaviour	80
9.3.14	ExceptionalBehaviour.....	81
9.3.15	DefaultBehaviour.....	83
9.3.16	InterruptBehaviour.....	84
9.3.17	PeriodicBehaviour	84
9.4	Atomic Behaviour - Abstract Syntax and Classifier Description	85
9.4.1	AtomicBehaviour.....	85
9.4.2	Break.....	86
9.4.3	Stop.....	86
9.4.4	VerdictAssignment	87
9.4.5	Assertion.....	87
9.4.6	Interaction	88
9.4.7	Message	89
9.4.8	ProcedureCall	91
9.4.9	Target.....	93
9.4.10	ValueAssignment.....	94
9.4.11	TestDescriptionReference.....	95
9.4.12	ComponentInstanceBinding.....	97
9.4.13	ActionBehaviour.....	98
9.4.14	ActionReference	99
9.4.15	InlineAction	99
9.4.16	Assignment	99
10	Predefined TDL Model Instances.....	100
10.1	Overview	100
10.2	Predefined Instances of the 'SimpleDataType' Element	100
10.2.1	Boolean.....	100
10.2.2	Integer	100
10.2.3	String	101
10.2.4	Verdict	101
10.3	Predefined Instances of 'SimpleDataInstance' Element.....	101
10.3.1	True.....	101
10.3.2	False.....	101
10.3.3	pass	101
10.3.4	fail	101
10.3.5	inconclusive	101
10.4	Predefined Instances of 'Time' Element	101
10.4.1	Second	101
10.5	Predefined Instances of the 'PredefinedFunction' Element.....	102
10.5.1	Overview	102
10.5.2	Functions of Return Type 'Boolean'.....	102
10.5.3	Functions of Return Type 'Integer'.....	103
10.5.4	Functions of Return Type of Instance of 'Time'.....	103
10.6	Predefined Instances of the 'AnnotationType' Element.....	103
10.6.1	Master	103
10.6.2	MappingName	103
10.6.3	Version.....	103
10.6.4	check.....	103
10.6.5	where	104