ETSI TS 102 950-1 V1.4.1 (2014-08)



Methods for Testing and Specification (MTS); TTCN-3 Conformance Test Suite; Part 1: Implementation Conformance Statement (ICS)

Reference

RTS/MTS-102950-1ed141T3Conf

Keywords

conformance, ICS, testing, TTCN

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 - NAF 742 C Association à but non lucratif enregistrée à la Sous-Préfecture de Grasse (06) N° 7803/88

Important notice

The present document can be downloaded from: http://www.etsi.org

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 only prevailing document is the print of the Portable Document Format (PDF) version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status.

Information on the current status of this and other ETSI documents is available at

http://portal.etsi.org/tb/status/status.asp

If you find errors in the present document, please send your comment to one of the following services: http://portal.etsi.org/chaircor/ETSI_support.asp

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.

© European Telecommunications Standards Institute 2014.
All rights reserved.

DECTTM, **PLUGTESTS**TM, **UMTS**TM and the ETSI logo are Trade Marks of ETSI registered for the benefit of its Members. **3GPP**TM and **LTE**TM are Trade Marks of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners.

GSM® and the GSM logo are Trade Marks registered and owned by the GSM Association.

Contents

| Intelle | ectual Property Rights | 7 |
|------------------|---|----|
| Forew | word | 7 |
| Moda | al verbs terminology | 7 |
| 1 | Scope | 8 |
| 2 | References | C |
| 2.1 | Normative references | |
| 2.2 | Informative references | |
| 3 | Definitions and abbreviations | C |
| 3.1 | Definitions | |
| 3.2 | Abbreviations | |
| 4 | Conformance requirement concerning ICS | 9 |
| Anne | ex A (normative): TTCN-3 conformance ICS proforma | 11 |
| A.1 | Instructions for completing the ICS proforma | 11 |
| A.1.1 | Other information | 11 |
| A.1.2 | 1 | |
| A.1.3 | Conventions | 11 |
| A.2 | Identification of the implementation | 12 |
| A.2.1 | Date of the statement | |
| A.2.2 | | |
| A.2.3 | | |
| A.2.4 | Product supplier | 13 |
| A.2.5 | | |
| A.2.6 | ICS contact person | 13 |
| A.3 | ICS proforma tables | 13 |
| A.3.1 | Global statement of conformance | |
| A.3.2 | Basic language elements | 14 |
| A.3.3 | | |
| A.3.4 | 1 | |
| A.3.5 | | |
| A.3.6 | 1 | |
| A.3.7 | | |
| A.3.8 | | |
| A.3.9 A.3.10 | • | |
| A.3.10 | <u>.</u> | |
| A.3.11 | 1 | |
| A.3.13 | 1 | |
| A.3.14 | 1 | |
| A.3.15 | | |
| A.3.16 | | |
| A.3.17 | 7 Accessing individual string elements | 21 |
| A.3.18 | | |
| A.3.19 | V 1 | |
| A.3.20 | | |
| A.3.21 | | |
| A.3.22 | • | |
| A.3.23 | | |
| A.3.24 A.3.25 | | |
| A.3.26 A.3.26 | 71 | |
| A.3.27 | ₹1 | |
| / | · ~ | |

| A.3.28 | Records and sets of single types | |
|------------------|---|----------|
| A.3.29 | Referencing elements of record of and set of types | 32 |
| A.3.30 | Enumerated type and values | 34 |
| A.3.31 | Arrays | 34 |
| A.3.32 | The default type | 35 |
| A.3.33 | Communication port types | |
| A.3.34 | Addressing entities inside the SUT | |
| A.3.35 | Type compatibility of non-structured types | 37 |
| A.3.36 | Type compatibility of structured types | 39 |
| A.3.37 | Type compatibility of enumerated types | 40 |
| A.3.38 | Type compatibility of component types | 41 |
| A.3.39 | Arithmetic operators | |
| A.3.40 | List operator | |
| A.3.41 | Relational operators | |
| A.3.42 | Logical operators | |
| A.3.43 | Bitwise operators | 47 |
| A.3.44 | Shift operators | 47 |
| A.3.45 | Rotate operators | |
| A.3.46 | Field references and list elements. | |
| A.3.47 | Definition of a module | |
| A.3.48 | Module definitions part | 49 |
| A.3.49 | Module parameters | |
| A.3.50 | Groups of definitions | |
| A.3.51 | General format of import | |
| A.3.52 | Importing single definitions | |
| A.3.53 | Importing groups | |
| A.3.54 | Importing definitions of the same kind | |
| A.3.55 | Importing all definitions of a module | |
| A.3.56 | Import definitions from other TTCN-3 editions and from non-TTCN-3 modules | |
| A.3.57 | Importing of import statements from TTCN-3 modules | 58 |
| A.3.58 | Compatibility of language specifications of imports | |
| A.3.59 | Definition of friend modules | |
| A.3.60 | Visibility of definitions | |
| A.3.61 | Module control part | |
| A.3.62 | Port types, component types and test configurations | |
| A.3.63 | Communication ports | |
| A.3.64 | Declaring constants | |
| A.3.65 | Value variables | |
| A.3.66 | Template variables | |
| A.3.67 | Declaring timers | |
| A.3.68 | Declaring messages | |
| A.3.69 | Declaring procedure signatures | |
| A.3.70 | Declaring templates | |
| A.3.71 | Declaring message templates | |
| A.3.72 | Declaring signature templates | |
| A.3.73 | Global and local templates | |
| A.3.74 | In-line templates | |
| A.3.75 | Modified templates | |
| A.3.76 | Referencing individual string elements | |
| A.3.77 | Referencing record and set fields | |
| A.3.78 | Referencing record of and set of elements | |
| A.3.79 | Template restrictions | |
| A.3.80 | Match operation | |
| A.3.81 | Value of operation | |
| A.3.82 | Concatenating templates of string and list types | |
| A.3.83 | Functions | |
| A.3.84 | Invoking functions. | |
| A.3.85 | Predefined functions | |
| A.3.86 A.3.87 | External functions. | |
| A.3.88 | Invoking function from specific places | |
| A.3.88 A 3.89 | Altsteps | 88 98 |

| A.3.90 | Test cases | 89 |
|--------------------|---|--------------------|
| A.3.91 | Assignments | 89 |
| A.3.92 | The if-else statement | |
| A.3.93 | The select case statement | |
| A.3.94 | The for statement | |
| A.3.95 | The while statement. | |
| A.3.96 | The do-while statement | |
| A.3.97 | The label statement. | |
| A.3.98 | The goto statement | |
| A.3.99 | The stop execution statement | |
| A.3.100 | The return statement | |
| A.3.101 | The log statement | |
| A.3.102 | The continue statement | |
| A.3.103 | Statement and operations for alternative behaviours | |
| A.3.104 | The alt statement | |
| A.3.105 | The repeat statement | |
| A.3.106 | The interleave statement | |
| A.3.107 | The default mechanism | |
| A.3.108 | The activate operation | |
| A.3.109 | Connection operations | |
| A.3.110 | The connect and map operations | |
| A.3.111 | The disconnect and unmap operations. | |
| A.3.112 | Test case operations. | |
| A.3.113 | The create operation | |
| A.3.114 | The start test component operation. | |
| A.3.115 | The stop test behaviour operation. | |
| A.3.116 | The kill test component operation | |
| A.3.117 | The alive operation | |
| A.3.118 | The running operation | |
| A.3.119 | The done operation | |
| A.3.110 | The killed operation | |
| A.3.121 | The send operation | |
| A.3.122 | The receive operation | |
| A.3.123 | The trigger operation | |
| A.3.124 | The call operation | |
| A.3.125 | The getcall operation | |
| A.3.126 | The reply operation | |
| A.3.127 | The check operation | |
| A.3.128 | Timer operations | |
| A.3.129 | The stop timer operation. | |
| A.3.130 | The running timer operation | |
| A.3.131 | The timeout operation | |
| A.3.131 | Test verdict operations | |
| A.3.132 | The verdict mechanism | |
| A.3.134 | The getverdict mechanism. | |
| A.3.134 A.3.135 | Module control | |
| A.3.136 | The execute statement | |
| A.3.137 | The control part | |
| A.3.137 | Scope of attributes | |
| A.3.139 | Optional attributes | |
| A.3.140 | Matching specific values | |
| A.3.140 A.3.141 | Value list | |
| A.3.141 A.3.142 | Complemented value list | |
| A.3.142 A.3.143 | Any value | |
| A.3.143 A.3.144 | Any value or none | |
| A.3.144 A.3.145 | Value range | |
| A.3.145 A.3.146 | SuperSet | |
| A.3.146 A.3.147 | SubSet | |
| A.3.147 A.3.148 | Omitting optional fields. | |
| A.3.148 A.3.149 | Any element | |
| A.3.149 A.3.150 | Any number of elements of no element | |
| A.3.150 Δ 3 151 | Permutation | 133 13 <i>1</i> |

| A.3.15 | 52 Length restrictions | | |
|--------|--|-----|--|
| A.3.15 | · · | | |
| A.3.15 | 54 Matching character pattern | 135 | |
| A.3.15 | 55 Set expression | 136 | |
| A.3.15 | A.3.156 Reference expression | | |
| A.3.15 | A.3.157 Match expression n times | | |
| A.3.15 | A.3.158 Match a referenced character set | | |
| A.3.15 | 59 Type compatibility rules for patterns | 139 | |
| A.3.16 | 60 Preprocessing macros | 140 | |
| A.4 | Additional information for ICS | 140 | |
| Anne | ex B (normative): TTCN-3 rev 4.6.1 (2014 edition) conformance ICS proforma | 141 | |
| B.1 | Instructions for completing the ICS proforma. | 141 | |
| B.2 | Identification of the implementation | 141 | |
| B.2.1 | Date of the statement | | |
| B.2.2 | Implementation under Test (IUT) identification | 141 | |
| B.2.3 | System under Test (SUT) identification | | |
| B.2.4 | Product supplier | 141 | |
| B.2.5 | Client | 142 | |
| B.2.6 | ICS contact person. | 142 | |
| B.3 | ICS proforma tables | 142 | |
| B.3.1 | Global statement of conformance | | |
| Histor | rv | 167 | |

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: "Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards", which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (http://ipr.etsi.org).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Methods for Testing and Specification (MTS).

The present document is part 1 of a multi-part deliverable covering a TTCN-3 conformance test suite, as identified below:

Part 1: "Implementation Conformance Statement";

Part 2: "Test Suite Structure and Test Purposes (TSS&TP)";

Part 3: "Abstract Test Suite (ATS) and Implementation eXtra Information for Testing (IXIT)".

Modal verbs terminology

In the present document "shall", "shall not", "should", "should not", "may", "may not", "need", "need not", "will", "will not", "can" and "cannot" are to be interpreted as described in clause 3.2 of the ETSI Drafting Rules (Verbal forms for the expression of provisions).

"must" and "must not" are NOT allowed in ETSI deliverables except when used in direct citation.

1 Scope

The present document provides the Implementation Conformance Statement (ICS) proforma for the conformance test suite for TTCN-3 as defined in ES 201 873-1 [1] in compliance with the relevant guidance given in the proforma for TTCN-3 reference test suite TS 102 995 [4]. In the present document only the core language features, specified in ES 201 873-1 [1] have been considered but not the tool implementation (see [i.1] and [i.2]), language mapping (see [i.3], [i.4] and [i.5]) and language extension (see e.g. [i.6], [i.7] and [i.8]) aspects.

The supplier of an implementation which is claimed to conform to ES 201 873-1 [1] is required to complete a copy of the ICS proforma provided in the annex A of the present document.

2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found at http://docbox.etsi.org/Reference.

2.1 Normative references

The following referenced documents are necessary for the application of the present document.

- [1] ETSI ES 201 873-1 (V4.5.1): "Methods for Testing and Specification (MTS); The Testing and Test Control Notation version 3; Part 1: TTCN-3 Core Language".
- [2] ISO/IEC 9646-7 (1994): "Conformance testing methodology and framework -- Part 7: Implementation Conformance Statement".
- [3] ISO/IEC 9646-1 (1992): "Information Technology -- Open Systems Interconnection -- Conformance Testing Methodology and Framework -- Part 1: General concepts".
- [4] ETSI TS 102 995: "Methods for Testing and Specification (MTS); The Testing and Test Control Notation version 3; Proforma for TTCN-3 reference test suite".
- [5] ETSI ES 201 873-1 (V4.6.1): "Methods for Testing and Specification (MTS); The Testing and Test Control Notation version 3; Part 1: TTCN-3 Core Language".

2.2 Informative references

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

- [i.1] ETSI ES 201 873-5: "Methods for Testing and Specification (MTS); The Testing and Test Control Notation version 3; Part 5: TTCN-3 Runtime Interface (TRI)".
- [i.2] ETSI ES 201 873-6: "Methods for Testing and Specification (MTS); The Testing and Test Control Notation version 3; Part 6: TTCN-3 Control Interface (TCI)".
- [i.3] ETSI ES 201 873-7: "Methods for Testing and Specification (MTS); The Testing and Test Control Notation version 3; Part 7: Using ASN.1 with TTCN-3".
- [i.4] ETSI ES 201 873-8: "Methods for Testing and Specification (MTS); The Testing and Test Control Notation version 3; Part 8: The IDL to TTCN-3 Mapping".
- [i.5] ETSI ES 201 873-9: "Methods for Testing and Specification (MTS); The Testing and Test Control Notation version 3; Part 9: Using XML schema with TTCN-3".

| [i.6] | ETSI ES 202 781: "Methods for Testing and Specification (MTS); The Testing and Test Control Notation version 3; TTCN-3 Language Extensions: Configuration and Deployment Support". |
|-------|--|
| [i.7] | ETSI ES 202 784: "Methods for Testing and Specification (MTS); The Testing and Test Control Notation version 3; TTCN-3 Language Extensions: Advanced Parameterization". |
| [i.8] | ETSI ES 202 785: "Methods for Testing and Specification (MTS); The Testing and Test Control Notation version 3: TTCN-3 Language Extensions: Behaviour Types". |

Definitions and abbreviations 3

Definitions 3.1

For the purposes of the present document, the terms and definitions given in ISO/IEC 9646-1 [3], ISO/IEC 9646-7 [2], ES 201 873-1 [1] (TTCN-3) and the following apply:

Abstract Test Suite (ATS): test suite composed of abstract test cases

ICS proforma: document, in the form of a questionnaire, which when completed for an implementation or system becomes an ICS

Implementation Conformance Statement (ICS): statement made by the supplier of an implementation claimed to conform to a given specification, stating which capabilities have been implemented

Implementation eXtra Information for Testing (IXIT): statement made by a supplier or implementor of an IUT which contains or references all of the information related to the IUT and its testing environment, which will enable the test laboratory to run an appropriate test suite against the IUT

Implementation Under Test (IUT): implementation of one or more OSI protocols in an adjacent user/provider relationship, being part of a real open system which is to be studied by testing

IXIT proforma: document, in the form of a questionnaire, which when completed for the IUT becomes the IXIT

3.2 **Abbreviations**

For the purposes of the present document, the following abbreviations apply:

| ATS | Abstract Test Suite |
|--------|--|
| BNF | Backus Naur Form |
| ICS | Implementation Conformance Statement |
| IUT | Implementation under Test |
| IXIT | Implementation eXtra Information for Testing |
| SUT | System Under Test |
| TC | Test Case |
| TCI | TTCN-3 Control Interface |
| TP | Test Purpose |
| TRI | TTCN-3 Runtime Interface |
| TS | Test System |
| TSS | Test Suite Structure |
| TSS&TP | Test Suite Structure and Test Purposes |
| TTCN-3 | Testing and Test Control Notation edition 3 |

Conformance requirement concerning ICS 4

If it claims to conform to the present document, the actual ICS proform to be filled in by a supplier shall be technically equivalent to the text of the ICS proforma given in annex A, and shall preserve the numbering/naming and ordering of the proforma items.

An ICS which conforms to the present document shall be a conforming ICS proforma completed in accordance with the instructions for completion given in clause A.1.

Annex A (normative): TTCN-3 conformance ICS proforma

A.1 Instructions for completing the ICS proforma

A.1.1 Other information

More detailed instructions are given at the beginning of the different clauses of the ICS proforma.

The supplier of the implementation shall complete the ICS proforma in each of the spaces provided. If necessary, the supplier may provide additional comments separately in Clause A.4.

A.1.2 Purposes and structure

The purpose of this ICS proforma is to provide a mechanism whereby a TTCN-3 tool vendor of the TTCN-3 core language [1] may provide information about the implementation in a standardized manner.

The ICS proforma is subdivided into clauses for the following categories of information:

- instructions for completing the ICS proforma;
- identification of the implementation;
- ICS proforma tables (containing the global statement of conformance).

A.1.3 Conventions

The ICS proforma is composed of information in tabular form in accordance with the guidelines presented in ISO/IEC 9646-7 [2].

Item column

It contains a number that identifies the item in the table.

Item description column

It describes each respective item (e.g. parameters, timers, etc.).

Reference column

It gives reference to the TTCN-3 core language [1], except where explicitly stated otherwise.

Status column

The following notations, defined in ISO/IEC 9646-7 [2], are used for the status column:

- m mandatory the capability is required to be supported.
- n/a not applicable in the given context, it is impossible to use the capability. No answer in the support column is required.
- o optional the capability may be supported or not.
- o.i qualified optional for mutually exclusive or selectable options from a set. "i" is an integer which identifies a unique group of related optional items and the logic of their selection which is defined immediately following the table.

ci conditional - the requirement on the capability ("m", "o" or "n/a") depends on the support of other optional or conditional items. "i" is an integer identifying a unique conditional status expression that is defined immediately following the table. For nested conditional expressions, the syntax "IF ... THEN (IF ... THEN ... ELSE...) ELSE ..." shall be used to avoid ambiguities. If an ELSE clause is omitted, "ELSE n/a" shall be implied.

NOTE: Support of a capability means that the capability is implemented in conformance to the TTCN-3 core language [1].

Support column

The support column shall be filled in by the supplier of the implementation. The following common notations, defined in ISO/IEC 9646-7 [2], are used for the support column:

- Y or y supported by the implementation.
- N or n not supported by the implementation.
- N/A or n/a or "no answer required" (allowed only if the status is N/A, directly or after evaluation of a conditional status).

Values allowed column

This column contains the values or the ranges of values allowed.

Values supported column

The support column shall be filled in by the supplier of the implementation. In this column the values or the ranges of values supported by the implementation shall be indicated.

References to items

For each possible item answer (answer in the support column) within the ICS proforma, a unique reference exists. It is defined as the table identifier, followed by a slash character "/", followed by the item number in the table. If there is more than one support column in a table, the columns shall be discriminated by letters (a, b, etc.) respectively.

EXAMPLE: 5/4 is the reference to the answer of item 4 in Table 5.

A.2 Identification of the implementation

Identification of the Implementation under Test (IUT) and the system in which it resides - the System Under Test (SUT) should be filled in so as to provide as much detail as possible regarding version numbers and configuration options.

The product supplier information and client information should both be filled in if they are different.

A person who can answer queries regarding information supplied in the ICS should be named as the contact person.

A.2.1 Date of the statement

| Date of the statement: |
|------------------------|
|------------------------|

A.2.2 Implementation under Test (IUT) identification

| IUT name: | |
|--------------|--|
| IUT version: | |

A.2.3 System under Test (SUT) identification

| SUT name: | |
|-------------------------|--|
| Hardware configuration: | |
| Operating system: | |

A.2.4 Product supplier

| Name: | |
|-------------------------|--|
| Address: | |
| Telephone number: | |
| Facsimile number: | |
| E-mail address: | |
| Additional information: | |

A.2.5 Client

| Name: | |
|-------------------------|--|
| Address: | |
| Telephone number: | |
| Facsimile number: | |
| E-mail address: | |
| Additional information: | |

A.2.6 ICS contact person

| Name: | |
|-------------------------|--|
| Telephone number: | |
| Facsimile number: | |
| E-mail address: | |
| Additional information: | |

A.3 ICS proforma tables

A.3.1 Global statement of conformance

| | (Yes/No) |
|---|----------|
| Are all mandatory capabilities implemented? | |

NOTE: Answering "No" to this question indicates non-conformance to the TTCN-3 core language.

Non-supported mandatory capabilities are to be identified in the ICS, with an explanation of why the implementation is non-conforming.

A.3.2 Basic language elements

Table A.1: Basic language elements

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------|--|------------------------------|--------|---------|
| 1 | 0 , = | When the IUT loads a module containing some definitions before the module declaration then the module is rejected. | Clause 5 | m | |

A.3.3 Identifiers and keywords

Table A.2: Identifiers and keywords

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_0501_Identifier_001 | Cannot pass a charstring value to an integer variable. | Clause 5.1 | m | |
| 2 | NegSyn_0501_Identifier_001 | | | m | |
| 3 | Syn_0501_Identifier_001 | The IUT handle the identifiers case sensitively. | Clause 5.1 | m | |

A.3.4 Scope rules

Table A.3: Scope rules

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------------|---|------------------------------|--------|---------|
| 1 | NegSem_0502_Scope_001 | The IUT correctly handles definitions of local scope | Clause 5.2 | m | |
| 2 | NegSem_0502_Scope_002 | The IUT correctly handles definitions of local scope | Clause 5.2 | m | |
| 3 | NegSem_0502_Scope_003 | The IUT correctly handles definitions of local scope | Clause 5.2 | m | |
| 4 | Sem_0502_Scope_001 | The IUT handle scope hierarchy of component constants. | Clause 5.2 | m | |
| 5 | Sem_0502_Scope_002 | The IUT handle scope hierarchy with component booleans. | Clause 5.2 | m | |
| 6 | Sem_0502_Scope_003 | The IUT handles scope hierarchy via functions. | Clause 5.2 | m | |
| 7 | Sem_0502_Scope_004 | The IUT correctly handles the scope of definitions made in the module part. | Clause 5.2 | m | |
| 8 | Sem_0502_Scope_008 | The IUT correctly handles definitions of extended component scope | Clause 5.2 | m | |
| 9 | Syn_0502_Scope_001 | The IUT supports all the nine scope units. | Clause 5.2 | m | |

A.3.5 Scope of formal parameters

Table A.4: Scope of formal parameters

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------------|---|------------------------------|--------|---------|
| 1 | Sem_050201_Scope_of_parameters_001 | The IUT correctly handles scope of formal function parameters | Clause 5.2.1 | m | |
| 2 | Sem_050201_Scope_of_parameters_002 | The IUT correctly handles scope of formal function parameters | Clause 5.2.1 | m | |

A.3.6 Uniqueness of identifiers

Table A.5: Uniqueness of identifiers

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------|---|---|--------|---------|
| 1 | NegSem_050202_Uniqueness_001 | The IUT correctly handles the uniqueness of variable names in its scope | Clause 5.2.2 | m | |
| 2 | NegSem_050202_Uniqueness_004 | The IUT correctly handles the uniqueness of variable names in its scope | | m | |
| 3 | NegSem_050202_Uniqueness_005 | The IUT correctly handles the uniqueness of variable names in its scope | Clause 5.2.2 | m | |
| 4 | NegSem_050202_Uniqueness_006 | The IUT correctly handles the uniqueness of variable names in its scope | Clause 5.2.2 | m | |
| 5 | NegSem_050202_Uniqueness_007 | The IUT correctly handles the uniqueness of variable names in its scope | Clause 5.2.2 | m | |
| 6 | NegSem_050202_Uniqueness_008 | The IUT correctly handles the uniqueness of variable names in its scope | | | |
| 7 | NegSem_050202_Uniqueness_009 | The IUT correctly handles the uniqueness of variable names in its scope | IUT correctly handles Clause 5.2.2 iniqueness of variable | | |
| 8 | NegSem_050202_Uniqueness_010 | The IUT correctly handles the uniqueness of variable names in its scope | Clause 5.2.2 | m | |
| 9 | NegSem_050202_Uniqueness_011 | The IUT correctly handles the uniqueness of variable names in its scope | Clause 5.2.2 | m | |
| 10 | NegSem_050202_Uniqueness_012 | The IUT correctly handles the uniqueness of variable names in its scope | Clause 5.2.2 | m | |
| 11 | Sem_050202_Uniqueness_001 | The IUT correctly handles the uniqueness of variable names in its scope | Clause 5.2.2 | m | |
| 12 | Sem_050202_Uniqueness_002 | The IUT correctly handles the uniqueness of variable names in its scope | Clause 5.2.2 | m | |
| 13 | Sem_050202_Uniqueness_003 | The IUT correctly handles the uniqueness of variable names in its scope | Clause 5.2.2 | m | |

A.3.7 Ordering of language elements

Table A.6: Ordering of language elements

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_0503_Ordering_001 | Declarations are in the allowed ordering | Clause 5.3 | m | |
| 2 | NegSem_0503_Ordering_002 | Declarations are in the allowed ordering | Clause 5.3 | m | |
| 3 | NegSem_0503_Ordering_003 | Declarations are in the allowed ordering | Clause 5.3 | m | |
| 4 | Sem_0503_Ordering_001 | Allowed orderings of declarations are supported | Clause 5.3 | m | |
| 5 | Sem_0503_Ordering_002 | Allowed any ordering with component definitions are supported | Clause 5.3 | m | |
| 6 | Sem_0503_Ordering_005 | Allowed orderings of declarations are supported | Clause 5.3 | m | |

A.3.8 Parameterization

Table A.7: Parameterization

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---|---|------------------------------|--------|---------|
| 1 | NegSem_0504_parametrization_incompatibility_001 | The IUT correctly handles received testcase parametrization type incompatibility. | Clause 5.4 | m | |
| 2 | NegSyn_0504_forbidden_parametrization_001 | The IUT rejects forbidden module parametrization types. | Clause 5.4 | m | |
| 3 | NegSyn_0504_forbidden_parametrization_002 | The IUT rejects forbidden module parametrization types. | Clause 5.4 | m | |

A.3.9 Formal parameters of kind value

Table A.8: Formal parameters of kind value

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---|---|------------------------------|--------|---------|
| 1 | Sem_05040101_parameters_of_kind_value_001 | The IUT correctly handles parametrization through the use of module parameters. | Clause 5.4.1.1 | m | |
| 2 | Sem_05040101_parameters_of_kind_value_002 | The IUT correctly handles parametrization through the use of module parameters. | Clause 5.4.1.1 | m | |
| 3 | Sem_05040101_parameters_of_kind_value_003 | The IUT correctly handles parametrization through the use of module parameters. | Clause 5.4.1.1 | m | |
| 4 | Sem_05040101_parameters_of_kind_value_004 | The IUT correctly handles parametrization through the use of module parameters. | Clause 5.4.1.1 | m | |

A.3.10 Formal parameters of kind template

Table A.9: Formal parameters of kind template

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|---|---------------------------|--------|---------|
| 1 | Sem_05040102_parameters_of_kind_template_001 | The IUT correctly handles parametrization through the use of parameterized templates. | Clause 5.4.1.2 | m | |
| 2 | Sem_05040102_parameters_of_kind_template_002 | The IUT correctly handles parametrization through the use of parameterized templates. | Clause 5.4.1.2 | m | |

A.3.11 Formal parameters of kind timer

Table A.10: Formal parameters of kind timer

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---|--------------------------------------|------------------------------|--------|---------|
| 1 | Sem_05040103_parameters_of_kind_timer_001 | The IUT correctly | Clause 5.4.1.3 | m | |
| | | handles parametrization | | | |
| | | through the use of timer parameters. | | | |

A.3.12 Formal parameters of kind port

Table A.11: Formal parameters of kind port

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 [1] | Status | Support |
|------|-----------------|---|----------------------------------|--------|---------|
| 1 | | The IUT accepts port parametrization types for functions. | Clause 5.4.1.4 | m | |

A.3.13 Actual parameters

Table A.12: Actual parameters

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------------|---|---------------------------|--------|---------|
| 1 | Sem_050402_actual_parameters_001 | The IUT accepts allowed assignments of actual parameters. | Clause 5.4.2 | m | |
| 2 | Sem_050402_actual_parameters_002 | The IUT accepts nested assignment of actual parameters. | Clause 5.4.2 | m | |

A.3.14 Cyclic definitions

Table A.13: Cyclic definitions

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------------|---|---------------------------|--------|---------|
| 1 | NegSem_0505_cyclic_definitions_001 | Verify that an error is detected when two constants reference each other | Clause 5.5 | m | |
| 2 | NegSem_0505_cyclic_definitions_002 | Verify that an error is detected when a forbidden cyclic reference occurs in cyclic import | Clause 5.5 | m | |
| 3 | Sem_0505_cyclic_definitions_001 | The IUT correctly handles recursive functions | Clause 5.5 | m | |
| 4 | Sem_0505_cyclic_definitions_002 | The IUT correctly handles cyclic imports | Clause 5.5 | m | |
| 5 | Sem_0505_cyclic_definitions_003 | Verify that cyclic import containing cyclic function calls is allowed | Clause 5.5 | m | |
| 6 | Sem_0505_cyclic_definitions_004 | Verify that cyclic altsteps are allowed | Clause 5.5 | m | |

A.3.15 Simple basic types and values

Table A.14: Simple basic types and values

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------------|---------------------------------------|------------------------------|--------|---------|
| 1 | NegSyn_060100_SimpleBasicTypes_001 | Assign float to integer values | Clause 6.1.0 | m | |
| 2 | NegSyn_060100_SimpleBasicTypes_002 | Assign boolean to integer values | Clause 6.1.0 | m | |
| 3 | NegSyn_060100_SimpleBasicTypes_003 | Assign integer to float values | Clause 6.1.0 | m | |
| 4 | NegSyn_060100_SimpleBasicTypes_004 | Assign boolean to float values | Clause 6.1.0 | m | |
| 5 | NegSyn_060100_SimpleBasicTypes_005 | Assign verdicttype to float values | Clause 6.1.0 | m | |
| 6 | NegSyn_060100_SimpleBasicTypes_006 | Assign integer to verdicttype values | Clause 6.1.0 | m | |
| 7 | Sem_060100_SimpleBasicTypes_001 | Assign and read integer values | Clause 6.1.0 | m | |
| 8 | Sem_060100_SimpleBasicTypes_002 | Assign and read large integer values | Clause 6.1.0 | m | |
| 9 | Sem_060100_SimpleBasicTypes_003 | Assign and read float values | Clause 6.1.0 | m | |
| 10 | Sem_060100_SimpleBasicTypes_004 | Assign and read large float values | Clause 6.1.0 | m | |
| 11 | Sem_060100_SimpleBasicTypes_005 | Assign and read verdicts | Clause 6.1.0 | m | |
| 12 | Syn_060100_SimpleBasicTypes_001 | Assign different integer values | Clause 6.1.0 | m | |
| 13 | Syn_060100_SimpleBasicTypes_002 | Assign large integer values | Clause 6.1.0 | m | |
| 14 | Syn_060100_SimpleBasicTypes_003 | Assign different float values | Clause 6.1.0 | m | |
| 15 | Syn_060100_SimpleBasicTypes_004 | Assign small and large float values | Clause 6.1.0 | m | |
| 16 | Syn_060100_SimpleBasicTypes_005 | Accept float mantisa for float values | Clause 6.1.0 | m | |
| 17 | Syn_060100_SimpleBasicTypes_006 | Accept all verdict values | Clause 6.1.0 | m | |

A.3.16 Basic string types and values

Table A.15: Basic string types and values

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------|--|------------------------------|--------|---------|
| 1 | NegSyn_060101_TopLevel_001 | Assign invalid bitstring value | Clause 6.1.1 | m | |
| 2 | NegSyn_060101_TopLevel_002 | Assign string to bitstring values | Clause 6.1.1 | m | |
| 3 | NegSyn_060101_TopLevel_003 | Assign octetstring to bitstring values | Clause 6.1.1 | m | |
| 4 | NegSyn_060101_TopLevel_004 | Assign invalid hexstring value | Clause 6.1.1 | m | |
| 5 | NegSyn_060101_TopLevel_005 | Assign string to hexstring values | Clause 6.1.1 | m | |
| 6 | NegSyn_060101_TopLevel_006 | Assign octetstring to hexstring values | Clause 6.1.1 | m | |
| 7 | NegSyn_060101_TopLevel_007 | Assign invalid hexstring value | Clause 6.1.1 | m | |
| 8 | NegSyn_060101_TopLevel_008 | Assign string to octetstring values | Clause 6.1.1 | m | |
| 9 | NegSyn_060101_TopLevel_009 | Assign hexstring to octetstring values | Clause 6.1.1 | m | |
| 10 | NegSyn_060101_TopLevel_010 | Assign invalid hexstring value | Clause 6.1.1 | m | |
| 11 | Sem_060101_TopLevel_001 | Assign and read bitstring | Clause 6.1.1 | m | |
| 12 | Sem_060101_TopLevel_002 | Assign and read hexstring | Clause 6.1.1 | m | |
| 13 | Sem_060101_TopLevel_003 | Assign and read octetstring | Clause 6.1.1 | m | |
| 14 | Sem_060101_TopLevel_004 | Assign and read charstring | Clause 6.1.1 | m | |
| 15 | Sem_060101_TopLevel_005 | Assign and read universal charstring | Clause 6.1.1 | m | |
| 16 | Sem_060101_TopLevel_006 | Assign and read universal charstring | Clause 6.1.1 | m | |
| 17 | Syn_060101_TopLevel_001 | Assign different bitstring values | Clause 6.1.1 | m | |
| 18 | Syn_060101_TopLevel_002 | Assign different hexstring values | Clause 6.1.1 | m | |
| 19 | Syn_060101_TopLevel_003 | Assign different octetstring values | Clause 6.1.1 | m | |

A.3.17 Accessing individual string elements

Table A.16: Accessing individual string elements

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---------------------------------------|--|------------------------------|--------|---------|
| 1 | Sem_06010101_AccessStringElements_001 | Access bitstring elements | Clause 6.1.1.1 | m | |
| 2 | Sem_06010101_AccessStringElements_002 | Access octetstring elements | Clause 6.1.1.1 | m | |
| 3 | Sem_06010101_AccessStringElements_003 | Access hexstring elements | Clause 6.1.1.1 | m | |
| 4 | Sem_06010101_AccessStringElements_004 | Access bitstring elements | Clause 6.1.1.1 | m | |
| 5 | Sem_06010101_AccessStringElements_005 | Access hexstring elements | Clause 6.1.1.1 | m | |
| 6 | Sem_06010101_AccessStringElements_006 | Access octetstring elements | Clause 6.1.1.1 | m | |
| 7 | Sem_06010101_AccessStringElements_007 | Access charstring elements | Clause 6.1.1.1 | m | |
| 8 | Sem_06010101_AccessStringElements_008 | Access charstring elements | Clause 6.1.1.1 | m | |
| 9 | Sem_06010101_AccessStringElements_009 | Access charstring elements with non printable characters | Clause 6.1.1.1 | m | |

A.3.18 Lists of values

Table A.17: Lists of values

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_06010201_ListOfValues_001 | Assign values to restricted bitstring. | Clause 6.1.2.1 | m | |
| 2 | NegSem_06010201_ListOfValues_002 | Assign values to restricted hexstring. | Clause 6.1.2.1 | m | |
| 3 | NegSem_06010201_ListOfValues_003 | Assign values to restricted octetstring. | Clause 6.1.2.1 | m | |
| 4 | NegSem_06010201_ListOfValues_004 | Assign values to restricted charstring. | Clause 6.1.2.1 | m | |
| 5 | NegSem_06010201_ListOfValues_005 | Assign values to restricted integer. | Clause 6.1.2.1 | m | |
| 6 | NegSem_06010201_ListOfValues_006 | Assign values to restricted float. | Clause 6.1.2.1 | m | |
| 7 | Sem_06010201_ListOfValues_001 | Assign invalid values to restricted bitstring. | Clause 6.1.2.1 | m | |

A.3.19 Lists of types

Table A.18: Lists of types

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_06010202_ListOfTypes_001 | Assign invalid values to list of types restricted bitstring. | Clause 6.1.2.2 | m | |
| 2 | NegSem_06010202_ListOfTypes_002 | Assign invalid values to list of types restricted hexstring. | Clause 6.1.2.2 | m | |
| 3 | NegSem_06010202_ListOfTypes_003 | Assign invalid values to list of types restricted octetstring. | Clause 6.1.2.2 | m | |
| 4 | NegSem_06010202_ListOfTypes_004 | Assign invalid values to list of types restricted charstring. | Clause 6.1.2.2 | m | |
| 5 | NegSem_06010202_ListOfTypes_005 | Assign invalid values to list of types restricted universal charstrings. | Clause 6.1.2.2 | m | |
| 6 | NegSem_06010202_ListOfTypes_006 | Assign invalid values to list of types restricted integers. | Clause 6.1.2.2 | m | |
| 7 | NegSem_06010202_ListOfTypes_007 | Assign invalid values to list of types restricted floats. | Clause 6.1.2.2 | m | |
| 8 | NegSem_06010202_ListOfTypes_008 | Assign invalid values to list of types restricted boolean value. | Clause 6.1.2.2 | m | |
| 9 | NegSem_06010202_ListOfTypes_009 | Assign invalid values to list of types restricted verdicttype. | Clause 6.1.2.2 | m | |
| 10 | Sem_06010202_ListOfTypes_001 | Assign values to list of types restricted bitstring. | Clause 6.1.2.2 | m | |
| 11 | Sem_06010202_ListOfTypes_002 | Assign values to list of types restricted hexstring. | Clause 6.1.2.2 | m | |
| 12 | Sem_06010202_ListOfTypes_003 | Assign values to list of types restricted octetstring. | Clause 6.1.2.2 | m | |
| 13 | Sem_06010202_ListOfTypes_004 | Assign values to list of types restricted charstring. | Clause 6.1.2.2 | m | |
| 14 | Sem_06010202_ListOfTypes_005 | Assign values to list of types unicharstring allows non-printable characters | Clause 6.1.2.2 | m | |
| 15 | Sem_06010202_ListOfTypes_006 | Assign values to list of types restricted integers. | Clause 6.1.2.2 | m | |
| 16 | Sem_06010202_ListOfTypes_007 | Assign values to list of types restricted floats. | Clause 6.1.2.2 | m | |
| 17 | Sem_06010202_ListOfTypes_008 | Assign values to list of types restricted boolean value. | Clause 6.1.2.2 | m | |
| 18 | Sem_06010202_ListOfTypes_009 | Assign values to list of types restricted verdicttype. | Clause 6.1.2.2 | m | |

A.3.20 Ranges

Table A.19: Ranges

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_06010203_Ranges_001 | Assign invalid values to restricted integer. | Clause 6.1.2.3 | m | |
| 2 | NegSem_06010203_Ranges_002 | Assign invalid values to restricted integer. | Clause 6.1.2.3 | m | |
| 3 | NegSem_06010203_Ranges_003 | Assure that not_a_number is not allowed in float range subtyping. | Clause 6.1.2.3 | m | |
| 4 | NegSem_06010203_Ranges_004 | Assign invalid values to restricted integer with exclusive bounds. | Clause 6.1.2.3 | m | |
| 5 | NegSem_06010203_Ranges_005 | Assign invalid values to restricted integer with exclusive bounds. | Clause 6.1.2.3 | m | |
| 6 | NegSem_06010203_Ranges_006 | Assign range to boolean not permitted. | Clause 6.1.2.3 | m | |
| 7 | NegSem_06010203_Ranges_007 | Assign invalid value to range constrained charstring. | Clause 6.1.2.3 | m | |
| 8 | NegSem_06010203_Ranges_008 | Assign invalid value to range constrained charstring. | Clause 6.1.2.3 | m | |
| 9 | NegSem_06010203_Ranges_009 | Assign invalid value to range constrained charstring. | Clause 6.1.2.3 | m | |
| 10 | NegSem_06010203_Ranges_010 | Assign invalid values to restricted float. | Clause 6.1.2.3 | m | |
| 11 | NegSem_06010203_Ranges_011 | Assign invalid values to range restricted float. | Clause 6.1.2.3 | m | |
| 12 | NegSem_06010203_Ranges_012 | Assign invalid values to range excluded restricted float. | Clause 6.1.2.3 | m | |
| 13 | NegSem_06010203_Ranges_013 | Assign invalid value to range constrained universal charstring. | Clause 6.1.2.3 | m | |
| 14 | NegSem_06010203_Ranges_014 | Assign invalid value to range constrained universal charstring with mixed bounds. | Clause 6.1.2.3 | m | |
| 15 | NegSem_06010203_Ranges_015 | Assign invalid value to range constrained charstring. | Clause 6.1.2.3 | m | |
| 16 | NegSem_06010203_Ranges_016 | Invalid value infinity for range constrained charstring. | Clause 6.1.2.3 | m | |
| 17 | NegSem_06010203_Ranges_017 | Invalid value -infinity for range constrained charstring. | Clause 6.1.2.3 | m | |
| 18 | Sem_06010203_Ranges_001 | Assign values to range restricted integer. | Clause 6.1.2.3 | m | |
| 19 | Sem_06010203_Ranges_002 | Assign values to infinity range restricted integer. | Clause 6.1.2.3 | m | |
| 20 | Sem_06010203_Ranges_003 | Assign values to range restricted integer with exclusive bounds. | Clause 6.1.2.3 | m | |
| 21 | Sem_06010203_Ranges_004 | Assign values to range restricted charstring with inclusive bounds. | Clause 6.1.2.3 | m | |
| 22 | Sem_06010203_Ranges_005 | Assign values to range restricted charstring with exclusive bounds. | Clause 6.1.2.3 | m | |
| 23 | Sem_06010203_Ranges_006 | Assign values to range restricted charstring with mixed bounds. | Clause 6.1.2.3 | m | |
| 24 | Sem_06010203_Ranges_007 | Assign values to range restricted universal charstring. | Clause 6.1.2.3 | m | |
| 25 | Sem_06010203_Ranges_008 | Assign values to range restricted universal charstring with mixed bounds. | Clause 6.1.2.3 | m | |

A.3.21 String length restrictions

Table A.20: String length restrictions

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|--|------------------------------|--------|---------|
| 1 | NegSem_06010204_StringLenghtRestrict_001 | Assign invalid values to length restricted bitstring. | Clause 6.1.2.4 | m | |
| 2 | NegSem_06010204_StringLenghtRestrict_002 | Assign invalid values to length restricted bitstring. | Clause 6.1.2.4 | m | |
| 3 | NegSem_06010204_StringLenghtRestrict_003 | Assign invalid values to length restricted hexstring | Clause 6.1.2.4 | m | |
| 4 | NegSem_06010204_StringLenghtRestrict_004 | Assign invalid values to length restricted hexstring | Clause 6.1.2.4 | m | |
| 5 | NegSem_06010204_StringLenghtRestrict_005 | Assign invalid values to length restricted octetstring | Clause 6.1.2.4 | m | |
| 6 | NegSem_06010204_StringLenghtRestrict_006 | Assign invalid values to length restricted octetstring | Clause 6.1.2.4 | m | |
| 7 | NegSem_06010204_StringLenghtRestrict_007 | Assign invalid values to length restricted charstring | Clause 6.1.2.4 | m | |
| 8 | NegSem_06010204_StringLenghtRestrict_008 | Assign invalid values to length restricted charstring | Clause 6.1.2.4 | m | |
| 9 | NegSyn_06010204_StringLenghtRestrict_001 | upper boundary should be greater than lower boundary in string length restrictions | Clause 6.1.2.4 | m | |
| 10 | NegSyn_06010204_StringLenghtRestrict_002 | boundary integers should be non negative integers | Clause 6.1.2.4 | m | |
| 11 | Sem_06010204_StringLenghtRestrict_001 | Assign values to list of types restricted bitstring. | Clause 6.1.2.4 | m | |
| 12 | Sem_06010204_StringLenghtRestrict_002 | Assign values to list of types restricted hexstring. | Clause 6.1.2.4 | m | |
| 13 | Sem_06010204_StringLenghtRestrict_003 | Assign values to list of types restricted octetstring. | Clause 6.1.2.4 | m | |
| 14 | Sem_06010204_StringLenghtRestrict_004 | Assign values to list of types restricted charstring. | Clause 6.1.2.4 | m | |

A.3.22 Pattern subtyping of character string types

Table A.21: Pattern subtyping of character string types

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_06010205_StringPattern_001 | Assign invalid values to pattern restricted character strings. | Clause 6.1.2.5 | m | |
| 2 | Sem_06010205_StringPattern_001 | Assign values to pattern restricted character strings. | Clause 6.1.2.5 | m | |
| 3 | Sem_06010205_StringPattern_002 | Assign values to pattern restricted character strings. | Clause 6.1.2.5 | m | |

A.3.23 Mixing patterns, lists and ranges

Table A.22: Mixing patterns, lists and ranges

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_0601020601_MixingSubtype_001 | Assign invalid values to mixed restricted floats. | Clause 6.1.2.6.1 | m | |
| 2 | NegSem_0601020601_MixingSubtype_002 | Assign invalid values to mixed restricted integers. | Clause 6.1.2.6.1 | m | |
| 3 | Sem_0601020601_MixingSubtype_001 | Assign values to mixed restricted floats. | Clause 6.1.2.6.1 | m | |
| 4 | Sem_0601020601_MixingSubtype_002 | Assign values to mixed restricted integers. | Clause 6.1.2.6.1 | m | |

A.3.24 Using length restriction with other constraints

Table A.23: Using length restriction with other constraints

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------------|--|---------------------------|--------|---------|
| 1 | NegSem_0601020602_StringMixing_001 | Assign invalid values to mixed restricted character strings. | Clause 6.1.2.6.2 | m | |
| 2 | NegSem_0601020602_StringMixing_002 | Assign invalid values to mixed restricted character strings. | Clause 6.1.2.6.2 | m | |
| 3 | NegSem_0601020602_StringMixing_003 | Assign invalid values to mixed restricted character strings. | Clause 6.1.2.6.2 | m | |
| 4 | NegSem_0601020602_StringMixing_004 | Assign invalid values to mixed restricted bit strings. | Clause 6.1.2.6.2 | m | |
| 5 | NegSem_0601020602_StringMixing_005 | Assign invalid values to mixed restricted hex strings. | Clause 6.1.2.6.2 | m | |
| 6 | NegSem_0601020602_StringMixing_006 | Assign invalid values to mixed restricted octet strings. | Clause 6.1.2.6.2 | m | |
| 7 | Sem_0601020602_StringMixing_001 | Assign values to mixed restricted character strings. | Clause 6.1.2.6.2 | m | |
| 8 | Sem_0601020602_StringMixing_002 | Assign values to mixed restricted character strings. | Clause 6.1.2.6.2 | m | |
| 9 | Sem_0601020602_StringMixing_003 | Assign values to mixed restricted character strings. | Clause 6.1.2.6.2 | m | |
| 10 | Sem_0601020602_StringMixing_004 | Assign values to mixed restricted bit strings. | Clause 6.1.2.6.2 | m | |
| 11 | Sem_0601020602_StringMixing_005 | Assign values to mixed restricted hex strings. | Clause 6.1.2.6.2 | m | |
| 12 | Sem_0601020602_StringMixing_006 | Assign values to mixed restricted octet strings. | Clause 6.1.2.6.2 | m | |

A.3.25 Structured types and values

Table A.24: Structured types and values

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_060201_RecordTypeValues_002 | Assignments with "implicit omit" attribute are correctly handled | Clause 6.2 | m | |
| 2 | NegSem_060201_RecordTypeValues_003 | Assignments with "implicit omit" attribute are correctly handled | Clause 6.2 | m | |
| 3 | NegSyn_060201_RecordTypeValues_001 | The omit keyword shall not be used for mandatory fields. | Clause 6.2 | m | |
| 4 | NegSyn_060201_RecordTypeValues_002 | The omit keyword shall not be used for mandatory fields. | Clause 6.2 | m | |
| 5 | Sem_060201_RecordTypeValues_005 | Assignments with "implicit omit" attribute are correctly handled | Clause 6.2 | m | |
| 6 | Sem_060201_RecordTypeValues_006 | Assignments with "implicit omit" attribute are correctly handled | Clause 6.2 | m | |
| 7 | Sem_060201_RecordTypeValues_007 | Assignments with "implicit omit" attribute are correctly handled | Clause 6.2 | m | |
| 8 | NegSem_060202_SetTypeValues_002 | Assignments with "implicit omit" attribute are correctly handled | Clause 6.2 | m | |
| 9 | NegSem_060202_SetTypeValues_003 | Assignments with "implicit omit" attribute are correctly handled | Clause 6.2 | m | |
| 10 | NegSyn_060202_SetTypeValues_001 | The omit keyword shall not be used for mandatory fields. | Clause 6.2 | m | |
| 11 | NegSyn_060202_SetTypeValues_002 | The omit keyword shall not be used for mandatory fields. | Clause 6.2 | m | |
| 12 | Sem_060202_SetTypeValues_005 | Assignments with "implicit omit" attribute are correctly handled | Clause 6.2 | m | |
| 13 | Sem_060202_SetTypeValues_006 | Assignments with "implicit omit" attribute are correctly handled | Clause 6.2 | m | |
| 14 | Sem_060202_SetTypeValues_007 | Assignments with "implicit omit" attribute are correctly handled | Clause 6.2 | m | |
| 15 | NegSem_0602_TopLevel_001 | Value list notation can not be used for a union type. | Clause 6.2 | m | |
| 16 | NegSem_0602_TopLevel_002 | Indexed notation can not be used for a record type. | Clause 6.2 | m | |
| 17 | NegSem_0602_TopLevel_003 | Indexed notation can not be used for a set type. | Clause 6.2 | m | |
| 18 | NegSem_0602_TopLevel_004 | Indexed notation can not be used for a union type. | Clause 6.2 | m | |
| 19 | NegSyn_0602_TopLevel_001 | Invalid recursive union type definition causing an error | Clause 6.2 | m | |
| 20 | NegSyn_0602_TopLevel_002 | Invalid recursive record type definition causing an error | Clause 6.2 | m | |
| 21 | NegSyn_0602_TopLevel_003 | Combined value list and assignment notation not allowed in the same (immediate) context. | Clause 6.2 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------------|---|------------------------------|--------|---------|
| 22 | Sem_0602_TopLevel_001 | Assignment notation can be used for a record type. | Clause 6.2 | m | |
| 23 | Sem_0602_TopLevel_002 | Assignment notation can be used for a record of type. | Clause 6.2 | m | |
| 24 | Sem_0602_TopLevel_003 | Assignment notation can be used for a set type. | Clause 6.2 | m | |
| 25 | Sem_0602_TopLevel_004 | Assignment notation can be used for a set of type. | Clause 6.2 | m | |
| 26 | Sem_0602_TopLevel_005 | Assignment notation can be used for a union type. | Clause 6.2 | m | |
| 27 | Sem_0602_TopLevel_006 | Assignment notation can be used for an array. | Clause 6.2 | m | |
| 28 | Sem_0602_TopLevel_007 | Value list notation can be used for a record type. | Clause 6.2 | m | |
| 29 | Sem_0602_TopLevel_008 | Value list notation can be used for a record of type. | Clause 6.2 | m | |
| 30 | Sem_0602_TopLevel_009 | Indexed notation can be used for an arrays. | Clause 6.2 | m | |
| 31 | Sem_0602_TopLevel_010 | Value list notation can be used for a set of type. | Clause 6.2 | m | |
| 32 | Sem_0602_TopLevel_011 | Value list notation can be used for an array. | Clause 6.2 | m | |
| 33 | Sem_0602_TopLevel_012 | Indexed notation can be used for a record of type. | Clause 6.2 | m | |
| 34 | Sem_0602_TopLevel_013 | Indexed notation can be used for a set of type. | Clause 6.2 | m | |
| 35 | Sem_0602_TopLevel_014 | Value list notation can be used for a set type and the values | Clause 6.2 | m | |
| 36 | Syn_0602_TopLevel_001 | Valid recursive union type definition | Clause 6.2 | m | |
| 37 | Syn_0602_TopLevel_002 | Valid recursive record type definition | Clause 6.2 | m | |
| 38 | Syn_0602_TopLevel_003 | Valid recursive record type definition | Clause 6.2 | m | |
| 39 | Syn_0602_TopLevel_004 | constant definition of a record type. | Clause 6.2 | m | |
| 40 | Syn_0602_TopLevel_005 | Fields not mentioned are implicitly left unspecified. | Clause 6.2 | m | |

A.3.26 Record type and values

Table A.25: Record type and values

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_060201_RecordTypeValues_001 | The dot notation used in record type definitions is correctly handled | Clause 6.2.1 | m | |
| 2 | Sem_060201_RecordTypeValues_001 | The dot notation used in record type definitions is correctly handled | Clause 6.2.1 | m | |
| 3 | Sem_060201_RecordTypeValues_002 | The dot notation used in record type definitions is correctly handled | Clause 6.2.1 | m | |
| 4 | Sem_060201_RecordTypeValues_003 | The dot notation used in record type definitions is correctly handled | Clause 6.2.1 | m | |
| 5 | Sem_060201_RecordTypeValues_004 | The dot notation used in record type definitions is correctly handled | Clause 6.2.1 | m | |
| 6 | Syn_060201_RecordTypeValues_001 | The element identifiers are local to the record and shall be unique within the record (but do not have to be globally unique). | Clause 6.2.1 | m | |
| 7 | Syn_060201_RecordTypeValues_002 | The IUT correctly handles empty record definitions. | Clause 6.2.1 | m | |

A.3.27 Set type and values

Table A.26: Set type and values

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---------------------------------|---|---------------------------|--------|---------|
| 1 | NegSem_060202_SetTypeValues_001 | The dot notation used in set type definitions is correctly handled | Clause 6.2.2 | m | |
| 2 | Sem_060202_SetTypeValues_001 | The dot notation used in set type definitions is correctly handled | Clause 6.2.2 | m | |
| 3 | Sem_060202_SetTypeValues_002 | The dot notation used in set type definitions is correctly handled | Clause 6.2.2 | m | |
| 4 | Sem_060202_SetTypeValues_003 | The dot notation used in set type definitions is correctly handled | Clause 6.2.2 | m | |
| 5 | Sem_060202_SetTypeValues_004 | The dot notation used in set type definitions is correctly handled | Clause 6.2.2 | m | |
| 6 | Syn_060202_SetTypeValues_001 | The element identifiers are local to the set and shall be unique within the record (but do not have to be globally unique). | Clause 6.2.2 | m | |
| 7 | Syn_060202_SetTypeValues_002 | The IUT correctly handles empty set definitions. | Clause 6.2.2 | m | |

A.3.28 Records and sets of single types

Table A.27: Records and sets of single types

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|---|------------------------------|--------|---------|
| 1 | NegSem_060203_records_and_sets_of_single_types_003 | negative index applied to a record of value on the right hand side of an assignment | Clause 6.2.3 | m | |
| 2 | NegSem_060203_records_and_sets_of_single_types_004 | negative index applied to a set of value on the right hand side of an assignment | Clause 6.2.3 | m | |
| 3 | NegSem_060203_records_and_sets_of_single_types_005 | negative index applied to a record of value on the left hand side of an assignment | Clause 6.2.3 | m | |
| 4 | NegSem_060203_records_and_sets_of_single_types_006 | negative index applied to a set of value on the left hand side of an assignment | Clause 6.2.3 | m | |
| 5 | NegSem_060203_records_and_sets_of_single_types_007 | wrong index type applied to a record of value on the right hand side of an assignment | Clause 6.2.3 | m | |
| 6 | NegSem_060203_records_and_sets_of_single_types_008 | wrong index type applied to a set of value on the right hand side of an assignment | Clause 6.2.3 | m | |
| 7 | NegSem_060203_records_and_sets_of_single_types_009 | wrong index type applied to a record of value on the left hand side of an assignment | Clause 6.2.3 | m | |
| 8 | Sem_060203_records_and_sets_of_single_types_020 | referencing non- existent element of set of value (left-hand side) | Clause 6.2.3 | m | |
| 9 | Sem_060203_records_and_sets_of_single_types_021 | referencing element of uninitialized record of value (left-hand side) | Clause 6.2.3 | m | |
| 10 | Sem_060203_records_and_sets_of_single_types_022 | referencing element of uninitialized set of value (left-hand side) | Clause 6.2.3 | m | |

A.3.29 Referencing elements of record of and set of types

Table A.28: Referencing elements of record of and set of types

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|---|------------------------------|--------|---------|
| 1 | NegSem_060203_records_and_sets_of_single_types_001 | ensure that the inner type referencing is correctly handled | Clause 6.2.3.2 | m | |
| 2 | NegSem_060203_records_and_sets_of_single_types_002 | ensure that the inner type referencing is correctly handled | Clause 6.2.3.2 | m | |
| 3 | NegSem_060203_records_and_sets_of_single_types_010 | wrong index type applied to a set of value on the left hand side of an assignment | Clause 6.2.3.2 | m | |
| 4 | NegSem_060203_records_and_sets_of_single_types_011 | record of index greater than the upper bound (left- hand side) | Clause 6.2.3.2 | m | |
| 5 | NegSem_060203_records_and_sets_of_single_types_012 | set of index greater than the upper bound (left- hand side) | Clause 6.2.3.2 | m | |
| 6 | NegSem_060203_records_and_sets_of_single_types_013 | wrong index type applied to a record of value on the right hand side of an assignment | Clause 6.2.3.2 | m | |
| 7 | NegSem_060203_records_and_sets_of_single_types_014 | wrong index type applied to a record of value on the right hand side of an assignment | Clause 6.2.3.2 | m | |
| 8 | NegSem_060203_records_and_sets_of_single_types_015 | verify than an error is generated when sending a partially initialized record of value | Clause 6.2.3.2 | m | |
| 9 | NegSyn_060203_records_and_sets_of_single_types_001 | ensure that value list cannot contain an empty assignment | Clause 6.2.3.2 | m | |
| 10 | Sem_060203_records_and_sets_of_single_types_001 | ensure that the inner type referencing is correctly handled | Clause 6.2.3.2 | m | |
| 11 | Sem_060203_records_and_sets_of_single_types_002 | verify assignment of explicitly identified elements to record of values | Clause 6.2.3.2 | m | |
| 12 | Sem_060203_records_and_sets_of_single_types_003 | verify assignment of explicitly identified elements to set of values | Clause 6.2.3.2 | m | |
| 13 | Sem_060203_records_and_sets_of_single_types_004 | verify handling of missing elements in assignment notation for record of values | Clause 6.2.3.2 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---|--|------------------------------|--------|---------|
| 14 | Sem_060203_records_and_sets_of_single_types_005 | verify handling of missing elements in assignment notation for set of values | Clause 6.2.3.2 | m | |
| 15 | Sem_060203_records_and_sets_of_single_types_006 | verify handling of missing and ignored elements during record of value re- assignment | Clause 6.2.3.2 | m | |
| 16 | Sem_060203_records_and_sets_of_single_types_007 | verify handling of missing and ignored elements during record of value re- assignment | Clause 6.2.3.2 | m | |
| 17 | Sem_060203_records_and_sets_of_single_types_008 | verify handling of value list assignment used for initialization of record of values | Clause 6.2.3.2 | m | |
| 18 | Sem_060203_records_and_sets_of_single_types_009 | verify handling of value list assignment used for initialization of set of values | Clause 6.2.3.2 | m | |
| 19 | Sem_060203_records_and_sets_of_single_types_010 | verify handling of value list assignment used for update of record of values | Clause 6.2.3.2 | m | |
| 20 | Sem_060203_records_and_sets_of_single_types_011 | verify handling of value list assignment used for update of set of values | Clause 6.2.3.2 | m | |
| 21 | Sem_060203_records_and_sets_of_single_types_012 | verify handling of index notation applied to record of values on right- hand side | Clause 6.2.3.2 | m | |
| 22 | Sem_060203_records_and_sets_of_single_types_013 | verify handling of index notation applied to set of values on right-hand side | Clause 6.2.3.2 | m | |
| 23 | Sem_060203_records_and_sets_of_single_types_014 | verify handling of index notation applied to record of values on left-hand side | Clause 6.2.3.2 | m | |
| 24 | Sem_060203_records_and_sets_of_single_types_015 | verify handling of index notation applied to set of values on left-hand side | Clause 6.2.3.2 | m | |
| 25 | Sem_060203_records_and_sets_of_single_types_016 | verify the first element of a record of value is accessible by an index notation | Clause 6.2.3.2 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---|---|------------------------------|--------|---------|
| 26 | Sem_060203_records_and_sets_of_single_types_017 | verify the first element of a set of value is accessible by an index notation | Clause 6.2.3.2 | m | |
| 27 | Sem_060203_records_and_sets_of_single_types_019 | referencing non- existent element of record of value (left-hand side) | Clause 6.2.3.2 | m | |
| 28 | Sem_060207_arrays_009 | verify the first element of an array is accessible by an index notation | Clause 6.2.3.2 | m | |

A.3.30 Enumerated type and values

Table A.29: Enumerated type and values

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------------|-------------------------------|------------------------------|--------|---------|
| 1 | Sem_060207_arrays_006 | verify handling of value list | Clause 6.2.4 | m | |
| | | assignment used for | | | |
| | | update of arrays | | | |

A.3.31 Arrays

Table A.30: Arrays

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------|--|---------------------------|--------|---------|
| 1 | NegSem_060207_arrays_001 | ensure that the value limitation is correctly handled within array | Clause 6.2.7 | m | |
| 2 | NegSem_060207_arrays_002 | ensure that the inner type referencing is correctly handled | Clause 6.2.7 | m | |
| 3 | NegSem_060207_arrays_003 | negative index applied to an array on the right hand side of an assignment | Clause 6.2.7 | m | |
| 4 | NegSem_060207_arrays_004 | negative index applied to an array on the left hand side of an assignment | Clause 6.2.7 | m | |
| 5 | NegSem_060207_arrays_005 | wrong index type applied to an array on the right hand side of an assignment | Clause 6.2.7 | m | |
| 6 | NegSem_060207_arrays_006 | wrong index type applied to an array on the left hand side of an assignment | Clause 6.2.7 | m | |
| 7 | NegSem_060207_arrays_007 | array index greater than the upper bound (left-hand side) | Clause 6.2.7 | m | |
| 8 | NegSem_060207_arrays_008 | wrong index type applied to an array on the right hand side of an assignment | Clause 6.2.7 | m | |
| 9 | NegSem_060207_arrays_009 | verify than an error is generated when sending a partially initialized array | Clause 6.2.7 | m | |
| 10 | NegSem_060207_arrays_010 | ensure that the value limitation is correctly handled within array | Clause 6.2.7 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------|--|------------------------------|--------|---------|
| 11 | NegSyn_060207_arrays_001 | ensure that array cannot contain an empty assignment | Clause 6.2.7 | m | |
| 12 | NegSyn_060207_arrays_002 | ensure that array field cannot contain an empty index | Clause 6.2.7 | m | |
| 13 | NegSyn_060207_arrays_003 | ensure that array field cannot contain an empty index | Clause 6.2.7 | m | |
| 14 | Sem_060207_arrays_001 | verify that value list notation can be used for an array | Clause 6.2.7 | m | |
| 15 | Sem_060207_arrays_002 | verify assignment of explicitly identified elements to arrays | Clause 6.2.7 | m | |
| 16 | Sem_060207_arrays_003 | verify handling of missing elements in assignment notation for arrays | Clause 6.2.7 | m | |
| 17 | Sem_060207_arrays_004 | verify handling of missing and ignored elements during an array re-assignment | Clause 6.2.7 | m | |
| 18 | Sem_060207_arrays_005 | verify handling of value list assignment used for initialization of arrays | Clause 6.2.7 | m | |
| 19 | Sem_060207_arrays_007 | verify handling of index notation applied to array on right-hand side | Clause 6.2.7 | m | |
| 20 | Sem_060207_arrays_008 | verify handling of index notation applied to array on left-hand side | Clause 6.2.7 | m | |
| 21 | Sem_060207_arrays_010 | verify that arrays can be used to specify record of type and they are compatible | Clause 6.2.7 | m | |
| 22 | Sem_060207_arrays_011 | verify that arrays can be used to specify record of type and they are compatible | Clause 6.2.7 | m | |
| 23 | Sem_060207_arrays_012 | referencing element of uninitialized array (left-hand side) | Clause 6.2.7 | m | |
| 24 | Sem_060207_arrays_013 | ensure that the two dimensional array type referencing is correctly handled | Clause 6.2.7 | m | |
| 25 | Sem_060207_arrays_014 | verify assignment of explicitly identified elements to two dimensional array | Clause 6.2.7 | m | |

A.3.32 The default type

Table A.31: The default type

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------------------|---|------------------------------|--------|---------|
| 1 | Sem_060208_default_type_001 | verify than a reference to an activated default can be assigned to a default variable | Clause 6.2.8 | m | |
| 2 | Sem_060208_default_type_002 | verify than null value can be assigned to a default variable | Clause 6.2.8 | m | |
| 3 | Sem_060208_default_type_003 | verify than existing default references can be assigned | Clause 6.2.8 | m | |

A.3.33 Communication port types

Table A.32: Communication port types

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|--|------------------------------|--------|---------|
| 1 | NegSem_060209_CommunicationPortTypes_001 | Restriction of port definitions are appropriately handles | Clause 6.2.9 | m | |
| 2 | NegSem_060209_CommunicationPortTypes_002 | Restriction of port definitions are appropriately handles | Clause 6.2.9 | m | |
| 3 | NegSem_060209_CommunicationPortTypes_003 | Restriction of port definitions are appropriately handles | Clause 6.2.9 | m | |
| 4 | NegSem_060209_CommunicationPortTypes_004 | Verify that an error is generated when a message port type definition contains no message types | Clause 6.2.9 | m | |
| 5 | NegSem_060209_CommunicationPortTypes_005 | Verify that an error is generated when a procedure port type definition contains no signatures | Clause 6.2.9 | m | |
| 6 | NegSem_060209_CommunicationPortTypes_006 | Verify that an error is generated when a signature port definition contains multiple address clauses | Clause 6.2.9 | m | |
| 7 | NegSem_060209_CommunicationPortTypes_007 | Verify that an error is generated when a signature port definition contains multiple map clauses | Clause 6.2.9 | m | |
| 8 | NegSem_060209_CommunicationPortTypes_008 | Verify that an error is generated when a signature port definition contains multiple unmap clauses | Clause 6.2.9 | m | |
| 9 | Sem_060209_CommunicationPortTypes_004 | Map and unmap param and local port address are allowed in a testcase block | Clause 6.2.9 | m | |
| 10 | Syn_060209_CommunicationPortTypes_001 | Message-based ports are accepted. | Clause 6.2.9 | m | |
| 11 | Syn_060209_CommunicationPortTypes_002 | Message-based ports with address are accepted. | Clause 6.2.9 | m | |
| 12 | Syn_060209_CommunicationPortTypes_003 | Verify that it is possible to define procedure-based port types | Clause 6.2.9 | m | |
| 13 | Syn_060209_CommunicationPortTypes_004 | Procedure-based ports with address are accepted | Clause 6.2.9 | m | |
| 14 | Syn_060209_CommunicationPortTypes_005 | Map param is accepted by the port definition. | Clause 6.2.9 | m | |
| 15 | Syn_060209_CommunicationPortTypes_006 | Unmap param is accepted by the port definition. | Clause 6.2.9 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---------------------------------------|---|------------------------------|--------|---------|
| 16 | Syn_060209_CommunicationPortTypes_007 | Complex port definition are accepted. | Clause 6.2.9 | m | |
| 17 | Syn_060209_CommunicationPortTypes_008 | Procedure-base port type definition can contain map parameter definition | Clause 6.2.9 | m | |
| 18 | Syn_060209_CommunicationPortTypes_009 | Procedure-base port type definition can contain unmap parameter definition | Clause 6.2.9 | m | |
| 19 | Syn_060209_CommunicationPortTypes_010 | Complex procedure- based port type definition are accepted | Clause 6.2.9 | m | |

A.3.34 Addressing entities inside the SUT

Table A.33: Addressing entities inside the SUT

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---|---|------------------------------|--------|---------|
| 1 | NegSem_060212_AddressingEntitiesInsideSut_001 | Ensure right type checking for address types in ports | Clause 6.2.12 | m | |
| 2 | Sem_060212_AddressingEntitiesInsideSut_001 | Ensure null assignment is accepted for addresses | Clause 6.2.12 | m | |
| 3 | Sem_060212_AddressingEntitiesInsideSut_002 | The right port address is used | Clause 6.2.12 | m | |

A.3.35 Type compatibility of non-structured types

Table A.34: Type compatibility of non-structured types

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|---|------------------------------|--------|---------|
| 1 | NegSem_060301_non_structured_types_001 | The IUT correctly handles assignments from incompatible type ranges | Clause 6.3.1 | m | |
| 2 | NegSem_060301_non_structured_types_002 | The IUT correctly handles assignments from incompatible type ranges | Clause 6.3.1 | m | |
| 3 | NegSem_060301_non_structured_types_003 | The IUT correctly handles assignments from incompatible type ranges | Clause 6.3.1 | m | |
| 4 | NegSem_060301_non_structured_types_004 | The IUT correctly handles assignments from incompatible type ranges | Clause 6.3.1 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|---|------------------------------|--------|---------|
| 5 | NegSem_060301_non_structured_types_005 | The IUT correctly handles assignments from incompatible type ranges | Clause 6.3.1 | m | |
| 6 | NegSem_060301_non_structured_types_006 | The IUT correctly handles assignments from incompatible type ranges | Clause 6.3.1 | m | |
| 7 | NegSem_060301_non_structured_types_007 | The IUT correctly handles assignments from compatible size restrictions | Clause 6.3.1 | m | |
| 8 | NegSem_060301_non_structured_types_008 | The IUT correctly handles assignments from compatible size restrictions | Clause 6.3.1 | m | |
| 9 | NegSem_060301_non_structured_types_009 | The IUT correctly handles assignments from compatible size restrictions | Clause 6.3.1 | m | |
| 10 | NegSem_060301_non_structured_types_010 | The IUT correctly handles assignments from compatible size restrictions | Clause 6.3.1 | m | |
| 11 | NegSem_060301_non_structured_types_011 | The IUT correctly handles assignments from compatible size restrictions | Clause 6.3.1 | m | |
| 12 | NegSem_060301_non_structured_types_012 | The IUT correctly handles assignments from compatible size restrictions | Clause 6.3.1 | m | |
| 13 | Sem_060301_non_structured_types_001 | The IUT correctly handles assignments from compatible type ranges | Clause 6.3.1 | m | |
| 14 | Sem_060301_non_structured_types_002 | The IUT correctly handles assignments from compatible size restrictions | Clause 6.3.1 | m | |
| 15 | Sem_060301_non_structured_types_003 | The IUT correctly handles assignments from compatible type ranges | Clause 6.3.1 | m | |
| 16 | Sem_060301_non_structured_types_004 | The IUT correctly handles assignments from compatible type ranges | Clause 6.3.1 | m | |

A.3.36 Type compatibility of structured types

Table A.35: Type compatibility of structured types

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_060302_structured_types_002 | The IUT rejects assignments from incompatible types or type ranges | Clause 6.3.2 | m | |
| 2 | NegSem_060302_structured_types_003 | The IUT rejects assignments from incompatible types or type ranges | Clause 6.3.2 | m | |
| 3 | NegSem_060302_structured_types_004 | The IUT rejects assignments from incompatible types or type ranges | Clause 6.3.2 | m | |
| 4 | NegSem_060302_structured_types_005 | The IUT rejects assignments from incompatible types or type ranges | Clause 6.3.2 | m | |
| 5 | NegSem_060302_structured_types_006 | The IUT rejects assignments from incompatible types or type ranges | Clause 6.3.2 | m | |
| 6 | NegSem_060302_structured_types_007 | The IUT rejects assignments from incompatible types or type ranges | Clause 6.3.2 | m | |
| 7 | NegSem_060302_structured_types_008 | The IUT rejects assignments from incompatible types or type ranges | Clause 6.3.2 | m | |
| 8 | NegSem_060302_structured_types_009 | The IUT rejects assignments from incompatible types or type ranges | Clause 6.3.2 | m | |
| 9 | NegSem_060302_structured_types_010 | The IUT rejects assignments from incompatible types or type ranges | Clause 6.3.2 | m | |
| 10 | NegSem_060302_structured_types_011 | The IUT rejects assignments from structures having incompatible anytypes | Clause 6.3.2 | m | |
| 11 | NegSem_060302_structured_types_012 | The IUT rejects assignments having mismatch between undefined and omitted elements | Clause 6.3.2 | m | |
| 12 | NegSem_060302_structured_types_013 | The IUT rejects assignments having mismatch between undefined and omitted elements | Clause 6.3.2 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------------|---|------------------------------|--------|---------|
| 13 | NegSem_060302_structured_types_014 | The IUT rejects assignments between incompatible structures | Clause 6.3.2 | m | |
| 14 | NegSem_060302_structured_types_015 | The IUT rejects assignments between incompatible structures | Clause 6.3.2 | m | |
| 15 | NegSem_060302_structured_types_016 | The IUT rejects assignments between incompatible structures | Clause 6.3.2 | m | |
| 16 | NegSem_060302_structured_types_017 | The IUT rejects assignments between incompatible structures | Clause 6.3.2 | m | |
| 17 | NegSem_060302_structured_types_018 | The IUT rejects assignments between incompatible structures | Clause 6.3.2 | m | |
| 18 | NegSem_060302_structured_types_019 | The IUT correctly handles assignments from structures having compatible types and lengths | Clause 6.3.2 | m | |
| 19 | Sem_060302_structured_types_001 | The IUT correctly handles assignments from structures having compatible types and type ranges | Clause 6.3.2 | m | |
| 20 | Sem_060302_structured_types_002 | The IUT correctly handles assignments from structures having compatible types and lengths | Clause 6.3.2 | m | |
| 21 | Sem_060302_structured_types_003 | The IUT correctly handles assignments from structures having compatible types and type ranges | Clause 6.3.2 | m | |
| 22 | Sem_060302_structured_types_004 | The IUT correctly handles assignments from structures having compatible anytypes | Clause 6.3.2 | m | |
| 23 | Sem_060302_structured_types_005 | The IUT correctly handles assignments from structures having compatible types and type ranges | Clause 6.3.2 | m | |
| 24 | Sem_060302_structured_types_006 | The IUT correctly handles assignments from structures having compatible types and lengths | Clause 6.3.2 | m | |

A.3.37 Type compatibility of enumerated types

Table A.36: Type compatibility of enumerated types

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------|---|------------------------------|--------|---------|
| 1 | | Reject assignment of other enumerated types since they are only compatible to synonym types | Clause 6.3.2.1 | m | |

A.3.38 Type compatibility of component types

Table A.37: Type compatibility of component types

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------------------------|--|---------------------------|--------|---------|
| 1 | NegSem_060303_component_types_001 | The IUT correctly handles component incompatibility due to differing list of constant definitions | Clause 6.3.3 | m | |
| 2 | NegSem_060303_component_types_002 | The IUT correctly handles component incompatibility due to differing constant types having same name | Clause 6.3.3 | m | |
| 3 | Sem_060303_component_types_001 | The IUT correctly handles assignments from structures having compatible components | Clause 6.3.3 | m | |
| 4 | Sem_060303_component_types_002 | The IUT correctly handles assignments from structures having compatible components | Clause 6.3.3 | m | |

A.3.39 Arithmetic operators

Table A.38: Arithmetic operators

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---------------------------------------|--|---------------------------|--------|---------|
| 1 | NegSem_070101_ArithmeticOperators_001 | Arithmetic operators are for integer and float values | Clause 7.1.1 | m | |
| 2 | NegSem_070101_ArithmeticOperators_002 | Arithmetic operators can handle same type of variables | Clause 7.1.1 | m | |
| 3 | NegSem_070101_ArithmeticOperators_003 | Mod arithmetic operator can handle integer variables | Clause 7.1.1 | m | |
| 4 | NegSem_070101_ArithmeticOperators_004 | Rem arithmetic operator can handle integer variables | Clause 7.1.1 | m | |
| 5 | NegSem_070101_ArithmeticOperators_005 | Arithmetic operators can not handle special float values | Clause 7.1.1 | m | |
| 6 | NegSem_070101_ArithmeticOperators_006 | Arithmetic operators can not handle special float values | Clause 7.1.1 | m | |
| 7 | NegSem_070101_ArithmeticOperators_007 | Arithmetic operators can not handle special float values | Clause 7.1.1 | m | |
| 8 | NegSem_070101_ArithmeticOperators_008 | In x mod y arithmetic operator y is non-zero positive number | Clause 7.1.1 | m | |
| 9 | NegSem_070101_ArithmeticOperators_009 | In x rem y arithmetic operator y is non-zero positive number | Clause 7.1.1 | m | |
| 10 | NegSem_070101_ArithmeticOperators_010 | In x rem y arithmetic operator y is non-zero positive number | Clause 7.1.1 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------------|---|------------------------------|--------|---------|
| 11 | Sem_070101_ArithmeticOperators_001 | The addition of two integer variables is evaluated correctly. | Clause 7.1.1 | m | |
| 12 | Sem_070101_ArithmeticOperators_002 | The addition of multiple integer variables is evaluated correctly. | Clause 7.1.1 | m | |
| 13 | Sem_070101_ArithmeticOperators_003 | The addition of two integer variables is evaluated correctly when the expression contains a negative value. | Clause 7.1.1 | m | |
| 14 | Sem_070101_ArithmeticOperators_004 | The substraction of two integer variables is evaluated correctly. | Clause 7.1.1 | m | |
| 15 | Sem_070101_ArithmeticOperators_005 | The substraction of multiple integer variables is evaluated correctly. | Clause 7.1.1 | m | |
| 16 | Sem_070101_ArithmeticOperators_006 | The multiplication of two integer variables is evaluated correctly. | Clause 7.1.1 | m | |
| 17 | Sem_070101_ArithmeticOperators_007 | The multiplication of multiple integer variables is evaluated correctly. | Clause 7.1.1 | m | |
| 18 | Sem_070101_ArithmeticOperators_008 | The division of two integer variables is evaluated correctly. | Clause 7.1.1 | m | |
| 19 | Sem_070101_ArithmeticOperators_009 | The division of multiple integer variables is evaluated correctly. | Clause 7.1.1 | m | |
| 20 | Sem_070101_ArithmeticOperators_010 | The application of the modulo operator on integer variables is evaluated correctly when the remainder is zero. | Clause 7.1.1 | m | |
| 21 | Sem_070101_ArithmeticOperators_011 | The application of the modulo operator on integer variables is evaluated correctly when the integer value is smaller than the modulo value. | Clause 7.1.1 | m | |
| 22 | Sem_070101_ArithmeticOperators_012 | The application of the modulo operator on integer variables is evaluated correctly when the integer value greater than the modulo value. | Clause 7.1.1 | m | |
| 23 | Sem_070101_ArithmeticOperators_013 | The application of the modulo operator on integer variables is evaluated correctly when two consecutive modulo operators are applied. | Clause 7.1.1 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------------|---|------------------------------|--------|---------|
| 24 | Sem_070101_ArithmeticOperators_014 | The application of the modulo operator on integer variables is evaluated correctly when the operand is a negative integer. | Clause 7.1.1 | m | |
| 25 | Sem_070101_ArithmeticOperators_015 | The application of the remainder operator on integer variables is evaluated correctly when the operand is a negative integer. | Clause 7.1.1 | m | |
| 26 | Sem_070101_ArithmeticOperators_016 | The application of the remainder operator on integer variables is evaluated correctly when the operand is a negative integer. | Clause 7.1.1 | m | |
| 27 | Sem_070101_ArithmeticOperators_017 | The consecutive application of the remainder operator and the modulo operator on integer variables is evaluated correctly. | Clause 7.1.1 | m | |
| 28 | Sem_070101_ArithmeticOperators_018 | Operator combinations and the modulo operator on integer variables is evaluated correctly. | Clause 7.1.1 | m | |
| 29 | Sem_070101_ArithmeticOperators_019 | The addition operator works on float variables. | Clause 7.1.1 | m | |
| 30 | Sem_070101_ArithmeticOperators_020 | The substraction operator works on float variables. | Clause 7.1.1 | m | |
| 31 | Sem_070101_ArithmeticOperators_021 | The multiplication operator works on float variables. | Clause 7.1.1 | m | |
| 32 | Sem_070101_ArithmeticOperators_022 | The division operator works on float variables. | Clause 7.1.1 | m | |
| 33 | Sem_070101_ArithmeticOperators_023 | The combination of different operators works on float variables. | Clause 7.1.1 | m | |
| 34 | Sem_070101_ArithmeticOperators_024 | The operator precedence is evaluated correctly. | Clause 7.1.1 | m | |
| 35 | Sem_070101_ArithmeticOperators_025 | The operator precedence is | Clause 7.1.1 | m | |
| 36 | Sem_070101_ArithmeticOperators_026 | evaluated correctly. The operator precedence is evaluated correctly. | Clause 7.1.1 | m | |
| 37 | Syn_070101_ArithmeticOperators_001 | The addition of two integers in a constant is accepted. | Clause 7.1.1 | m | |
| 38 | Syn_070101_ArithmeticOperators_002 | The substraction of two integers in a constant is accepted. | Clause 7.1.1 | m | |
| 39 | Syn_070101_ArithmeticOperators_003 | The multiplication of two integers in a constant is accepted. | Clause 7.1.1 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------------|---|------------------------------|--------|---------|
| 40 | Syn_070101_ArithmeticOperators_004 | The division of two integers in a constant is accepted. | Clause 7.1.1 | m | |
| 41 | Syn_070101_ArithmeticOperators_005 | The modulo operator on two integers is accepted. | Clause 7.1.1 | m | |
| 42 | Syn_070101_ArithmeticOperators_006 | The remainder operator on two integers is accepted. | Clause 7.1.1 | m | |
| 43 | Syn_070101_ArithmeticOperators_007 | Operator combinations on integers is accepted. | Clause 7.1.1 | m | |
| 44 | Syn_070101_ArithmeticOperators_008 | The addition operator on float constants is accepted. | Clause 7.1.1 | m | |
| 45 | Syn_070101_ArithmeticOperators_009 | The substraction operator on float constants is accepted. | Clause 7.1.1 | m | |
| 46 | Syn_070101_ArithmeticOperators_010 | The multiplication operator on float constants is accepted. | Clause 7.1.1 | m | |
| 47 | Syn_070101_ArithmeticOperators_011 | The division operator on float constants is accepted. | Clause 7.1.1 | m | |
| 48 | Syn_070101_ArithmeticOperators_012 | A combination of operators on float constants is accepted. | Clause 7.1.1 | m | |

A.3.40 List operator

Table A.39: List operator

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------------------|--|------------------------------|--------|---------|
| 1 | Sem_070102_ListOperator_001 | The list operator on bitstrings is evaluated correctly. | Clause 7.1.2 | m | |
| 2 | Sem_070102_ListOperator_002 | The list operator on charstrings is evaluated correctly. | Clause 7.1.2 | m | |
| 3 | Sem_070102_ListOperator_003 | The list operator on record of is evaluated correctly. | Clause 7.1.2 | m | |
| 4 | Sem_070102_ListOperator_004 | The list operator on set of is evaluated correctly. | Clause 7.1.2 | m | |
| 5 | Sem_070102_ListOperator_005 | The list operator on arrays is evaluated correctly. | Clause 7.1.2 | m | |
| 6 | Sem_070102_ListOperator_006 | The list operator on record of is evaluated correctly. | Clause 7.1.2 | m | |

A.3.41 Relational operators

Table A.40: Relational operators

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---------------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_070103_RelationalOperators_001 | The equals operator on records is evaluated correctly. | Clause 7.1.3 | m | |
| 2 | Sem_070103_RelationalOperators_001 | The equals operator on integers is evaluated correctly. | Clause 7.1.3 | m | |
| 3 | Sem_070103_RelationalOperators_002 | The equals operator on floats is evaluated correctly. | Clause 7.1.3 | m | |
| 4 | Sem_070103_RelationalOperators_003 | The equals operator on enumerations is evaluated correctly. | Clause 7.1.3 | m | |
| 5 | Sem_070103_RelationalOperators_004 | The less than operator on integers is evaluated correctly. | Clause 7.1.3 | m | |
| 6 | Sem_070103_RelationalOperators_005 | The less than operator on floats is evaluated correctly. | Clause 7.1.3 | m | |
| 7 | Sem_070103_RelationalOperators_006 | The less than operator on enumerations is evaluated correctly. | Clause 7.1.3 | m | |
| 8 | Sem_070103_RelationalOperators_007 | The less than or equal to operator on integers is evaluated correctly with differing values. | Clause 7.1.3 | m | |
| 9 | Sem_070103_RelationalOperators_008 | The less than or equal to operator on integers is evaluated correctly with equal values. | Clause 7.1.3 | m | |
| 10 | Sem_070103_RelationalOperators_009 | The less than or equal to operator on floats is evaluated correctly with differing values. | Clause 7.1.3 | m | |
| 11 | Sem_070103_RelationalOperators_010 | The less than or equal to operator on floats is evaluated correctly with equal values. | Clause 7.1.3 | m | |
| 12 | Sem_070103_RelationalOperators_011 | The less than or equal to operator on enumerations is evaluated correctly with differing values. | Clause 7.1.3 | m | |
| 13 | Sem_070103_RelationalOperators_012 | The less than or equal to operator on enumerations is evaluated correctly with equal values. | Clause 7.1.3 | m | |
| 14 | Sem_070103_RelationalOperators_013 | The greater than operator on integers is evaluated correctly. | Clause 7.1.3 | m | |
| 15 | Sem_070103_RelationalOperators_014 | The less than operator on floats is evaluated correctly. | Clause 7.1.3 | m | |
| 16 | Sem_070103_RelationalOperators_015 | The less than operator on enumerations is evaluated correctly. | Clause 7.1.3 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------------|--|------------------------------|--------|---------|
| 17 | Sem_070103_RelationalOperators_016 | The greater than or equal to operator on integers is evaluated correctly with differing values. | Clause 7.1.3 | m | |
| 18 | Sem_070103_RelationalOperators_017 | The greater than or equal to operator on integers is evaluated correctly with equal values. | Clause 7.1.3 | m | |
| 19 | Sem_070103_RelationalOperators_018 | The greater than or equal to operator on floats is evaluated correctly with differing values. | Clause 7.1.3 | m | |
| 20 | Sem_070103_RelationalOperators_019 | The greater than or equal to operator on floats is evaluated correctly with equal values. | Clause 7.1.3 | m | |
| 21 | Sem_070103_RelationalOperators_020 | The less than or equal to operator on enumerations is evaluated correctly with differing values. | Clause 7.1.3 | m | |
| 22 | Sem_070103_RelationalOperators_021 | The greater than or equal to operator on enumerations is evaluated correctly with equal values. | Clause 7.1.3 | m | |
| 23 | Sem_070103_RelationalOperators_022 | The not equals operator on integers is evaluated correctly. | Clause 7.1.3 | m | |
| 24 | Sem_070103_RelationalOperators_023 | The not equals operator on floats is evaluated correctly. | Clause 7.1.3 | m | |
| 25 | Sem_070103_RelationalOperators_024 | The not equals operator on enumerations is evaluated correctly. | Clause 7.1.3 | m | |
| 26 | Sem_070103_RelationalOperators_025 | The equals operator on sets is evaluated correctly. | Clause 7.1.3 | m | |
| 27 | Sem_070103_RelationalOperators_026 | The equals operator on records is evaluated correctly. | Clause 7.1.3 | m | |
| 28 | Sem_070103_RelationalOperators_030 | The equals operator on records is evaluated correctly. | Clause 7.1.3 | m | |
| 29 | Sem_070103_RelationalOperators_031 | The equals operator on records is evaluated correctly. | Clause 7.1.3 | m | |
| 30 | Sem_070103_RelationalOperators_032 | The equals operator on records is evaluated correctly. | Clause 7.1.3 | m | |
| 31 | Sem_070103_RelationalOperators_033 | The equals operator on records is evaluated correctly. | Clause 7.1.3 | m | |
| 32 | Sem_070103_RelationalOperators_034 | The equals operator on records is evaluated correctly. | Clause 7.1.3 | m | |

A.3.42 Logical operators

Table A.41: Logical operators

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------|---|------------------------------|--------|---------|
| 1 | | The boolean operator supports negation. | Clause 7.1.4 | m | |
| 2 | | The and operator with true and false as operands work on boolean variables. | Clause 7.1.4 | m | |

A.3.43 Bitwise operators

Table A.42: Bitwise operators

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---------------------------------|--|------------------------------|--------|---------|
| 1 | Sem_070105_BitwiseOperators_001 | The bitwise negation operator works as expected. | Clause 7.1.5 | m | |
| 2 | Sem_070105_BitwiseOperators_002 | The bitwise negation operator works as expected on hexstrings. | Clause 7.1.5 | m | |

A.3.44 Shift operators

Table A.43: Shift operators

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------------|---|---------------------------|--------|---------|
| 1 | Sem_070106_ShiftOperators_001 | The shift left operator works as expected on bitstrings. | Clause 7.1.6 | m | |
| 2 | Sem_070106_ShiftOperators_002 | The shift left operator works as expected on hexstrings. | Clause 7.1.6 | m | |
| 3 | Sem_070106_ShiftOperators_003 | The shift right operator works as expected on bitstrings. | Clause 7.1.6 | m | |
| 4 | Sem_070106_ShiftOperators_004 | The shift right operator works as expected on hexstrings. | Clause 7.1.6 | m | |

A.3.45 Rotate operators

Table A.44: Rotate operators

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------|--|------------------------------|--------|---------|
| 1 | Sem_070107_RotateOperators_001 | The rotate left operator works as expected on bitstrings. | Clause 7.1.7 | m | |
| 2 | Sem_070107_RotateOperators_002 | The rotate left operator works as expected on hexstrings. | Clause 7.1.7 | m | |
| 3 | Sem_070107_RotateOperators_003 | The rotate right operator works as expected on bitstrings. | Clause 7.1.7 | m | |
| 4 | Sem_070107_RotateOperators_004 | The rotate right operator works as expected on hexstrings. | Clause 7.1.7 | m | |

A.3.46 Field references and list elements

Table A.45: Field references and list elements

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---|---|---------------------------|--------|---------|
| 1 | Sem_0702_FieldReferencesAndListElements_001 | The IUT correctly handles field referencing | Clause 7.2 | m | |
| 2 | Sem_0702_FieldReferencesAndListElements_002 | The IUT correctly handles field referencing | Clause 7.2 | m | |

A.3.47 Definition of a module

Table A.46: Definition of a module

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------------------|--|---------------------------|--------|---------|
| 1 | NegSyn_0801_DefinitionOfAModule_001 | A module definition with multiple language specifications is rejected. | Clause 8.1 | m | |
| 2 | Syn_0801_DefinitionOfAModule_001 | A "plain" module definition is accepted. | Clause 8.1 | m | |
| 3 | Syn_0801_DefinitionOfAModule_002 | A module definition with language specification is accepted. | Clause 8.1 | m | |
| 4 | Syn_0801_DefinitionOfAModule_003 | A module definition with language and package is accepted. | Clause 8.1 | m | |
| 5 | Syn_0801_DefinitionOfAModule_004 | A module definition with package and without language is accepted. | Clause 8.1 | m | |
| 6 | Syn_0801_DefinitionOfAModule_005 | A module definition with ed4.3.1 language and package is accepted. | Clause 8.1 | m | |
| 7 | Syn_0801_DefinitionOfAModule_006 | A module definition with ed4.4.1 language and package is accepted. | Clause 8.1 | m | |

A.3.48 Module definitions part

Table A.47: Module definitions part

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 [1] | Status | Support |
|------|------------------------------------|--|----------------------------------|--------|---------|
| 1 | Syn_0802_ModuleDefinitionsPart_001 | A TypeDef module definition with public visibility is accepted. | Clause 8.2 | m | |
| 2 | Syn_0802_ModuleDefinitionsPart_002 | A TypeDef module definition with private visibility is accepted. | Clause 8.2 | m | |

A.3.49 Module parameters

Table A.48: Module parameters

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---------------------------------|---|------------------------------|--------|---------|
| 1 | Sem_080201_ModuleParameters_001 | A reference to plain module parameter with a default value delivers the default value unless it is overwritten. | Clause 8.2.1 | m | |
| 2 | Syn_080201_ModuleParameters_001 | Plain module parameters are accepted. | Clause 8.2.1 | m | |
| 3 | Syn_080201_ModuleParameters_002 | Plain module parameters with default values are accepted. | Clause 8.2.1 | m | |
| 4 | Syn_080201_ModuleParameters_003 | Plain module parameters with default values and visibility modifiers are accepted. | Clause 8.2.1 | m | |

A.3.50 Groups of definitions

Table A.49: Groups of definitions

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------------------------|---|------------------------------|--------|---------|
| 1 | Syn_080202_GroupOfDefinitions_001 | A definition within a group is accepted. | Clause 8.2.2 | m | |
| 2 | Syn_080202_GroupOfDefinitions_002 | A definition within a nested group is accepted. | Clause 8.2.2 | m | |
| 3 | Syn_080202_GroupOfDefinitions_003 | A definition within a group with public visibility modifier is accepted. | Clause 8.2.2 | m | |
| 4 | Syn_080202_GroupOfDefinitions_004 | A definition within a group with public visibility modifier and attributes is accepted. | Clause 8.2.2 | m | |

A.3.51 General format of import

Table A.50: General format of import

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---|--|------------------------------|--------|---------|
| 1 | NegSem_08020301_GeneralFormatOfImport_001 | Name handling of imported enumerations is properly handled | Clause 8.2.3.1 | m | |
| 2 | NegSem_08020301_GeneralFormatOfImport_002 | Name handling of imported enumerations is properly handled | Clause 8.2.3.1 | m | |
| 3 | NegSem_08020301_GeneralFormatOfImport_005 | Make sure that the identifier of the current module cannot be used for prefixing imported entities | Clause 8.2.3.1 | m | |
| 4 | NegSem_08020301_GeneralFormatOfImport_006 | The import statement cannot be used in other places than in the module definition part | Clause 8.2.3.1 | m | |
| 5 | NegSem_08020301_GeneralFormatOfImport_007 | Verify that information about message types is imported together with port type | Clause 8.2.3.1 | m | |
| 6 | NegSem_08020301_GeneralFormatOfImport_008 | Verify that identifiers of module parameter types are not imported together with module parameters | Clause 8.2.3.1 | m | |
| 7 | NegSem_08020301_GeneralFormatOfImport_009 | Verify that identifiers of constant types are not imported together with constants | Clause 8.2.3.1 | m | |
| 8 | NegSem_08020301_GeneralFormatOfImport_010 | Verify that identifiers of field types are not imported together with structured types | Clause 8.2.3.1 | m | |
| 9 | NegSem_08020301_GeneralFormatOfImport_011 | Verify that identifiers of message types are not imported together with port types | Clause 8.2.3.1 | m | |
| 10 | NegSem_08020301_GeneralFormatOfImport_012 | Verify that identifiers of signatures are not imported together with port types | Clause 8.2.3.1 | m | |
| 11 | NegSem_08020301_GeneralFormatOfImport_013 | Verify that identifiers of constant types are not imported together with component types | Clause 8.2.3.1 | m | |
| 12 | NegSem_08020301_GeneralFormatOfImport_014 | Verify that identifiers of variable types are not imported together with component types | Clause 8.2.3.1 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---|---|------------------------------|--------|---------|
| 13 | NegSem_08020301_GeneralFormatOfImport_015 | Verify that identifiers of port types are not imported together with component types | Clause 8.2.3.1 | m | |
| 14 | NegSem_08020301_GeneralFormatOfImport_016 | Verify that identifiers of parameter types are not imported together with signatures | Clause 8.2.3.1 | m | |
| 15 | NegSem_08020301_GeneralFormatOfImport_017 | Verify that identifiers of return types are not imported together with signatures | Clause 8.2.3.1 | m | |
| 16 | NegSem_08020301_GeneralFormatOfImport_018 | Verify that identifiers of exception types are not imported together with signatures | Clause 8.2.3.1 | m | |
| 17 | NegSem_08020301_GeneralFormatOfImport_019 | Verify that identifiers of template types are not imported together with data templates | Clause 8.2.3.1 | m | |
| 18 | NegSem_08020301_GeneralFormatOfImport_020 | Verify that identifiers of parameter types are not imported together with data templates | Clause 8.2.3.1 | m | |
| 19 | NegSem_08020301_GeneralFormatOfImport_021 | Verify that identifiers of constants are not imported together with data templates | Clause 8.2.3.1 | m | |
| 20 | NegSem_08020301_GeneralFormatOfImport_022 | Verify that identifiers of module parameters are not imported together with data templates | Clause 8.2.3.1 | m | |
| 21 | NegSem_08020301_GeneralFormatOfImport_023 | Verify that identifiers of functions are not imported together with data templates | Clause 8.2.3.1 | m | |
| 22 | NegSem_08020301_GeneralFormatOfImport_024 | Verify that identifiers of signatures are not imported together with signature templates | Clause 8.2.3.1 | m | |
| 23 | NegSem_08020301_GeneralFormatOfImport_025 | Verify that identifiers of constants are not imported together with signature templates | Clause 8.2.3.1 | m | |
| 24 | NegSem_08020301_GeneralFormatOfImport_026 | Verify that identifiers of module parameters are not imported together with signature templates | Clause 8.2.3.1 | m | |
| 25 | NegSem_08020301_GeneralFormatOfImport_027 | Verify that identifiers of functions are not imported together with signature templates | Clause 8.2.3.1 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---|--|------------------------------|--------|---------|
| 26 | NegSem_08020301_GeneralFormatOfImport_028 | Verify that identifiers of parameter types are not imported together with functions | Clause 8.2.3.1 | m | |
| 27 | NegSem_08020301_GeneralFormatOfImport_029 | Verify that identifiers of return type are not imported together with functions | Clause 8.2.3.1 | m | |
| 28 | NegSem_08020301_GeneralFormatOfImport_030 | Verify that identifiers of component types are not imported together with functions | Clause 8.2.3.1 | m | |
| 29 | NegSem_08020301_GeneralFormatOfImport_031 | Verify that identifiers of parameter types are not imported together with external functions | Clause 8.2.3.1 | m | |
| 30 | NegSem_08020301_GeneralFormatOfImport_032 | Verify that identifiers of return type are not imported together with external functions | Clause 8.2.3.1 | m | |
| 31 | NegSem_08020301_GeneralFormatOfImport_033 | Verify that identifiers of parameter types are not imported together with altsteps | Clause 8.2.3.1 | m | |
| 32 | NegSem_08020301_GeneralFormatOfImport_034 | Verify that identifiers of component types are not imported together with altsteps | Clause 8.2.3.1 | m | |
| 33 | NegSem_08020301_GeneralFormatOfImport_035 | Verify that identifiers of parameter types are not imported together with test cases | Clause 8.2.3.1 | m | |
| 34 | NegSem_08020301_GeneralFormatOfImport_036 | Verify that identifiers of component types (runs on) are not imported together with test cases | Clause 8.2.3.1 | m | |
| 35 | NegSem_08020301_GeneralFormatOfImport_037 | Verify that identifiers of component types (system) are not imported together with test cases | Clause 8.2.3.1 | m | |
| 36 | NegSem_08020301_GeneralFormatOfImport_038 | Verify that definition from inside an imported function cannot be referenced | Clause 8.2.3.1 | m | |
| 37 | NegSem_08020301_GeneralFormatOfImport_039 | Verify that import clause cannot override language tag of imported module | Clause 8.2.3.1 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---|--|---------------------------|--------|---------|
| 38 | NegSem_08020301_GeneralFormatOfImport_040 | Verify that unsupported language concepts cannot be used when language is set by import clause | Clause 8.2.3.1 | m | |
| 39 | NegSyn_08020301_GeneralFormatOfImport_001 | Import statement cannot be used in test case blocks | Clause 8.2.3.1 | m | |
| 40 | NegSyn_08020301_GeneralFormatOfImport_002 | Import statement cannot be used in module control part | Clause 8.2.3.1 | m | |
| 41 | Sem_08020301_GeneralFormatOfImport_003 | Make sure that local definition takes precedence over imported one when their identifiers are equal | Clause 8.2.3.1 | m | |
| 42 | Sem_08020301_GeneralFormatOfImport_004 | Make sure that imported enumeration values take precedence over local definition | Clause 8.2.3.1 | m | |
| 43 | Sem_08020301_GeneralFormatOfImport_005 | Make sure that it is possible to use module prefix for local definitions | Clause 8.2.3.1 | m | |
| 44 | Sem_08020301_GeneralFormatOfImport_006 | Make sure that it is possible to use module prefix for local definitions | Clause 8.2.3.1 | m | |
| 45 | Sem_08020301_GeneralFormatOfImport_007 | Make sure that it is possible to use module prefix for imported definitions | Clause 8.2.3.1 | m | |
| 46 | Sem_08020301_GeneralFormatOfImport_008 | Verify that structured type is imported together with its field names and nested type definitions | Clause 8.2.3.1 | m | |
| 47 | Sem_08020301_GeneralFormatOfImport_009 | Verify that component type is imported together with constant, variable, timer and port names | Clause 8.2.3.1 | m | |
| 48 | Sem_08020301_GeneralFormatOfImport_010 | Verify that signature is imported together with parameter names | Clause 8.2.3.1 | m | |
| 49 | Sem_08020301_GeneralFormatOfImport_011 | Verify that parameterized template is imported together with parameter names | Clause 8.2.3.1 | m | |
| 50 | Sem_08020301_GeneralFormatOfImport_012 | Verify that function is imported together with parameter names | Clause 8.2.3.1 | m | |
| 51 | Sem_08020301_GeneralFormatOfImport_013 | Verify that altstep is imported together with parameter names | Clause 8.2.3.1 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|--|------------------------------|--------|---------|
| 52 | Sem_08020301_GeneralFormatOfImport_014 | Verify that test case is imported together with parameter names | Clause 8.2.3.1 | m | |
| 53 | Sem_08020301_GeneralFormatOfImport_015 | Verify that information about module parameter type is imported together with module parameter | Clause 8.2.3.1 | m | |
| 54 | Sem_08020301_GeneralFormatOfImport_016 | Verify that information about type of constant is imported together with constant | Clause 8.2.3.1 | m | |
| 55 | Sem_08020301_GeneralFormatOfImport_017 | Verify using of import clause with language tag for importing module having identical language tag | Clause 8.2.3.1 | m | |
| 56 | Sem_08020301_GeneralFormatOfImport_018 | Verify using of import clause with language tag for importing module with no language tag | Clause 8.2.3.1 | m | |
| 57 | Syn_08020301_GeneralFormatOfImport_001 | Import all is accepted. | Clause 8.2.3.1 | m | |
| 58 | Syn_08020301_GeneralFormatOfImport_002 | Import of specific types is accepted. | Clause 8.2.3.1 | m | |

A.3.52 Importing single definitions

Table A.51: Importing single definitions

| Item | TC/TP reference | Purpose | Reference in | Status | Support |
|------|---|--|------------------|--------|---------|
| | | | ES 201 873-1 [1] | | |
| 1 | Sem_08020302_ImportingSingleDefinitions_001 | The value of an explicitly imported constant can be read and carries the same value. | Clause 8.2.3.2 | m | |
| 2 | Sem_08020302_ImportingSingleDefinitions_002 | The value of an explicitly imported template can be read and carries the same value. | Clause 8.2.3.2 | m | |

A.3.53 Importing groups

Table A.52: Importing groups

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------------------|---|---------------------------|--------|---------|
| 1 | NegSem_08020303_ImportingGroups_001 | Constants listed as exceptions in imported groups are not accessible. | Clause 8.2.3.3 | m | |
| 2 | Sem_08020303_ImportingGroups_001 | A const defined in a group can be accessed if the group is imported. | Clause 8.2.3.3 | m | |
| 3 | Sem_08020303_ImportingGroups_002 | The IUT properly handles 'except' clause in group import definitions | Clause 8.2.3.3 | m | |
| 4 | Sem_08020303_ImportingGroups_003 | but that it is in fact a shortcut notation for explicit imports. | Clause 8.2.3.3 | m | |

A.3.54 Importing definitions of the same kind

Table A.53: Importing definitions of the same kind

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|--|------------------------------|--------|---------|
| 1 | NegSem_08020301_GeneralFormatOfImport_003 | Transitive import rules are properly handled | Clause 8.2.3.4 | m | |
| 2 | NegSem_08020301_GeneralFormatOfImport_004 | Transitive import rules are properly handled | Clause 8.2.3.4 | m | |
| 3 | Sem_08020301_GeneralFormatOfImport_001 | Transitive imports are properly handled | Clause 8.2.3.4 | m | |
| 4 | Sem_08020301_GeneralFormatOfImport_002 | Enumerated type definitions are automatically imported when needed | Clause 8.2.3.4 | m | |
| 5 | Sem_08020304_ImportingDefinitionsOfTheSameKind_001 | An import of all constants allows access to a sample constant. | Clause 8.2.3.4 | m | |
| 6 | Sem_08020304_ImportingDefinitionsOfTheSameKind_002 | A previously valid const import is not removed by an import covering the same definition with an except. | Clause 8.2.3.4 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|--|---------------------------|--------|---------|
| 7 | Sem_08020304_ImportingDefinitionsOfTheSameKind_003 | A previously valid const import is not removed by a second import statement excluding the same definition. | Clause 8.2.3.4 | m | |

A.3.55 Importing all definitions of a module

Table A.54: Importing all definitions of a module

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|---|---------------------------|--------|---------|
| 1 | NegSem_08020305_ImportingAllDefinitionsOfAModule_001 | The constant is not visible after import with except. | Clause 8.2.3.5 | m | |
| 2 | NegSem_08020305_ImportingAllDefinitionsOfAModule_002 | The constant is not visible after import with except. | Clause 8.2.3.5 | m | |
| 3 | Sem_08020305_ImportingAllDefinitionsOfAModule_001 | The constant is be visible after multiple imports. | Clause 8.2.3.5 | m | |
| 4 | Sem_08020305_ImportingAllDefinitionsOfAModule_002 | The constant is be visible after multiple imports. | Clause 8.2.3.5 | m | |

A.3.56 Import definitions from other TTCN-3 editions and from non-TTCN-3 modules

Table A.55: Import definitions from other TTCN-3 editions and from non-TTCN-3 modules

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|--|------------------------------|--------|---------|
| 1 | Sem_08020306_ImportingDefinitionsFromOtherT3EditionsAndFromNonT3Modules_001 | It is possible to import from previous language versions. | Clause 8.2.3.6 | m | |
| 2 | Syn_08020306_ImportingDefinitionsFromOtherT3Edition sAndFromNonT3Modules_001 | Imports work with language references when importing definitions of the same kinds (in this case constants) is accepted. | Clause 8.2.3.6 | m | |
| 3 | Syn_08020306_ImportingDefinitionsFromOtherT3Edition sAndFromNonT3Modules_002 | Imports work with language references when importing all definitions of another module is accepted. | Clause 8.2.3.6 | m | |

A.3.57 Importing of import statements from TTCN-3 modules

Table A.56: Importing of import statements from TTCN-3 modules

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|---|------------------------------|--------|---------|
| 1 | NegSem_08020307_ImportingOfImportStatementsFromT3Modules_001 | The import of import statements works for import all. | Clause 8.2.3.7 | m | |
| 2 | NegSem_08020307_ImportingOfImportStatementsFromT3Modules_002 | The import of import statements works for import all. | Clause 8.2.3.7 | m | |
| 3 | Sem_08020307_ImportingOfImportStatementsFromT 3Modules_001 | The import of import statements works for import all. | Clause 8.2.3.7 | m | |

A.3.58 Compatibility of language specifications of imports

Table A.57: Compatibility of language specifications of imports

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---|--|------------------------------|--------|---------|
| 1 | NegSem_08020308_CompatibilityOfLanguageSp ecificationsInImports_001 | Imports referring to future TTCN-3 versions are rejected. | Clause 8.2.3.8 | m | |
| 2 | NegSem_08020308_CompatibilityOfLanguageSp ecificationsInImports_002 | Verify that modules with explicit language tag cannot import from newer TTCN-3 versions | Clause 8.2.3.8 | m | |
| 3 | NegSem_08020308_CompatibilityOfLanguageSp ecificationsInImports_003 | Verify that modules with explicit language tag cannot import from newer TTCN-3 versions | Clause 8.2.3.8 | m | |
| 4 | Sem_08020308_CompatibilityOfLanguageSpecificationsInImports_001 | Verify that modules with explicit language tag can import from older TTCN-3 versions | Clause 8.2.3.8 | m | |
| 5 | Sem_08020308_CompatibilityOfLanguageSpecificationsInImports_002 | Verify that modules with explicit language tag can import from older TTCN-3 versions | Clause 8.2.3.8 | m | |

A.3.59 Definition of friend modules

Table A.58: Definition of friend modules

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---|---|------------------------------|--------|---------|
| 1 | NegSem_080204_DefinitionOfFriendModules_001 | Friend visibility works for a sample constant. | Clause 8.2.4 | m | |
| 2 | NegSem_080204_DefinitionOfFriendModules_002 | Private definitions are not made visible by friend declarations (for a constant sample definition). | Clause 8.2.4 | m | |
| 3 | Sem_080204_DefinitionOfFriendModules_001 | Friend visibility works for a sample constant. | Clause 8.2.4 | m | |

A.3.60 Visibility of definitions

Table A.59: Visibility of definitions

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---|--|------------------------------|--------|---------|
| 1 | NegSem_080205_VisibilityOfDefinitions_001 | Private definition (in this case a sample constant) is not visible using a normal import. | Clause 8.2.5 | m | |
| 2 | NegSem_080205_VisibilityOfDefinitions_002 | Private definition (in this case a sample constant) is not visible using an import of a friend module. | Clause 8.2.5 | m | |
| 3 | NegSem_080205_VisibilityOfDefinitions_003 | Friend definition (in this case a sample constant) is not visible using a group import of a non-friend module. | Clause 8.2.5 | m | |
| 4 | NegSem_080205_VisibilityOfDefinitions_004 | Private definition (in this case a sample constant) is not visible using a group import of a non-friend module. | Clause 8.2.5 | m | |
| 5 | NegSem_080205_VisibilityOfDefinitions_005 | Private definition (in this case a sample constant) is not visible using a group import of a friend module. | Clause 8.2.5 | m | |
| 6 | Sem_080205_VisibilityOfDefinitions_001 | Explicitly defined public definitions (in this case a sample constant) are visible when imported. | Clause 8.2.5 | m | |
| 7 | Sem_080205_VisibilityOfDefinitions_002 | Explicitly defined public definitions (in this case a sample constant) are visible when imported by a friend module. | Clause 8.2.5 | m | |
| 8 | Sem_080205_VisibilityOfDefinitions_003 | Explicitly defined public definitions (in this case a sample constant) are visible when imported through a group. | Clause 8.2.5 | m | |
| 9 | Sem_080205_VisibilityOfDefinitions_004 | Explicitly defined public definitions (in this case a sample constant) are visible when imported through a group of a friend module. | Clause 8.2.5 | m | |
| 10 | Sem_080205_VisibilityOfDefinitions_005 | Friend definitions (in this case a sample constant) are visible when imported through a group of a friend module. | Clause 8.2.5 | m | |

A.3.61 Module control part

Table A.60: Module control part

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------------------------|---|------------------------------|--------|---------|
| 1 | NegSyn_0803_ModuleControlPart_001 | There is not more than one control part. | Clause 8.3 | m | |
| 2 | Sem_0803_ModuleControlPart_001 | The verdict returned from a test case to the control-part does not influence the execution of a second test case. The result of the last test case execution corresponds to the overall test verdict. | Clause 8.3 | m | |
| 3 | Syn_0803_ModuleControlPart_001 | The module control is able to accept execute statements. | Clause 8.3 | m | |
| 4 | Syn_0803_ModuleControlPart_002 | The module control part with a few commonly used statements is accepted. | Clause 8.3 | m | |
| 5 | Syn_0803_ModuleControlPart_003 | An empty control part is accepted. | Clause 8.3 | m | |

A.3.62 Port types, component types and test configurations

Table A.61: Port types, component types and test configurations

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_0901_Communication_ports_002 | It is not possible to connect a mapped port | Clause 9 | m | |
| 2 | NegSem_0901_Communication_ports_003 | It is not possible to connect a port with two ports owned by the same component | Clause 9 | m | |
| 3 | Sem_0901_Communication_ports_001 | The IUT correctly handles loopback message | Clause 9 | m | |
| 4 | Sem_0901_Communication_ports_002 | The IUT receives the message sent by mycompA | Clause 9 | m | |
| 5 | Sem_0901_Communication_ports_003 | The IUT receives the message sent by mycompB and mycompC | Clause 9 | m | |
| 6 | Sem_0901_Communication_ports_004 | The IUT correctly handles message exch. between ports | Clause 9 | m | |
| 7 | Sem_0901_Communication_ports_005 | The IUT receives the message sent by mycompA | Clause 9 | m | |
| 8 | NegSem_0902_Communication_ports_001 | The IUT correctly handles the assoc. of two port to the same system interface | Clause 9 | m | |
| 9 | NegSem_0902_Communication_ports_002 | The mycomp is connected to two system interface port. | Clause 9 | m | |
| 10 | NegSem_0902_Communication_ports_003 | The two system interf. port cannot connect | Clause 9 | m | |
| 11 | NegSem_0902_Communication_ports_004 | The a connected port cannot be mapped | Clause 9 | m | |
| 12 | Sem_0902_Communication_ports_001 | The IUT port correctly mapped with a system interface | Clause 9 | m | |
| 13 | Sem_0902_Communication_ports_002 | The IUTs two ports are mapped correctly to system interfaces | Clause 9 | m | |
| 14 | Syn_0902_Communication_ports_001 | Two component can be mapped by one system interface | Clause 9 | m | |

A.3.63 Communication ports

Table A.62: Communication ports

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_0901_Communication_ports_001 | A port owned by a component A cannot be connected with two ports owned by a component B | Clause 9.1 | m | |
| 2 | NegSem_0901_Communication_ports_004 | Verify that it is not possible to map a connected port | Clause 9.1 | m | |
| 3 | NegSem_0901_Communication_ports_005 | Verify that it is not possible to connect a port with two ports owned by the same component | Clause 9.1 | m | |
| 4 | NegSem_0901_Communication_ports_006 | Verify that only 1:1 between component port and TSI are allowed | Clause 9.1 | m | |
| 5 | NegSem_0901_Communication_ports_007 | Verify that a TSI port cannot be mapped to two ports owned by the same component | Clause 9.1 | m | |
| 6 | NegSem_0901_Communication_ports_009 | Verify that connections within the test system interface are not allowed | Clause 9.1 | m | |
| 7 | Sem_0901_Communication_ports_006 | Verify that a port can connect to itself | Clause 9.1 | m | |
| 8 | Sem_0901_Communication_ports_007 | Verify that a port can connect to another port of the same component | Clause 9.1 | m | |
| 9 | Sem_0901_Communication_ports_008 | Verify that more than one component port can mapped to a single system port | Clause 9.1 | m | |

A.3.64 Declaring constants

Table A.63: Declaring constants

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_10_Constants_001 | Assign rnd to constant used in type, not allowed since constant expressions used in types have to be known at compile-time. | Clause 10 | m | |
| 2 | NegSem_10_Constants_002 | A value is assigned only once to a constant | Clause 10 | m | |
| 3 | NegSem_10_Constants_003 | Constant shall not be of port type | Clause 10 | m | |
| 4 | Sem_10_Constants_001 | Assign and read constants | Clause 10 | m | |
| 5 | Sem_10_Constants_002 | Assign and read constants values | Clause 10 | m | |
| 6 | Sem_10_Constants_003 | Single expression and constant values | Clause 10 | m | |
| 7 | Sem_10_Constants_004 | Constant used within invoke function with return | Clause 10 | m | |
| 8 | Sem_10_Constants_005 | Constant used within predefined function | Clause 10 | m | |
| 9 | Sem_10_Constants_006 | Record type used as a constant | Clause 10 | m | |
| 10 | Sem_10_Constants_007 | Record type used as a constant with optional fields | Clause 10 | m | |
| 11 | Sem_10_Constants_008 | Set type used as a constant | Clause 10 | m | |
| 12 | Sem_10_Constants_009 | Set type used as a constant with optional fields | Clause 10 | m | |
| 13 | Syn_10_Constants_001 | Create constants | Clause 10 | m | |
| 14 | Syn_10_Constants_002 | Assign default constants values | Clause 10 | m | |
| 15 | Syn_10_Constants_003 | Assign component constants values | Clause 10 | m | |
| 16 | Syn_10_Constants_004 | Define constants in different scopes | Clause 10 | m | |

A.3.65 Value variables

Table A.64: Value variables

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_1101_ValueVars_001 | Variables should be assigned only by values | Clause 11.1 | m | |
| 2 | NegSem_1101_ValueVars_002 | Partially initialized variables are evaluated correctly. | Clause 11.1 | m | |
| 3 | NegSyn_1101_ValueVars_001 | Define variables in module scope | Clause 11.1 | m | |
| 4 | Sem_1101_ValueVars_001 | Define variables in different scopes | Clause 11.1 | m | |
| 5 | Sem_1101_ValueVars_002 | Define variables in different scopes | Clause 11.1 | m | |
| 6 | Sem_1101_ValueVars_003 | Read and write variables | Clause 11.1 | m | |
| 7 | Sem_1101_ValueVars_004 | Partially initialized variables are evaluated correctly. | Clause 11.1 | m | |
| 8 | Sem_1101_ValueVars_005 | Partially initialized variables are evaluated correctly. | Clause 11.1 | m | |
| 9 | Syn_1101_ValueVars_001 | Define variables in different scopes | Clause 11.1 | m | |

A.3.66 Template variables

Table A.65: Template variables

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_1102_TemplateVars_001 | Template variables should be assigned with unitialized variables | Clause 11.2 | m | |
| 2 | NegSem_1102_TemplateVars_002 | Partially initialized templates are evaluated correctly. | Clause 11.2 | m | |
| 3 | NegSyn_1102_TemplateVars_001 | Define template variables in module scope | Clause 11.2 | m | |
| 4 | Sem_1102_TemplateVars_001 | Define variables in different scopes | Clause 11.2 | m | |
| 5 | Sem_1102_TemplateVars_002 | Partially initialized templates are evaluated correctly. | Clause 11.2 | m | |
| 6 | Sem_1102_TemplateVars_003 | Partially initialized templates are evaluated correctly. | Clause 11.2 | m | |
| 7 | Syn_1102_TemplateVars_001 | Define template variables in different scopes | Clause 11.2 | m | |

A.3.67 Declaring timers

Table A.66: Declaring timers

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_12_toplevel_timer_001 | Ensure timer can not be initialized with negative duration | Clause 12 | m | |
| 2 | NegSem_12_toplevel_timer_002 | Ensure timer in array can not be initialized with negative duration | Clause 12 | m | |
| 3 | NegSem_12_toplevel_timer_003 | Ensure uninitialized timer can not be started | Clause 12 | m | |
| 4 | NegSem_12_toplevel_timer_004 | Ensure uninitialized timer in array can not be started | Clause 12 | m | |
| 5 | NegSem_12_toplevel_timer_005 | Ensure uninitialized timer in array can not be started | Clause 12 | m | |
| 6 | NegSem_12_toplevel_timer_006 | Ensure timer declaration syntax - reject single timer instance initialized with array | Clause 12 | m | |
| 7 | NegSem_12_toplevel_timer_007 | Ensure timer declaration syntax reject array initialization with wrong number of initializers | Clause 12 | m | |
| 8 | NegSem_12_toplevel_timer_008 | Ensure timer declaration syntax reject array of timers initizlized with a single float value | Clause 12 | m | |
| 9 | NegSyn_12_toplevel_timer_001 | Ensure timer can not be used in module control parts when declared in components | Clause 12 | m | |
| 10 | NegSyn_12_toplevel_timer_002 | Ensure timer declaration syntax | Clause 12 | m | |
| 11 | NegSyn_12_toplevel_timer_003 | Ensure timer declaration syntax | Clause 12 | m | |
| 12 | NegSyn_12_toplevel_timer_005 | Ensure timer declaration syntax | Clause 12 | m | |
| 13 | NegSyn_12_toplevel_timer_006 | Ensure timer array declaration syntax | Clause 12 | m | |
| 14 | NegSyn_12_toplevel_timer_007 | Ensure timer array declaration syntax | Clause 12 | m | |
| 15 | Sem_12_toplevel_timer_001 | Ensure timer can be declared in components | Clause 12 | m | |
| 16 | Sem_12_toplevel_timer_002 | Ensure timer can be declared in module control parts | Clause 12 | m | |
| 17 | Sem_12_toplevel_timer_003 | Ensure timer can be declared in altsteps | Clause 12 | m | |
| 18 | Sem_12_toplevel_timer_004 | Ensure timer can be declared in functions | Clause 12 | m | |
| 19 | Sem_12_toplevel_timer_005 | Ensure timer can be declared in test cases | Clause 12 | m | |
| 20 | Sem_12_toplevel_timer_006 | Ensure timer`s elapsed time is plausible | Clause 12 | m | |
| 21 | Sem_12_toplevel_timer_007 | Ensure timer can be declared in components but used in test cases | Clause 12 | m | |
| 22 | Sem_12_toplevel_timer_008 | Ensure timer can be declared in components but used in functions | Clause 12 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---------------------------|--|------------------------------|--------|---------|
| 23 | Sem_12_toplevel_timer_009 | Ensure timer can be declared in components but used in altsteps | Clause 12 | m | |
| 24 | Syn_12_toplevel_timer_001 | Ensure non-initialized timer declaration syntax | Clause 12 | m | |
| 25 | Syn_12_toplevel_timer_002 | Ensure timer array declaration syntax | Clause 12 | m | |
| 26 | Syn_12_toplevel_timer_003 | Ensure definition of a list of timers is allowed as a single declaration | Clause 12 | m | |
| 27 | Syn_12_toplevel_timer_004 | Ensure timer array initialization syntax | Clause 12 | m | |
| 28 | Syn_12_toplevel_timer_005 | Ensure timer declaration with expression | Clause 12 | m | |
| 29 | Syn_12_toplevel_timer_006 | Ensure timer declaration with expression | Clause 12 | m | |
| 30 | Sem_13_declaring_msg_001 | Ensure received messages can be a combination of value and matching mechanism | Clause 12 | m | |

A.3.68 Declaring messages

Table A.67: Declaring messages

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---|-------------------------|------------------------------|--------|---------|
| 1 | Sem_13_toplevel_declaring_msg_various_types_001 | Port with type | Clause 13 | m | |
| | | anytype can send | | | |
| | | and receive | | | |
| | | messages of any | | | |
| | | basic or structured | | | |
| | | type: 'record' type. | | | |
| 2 | Sem_13_toplevel_declaring_msg_various_types_002 | Port with type | Clause 13 | m | |
| | | anytype can send | | | |
| | | and receive | | | |
| | | messages of any | | | |
| | | basic or structured | | | |
| | | type: 'record of' type. | | | |
| 3 | Sem_13_toplevel_declaring_msg_various_types_003 | Port with type | Clause 13 | m | |
| | | anytype can send | | | |
| | | and receive | | | |
| | | messages of any | | | |
| | | basic or structured | | | |
| | | type: 'enum' type. | | | |
| 4 | Sem_13_toplevel_declaring_msg_various_types_004 | Port with type | Clause 13 | m | |
| | | anytype can send | | | |
| | | and receive | | | |
| | | messages of any | | | |
| | | basic or structured | | | |
| | | type: 'set' type. | | | |
| 5 | Sem_13_toplevel_declaring_msg_various_types_005 | Port with type | Clause 13 | m | |
| | | anytype can send | | | |
| | | and receive | | | |
| | | messages of any | | | |
| | | basic or structured | | | |
| | | type: 'union' type. | | | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---|--|------------------------------|--------|---------|
| 6 | Sem_13_toplevel_declaring_msg_various_types_006 | Port with type anytype can send and receive messages of any basic or structured type: 'bitstring' type. | Clause 13 | m | |
| 7 | Sem_13_toplevel_declaring_msg_various_types_007 | Port with type anytype can send and receive messages of any basic or structured type: 'boolean' type. | Clause 13 | m | |
| 8 | Sem_13_toplevel_declaring_msg_various_types_008 | Port with type anytype can send and receive messages of any basic or structured type: 'charstring' type. | Clause 13 | m | |
| 9 | Sem_13_toplevel_declaring_msg_various_types_009 | Port with type anytype can send and receive messages of any basic or structured type: 'float' type. | Clause 13 | m | |
| 10 | Sem_13_toplevel_declaring_msg_various_types_010 | Port with type anytype can send and receive messages of any basic or structured type: 'hexstring' type. | Clause 13 | m | |
| 11 | Sem_13_toplevel_declaring_msg_various_types_011 | Port with type anytype can send and receive messages of any basic or structured type: 'integer' type. | Clause 13 | m | |
| 12 | Sem_13_toplevel_declaring_msg_various_types_012 | Port with type anytype can send and receive messages of any basic or structured type: 'octetstring' type. | Clause 13 | m | |
| 13 | Sem_13_toplevel_declaring_msg_various_types_013 | Port with type anytype can send and receive messages of any basic or structured type: 'universal charstring' type. | Clause 13 | m | |
| 14 | Sem_13_toplevel_declaring_msg_various_types_014 | Port with type anytype can send and receive messages of any basic or structured type: 'verdicttype' type. | Clause 13 | m | |

A.3.69 Declaring procedure signatures

Table A.68: Declaring procedure signatures

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_1400_procedure_signatures_002 | Blocking calls needs response or exception handling | Clause 14 | m | |
| 2 | Sem_1400_procedure_signatures_001 | The IUT calls signature exception | Clause 14 | m | |
| 3 | Sem_1400_procedure_signatures_002 | With noblock signature the IUT can raise exception | Clause 14 | m | |
| 4 | Sem_1400_procedure_signatures_003 | Non blocking signatures can raise exception | Clause 14 | m | |
| 5 | Sem_1400_procedure_signatures_004 | Multiple calls can be send without ack using non-blocking signature | Clause 14 | m | |

A.3.70 Declaring templates

Table A.69: Declaring templates

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_15_TopLevel_001 | A template formed from a union is rejected when the union somehow contains a default type field. | Clause 15 | m | |
| 2 | NegSem_15_TopLevel_002 | A template formed from a union is rejected when the union somehow contains a port type field. | Clause 15 | m | |
| 3 | NegSem_15_TopLevel_003 | A template shall not be of default type. | Clause 15 | m | |
| 4 | NegSem_15_TopLevel_004 | A template shall not be of port type. | Clause 15 | m | |
| 5 | Syn_15_TopLevel_001 | A simple template with a single charstring field is accepted. | Clause 15 | m | |

A.3.71 Declaring message templates

Table A.70: Declaring message templates

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|---|------------------------------|--------|---------|
| 1 | Syn_1501_DeclaringMessageTemplates_001 | A simple record-based message template can be defined. | Clause 15.1 | m | |
| 2 | Syn_1501_DeclaringMessageTemplates_002 | A simple record-based message template with a wildcard ? is accepted. | Clause 15.1 | m | |
| 3 | Syn_1501_DeclaringMessageTemplates_003 | A simple record-based message template can be defined with a pattern in a charstring field. | Clause 15.1 | m | |
| 4 | Syn_1501_DeclaringMessageTemplates_004 | A primitive type template can be defined with a ? wildcard. | Clause 15.1 | m | |
| 5 | Syn_1501_DeclaringMessageTemplates_005 | A primitive type template can be defined with a one-of notation. | Clause 15.1 | m | |
| 6 | Syn_1501_DeclaringMessageTemplates_006 | All port operations are accepted. | Clause 15.1 | m | |

A.3.72 Declaring signature templates

Table A.71: Declaring signature templates

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|---|------------------------------|--------|---------|
| 1 | Sem_1502_DeclaringSignatureTemplates_001 | Test in-line templates for accepting procedure replies. | Clause 15.2 | m | |
| 2 | Sem_1502_DeclaringSignatureTemplates_002 | Test in-line templates for accepting procedure replies. | Clause 15.2 | m | |
| 3 | Sem_1502_DeclaringSignatureTemplates_003 | Test in-line templates for accepting procedure replies. | Clause 15.2 | m | |
| 4 | Syn_1502_DeclaringSignatureTemplates_001 | Signature templates with explicit values are accepted. | Clause 15.2 | m | |
| 5 | Syn_1502_DeclaringSignatureTemplates_002 | Signature templates with wildcards are accepted. | Clause 15.2 | m | |
| 6 | Syn_1502_DeclaringSignatureTemplates_003 | The basic operations call and getreply are accepted. | Clause 15.2 | m | |
| 7 | Syn_1502_DeclaringSignatureTemplates_004 | The raise and catch operations are accepted. | Clause 15.2 | m | |

A.3.73 Global and local templates

Table A.72: Global and local templates

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---|--|------------------------------|--------|---------|
| 1 | NegSem_1503_GlobalAndLocalTemplates_001 | There's an error for re-assignment of a global non-parameterized template | Clause 15.3 | m | |
| 2 | NegSem_1503_GlobalAndLocalTemplates_002 | There's an error for re-assignment of a global non-parameterized template | Clause 15.3 | m | |
| 3 | NegSem_1503_GlobalAndLocalTemplates_003 | There's an error for re-assignment of a global parameterized template | Clause 15.3 | m | |
| 4 | NegSem_1503_GlobalAndLocalTemplates_004 | There's an error for re-assignment of a local parameterized template | Clause 15.3 | m | |
| 5 | NegSyn_1503_GlobalAndLocalTemplates_001 | There's an error if no value is assigned in a global non-parameterized template declaration | Clause 15.3 | m | |
| 6 | NegSyn_1503_GlobalAndLocalTemplates_002 | There's an error if no value is assigned in a local non-parameterized template declaration | Clause 15.3 | m | |
| 7 | NegSyn_1503_GlobalAndLocalTemplates_003 | There's an error if no value is assigned in a global parameterized template declaration | Clause 15.3 | m | |
| 8 | NegSyn_1503_GlobalAndLocalTemplates_004 | There's an error if no value is assigned in a local parameterized template declaration | Clause 15.3 | m | |
| 9 | Sem_1503_GlobalAndLocalTemplates_001 | A template values can be accessed with the dot notation as expected. | Clause 15.3 | m | |
| 10 | Sem_1503_GlobalAndLocalTemplates_002 | A template actual parameter is passed through correctly. | Clause 15.3 | m | |
| 11 | Sem_1503_GlobalAndLocalTemplates_003 | A send operation with actual parameters of a global parameterized template is accepted. | Clause 15.3 | m | |
| 12 | Sem_1503_GlobalAndLocalTemplates_004 | A parameterized local template in a test case is accepted. | Clause 15.3 | m | |
| 13 | Sem_1503_GlobalAndLocalTemplates_005 | A send operation with actual parameters of a global parameterized template is accepted with the actual parameter being a template parameter. | Clause 15.3 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------------|--|------------------------------|--------|---------|
| 14 | Sem_1503_GlobalAndLocalTemplates_006 | A send operation with actual parameters of a global parameterized template is accepted with the actual parameter being an inline template. | Clause 15.3 | m | |
| 15 | Syn_1503_GlobalAndLocalTemplates_001 | A global parameterized template is accepted. | Clause 15.3 | m | |
| 16 | Syn_1503_GlobalAndLocalTemplates_004 | A parameterized local template in the control part is accepted. | Clause 15.3 | m | |
| 17 | Syn_1503_GlobalAndLocalTemplates_005 | A parameterized local template in a function is accepted. | Clause 15.3 | m | |
| 18 | Syn_1503_GlobalAndLocalTemplates_006 | A parameterized local template in an altstep is accepted. | Clause 15.3 | m | |

A.3.74 In-line templates

Table A.73: In-line templates

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------|---|------------------------------|--------|---------|
| 1 | Syn_1504_InlineTemplates_001 | Inline templates are accepted. | Clause 15.4 | m | |
| 2 | Syn_1504_InlineTemplates_002 | Modified parameterized inline templates are accepted. | Clause 15.4 | m | |
| 3 | Syn_1504_InlineTemplates_003 | Modified plain inline templates are accepted. | Clause 15.4 | m | |

A.3.75 Modified templates

Table A.74: Modified templates

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_1505_ModifiedTemplates_001 | A modified template does not refer to itself. | Clause 15.5 | m | |
| 2 | NegSem_1505_ModifiedTemplates_002 | A modified template does not omit possible parameters of the base template. | Clause 15.5 | m | |
| 3 | NegSem_1505_ModifiedTemplates_003 | A modified template does not omit possible parameters introduced in any modification step. | Clause 15.5 | m | |
| 4 | NegSem_1505_ModifiedTemplates_004 | Parameter names in modified templates are the same. | Clause 15.5 | m | |
| 5 | NegSem_1505_ModifiedTemplates_005 | The dash in default parameter values of a modified templates is only accepted when the base template actually has a default value. | Clause 15.5 | m | |
| 6 | NegSem_1505_ModifiedTemplates_006 | The same parameter name is used when modifying the base template. | Clause 15.5 | m | |
| 7 | NegSem_1505_ModifiedTemplates_007 | The same parameter type is used when modifying the base template. | Clause 15.5 | m | |
| 8 | Sem_1505_ModifiedTemplates_001 | The values of plain modified template definitions are as expected. | Clause 15.5 | m | |
| 9 | Sem_1505_ModifiedTemplates_002 | A modified template of a record of type using index notation access works as expected. | Clause 15.5 | m | |
| 10 | Sem_1505_ModifiedTemplates_003 | Default values in formal parameters of modified templates are working as expected. | Clause 15.5 | m | |
| 11 | Sem_1505_ModifiedTemplates_004 | Default values in formal parameters of modified templates are working as expected when the modified template uses the dash for the default value. | Clause 15.5 | m | |
| 12 | Syn_1505_ModifiedTemplates_001 | Plain modified template definitions are accepted. | Clause 15.5 | m | |
| 13 | Syn_1505_ModifiedTemplates_002 | A modified template does not omit possible parameters introduced in any modification step. | Clause 15.5 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------|---|------------------------------|--------|---------|
| 14 | Syn_1505_ModifiedTemplates_003 | The default values in formal parameters of modified templates are accepted. | Clause 15.5 | m | |
| 15 | Syn_1505_ModifiedTemplates_004 | Dash as default parameter values are accepted. | Clause 15.5 | m | |

A.3.76 Referencing individual string elements

Table A.75: Referencing individual string elements

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---|---|------------------------------|--------|---------|
| 1 | NegSem_150601_ReferencingIndividualStringElements_001 | The referencing of individual string elements inside templates or template fields is forbidden. | Clause 15.6.1 | m | |

A.3.77 Referencing record and set fields

Table A.76: Referencing record and set fields

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---|---|------------------------------|--------|---------|
| 1 | NegSem_150602_ReferencingRecordAndSetFields_001 | Fields with omit values on the right-hand side of an assignment are rejected. | Clause 15.6.2 | m | |
| 2 | NegSem_150602_ReferencingRecordAndSetFields_002 | Fields with * values on the right-hand side of an assignment are rejected | Clause 15.6.2 | m | |
| 3 | NegSem_150602_ReferencingRecordAndSetFields_003 | Value lists on the right-hand side of an assignment are not acceped. | Clause 15.6.2 | m | |
| 4 | NegSem_150602_ReferencingRecordAndSetFields_004 | Complement lists on the right-hand side of an assignment are not acceped. | Clause 15.6.2 | m | |
| 5 | NegSem_150602_ReferencingRecordAndSetFields_005 | Referencing a template field with the ifpresent attribute causes a rejection. | Clause 15.6.2 | m | |
| 6 | Sem_150602_ReferencingRecordAndSetFields_001 | ? shall be returned for mandatory subfields and * shall be returned for optional subfields. | Clause 15.6.2 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------|---|---------------------------|--------|---------|
| 7 | | The recurisve anyvalue expansion is performed correctly when new values are assigned. | Clause 15.6.2 | m | |

A.3.78 Referencing record of and set of elements

Table A.77: Referencing record of and set of elements

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---|--|------------------------------|--------|---------|
| 1 | NegSem_150603_ReferencingRecordOfAnd SetElements_001 | Referencing an element within a value list causes an error in the context of record of. | Clause 15.6.3 | m | |
| 2 | NegSem_150603_ReferencingRecordOfAnd SetElements_002 | Access to unitialized fields in the context of record of is rejected. | Clause 15.6.3 | m | |
| 3 | NegSem_150603_ReferencingRecordOfAnd SetElements_003 | Anyvalueornone fields in the context of record of is rejected. | Clause 15.6.3 | m | |
| 4 | NegSem_150603_ReferencingRecordOfAnd SetElements_004 | Complement value lists in the context of record of are rejected. | Clause 15.6.3 | m | |
| 5 | NegSem_150603_ReferencingRecordOfAnd SetElements_005 | Subset in the context of record of are rejected. | Clause 15.6.3 | m | |
| 6 | NegSem_150603_ReferencingRecordOfAnd SetElements_006 | Superset in the context of record of are rejected. | Clause 15.6.3 | m | |
| 7 | NegSem_150603_ReferencingRecordOfAnd SetElements_007 | Access into permutation in record of templates is forbidden. | Clause 15.6.3 | m | |
| 8 | NegSem_150603_ReferencingRecordOfAnd SetElements_008 | Access to record of indexes is forbidden when a previous index entry is a permutation with a *. | Clause 15.6.3 | m | |
| 9 | NegSem_150603_ReferencingRecordOfAnd SetElements_009 | Access to ifpresent fields is not allowed. | Clause 15.6.3 | m | |
| 10 | NegSem_150603_ReferencingRecordOfAnd SetElements_010 | Referencing AnyValueOrNone fields is not allowed. | Clause 15.6.3 | m | |
| 11 | Sem_150603_ReferencingRecordOfAndSetEI ements_001 | Assignment of an anyvalue on the right hand side yields an anyvalue in the context of record of. | Clause 15.6.3 | m | |
| 12 | Sem_150603_ReferencingRecordOfAndSetEl ements_002 | Assignment to a anyvalue in the context of record of is handled correctly. | Clause 15.6.3 | m | |
| 13 | Sem_150603_ReferencingRecordOfAndSetEl ements_003 | Assignment to a anyvalue in the context of record of is handled correctly in two subsequent assignments. | Clause 15.6.3 | m | |
| 14 | Sem_150603_ReferencingRecordOfAndSetEl ements_004 | Assignment to a anyvalue in the context of record of is handled correctly when the first element is changed. | Clause 15.6.3 | m | |
| 15 | Sem_150603_ReferencingRecordOfAndSetEl ements_005 | Access outside permutation fields is allowed and works as expected. | Clause 15.6.3 | m | |

A.3.79 Template restrictions

Table A.78: Template restrictions

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_1508_TemplateRestrictions_001 | Template(omit) is rejected with anyvalue(?). | Clause 15.8 | m | |
| 2 | NegSem_1508_TemplateRestrictions_002 | Template(omit) is rejected with setof template. | Clause 15.8 | m | |
| 3 | NegSem_1508_TemplateRestrictions_003 | Template(omit) is rejected with anyvalueornone(*). | Clause 15.8 | m | |
| 4 | NegSem_1508_TemplateRestrictions_004 | Template(omit) is rejected with value ranges. | Clause 15.8 | m | |
| 5 | NegSem_1508_TemplateRestrictions_005 | Template(omit) is rejected with supersets. | Clause 15.8 | m | |
| 6 | NegSem_1508_TemplateRestrictions_006 | Template(omit) is rejected with subsets. | Clause 15.8 | m | |
| 7 | NegSem_1508_TemplateRestrictions_007 | Template(omit) is rejected with patterns. | Clause 15.8 | m | |
| 8 | NegSem_1508_TemplateRestrictions_008 | Template(omit) is rejected with anyelement inside values. | Clause 15.8 | m | |
| 9 | NegSem_1508_TemplateRestrictions_009 | Template(omit) is rejected with anyelemenornone inside values. | Clause 15.8 | m | |
| 10 | NegSem_1508_TemplateRestrictions_010 | Template(omit) is rejected with permutation inside values. | Clause 15.8 | m | |
| 11 | NegSem_1508_TemplateRestrictions_011 | Template(omit) is rejected with length restrictions. | Clause 15.8 | m | |
| 12 | NegSem_1508_TemplateRestrictions_012 | Template(omit) is rejected with length restrictions. | Clause 15.8 | m | |
| 13 | NegSem_1508_TemplateRestrictions_013 | Template(omit) is rejected with length restrictions. | Clause 15.8 | m | |
| 14 | NegSem_1508_TemplateRestrictions_014 | Template(value) is rejected with anyvalue(?). | Clause 15.8 | m | |
| 15 | NegSem_1508_TemplateRestrictions_015 | Template(value) is rejected with valuelist. | Clause 15.8 | m | |
| 16 | NegSem_1508_TemplateRestrictions_016 | Template(value) is rejected with anyvalueornone(*). | Clause 15.8 | m | |
| 17 | NegSem_1508_TemplateRestrictions_017 | Template(value) is rejected with value ranges. | Clause 15.8 | m | |
| 18 | NegSem_1508_TemplateRestrictions_018 | Template(value) is rejected with supersets. | Clause 15.8 | m | |
| 19 | NegSem_1508_TemplateRestrictions_019 | Template(value) is rejected with supersets. | Clause 15.8 | m | |
| 20 | NegSem_1508_TemplateRestrictions_020 | Template(value) is rejected with patterns. | Clause 15.8 | m | |
| 21 | NegSem_1508_TemplateRestrictions_021 | Template(value) is rejected with anyelement inside values. | Clause 15.8 | m | |
| 22 | NegSem_1508_TemplateRestrictions_022 | Template(value) is rejected with permutation inside values. | Clause 15.8 | m | |
| 23 | NegSem_1508_TemplateRestrictions_023 | Template(value) is rejected with length restrictions. | Clause 15.8 | m | |
| 24 | NegSem_1508_TemplateRestrictions_024 | Template(value) is rejected with length restrictions. | Clause 15.8 | m | |
| 25 | NegSem_1508_TemplateRestrictions_025 | Template(present) refuses omitvalue as a whole. | Clause 15.8 | m | |
| 26 | NegSem_1508_TemplateRestrictions_026 | Template(value) refuses omit as a whole. | Clause 15.8 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------------|---|------------------------------|--------|---------|
| 27 | NegSem_1508_TemplateRestrictions_027 | ensure that symbols created during template expansion are checked against omit template restriction | Clause 15.8 | m | |
| 28 | NegSem_1508_TemplateRestrictions_028 | ensure that symbols created during template expansion are checked against value template restriction | Clause 15.8 | m | |
| 29 | NegSem_1508_TemplateRestrictions_029 | The template(present) with anyvalue(?) can not be assigned to an omit restricted variable template | Clause 15.8 | m | |
| 30 | NegSem_1508_TemplateRestrictions_030 | Unrestricted template with anyvalue(?) can not be assigned to an omit restricted variable template | Clause 15.8 | m | |
| 31 | NegSem_1508_TemplateRestrictions_031 | Template(omit) can not be assigned to a variable template(value) if omit | Clause 15.8 | m | |
| 32 | NegSem_1508_TemplateRestrictions_032 | Template(present) can not be assigned to a template(value) variable if contains anyvalueornone(*) | Clause 15.8 | m | |
| 33 | NegSem_1508_TemplateRestrictions_033 | An unrestricted template can not be assigned to a template(value) variable if contains anyvalueornone(*) | Clause 15.8 | m | |
| 34 | NegSem_1508_TemplateRestrictions_034 | A template with omit restriction can not be assigned to a template(present)variable if omit | Clause 15.8 | m | |
| 35 | NegSem_1508_TemplateRestrictions_035 | An unrestricted template can not be assigned to a template(present)variable if omit | Clause 15.8 | m | |
| 36 | NegSem_1508_TemplateRestrictions_036 | Template(present) can not be parameter to a template(omit) if contains anyvalueornone(*) | Clause 15.8 | m | |
| 37 | NegSem_1508_TemplateRestrictions_037 | Template(present) can not be parameter to template(omit) if contains anyvalue(?) | Clause 15.8 | m | |
| 38 | NegSem_1508_TemplateRestrictions_038 | Template(omit) can not be parameter to template(value) if it is omit | Clause 15.8 | m | |
| 39 | NegSem_1508_TemplateRestrictions_039 | Template(present) can not be parameter to template(value) if it contains anyvalueornone(*) | Clause 15.8 | m | |
| 40 | NegSem_1508_TemplateRestrictions_040 | Unrestricted template can not be parameter to template(value) if it contains anyvalueornone(*) | Clause 15.8 | m | |
| 41 | NegSem_1508_TemplateRestrictions_041 | Template (omit) can not be parameter to template(present) if it contains omit | Clause 15.8 | m | |
| 42 | NegSem_1508_TemplateRestrictions_042 | The an unrestriced template can not be parameter to template(present) if it contains omit | Clause 15.8 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------------|---|------------------------------|--------|---------|
| 43 | NegSem_1508_TemplateRestrictions_049 | Template(present) can not be parameter to a template(omit) | Clause 15.8 | m | |
| 44 | Sem_1508_TemplateRestrictions_001 | A value can be assigned to a template(omit) variable. | Clause 15.8 | m | |
| 45 | Sem_1508_TemplateRestrictions_002 | A template(omit) can be assigned to a template(omit) variable. | Clause 15.8 | m | |
| 46 | Sem_1508_TemplateRestrictions_003 | A templat(value) can be assigned to a template(omit) variable. | Clause 15.8 | m | |
| 47 | Sem_1508_TemplateRestrictions_004 | A value can be assigned to a template(value) variable. | Clause 15.8 | m | |
| 48 | Sem_1508_TemplateRestrictions_005 | A template(value) can be assigned to a template(value) variable. | Clause 15.8 | m | |
| 49 | Sem_1508_TemplateRestrictions_006 | A value can be assigned to a template(present) variable. | Clause 15.8 | m | |
| 50 | Sem_1508_TemplateRestrictions_007 | A template(omit) can be assigned to a template(present) variable. | Clause 15.8 | m | |
| 51 | Sem_1508_TemplateRestrictions_008 | A template(value) can be assigned to a template(present) variable. | Clause 15.8 | m | |
| 52 | Sem_1508_TemplateRestrictions_009 | A template(present) can be assigned to a template(present) variable. | Clause 15.8 | m | |
| 53 | Sem_1508_TemplateRestrictions_010 | A value can be assigned to a template variable. | Clause 15.8 | m | |
| 54 | Sem_1508_TemplateRestrictions_011 | A template(omit) can be assigned to a template variable. | Clause 15.8 | m | |
| 55 | Sem_1508_TemplateRestrictions_012 | A template(value) can be assigned to a template variable. | Clause 15.8 | m | |
| 56 | Sem_1508_TemplateRestrictions_013 | A template(present) can be assigned to a template variable. | Clause 15.8 | m | |
| 57 | Sem_1508_TemplateRestrictions_014 | A template can be assigned to a template variable. | Clause 15.8 | m | |
| 58 | Sem_1508_TemplateRestrictions_015 | A base template can be modified without restrictions. | Clause 15.8 | m | |
| 59 | Sem_1508_TemplateRestrictions_016 | A base template can be modified with template(present) restriction. | Clause 15.8 | m | |
| 60 | Sem_1508_TemplateRestrictions_017 | A base template can be modified with template(omit) restriction. | Clause 15.8 | m | |
| 61 | Sem_1508_TemplateRestrictions_018 | A base template can be modified with template(value) restriction. | Clause 15.8 | m | |
| 62 | Sem_1508_TemplateRestrictions_019 | A template(present) base template can be modified with template(present) restriction. | Clause 15.8 | m | |
| 63 | Sem_1508_TemplateRestrictions_020 | A template(present) base template can be modified with template(value) restriction. | Clause 15.8 | m | |
| 64 | Sem_1508_TemplateRestrictions_021 | A template(omit) base template can be modified with template(omit) restriction. | Clause 15.8 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------------------------|---|------------------------------|--------|---------|
| 65 | Sem_1508_TemplateRestrictions_022 | A template(omit) base template can be modified with template(value) restriction. | Clause 15.8 | m | |
| 66 | Sem_1508_TemplateRestrictions_023 | A template(value) base template can be modified with template(value) restriction. | Clause 15.8 | m | |
| 67 | Sem_1508_TemplateRestrictions_024 | Template(present) base templates are allowed to be modfied to template(omit). | Clause 15.8 | m | |
| 68 | Sem_1508_TemplateRestrictions_025 | Template(omit) base templates are allowed to be modfied to template(present). | Clause 15.8 | m | |
| 69 | Sem_1508_TemplateRestrictions_026 | Template(value) base templates are allowed to be modfied to template(present). | Clause 15.8 | m | |
| 70 | Sem_1508_TemplateRestrictions_027 | Template(value) base templates are allowed to be modfied to template(omit). | Clause 15.8 | m | |
| 71 | Sem_1508_TemplateRestrictions_028 | Template(value) base templates are allowed to be modfied to template. | Clause 15.8 | Э | |
| 72 | Sem_1508_TemplateRestrictions_029 | Template(omit) base templates are allowed to be modfied to template. | Clause 15.8 | m | |
| 73 | Sem_1508_TemplateRestrictions_030 | Template(present) base templates are allowed to be modfied to template. | Clause 15.8 | m | |
| 74 | Sem_1508_TemplateRestrictions_043 | The an unrestriced template can be parameter to template(present) | Clause 15.8 | m | |
| 75 | Sem_1508_TemplateRestrictions_044 | Template (omit) can be parameter to template(present) | Clause 15.8 | m | |
| 76 | Sem_1508_TemplateRestrictions_045 | Unrestricted template can be parameter to template(value) | Clause 15.8 | m | |
| 77 | Sem_1508_TemplateRestrictions_046 | Template(present) can be parameter to template(value) | Clause 15.8 | m | |
| 78 | Sem_1508_TemplateRestrictions_047 | Template(omit) can be parameter to template(value) | Clause 15.8 | m | |
| 79 | Sem_1508_TemplateRestrictions_048 | Template(present) can be parameter to template(omit) | Clause 15.8 | m | |
| 80 | Syn_1508_TemplateRestrictions_001 | Template(omit) is accepted with value omitvalue. | Clause 15.8 | m | |
| 81 | Syn_1508_TemplateRestrictions_002 | Template(omit) is accepted with a concrete value. | Clause 15.8 | m | |
| 82 | Syn_1508_TemplateRestrictions_003 | Template(value) is accepted with a concrete value. | Clause 15.8 | m | |
| 83 | Syn_1508_TemplateRestrictions_004 | Template(present) is accepted with a concrete value. | Clause 15.8 | m | |

A.3.80 Match operation

Table A.79: Match operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_1509_MatchOperation_001 | The match operation refuses two templates as actual parameters. | Clause 15.9 | m | |
| 2 | Sem_1509_MatchOperation_001 | The match operation works as expected on a template with range restriction when the tested value is inside the range. | Clause 15.9 | m | |
| 3 | Sem_1509_MatchOperation_002 | The match operation works as expected on a template with range restriction when the tested value is outside the range. | Clause 15.9 | m | |
| 4 | Sem_1509_MatchOperation_003 | The match operation works correctly on records in the positive case. | Clause 15.9 | m | |
| 5 | Sem_1509_MatchOperation_004 | The match operation works correctly on records in the negative case. | Clause 15.9 | m | |
| 6 | Sem_1509_MatchOperation_005 | The match operation works correctly if the types are incompatible. | Clause 15.9 | m | |
| 7 | Sem_1509_MatchOperation_006 | The match operation works correctly on records with optional fields in the positive case. | Clause 15.9 | m | |
| 8 | Sem_1509_MatchOperation_007 | The match operation works correctly on sets in the positive case. | Clause 15.9 | m | |
| 9 | Sem_1509_MatchOperation_008 | The match operation works correctly on sets in the negative case. | Clause 15.9 | m | |
| 10 | Sem_1509_MatchOperation_009 | The match operation works correctly if the set types are incompatible. | Clause 15.9 | m | |
| 11 | Sem_1509_MatchOperation_010 | The match operation works correctly on sets with optional fields in the positive case. | Clause 15.9 | m | |

A.3.81 Valueof operation

Table A.80: Valueof operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_1510_ValueOfOperation_001 | The valueof function works correctly on omit. | Clause 15.10 | m | |
| 2 | NegSem_1510_ValueOfOperation_002 | The valueof function works correctly on templates with wildcards. | Clause 15.10 | m | |
| 3 | NegSem_1510_ValueOfOperation_003 | The valueof function works correctly on regular value templates. | Clause 15.10 | m | |
| 4 | NegSem_1510_ValueOfOperation_004 | The valueof function works correctly on range templates. | Clause 15.10 | m | |
| 5 | NegSem_1510_ValueOfOperation_005 | check that runtime error occurs if valueof is applied to uninitialized template | Clause 15.10 | m | |
| 6 | NegSem_1510_ValueOfOperation_006 | check that runtime error occurs if valueof is applied to partially initialized template | Clause 15.10 | m | |
| 7 | Sem_1510_ValueOfOperation_001 | The valueof operation works as expected for fully initialized templates. | Clause 15.10 | m | |

A.3.82 Concatenating templates of string and list types

Table A.81: Concatenating templates of string and list types

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---|---|------------------------------|--------|---------|
| 1 | NegSem_1511_ConcatenatingTemplatesOfStringAndListTy pes_001 | Concatenation of octetstring types yields an even number of digits. | Clause 15.11 | m | |
| 2 | NegSem_1511_ConcatenatingTemplatesOfStringAndListTy pes_002 | Concatenation of strings types yields an error if specified ranges are not fixed length. | Clause 15.11 | m | |
| 3 | NegSem_1511_ConcatenatingTemplatesOfStringAndListTy pes_003 | A simple concatenation of non-wildcard octetstring should not yield in a non-even number of hexadecimals. | Clause 15.11 | m | |
| 4 | NegSem_1511_ConcatenatingTemplatesOfStringAndListTy pes_004 | The inline template definitions are correctly concatenated. | Clause 15.11 | m | |
| 5 | NegSem_1511_ConcatenatingTemplatesOfStringAndListTy pes_005 | The inline template definitions are correctly concatenated. | Clause 15.11 | m | |
| 6 | NegSem_1511_ConcatenatingTemplatesOfStringAndListTy pes_006 | Concatenation of octetstring types and ? patterns works as expected. | Clause 15.11 | m | |
| 7 | Sem_1511_ConcatenatingTemplatesOfStringAndListTypes001 | Concatenation of charstring types works as expected (variant 1). | Clause 15.11 | m | |
| 8 | Sem_1511_ConcatenatingTemplatesOfStringAndListTypes _002 | Concatenation of octetstring types works as expected (variant 2). | Clause 15.11 | m | |
| 9 | Sem_1511_ConcatenatingTemplatesOfStringAndListTypes _003 | Concatenation of bitstring types works as expected. | Clause 15.11 | m | |
| 10 | Sem_1511_ConcatenatingTemplatesOfStringAndListTypes004 | Concatenation of octetstring types works as expected (variant 1). | Clause 15.11 | m | |
| 11 | Sem_1511_ConcatenatingTemplatesOfStringAndListTypes _005 | Concatenation of octetstring types works as expected (variant 2). | Clause 15.11 | m | |
| 12 | Sem_1511_ConcatenatingTemplatesOfStringAndListTypes _006 | A concatenation of charstrings with a fixed length AnyValueOrNone be matched. | Clause 15.11 | m | |
| 13 | Sem_1511_ConcatenatingTemplatesOfStringAndListTypes007 | Concatenations of record of charstrings are accepted. | Clause 15.11 | m | |
| 14 | Sem_1511_ConcatenatingTemplatesOfStringAndListTypes _008 | Concatenations of record of charstrings work when parameterized. | Clause 15.11 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|--|------------------------------|--------|---------|
| 15 | Sem_1511_ConcatenatingTemplatesOfStringAndListTypes _009 | Concatenations of set of integers are accepted. | Clause 15.11 | m | |
| 16 | Sem_1511_ConcatenatingTemplatesOfStringAndListTypes _010 | The inline template definitions are correctly concatenated. | Clause 15.11 | m | |
| 17 | Sem_1511_ConcatenatingTemplatesOfStringAndListTypes _011 | Concatenation of octetstring types works as expected (matching patterns in quotation). | Clause 15.11 | m | |
| 18 | Sem_1511_ConcatenatingTemplatesOfStringAndListTypes _012 | Concatenation of octetstring types and ? patterns works as expected. | Clause 15.11 | m | |
| 19 | Sem_1511_ConcatenatingTemplatesOfStringAndListTypes _013 | Concatenation of octetstring types and ? patterns works as expected. | Clause 15.11 | m | |

A.3.83 Functions

Table A.82: Functions

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_1601_toplevel_001 | The IUT correctly handles function definitions | Clause 16.1 | m | |
| 2 | NegSem_1601_toplevel_002 | The IUT correctly handles function definitions | Clause 16.1 | m | |
| 3 | NegSem_1601_toplevel_003 | The IUT correctly handles function definitions | Clause 16.1 | m | |
| 4 | NegSem_1601_toplevel_004 | The IUT correctly handles function definitions | Clause 16.1 | m | |
| 5 | NegSem_1601_toplevel_005 | The IUT correctly handles function definitions | Clause 16.1 | m | |
| 6 | NegSem_1601_toplevel_006 | The IUT correctly handles function definitions | Clause 16.1 | m | |
| 7 | Sem_1601_toplevel_001 | The IUT correctly handles function definitions | Clause 16.1 | m | |
| 8 | Sem_1601_toplevel_002 | The IUT correctly handles function definitions | Clause 16.1 | m | |
| 9 | Sem_1601_toplevel_003 | The IUT correctly handles function definitions | Clause 16.1 | m | |

A.3.84 Invoking functions

Table A.83: Invoking functions

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------------------------|--|------------------------------|--------|---------|
| 1 | Sem_160101_invoking_functions_001 | The IUT correctly handles function invocations | Clause 16.1.1 | m | |

A.3.85 Predefined functions

Table A.84: Predefined functions

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|--|------------------------------|--------|---------|
| 1 | NegSem_160102_predefined_functions_001 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 2 | NegSem_160102_predefined_functions_002 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 3 | NegSem_160102_predefined_functions_003 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 4 | NegSem_160102_predefined_functions_004 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 5 | NegSem_160102_predefined_functions_005 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 6 | NegSem_160102_predefined_functions_006 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 7 | NegSem_160102_predefined_functions_007 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 8 | NegSem_160102_predefined_functions_008 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 9 | NegSem_160102_predefined_functions_009 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 10 | NegSem_160102_predefined_functions_010 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 11 | NegSem_160102_predefined_functions_017 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 12 | NegSem_160102_predefined_functions_018 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|--|---------------------------|--------|---------|
| 13 | NegSem_160102_predefined_functions_019 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 14 | NegSem_160102_predefined_functions_021 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 15 | NegSem_160102_predefined_functions_022 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 16 | NegSem_160102_predefined_functions_023 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 17 | NegSem_160102_predefined_functions_024 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 18 | NegSem_160102_predefined_functions_025 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 19 | NegSem_160102_predefined_functions_026 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 20 | NegSem_160102_predefined_functions_027 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 21 | NegSem_160102_predefined_functions_028 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 22 | NegSem_160102_predefined_functions_029 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 23 | NegSem_160102_predefined_functions_030 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 24 | NegSem_160102_predefined_functions_031 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 25 | NegSem_160102_predefined_functions_032 | An error is generated when the parameter of the encvalue function contains a matching symbol | Clause 16.1.2 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|---|------------------------------|--------|---------|
| 26 | NegSem_160102_predefined_functions_033 | An error is detected when the parameter of the encvalue function contains an unitialized value | Clause 16.1.2 | m | |
| 27 | NegSem_160102_predefined_functions_034 | An error is detected when the parameter of the encvalue function contains a partially initialized value | Clause 16.1.2 | m | |
| 28 | NegSem_160102_predefined_functions_035 | An error is detected when the first parameter of the decvalue function contains an uninitialized value | Clause 16.1.2 | m | |
| 29 | Sem_160102_predefined_functions_001 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 30 | Sem_160102_predefined_functions_002 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 31 | Sem_160102_predefined_functions_003 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 32 | Sem_160102_predefined_functions_004 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 33 | Sem_160102_predefined_functions_005 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 34 | Sem_160102_predefined_functions_006 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 35 | Sem_160102_predefined_functions_007 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 36 | Sem_160102_predefined_functions_008 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 37 | Sem_160102_predefined_functions_009 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------------------|--|------------------------------|--------|---------|
| 38 | Sem_160102_predefined_functions_010 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 39 | Sem_160102_predefined_functions_011 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 40 | Sem_160102_predefined_functions_012 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 41 | Sem_160102_predefined_functions_013 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 42 | Sem_160102_predefined_functions_014 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 43 | Sem_160102_predefined_functions_015 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 44 | Sem_160102_predefined_functions_016 | Predefined encvalue function works correctly (as specified in Annex C.5.1) | Clause 16.1.2 | m | |
| 45 | Sem_160102_predefined_functions_017 | Predefined decvalue function performs full decoding correctly | Clause 16.1.2 | m | |
| 46 | Sem_160102_predefined_functions_018 | Predefined decvalue function performs decoding if there are more bits than needed | Clause 16.1.2 | m | |
| 47 | Sem_160102_predefined_functions_019 | Predefined decvalue function works properly in case of decoding failure | Clause 16.1.2 | m | |
| 48 | Sem_160102_predefined_functions_020 | Predefined decvalue function works properly in case of not enough bits | Clause 16.1.2 | m | |
| 49 | Sem_160102_predefined_functions_021 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 50 | Sem_160102_predefined_functions_022 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 51 | Sem_160102_predefined_functions_023 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------------------|---|------------------------------|--------|---------|
| 52 | Sem_160102_predefined_functions_024 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 53 | Sem_160102_predefined_functions_025 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C.33) | Clause 16.1.2 | m | |

A.3.86 External functions

Table A.85: External functions

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_160103_external_functions_001 | The IUT recognizes external functions | Clause 16.1.3 | m | |
| 2 | NegSem_160103_external_functions_002 | Port parameters cannot be passed to external functions as inout parameters | Clause 16.1.3 | m | |
| 3 | NegSem_160103_external_functions_003 | Timer parameters cannot be passed to external functions as inout parameters | Clause 16.1.3 | m | |
| 4 | Sem_160103_external_functions_001 | The IUT recognizes external functions | Clause 16.1.3 | m | |
| 5 | Sem_160103_external_functions_002 | The IUT recognizes external functions | Clause 16.1.3 | m | |

A.3.87 Invoking function from specific places

Table A.86: Invoking function from specific places

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|--|---------------------------|--------|---------|
| 1 | NegSem_160104_invoking_functions_from_s pecific_places_001 | The IUT recognizes restrictions described in section 16.1.4. STF409 assumes that the list given in section 16.1.4 describes mandatory restrictions | Clause 16.1.4 | m | |
| 2 | NegSem_160104_invoking_functions_from_s pecific_places_002 | The IUT recognizes restrictions described in section 16.1.4. STF409 assumes that the list given in section 16.1.4 describes mandatory restrictions | Clause 16.1.4 | m | |
| 3 | NegSem_160104_invoking_functions_from_s pecific_places_003 | The IUT recognizes restrictions described in section 16.1.4. STF409 assumes that the list given in section 16.1.4 describes mandatory restrictions | Clause 16.1.4 | m | |
| 4 | NegSem_160104_invoking_functions_from_s pecific_places_004 | The IUT recognizes restrictions described in section 16.1.4. STF409 assumes that the list given in section 16.1.4 describes mandatory restrictions | Clause 16.1.4 | m | |

A.3.88 Altsteps

Table A.87: Altsteps

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_1602_toplevel_001 | The IUT recognizes altstep definitions and correctly evaluates them | Clause 16.2 | m | |
| 2 | NegSem_1602_toplevel_002 | The IUT recognizes altstep definitions and correctly evaluates them | Clause 16.2 | m | |
| 3 | NegSem_1602_toplevel_003 | The IUT recognizes altstep definitions and correctly evaluates them | Clause 16.2 | m | |
| 4 | NegSem_1602_toplevel_004 | The IUT recognizes altstep definitions and correctly evaluates them | Clause 16.2 | m | |
| 5 | NegSem_1602_toplevel_005 | The IUT recognizes altstep definitions and correctly evaluates them | Clause 16.2 | m | |
| 6 | NegSem_1602_toplevel_006 | The IUT recognizes altstep definitions and correctly evaluates them | Clause 16.2 | m | |
| 7 | NegSyn_1602_toplevel_001 | The IUT recognizes altstep definitions and correctly evaluates them | Clause 16.2 | m | |
| 8 | Sem_1602_toplevel_001 | The IUT recognizes altstep definitions and correctly evaluates them | Clause 16.2 | m | |

A.3.89 Invoking altsteps

Table A.88: Invoking altsteps

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------------------|---|---------------------------|--------|---------|
| 1 | NegSem_160201_invoking_altsteps_001 | The IUT recognizes altstep definitions and correctly evaluates them | Clause 16.2.1 | m | |
| 2 | Sem_160201_invoking_altsteps_001 | The IUT recognizes altstep definitions and correctly evaluates them | Clause 16.2.1 | m | |
| 3 | Sem_160201_invoking_altsteps_002 | The IUT recognizes altstep definitions and correctly evaluates them | Clause 16.2.1 | m | |
| 4 | Sem_160201_invoking_altsteps_003 | Altsteps are correctly handled for dynamically mapped ports | Clause 16.2.1 | m | |
| 5 | Sem_160201_invoking_altsteps_004 | Altsteps are correctly handled for dynamically mapped ports | Clause 16.2.1 | m | |

A.3.90 Test cases

Table A.89: Test cases

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_1603_testcases_001 | The IUT properly evaluates invocation of testcases | Clause 16.3 | m | |
| 2 | NegSem_1603_testcases_002 | The IUT properly evaluates invocation of testcases | Clause 16.3 | m | |
| 3 | Syn_1603_testcases_001 | The IUT properly evaluates invocation of testcases with system clause | Clause 16.3 | m | |

A.3.91 Assignments

Table A.90: Assignments

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_1901_assignments_001 | The IUT properly evaluates assignment statements | Clause 19.1 | m | |
| 2 | NegSem_1901_assignments_002 | The IUT properly evaluates assignment statements | Clause 19.1 | m | |
| 3 | NegSem_1901_assignments_003 | The IUT properly evaluates assignment statements | Clause 19.1 | m | |
| 4 | NegSyn_1901_assignments_001 | The IUT properly evaluates assignment statements | Clause 19.1 | m | |
| 5 | Sem_1901_assignments_001 | The IUT properly evaluates assignment statements | Clause 19.1 | m | |

A.3.92 The if-else statement

Table A.91: The if-else statement

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------------------------|---|------------------------------|--------|---------|
| 1 | NegSyn_1902_if_else_statement_001 | If statement requires curly brackets for the body | Clause 19.2 | m | |
| 2 | Sem_1902_if_else_statement_001 | The IUT properly evaluates if-else statements | Clause 19.2 | m | |
| 3 | Sem_1902_if_else_statement_002 | The IUT properly evaluates if-else statements | Clause 19.2 | m | |

A.3.93 The select case statement

Table A.92: The select case statement

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------------|---|------------------------------|--------|---------|
| 1 | Sem_1903_select_case_statement_001 | The IUT properly evaluates select-case statements | Clause 19.3 | m | |
| 2 | Sem_1903_select_case_statement_002 | The IUT properly evaluates select-case statements | Clause 19.3 | m | |
| 3 | Sem_1903_select_case_statement_003 | The IUT properly evaluates select-case statements | Clause 19.3 | m | |
| 4 | Sem_1903_select_case_statement_004 | The IUT properly evaluates select-case statements | Clause 19.3 | m | |

A.3.94 The for statement

Table A.93: The for statement

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_1904_for_statement_001 | The IUT properly evaluates for statements | Clause 19.4 | m | |
| 2 | Sem_1904_for_statement_001 | The IUT properly evaluates for statements | Clause 19.4 | m | |
| 3 | Sem_1904_for_statement_002 | The IUT properly evaluates for statements | Clause 19.4 | m | |
| 4 | Sem_1904_for_statement_003 | The IUT properly evaluates for statements | Clause 19.4 | m | |

A.3.95 The while statement

Table A.94: The while statement

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---------------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_1905_while_statement_001 | The IUT properly evaluates while statements | Clause 19.5 | m | |
| 2 | Sem_1905_while_statement_001 | The IUT properly evaluates while statements | Clause 19.5 | m | |
| 3 | Sem_1905_while_statement_002 | The IUT properly evaluates while statements | Clause 19.5 | m | |
| 4 | Sem_1905_while_statement_003 | The IUT properly evaluates while statements | Clause 19.5 | m | |

A.3.96 The do-while statement

Table A.95: The do-while statement

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_1906_do_while_statement_001 | The IUT properly evaluates do-while statements | Clause 19.6 | m | |
| 2 | Sem_1906_do_while_statement_001 | The IUT properly evaluates do-while statements | Clause 19.6 | m | |
| 3 | Sem_1906_do_while_statement_002 | The IUT properly evaluates do-while statements | Clause 19.6 | m | |
| 4 | Sem_1906_do_while_statement_003 | The IUT properly evaluates do-while statements | Clause 19.6 | m | |

A.3.97 The label statement

Table A.96: The label statement

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_1907_label_statement_001 | The IUT correctly handles label naming uniqueness. | Clause 19.7 | m | |
| 2 | NegSyn_1907_label_statement_001 | The IUT correctly handles label syntax. | Clause 19.7 | m | |
| 3 | NegSyn_1907_label_statement_002 | The IUT correctly handles label syntax. | Clause 19.7 | m | |
| 4 | Syn_1907_label_statement_001 | The IUT correctly handles label syntax. | Clause 19.7 | m | |

A.3.98 The goto statement

Table A.97: The goto statement

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_1908_goto_statement_001 | The IUT correctly handles goto statements. | Clause 19.8 | m | |
| 2 | NegSem_1908_goto_statement_002 | The IUT correctly handles goto statements. | Clause 19.8 | m | |
| 3 | NegSem_1908_goto_statement_003 | The IUT correctly handles goto statements. | Clause 19.8 | m | |
| 4 | Sem_1908_goto_statement_001 | The IUT correctly handles goto statements. | Clause 19.8 | m | |
| 5 | Sem_1908_goto_statement_002 | The IUT correctly handles goto statements. | Clause 19.8 | m | |
| 6 | Sem_1908_goto_statement_003 | The IUT correctly handles goto statements. | Clause 19.8 | m | |

A.3.99 The stop execution statement

Table A.98: The stop execution statement

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------|--|------------------------------|--------|---------|
| 1 | | The IUT correctly handles stop statements. | Clause 19.9 | m | |
| 2 | | The IUT correctly handles stop statements. | Clause 19.9 | m | |

A.3.100The return statement

Table A.99: The return statement

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_1910_return_statement_001 | The IUT correctly handles return statements. | Clause 19.10 | m | |
| 2 | Sem_1910_return_statement_001 | The IUT correctly handles return statements. | Clause 19.10 | m | |
| 3 | Sem_1910_return_statement_002 | The IUT correctly handles return statements. | Clause 19.10 | m | |

A.3.101 The log statement

Table A.100: The log statement

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------------|---|---------------------------|--------|---------|
| 1 | NegSem_1911_log_statement_001 | The IUT properly evaluates log statements | Clause 19.11 | m | |
| 2 | Sem_1911_log_statement_001 | The IUT properly evaluates log statements | Clause 19.11 | m | |
| 3 | Sem_1911_log_statement_002 | The IUT properly evaluates log statements | Clause 19.11 | m | |
| 4 | Sem_1911_log_statement_003 | The IUT properly evaluates log statements | Clause 19.11 | m | |
| 5 | Sem_1911_log_statement_004 | The IUT properly evaluates log statements | Clause 19.11 | m | |
| 6 | Sem_1911_log_statement_005 | The IUT properly evaluates log statements | Clause 19.11 | m | |

A.3.102The continue statement

Table A.101: The continue statement

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------|--------------------|------------------------------|--------|---------|
| 1 | | evaluates continue | Clause 19.13 | m | |
| | | statements | | | |

A.3.103 Statement and operations for alternative behaviours

Table A.102: Statement and operations for alternative behaviours

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---------------------|--|------------------------------|--------|---------|
| 1 | Syn_20_TopLevel_001 | Alt-statements are accepted. | Clause 20 | m | |
| 2 | Syn_20_TopLevel_002 | Repeat in an alt-statement is accepted. | Clause 20 | m | |
| 3 | Syn_20_TopLevel_003 | The interleave-statement is accepted. | Clause 20 | m | |
| 4 | Syn_20_TopLevel_004 | Defaults and the activate statement is accepted. | Clause 20 | m | |
| 5 | Syn_20_TopLevel_005 | Defaults and the activate statement is accepted. | Clause 20 | m | |

A.3.104The alt statement

Table A.103: The alt statement

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------|---|------------------------------|--------|---------|
| 1 | Sem_2002_TheAltStatement_001 | The alt-statement works as expected (loopback case). | Clause 20.2 | m | |
| 2 | Sem_2002_TheAltStatement_002 | The alt-statement with a guard works as expected (loopback case). | Clause 20.2 | m | |
| 3 | Sem_2002_TheAltStatement_003 | The alt-statement processes the alternatives in order (loopback case). | Clause 20.2 | m | |
| 4 | Sem_2002_TheAltStatement_004 | Activated defaults are processed in the reverse order (loopback case). | Clause 20.2 | m | |
| 5 | Sem_2002_TheAltStatement_005 | The else branch is executed when nothing else matched (loopback case). | Clause 20.2 | m | |
| 6 | Sem_2002_TheAltStatement_006 | An altstep invocation works as expected (loopback case). | Clause 20.2 | m | |
| 7 | Sem_2002_TheAltStatement_007 | An altstep invocation works as expected and that the optional statement block is executed after the altstep staatement block (loopback case). | Clause 20.2 | m | |
| 8 | Sem_2002_TheAltStatement_008 | The done-block in an alt- statement is triggered as expected (loopback case). | Clause 20.2 | m | |
| 9 | Sem_2002_TheAltStatement_009 | The killed-block in an alt- statement is triggered as expected when the component is killed (loopback case). | Clause 20.2 | m | |
| 10 | Sem_2002_TheAltStatement_010 | The timeout branch is taken as expected (loopback case). | Clause 20.2 | m | |
| 11 | Sem_2002_TheAltStatement_011 | The behavior continues after the alt-statement (loopback case). | Clause 20.2 | m | |
| 12 | Sem_2002_TheAltStatement_012 | Alt statements are correctly handled for dynamically mapped ports | Clause 20.2 | m | |
| 13 | Sem_2002_TheAltStatement_013 | Alt statements are correctly handled for dynamically mapped ports | Clause 20.2 | m | |

A.3.105The repeat statement

Table A.104: The repeat statement

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_2003_the_repeat_statement_001 | The IUT correctly processes repeat statements | Clause 20.3 | m | |
| 2 | Sem_2003_the_repeat_statement_001 | The IUT correctly processes repeat statements | Clause 20.3 | m | |

A.3.106The interleave statement

Table A.105: The interleave statement

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_2004_InterleaveStatement_001 | Validate that interleave statements are properly handled. | Clause 20.4 | m | |
| 2 | NegSyn_2004_InterleaveStatement_001 | Validate that interleave statements are properly handled. | Clause 20.4 | m | |
| 3 | NegSyn_2004_InterleaveStatement_002 | Validate that interleave statements are properly handled. | Clause 20.4 | m | |
| 4 | Sem_2004_InterleaveStatement_001 | Validate that interleave statements are properly handled. | Clause 20.4 | m | |
| 5 | Sem_2004_InterleaveStatement_002 | Validate that interleave statements are properly handled. | Clause 20.4 | m | |
| 6 | Syn_2004_InterleaveStatement_001 | Validate that interleave statements are properly handled. | Clause 20.4 | m | |

A.3.107 The default mechanism

Table A.106: The default mechanism

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|--|------------------------------|--------|---------|
| 1 | NegSem_200501_the_default_mechanism_001 | verify unsuccessful default termination | Clause 20.5.1 | m | |
| 2 | Sem_200501_the_default_mechanism_001 | verify that activated default is invoked | Clause 20.5.1 | m | |
| 3 | Sem_200501_the_default_mechanism_002 | verify that default are processed in interleave | Clause 20.5.1 | m | |
| 4 | Sem_200501_the_default_mechanism_003 | verify than default are processed in interleave | Clause 20.5.1 | m | |
| 5 | Sem_200501_the_default_mechanism_004 | verify that default processing order is correct | Clause 20.5.1 | m | |
| 6 | Sem_200501_the_default_mechanism_005 | verify that default processing order is correct | Clause 20.5.1 | m | |
| 7 | Sem_200501_the_default_mechanism_006 | verify repeat command behaviour in invoked default | Clause 20.5.1 | m | |
| 8 | Sem_200501_the_default_mechanism_007 | verify break command behaviour in invoked default | Clause 20.5.1 | m | |
| 9 | Sem_200501_the_default_mechanism_008 | verify stop command behaviour in invoked default | Clause 20.5.1 | m | |
| 10 | NegSem_200503_the_deactivate_operation_001 | verify that deactivate deactivated default causes error | Clause 20.5.1 | m | |
| 11 | NegSem_200503_the_deactivate_operation_002 | verify that deactivate uninitialized default causes error | Clause 20.5.1 | m | |
| 12 | NegSem_200503_the_deactivate_operation_003 | verify that error is generated when deactivated reference is on incorrect type | Clause 20.5.1 | m | |
| 13 | Sem_200503_the_deactivate_operation_001 | verify that deactivate removes default from list of defaults | Clause 20.5.1 | m | |
| 14 | Sem_200503_the_deactivate_operation_002 | verify that deactivate removes default from list of defaults | Clause 20.5.1 | m | |
| 15 | Sem_200503_the_deactivate_operation_003 | verify that deactivate without parameter clear list of defaults | Clause 20.5.1 | m | |
| 16 | Sem_200503_the_deactivate_operation_004 | verify that deactivate null works correctly | Clause 20.5.1 | m | |

A.3.108 The activate operation

Table A.107: The activate operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|--|------------------------------|--------|---------|
| 1 | NegSem_200502_the_activate_operation_001 | verify error is generated if activated alstep runs on incompatible component | Clause 20.5.2 | m | |
| 2 | NegSem_200502_the_activate_operation_002 | verify error is generated when passing local timer | Clause 20.5.2 | m | |
| 3 | NegSem_200502_the_activate_operation_003 | verify error is generated when activating altstep with out parameters | Clause 20.5.2 | m | |
| 4 | NegSem_200502_the_activate_operation_004 | verify error is generated when activating altstep with inout parameters | Clause 20.5.2 | m | |
| 5 | NegSem_200502_the_activate_operation_005 | verify error is generated when activating function | Clause 20.5.2 | m | |
| 6 | Sem_200502_the_activate_operation_001 | verify that activate operation can be used as standalone statement | Clause 20.5.2 | m | |
| 7 | Sem_200502_the_activate_operation_002 | verify that parameters are passed at activation time | Clause 20.5.2 | m | |
| 8 | Sem_200502_the_activate_operation_003 | verify that passing component timer to activated altstep | Clause 20.5.2 | m | |
| 9 | Sem_200502_the_activate_operation_004 | verify passing port parameter to activated altstep | Clause 20.5.2 | m | |

A.3.109 Connection operations

Table A.108: Connection operations

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------|--|---------------------------|--------|---------|
| 1 | | Verify that connect operation cannot contain a system port | Clause 21.1 | m | |
| 2 | 5 – – . – | Verify that map operation fails if both operands are component ports | Clause 21.1 | m | |

A.3.110The connect and map operations

Table A.109: The connect and map operations

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|---|------------------------------|--------|---------|
| 1 | NegSem_210101_connect_and_map_operations_001 | Verify that connect operation rejects ports with incompatible message type lists | Clause 21.1.1 | m | |
| 2 | NegSem_210101_connect_and_map_operations_002 | Verify that connect operation rejects ports with only partially compatible message type lists | Clause 21.1.1 | m | |
| 3 | NegSem_210101_connect_and_map_operations_003 | Verify that map operation rejects ports with incompatible message type lists | Clause 21.1.1 | m | |
| 4 | NegSem_210101_connect_and_map_operations_004 | Verify that connect operation rejects ports with only partially compatible message type lists | Clause 21.1.1 | m | |
| 5 | NegSem_210101_connect_and_map_operations_005 | Verify that map parameters cannot be used when not declared in the port type | Clause 21.1.1 | m | |
| 6 | NegSem_210101_connect_and_map_operations_006 | Verify that type incompatibility in map parameters is detected | Clause 21.1.1 | m | |
| 7 | NegSem_210101_connect_and_map_operations_007 | Verify that parameter count mismatch in map param clause is detected | Clause 21.1.1 | m | |
| 8 | NegSem_210101_connect_operation_001 | The IUT does not allows two output port connection | Clause 21.1.1 | m | |
| 9 | NegSem_210101_connect_operation_002 | The IUT does not allow connecting incompatible ports | Clause 21.1.1 | m | |
| 10 | NegSem_210101_map_operation_001 | IUT cannot map input port with output port | Clause 21.1.1 | m | |
| 11 | NegSem_210101_map_operation_002 | IUT cannot map input port with output port | Clause 21.1.1 | m | |
| 12 | Sem_210101_connect_and_map_operations_001 | Connect operation accepts ports with compatible message type list containing several types | Clause 21.1.1 | m | |
| 13 | Sem_210101_connect_and_map_operations_002 | Connect operation accepts ports where outlist of the 1st port is a subset of inlist of the 2nd port | Clause 21.1.1 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---|--|------------------------------|--------|---------|
| 14 | Sem_210101_connect_and_map_operations_003 | Connect operation accepts ports where outlist of the 2nd port is a subset of inlist of the 1st port | Clause 21.1.1 | m | |
| 15 | Sem_210101_connect_and_map_operations_004 | Connect operation accepts ports where outlist of both ports are subsets of inlist of the counterpart ports | Clause 21.1.1 | m | |
| 16 | Sem_210101_connect_and_map_operations_005 | Map operation accepts ports with compatible message type list containing several types | Clause 21.1.1 | m | |
| 17 | Sem_210101_connect_and_map_operations_006 | Map operation accepts ports with compatible message type list containing several types | Clause 21.1.1 | m | |
| 18 | Sem_210101_connect_and_map_operations_007 | Map operation accepts ports with compatible message type list containing several types | Clause 21.1.1 | m | |
| 19 | Sem_210101_connect_and_map_operations_008 | Map operation accepts ports with compatible message type list containing several types | Clause 21.1.1 | m | |
| 20 | Sem_210101_connect_and_map_operations_009 | Map param statements are allowed in testcase block | Clause 21.1.1 | m | |
| 21 | Sem_210101_connect_and_map_operations_010 | Verify that the param part can be skipped in map operations | Clause 21.1.1 | m | |
| 22 | Sem_210102_disconnect_operation_002 | Disconnect has no effect on components that are not connected | Clause 21.1.1 | m | |

A.3.111 The disconnect and unmap operations

Table A.110: The disconnect and unmap operations

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---|--|------------------------------|--------|---------|
| 1 | NegSem_210102_disconnect_and_unmap_operations_001 | Verify that unmap operation cannot contain a system port reference | Clause 21.1.2 | m | |
| 2 | NegSem_210102_disconnect_and_unmap_operations_002 | Verify that disconnecting all ports of all components is not possible in PTC | Clause 21.1.2 | m | |
| 3 | NegSem_210102_disconnect_and_unmap_operations_003 | Verify that unmapping all ports of all components is not possible in PTC | Clause 21.1.2 | m | |
| 4 | NegSem_210102_disconnect_and_unmap_operations_004 | Verify that unmap parameters cannot be used when not declared in the port type | Clause 21.1.2 | m | |
| 5 | NegSem_210102_disconnect_and_unmap_operations_005 | Verify that type incompatibility in unmap parameters is detected | Clause 21.1.2 | m | |
| 6 | NegSem_210102_disconnect_and_unmap_operations_006 | Verify that parameter count mismatch in unmap param clause is detected | Clause 21.1.2 | m | |
| 7 | NegSem_210102_disconnect_and_unmap_operations_017 | Verify that the param clause cannot be used when unmap contains no system port reference | Clause 21.1.2 | m | |
| 8 | NegSem_210102_disconnect_operation_001 | Mapped port cannot disconnect | Clause 21.1.2 | m | |
| 9 | Sem_210102_disconnect_and_unmap_operations_001 | Disconnect operation with two parameters works correctly | Clause 21.1.2 | m | |
| 10 | Sem_210102_disconnect_and_unmap_operations_002 | Disconnect operation with one parameter works correctly | Clause 21.1.2 | m | |
| 11 | Sem_210102_disconnect_and_unmap_operations_003 | Disconnect operation with all ports of a component works correctly | Clause 21.1.2 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|---|------------------------------|--------|---------|
| 12 | Sem_210102_disconnect_and_unmap_operations_004 | Disconnect operation with no argument works correctly | Clause 21.1.2 | m | |
| 13 | Sem_210102_disconnect_and_unmap_operations_005 | Unmap operation with one system port as a parameter works correctly | Clause 21.1.2 | m | |
| 14 | Sem_210102_disconnect_and_unmap_operations_006 | Unmap operation with one component port as a parameter works correctly | Clause 21.1.2 | m | |
| 15 | Sem_210102_disconnect_and_unmap_operations_007 | Unmap operation with all ports of a component works correctly | Clause 21.1.2 | m | |
| 16 | Sem_210102_disconnect_and_unmap_operations_008 | Unmap operation with no parameters works correctly | Clause 21.1.2 | m | |
| 17 | Sem_210102_disconnect_and_unmap_operations_009 | All component notation works correctly in unmap operations | Clause 21.1.2 | m | |
| 18 | Sem_210102_disconnect_and_unmap_operations_010 | Verify that no error is generated when unmapping ports that are not mapped | Clause 21.1.2 | m | |
| 19 | Sem_210102_disconnect_and_unmap_operations_011 | Unmap param statements are allowed in testcase block | Clause 21.1.2 | m | |
| 20 | Sem_210102_disconnect_and_unmap_operations_012 | Verify that the param part can be skipped in unmap operations | Clause 21.1.2 | m | |
| 21 | Sem_210102_disconnect_and_unmap_operations_013 | Verify that the param clause can be used when unmap contains a single system port parameter | Clause 21.1.2 | m | |
| 22 | Sem_210102_disconnect_operation_001 | All component notation work correctly in disconnect operation | Clause 21.1.2 | m | |
| 23 | Sem_210102_unmap_operation_001 | Umnap operation of a system and component port works correctly | Clause 21.1.2 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------|--|------------------------------|--------|---------|
| 24 | | Umnap operation of a component and system port works correctly | Clause 21.1.2 | m | |

A.3.112Test case operations

Table A.111: Test case operations

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------------|--------------------|------------------------------|--------|---------|
| 1 | NegSem_2102_testcase_stop_001 | Stopping test case | Clause 21.2 | m | |

A.3.113The create operation

Table A.112: The create operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_210301_CreateOperation_001 | Named components on hosts are accepted | Clause 21.3.1 | m | |
| 2 | NegSem_210301_CreateOperation_002 | Named components on hosts are accepted | Clause 21.3.1 | m | |
| 3 | NegSem_210301_CreateOperation_003 | Named components on hosts are accepted | Clause 21.3.1 | m | |
| 4 | Sem_210301_CreateOperation_001 | Unnamed components can be created | Clause 21.3.1 | m | |
| 5 | Sem_210301_CreateOperation_002 | Named components can be created | Clause 21.3.1 | m | |
| 6 | Sem_210301_CreateOperation_003 | Unnamed alive components on hosts can be created | Clause 21.3.1 | m | |
| 7 | Sem_210301_CreateOperation_004 | Named alive components can be created | Clause 21.3.1 | m | |
| 8 | Syn_210301_CreateOperation_001 | Named components on hosts are accepted | Clause 21.3.1 | m | |

A.3.114The start test component operation

Table A.113: The start test component operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|---|---------------------------|--------|---------|
| 1 | NegSem_210302_Start_test_component_001 | Non-alive ptc cannot start again | Clause 21.3.2 | m | |
| 2 | NegSem_210302_Start_test_component_002 | Only component type is allowed for ptc declaration | Clause 21.3.2 | m | |
| 3 | Sem_210302_Start_test_component_001 | Alive test components are allowed to start another function | Clause 21.3.2 | m | |

A.3.115The stop test behaviour operation

Table A.114: The stop test behaviour operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------------|---|------------------------------|--------|---------|
| 1 | | Component.stop causes the stopping of the target component. | Clause 21.3.3 | m | |
| 2 | Sem_210303_Stop_test_component_002 | Self.stop stops current component | Clause 21.3.3 | m | |

A.3.116The kill test component operation

Table A.115: The kill test component operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------------|--|------------------------------|--------|---------|
| 1 | Sem_210304_kill_test_component_001 | Kill operator stops a non alive test components. | Clause 21.3.4 | m | |
| 2 | Sem_210304_kill_test_component_002 | All component kill stop all ptcs | Clause 21.3.4 | m | |
| 3 | Sem_210304_kill_test_component_003 | Kill operator stops only non alive test components | Clause 21.3.4 | m | |
| 4 | Sem_210304_kill_test_component_004 | Self kill called in a functions stops non alive test comp. | Clause 21.3.4 | m | |

A.3.117The alive operation

Table A.116: The alive operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------|---|------------------------------|--------|---------|
| 1 | Sem_210305_alive_operation_001 | Testing alive operator with an alive test component | Clause 21.3.5 | m | |
| 2 | Sem_210305_alive_operation_002 | Test all component alive operator with alive test components | Clause 21.3.5 | m | |
| 3 | Sem_210305_alive_operation_003 | Alive operator gives a correct boolean result | Clause 21.3.5 | m | |
| 4 | Sem_210305_alive_operation_004 | Test any component alive operator with multiple test components | Clause 21.3.5 | m | |

A.3.118The running operation

Table A.117: The running operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------------|---|------------------------------|--------|---------|
| 1 | Sem_210306_running_operation_001 | Check that running operator provides information about test components. | Clause 21.3.6 | m | |
| 2 | Sem_210306_running_operation_002 | Any component with running can check the status of the test components | Clause 21.3.6 | m | |

A.3.119The done operation

Table A.118: The done operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_210307_done_operation_001 | Done operator can be used only for ptcs. | Clause 21.3.7 | m | |
| 2 | Sem_210307_done_operation_001 | All component with done can check that at least one test component is not done | Clause 21.3.7 | m | |

A.3.120 The killed operation

Table A.119: The killed operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_210308_killed_operation_001 | Killed operator is only valid for ptcs. | Clause 21.3.8 | m | |
| 2 | Sem_210308_killed_operation_001 | All component kill can be checked with killed operator | Clause 21.3.8 | m | |
| 3 | Sem_210308_killed_operation_002 | check that any component and killed operator can check that at least one test component is running or not | Clause 21.3.8 | m | |
| 4 | Sem_210308_killed_operation_003 | The alive keyword is properly evaluated | Clause 21.3.8 | m | |

A.3.121 The send operation

Table A.120: The send operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_220201_SendOperation_001 | The IUT correctly handles message sending operations | Clause 22.2.1 | m | |
| 2 | NegSem_220201_SendOperation_002 | The IUT correctly handles message sending operations | Clause 22.2.1 | m | |
| 3 | NegSem_220201_SendOperation_003 | The IUT correctly handles message sending operations | Clause 22.2.1 | m | |
| 4 | NegSem_220201_SendOperation_004 | The IUT correctly handles message sending operations | Clause 22.2.1 | m | |
| 5 | Sem_220201_SendOperation_001 | The IUT correctly handles message sending operations | Clause 22.2.1 | m | |
| 6 | Sem_220201_SendOperation_002 | The IUT correctly handles message sending operations | Clause 22.2.1 | m | |
| 7 | Sem_220201_SendOperation_003 | The IUT correctly handles message sending operations | Clause 22.2.1 | m | |
| 8 | Sem_220201_SendOperation_004 | The IUT correctly handles message sending operations | Clause 22.2.1 | m | |

A.3.122The receive operation

Table A.121: The receive operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_220202_ReceiveOperation_001 | The IUT correctly handles message receiving operations | Clause 22.2.2 | m | |
| 2 | Sem_220202_ReceiveOperation_001 | The IUT correctly handles message receiving operations | Clause 22.2.2 | m | |
| 3 | Sem_220202_ReceiveOperation_002 | The IUT correctly handles message receiving operations | Clause 22.2.2 | m | |
| 4 | Sem_220202_ReceiveOperation_003 | The IUT correctly handles message receiving operations | Clause 22.2.2 | m | |
| 5 | Sem_220202_ReceiveOperation_004 | The IUT correctly handles message receiving operations | Clause 22.2.2 | m | |
| 6 | Sem_220202_ReceiveOperation_005 | The IUT correctly handles message receiving operations | Clause 22.2.2 | m | |

A.3.123The trigger operation

Table A.122: The trigger operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_220203_TriggerOperation_001 | The IUT correctly handles message trigger operations | Clause 22.2.3 | m | |
| 2 | Sem_220203_TriggerOperation_001 | The IUT correctly handles message trigger operations | Clause 22.2.3 | m | |
| 3 | Sem_220203_TriggerOperation_002 | The IUT correctly handles message trigger operations | Clause 22.2.3 | m | |
| 4 | Sem_220203_TriggerOperation_003 | The IUT correctly handles message trigger operations | Clause 22.2.3 | m | |
| 5 | Sem_220203_TriggerOperation_004 | The IUT correctly handles message trigger operations | Clause 22.2.3 | m | |
| 6 | Sem_220203_TriggerOperation_005 | The IUT correctly handles message trigger operations | Clause 22.2.3 | m | |

A.3.124The call operation

Table A.123: The call operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_1400_procedure_signatures_001 | Nonblocking signature contains in parameter | Clause 22.3.1 | m | |
| 2 | NegSem_220301_CallOperation_001 | The IUT correctly handles procedure call operations | Clause 22.3.1 | m | |
| 3 | NegSem_220301_CallOperation_002 | The IUT correctly procedure calls | Clause 22.3.1 | m | |
| 4 | Sem_220301_CallOperation_001 | The IUT correctly handles procedure call operations | Clause 22.3.1 | m | |
| 5 | Sem_220301_CallOperation_002 | The IUT correctly handles procedure call operations | Clause 22.3.1 | m | |
| 6 | Sem_220301_CallOperation_003 | The IUT correctly handles non-blocking procedure call | Clause 22.3.1 | m | |
| 7 | Sem_220301_CallOperation_004 | The IUT correctly handles multiple client calls to the same server | Clause 22.3.1 | m | |
| 8 | Sem_220301_CallOperation_005 | The IUT correctly handles broadcast/multicast procedure call | Clause 22.3.1 | m | |
| 9 | Sem_220301_CallOperation_006 | The IUT correctly handles broadcast/multicast procedure call | Clause 22.3.1 | m | |
| 10 | Sem_220301_CallOperation_007 | The IUT correctly handles blocking procedure call | Clause 22.3.1 | m | |

A.3.125 The getcall operation

Table A.124: The getcall operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_220302_GetcallOperation_001 | Getcall operations are only used on procedure based ports | Clause 22.3.2 | m | |
| 2 | NegSem_220302_GetcallOperation_002 | Getcall operation does not allow value assignment | Clause 22.3.2 | m | |
| 3 | NegSem_220302_GetcallOperation_003 | Getcall for any call does not allow param assignment | Clause 22.3.2 | m | |
| 4 | Sem_220302_GetcallOperation_001 | Getcall operations remove only matching procedure from the queue | Clause 22.3.2 | m | |
| 5 | Sem_220302_GetcallOperation_002 | Getcall operations remove the matching procedure from the queue | Clause 22.3.2 | m | |
| 6 | Sem_220302_GetcallOperation_003 | The getcall operation can be correctly restricted to a certain client | Clause 22.3.2 | m | |
| 7 | Sem_220302_GetcallOperation_004 | The getcall operation can be correctly restricted to a certain client | Clause 22.3.2 | m | |
| 8 | Sem_220302_GetcallOperation_005 | Getcall operations work with any port attribute | Clause 22.3.2 | m | |

A.3.126The reply operation

Table A.125: The reply operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_220303_ReplyOperation_001 | Reply operations are only used on procedure based ports | Clause 22.3.3 | m | |
| 2 | Sem_220303_ReplyOperation_001 | The IUT correctly handles reply to multiple clients on the same server | Clause 22.3.3 | m | |
| 3 | Sem_220303_ReplyOperation_002 | The IUT correctly handles reply to multiple clients on the same server | Clause 22.3.3 | m | |

A.3.127The check operation

Table A.126: The check operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------------|---|------------------------------|--------|---------|
| 1 | Sem_2204_the_check_operation_001 | Verify that port.check(receive) works correctly inside alt | Clause 22.4 | m | |
| 2 | Sem_2204_the_check_operation_002 | Verify that port.check(receive) with assignment works correctly inside alt | Clause 22.4 | m | |
| 3 | Sem_2204_the_check_operation_003 | Verify that port.check(receive) works correctly as standalone statement | Clause 22.4 | m | |
| 4 | Sem_2204_the_check_operation_004 | Verify that port.check(receive) with assignment works correctly as standalone statement | Clause 22.4 | m | |
| 5 | Sem_2204_the_check_operation_005 | Verify that any port.check(receive) works correctly inside alt | Clause 22.4 | m | |
| 6 | Sem_2204_the_check_operation_006 | Verify that any port.check(receive) with assignment works correctly inside alt | Clause 22.4 | m | |
| 7 | Sem_2204_the_check_operation_007 | Verify that any port.check(receive) works correctly as standalone statement | Clause 22.4 | m | |
| 8 | Sem_2204_the_check_operation_008 | Verify that any port.check(receive) with assignment works correctly as standalone statement | Clause 22.4 | m | |
| 9 | Sem_2204_the_check_operation_009 | Verify behaviour of port.check(receive) in case of unsuccessful match inside alt | Clause 22.4 | m | |
| 10 | Sem_2204_the_check_operation_010 | Verify behaviour of port.check(receive) with assignment in case of unsuccessful match inside alt | Clause 22.4 | m | |
| 11 | Sem_2204_the_check_operation_011 | Verify port.check(receive) behaviour in case of unsuccessful match in standalone statement | Clause 22.4 | m | |
| 12 | Sem_2204_the_check_operation_012 | Verify behaviour of port.check(receive) with assignment in case of unsuccessful match in standalone statement | Clause 22.4 | m | |
| 13 | Sem_2204_the_check_operation_013 | Verify any port.check(receive) behaviour in case of unsuccessful match inside alt | Clause 22.4 | m | |
| 14 | Sem_2204_the_check_operation_014 | Verify behaviour of any port.check(receive) with assignment in case of unsuccessful match inside alt | Clause 22.4 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------------|---|------------------------------|--------|---------|
| 15 | Sem_2204_the_check_operation_015 | Verify any port.check(receive) behaviour in case of unsuccessful match in standalone statement | Clause 22.4 | m | |
| 16 | Sem_2204_the_check_operation_016 | Verify behaviour of any port.check(receive) with assignment in case of unsuccessful match in standalone statement | Clause 22.4 | m | |
| 17 | Sem_2204_the_check_operation_017 | Verify behaviour of port.check(receive) in case of successful match inside alt | Clause 22.4 | m | |
| 18 | Sem_2204_the_check_operation_018 | Verify behation of port.check(receive) with assignment in case of successful match inside alt | Clause 22.4 | m | |
| 19 | Sem_2204_the_check_operation_019 | Verify behaviour of port.check(receive) in case of successful match in standalone statement | Clause 22.4 | m | |
| 20 | Sem_2204_the_check_operation_020 | Verify behaviour of port.check(receive) with assignment in case of successful match works correctly as standalone statement | Clause 22.4 | m | |
| 21 | Sem_2204_the_check_operation_021 | Verify behaviour of any port.check(receive) in case of successful match inside alt | Clause 22.4 | m | |
| 22 | Sem_2204_the_check_operation_022 | Verify behation of any port.check(receive) with assignment in case of successful match inside alt | Clause 22.4 | m | |
| 23 | Sem_2204_the_check_operation_023 | Verify behaviour of any port.check(receive) in case of successful match in standalone statement | Clause 22.4 | m | |
| 24 | Sem_2204_the_check_operation_024 | Verify behaviour of any port.check(receive) with assignment in case of successful match works correctly as standalone statement | Clause 22.4 | m | |
| 25 | Sem_2204_the_check_operation_025 | Verify that port.check(getcall) works correctly inside alt | Clause 22.4 | m | |
| 26 | Sem_2204_the_check_operation_026 | Verify that port.check(getcall) with assignment works correctly inside alt | Clause 22.4 | m | |
| 27 | Sem_2204_the_check_operation_027 | Verify that port.check(getcall) works correctly as standalone statement | Clause 22.4 | m | |
| 28 | Sem_2204_the_check_operation_028 | Verify that port.check(getcall) with assignment works correctly as standalone statement | Clause 22.4 | m | |
| 29 | Sem_2204_the_check_operation_029 | Verify that any port.check(getcall) works correctly inside alt | Clause 22.4 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------------|---|------------------------------|--------|---------|
| 30 | Sem_2204_the_check_operation_030 | Verify that any port.check(getcall) with assignment works correctly inside alt | Clause 22.4 | m | |
| 31 | Sem_2204_the_check_operation_031 | Verify that any port.check(getcall) works correctly as standalone statement | Clause 22.4 | m | |
| 32 | Sem_2204_the_check_operation_032 | Verify that any port.check(getcall) with assignment works correctly as standalone statement | Clause 22.4 | m | |
| 33 | Sem_2204_the_check_operation_033 | Verify behaviour of port.check(getcall) in case of unsuccessful match inside alt | Clause 22.4 | m | |
| 34 | Sem_2204_the_check_operation_034 | Verify behaviour of port.check(getcall) with assignment in case of unsuccessful match inside alt | Clause 22.4 | m | |
| 35 | Sem_2204_the_check_operation_035 | Verify behaviour of port.check(getcall) in case of unsuccessful match in standalone statement | Clause 22.4 | m | |
| 36 | Sem_2204_the_check_operation_036 | Verify behaviour of port.check(getcall) with assignment in case of unsuccessful match in standalone statement | Clause 22.4 | m | |
| 37 | Sem_2204_the_check_operation_037 | Verify behaviour of any port.check(getcall) in case of unsuccessful match inside alt | Clause 22.4 | m | |
| 38 | Sem_2204_the_check_operation_038 | Verify behaviour of any port.check(getcall) with assignment in case of unsuccessful match inside alt | Clause 22.4 | m | |
| 39 | Sem_2204_the_check_operation_039 | Verify behaviour of any port.check(getcall) in case of unsuccessful match in standalone statement | Clause 22.4 | m | |
| 40 | Sem_2204_the_check_operation_040 | Verify behaviour of any port.check(getcall) with assignment in case of unsuccessful match in standalone statement | Clause 22.4 | m | |
| 41 | Sem_2204_the_check_operation_041 | Verify behaviour of port.check(getcall) in case of successful match inside alt | Clause 22.4 | m | |
| 42 | Sem_2204_the_check_operation_042 | Verify behaviour of port.check(getcall) with assignment in case of successful match inside alt | Clause 22.4 | m | |
| 43 | Sem_2204_the_check_operation_043 | Verify behaviour of port.check(getcall) in case of successful match in standalone statement | Clause 22.4 | m | |
| 44 | Sem_2204_the_check_operation_044 | Verify behaviour of port.check(getcall) with assignment in case of successful match in standalone statement | Clause 22.4 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------------|---|---------------------------|--------|---------|
| 45 | Sem_2204_the_check_operation_045 | Verify behaviour of any port.check(getcall) in case of successful match inside alt | Clause 22.4 | m | |
| 46 | Sem_2204_the_check_operation_046 | Verify behaviour of any port.check(getcall) with assignment in case of successful match inside alt | Clause 22.4 | m | |
| 47 | Sem_2204_the_check_operation_047 | Verify behaviour of any port.check(getcall) in case of successful match in standalone statement | Clause 22.4 | m | |
| 48 | Sem_2204_the_check_operation_048 | Verify behaviour of any port.check(getcall) with assignment in case of successful match in standalone statement | Clause 22.4 | m | |
| 49 | Sem_2204_the_check_operation_049 | Verify that port.check(getreply) works correctly inside alt | Clause 22.4 | m | |
| 50 | Sem_2204_the_check_operation_050 | Verify that port.check(getreply) with assignment works correctly inside alt | Clause 22.4 | m | |
| 51 | Sem_2204_the_check_operation_051 | Verify that port.check(getreply) works correctly as standalone statement | Clause 22.4 | m | |
| 52 | Sem_2204_the_check_operation_052 | Verify that port.check(getreply) with assignment works correctly as standalone statement | Clause 22.4 | m | |
| 53 | Sem_2204_the_check_operation_053 | Verify that any port.check(getreply) works correctly inside alt | Clause 22.4 | m | |
| 54 | Sem_2204_the_check_operation_054 | Verify that any port.check(getreply) with assignment works correctly inside alt | Clause 22.4 | m | |
| 55 | Sem_2204_the_check_operation_055 | Verify that any port.check(getreply) works correctly as standalone statement | Clause 22.4 | m | |
| 56 | Sem_2204_the_check_operation_056 | Verify that any port.check(getreply) with assignment works correctly as standalone statement | Clause 22.4 | m | |
| 57 | Sem_2204_the_check_operation_057 | Verify behaviour of port.check(getreply) in case of unsuccessful match inside alt | Clause 22.4 | m | |
| 58 | Sem_2204_the_check_operation_058 | Verify behaviour of port.check(getreply) with assignment in case of unsuccessful match inside alt | Clause 22.4 | m | |
| 59 | Sem_2204_the_check_operation_059 | Verify behaviour of port.check(getreply) in case of unsuccessful match in standalone statement | Clause 22.4 | m | |
| 60 | Sem_2204_the_check_operation_060 | Verify behaviour of port.check(getreply) with assignment in case of unsuccessful match in standalone statement | Clause 22.4 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------------|--|------------------------------|--------|---------|
| 61 | Sem_2204_the_check_operation_061 | Verify behaviour of any port.check(getreply) in case of unsuccessful match inside alt | Clause 22.4 | m | |
| 62 | Sem_2204_the_check_operation_062 | Verify behaviour of any port.check(getreply) with assignment in case of unsuccessful match inside alt | Clause 22.4 | m | |
| 63 | Sem_2204_the_check_operation_063 | Verify behaviour of any port.check(getreply) in case of unsuccessful match in standalone statement | Clause 22.4 | m | |
| 64 | Sem_2204_the_check_operation_064 | Verify behaviour of any port.check(getreply) with assignment in case of unsuccessful match in standalone statement | Clause 22.4 | m | |
| 65 | Sem_2204_the_check_operation_065 | Verify behaviour of port.check(getreply) in case of successful match inside alt | Clause 22.4 | m | |
| 66 | Sem_2204_the_check_operation_066 | Verify behaviour of port.check(getreply) with assignment in case of successful match inside alt | Clause 22.4 | m | |
| 67 | Sem_2204_the_check_operation_067 | Verify behaviour of port.check(getreply) in case of successful match in standalone statement | Clause 22.4 | m | |
| 68 | Sem_2204_the_check_operation_068 | Verify behaviour of port.check(getreply) with assignment in case of successful match in standalone statement | Clause 22.4 | m | |
| 69 | Sem_2204_the_check_operation_069 | Verify behaviour of any port.check(getreply) in case of successful match inside alt | Clause 22.4 | m | |
| 70 | Sem_2204_the_check_operation_070 | Verify behaviour of any port.check(getreply) with assignment in case of successful match inside alt | Clause 22.4 | m | |
| 71 | Sem_2204_the_check_operation_071 | Verify behaviour of any port.check(getreply) in case of successful match in standalone statement | Clause 22.4 | m | |
| 72 | Sem_2204_the_check_operation_072 | Verify behaviour of any port.check(getreply) with assignment in case of successful match in standalone statement | Clause 22.4 | m | |
| 73 | Sem_2204_the_check_operation_073 | Verify that port.check(catch) works correctly inside alt | Clause 22.4 | m | |
| 74 | Sem_2204_the_check_operation_074 | Verify that port.check(catch) with assignment works correctly inside alt | Clause 22.4 | m | |
| 75 | Sem_2204_the_check_operation_075 | Verify that port.check(catch) works correctly as standalone statement | Clause 22.4 | m | |
| 76 | Sem_2204_the_check_operation_076 | Verify that port.check(catch) with assignment works correctly as standalone statement | Clause 22.4 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------------|---|------------------------------|--------|---------|
| 77 | Sem_2204_the_check_operation_077 | Verify that any port.check(catch) works correctly inside alt | Clause 22.4 | m | |
| 78 | Sem_2204_the_check_operation_078 | Verify that any port.check(catch) with assignment works correctly inside alt | Clause 22.4 | m | |
| 79 | Sem_2204_the_check_operation_079 | Verify that any port.check(catch) works correctly as standalone statement | Clause 22.4 | m | |
| 80 | Sem_2204_the_check_operation_080 | Verify that any port.check(catch) with assignment works correctly as standalone statement | Clause 22.4 | m | |
| 81 | Sem_2204_the_check_operation_081 | Verify behaviour of port.check(catch) in case of unsuccessful match inside alt | Clause 22.4 | m | |
| 82 | Sem_2204_the_check_operation_082 | Verify behaviour of port.check(catch) with assignment in case of unsuccessful match inside alt | Clause 22.4 | m | |
| 83 | Sem_2204_the_check_operation_083 | Verify behaviour of port.check(catch) in case of unsuccessful match in standalone statement | Clause 22.4 | m | |
| 84 | Sem_2204_the_check_operation_084 | Verify behaviour of port.check(catch) with assignment in case of unsuccessful match in standalone statement | Clause 22.4 | m | |
| 85 | Sem_2204_the_check_operation_085 | Verify behaviour of any port.check(catch) in case of unsuccessful match inside alt | Clause 22.4 | m | |
| 86 | Sem_2204_the_check_operation_086 | Verify behaviour of any port.check(catch) with assignment in case of unsuccessful match inside alt | Clause 22.4 | m | |
| 87 | Sem_2204_the_check_operation_087 | Verify behaviour of any port.check(catch) in case of unsuccessful match in standalone statement | Clause 22.4 | m | |
| 88 | Sem_2204_the_check_operation_088 | Verify behaviour of any port.check(catch) with assignment in case of unsuccessful match in standalone statement | Clause 22.4 | m | |
| 89 | Sem_2204_the_check_operation_089 | Verify behaviour of port.check(catch) in case of successful match inside alt | Clause 22.4 | m | |
| 90 | Sem_2204_the_check_operation_090 | Verify behaviour of port.check(catch) with assignment in case of successful match inside alt | Clause 22.4 | m | |
| 91 | Sem_2204_the_check_operation_091 | Verify behaviour of port.check(catch) in case of successful match in standalone statement | Clause 22.4 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------------|---|------------------------------|--------|---------|
| 92 | Sem_2204_the_check_operation_092 | Verify behaviour of port.check(catch) with assignment in case of successful match in standalone statement | Clause 22.4 | m | |
| 93 | Sem_2204_the_check_operation_093 | Verify behaviour of any port.check(catch) in case of successful match inside alt | Clause 22.4 | m | |
| 94 | Sem_2204_the_check_operation_094 | Verify behaviour of any port.check(catch) with assignment in case of successful match inside alt | Clause 22.4 | m | |
| 95 | Sem_2204_the_check_operation_095 | Verify behaviour of any port.check(catch) in case of successful match in standalone statement | Clause 22.4 | m | |
| 96 | Sem_2204_the_check_operation_096 | Verify behaviour of any port.check(catch) with assignment in case of successful match in standalone statement | Clause 22.4 | m | |
| 97 | Sem_2204_the_check_operation_097 | Verify that port.check works correctly inside alt | Clause 22.4 | m | |
| 98 | Sem_2204_the_check_operation_098 | Verify that port.check with assignment works correctly inside alt | Clause 22.4 | m | |
| 99 | Sem_2204_the_check_operation_099 | Verify that port.check works correctly as standalone statement | Clause 22.4 | m | |
| 100 | Sem_2204_the_check_operation_100 | Verify that port.check with assignment works correctly as standalone statement | Clause 22.4 | m | |
| 101 | Sem_2204_the_check_operation_101 | Verify that any port.check works correctly inside alt | Clause 22.4 | m | |
| 102 | Sem_2204_the_check_operation_102 | Verify that any port.check with assignment works correctly inside alt | Clause 22.4 | m | |
| 103 | Sem_2204_the_check_operation_103 | Verify that any port.check works correctly as standalone statement | Clause 22.4 | m | |
| 104 | Sem_2204_the_check_operation_104 | Verify that any port.check(catch) with assignment works correctly as standalone statement | Clause 22.4 | m | |
| 105 | Sem_2204_the_check_operation_105 | Verify behaviour of port.check in case of unsuccessful match inside alt | Clause 22.4 | m | |
| 106 | Sem_2204_the_check_operation_106 | Verify behaviour of port.check with assignment in case of unsuccessful match inside alt | Clause 22.4 | m | |
| 107 | Sem_2204_the_check_operation_107 | Verify behaviour of port.check in case of unsuccessful match in standalone statement | Clause 22.4 | m | |
| 108 | Sem_2204_the_check_operation_108 | Verify behaviour of port.check with assignment in case of unsuccessful match in standalone statement | Clause 22.4 | m | |
| 109 | Sem_2204_the_check_operation_109 | Verify any port.check behaviour in case of unsuccessful match inside alt | Clause 22.4 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------------|--|------------------------------|--------|---------|
| 110 | Sem_2204_the_check_operation_110 | Verify behaviour of any port.check with assignment in case of unsuccessful match inside alt | Clause 22.4 | m | |
| 111 | Sem_2204_the_check_operation_111 | Verify behaviour of any port.check in case of unsuccessful match in standalone statement | Clause 22.4 | m | |
| 112 | Sem_2204_the_check_operation_112 | Verify behaviour of any port.check with assignment in case of unsuccessful match in standalone statement | Clause 22.4 | m | |
| 113 | Sem_2204_the_check_operation_113 | Verify behaviour of port.check in case of successful match inside alt | Clause 22.4 | m | |
| 114 | Sem_2204_the_check_operation_114 | Verify behaviour of port.check with assignment in case of successful match inside alt | Clause 22.4 | m | |
| 115 | Sem_2204_the_check_operation_115 | Verify behaviour of port.check in case of successful match in standalone statement | Clause 22.4 | m | |
| 116 | Sem_2204_the_check_operation_116 | Verify behaviour of port.check with assignment in case of successful match in standalone statement | Clause 22.4 | m | |
| 117 | Sem_2204_the_check_operation_117 | Verify behaviour of any port.check in case of successful match inside alt | Clause 22.4 | m | |
| 118 | Sem_2204_the_check_operation_118 | Verify behaviour of any port.check with assignment in case of successful match inside alt | Clause 22.4 | m | |
| 119 | Sem_2204_the_check_operation_119 | Verify behaviour of any port.check in case of successful match in standalone statement | Clause 22.4 | m | |
| 120 | Sem_2204_the_check_operation_120 | Verify behaviour of any port.check with assignment in case of successful match in standalone statement | Clause 22.4 | m | |

A.3.128 Timer operations

Table A.127: Timer operations

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_2302_timer_start_001 | Ensure infinity is not allowed | Clause 23 | m | |
| 2 | NegSem_2302_timer_start_002 | Ensure not_a_number is not allowed | Clause 23 | m | |
| 3 | NegSem_2302_timer_start_003 | Ensure negative value is not allowed | Clause 23 | m | |
| 4 | NegSem_2302_timer_start_004 | Ensure negative infinity is not allowed | Clause 23 | m | |
| 5 | NegSyn_2302_timer_start_001 | Ensure timer start syntax | Clause 23 | m | |
| 6 | NegSyn_2302_timer_start_002 | Ensure timer start syntax | Clause 23 | m | |
| 7 | NegSyn_2302_timer_start_003 | Ensure timer start syntax | Clause 23 | m | |
| 8 | NegSyn_2302_timer_start_004 | Ensure timer start syntax | Clause 23 | m | |
| 9 | NegSyn_2302_timer_start_005 | Ensure timer start syntax | Clause 23 | m | |
| 10 | NegSyn_2302_timer_start_006 | Ensure timer start syntax | Clause 23 | m | |
| 11 | NegSyn_2302_timer_start_007 | Ensure timer start syntax | Clause 23 | m | |
| 12 | NegSyn_2302_timer_start_008 | Ensure timer start syntax | Clause 23 | m | |
| 13 | NegSyn_2302_timer_start_009 | Ensure timer start syntax | Clause 23 | m | |
| 14 | NegSyn_2302_timer_start_010 | Ensure timer start syntax | Clause 23 | m | |
| 15 | NegSyn_2302_timer_start_011 | Ensure timer start syntax | Clause 23 | m | |
| 16 | NegSyn_2302_timer_start_012 | Ensure timer start syntax | Clause 23 | m | |
| 17 | NegSyn_2302_timer_start_013 | Ensure timer start syntax | Clause 23 | m | |
| 18 | Sem_2302_timer_start_001 | Ensure timer runs from zero to stated value | Clause 23 | m | |
| 19 | Sem_2302_timer_start_002 | Ensure timer can be restarted | Clause 23 | m | |
| 20 | Sem_2302_timer_start_003 | Ensure timer default value can be modified by start value | Clause 23 | m | |
| 21 | Sem_2302_timer_start_004 | Ensure timer with value 0.0 expires immediately | Clause 23 | m | |
| 22 | NegSem_23_toplevel_001 | Ensure timer operations are not allowed outside of module control, test case, function, altstep | Clause 23 | m | |
| 23 | NegSem_23_toplevel_002 | Ensure timer operations are not allowed outside of module control, test case, function, altstep | Clause 23 | m | |
| 24 | NegSyn_23_toplevel_001 | Ensure timer operations are not allowed outside of module control, test case, function, altstep | Clause 23 | m | |
| 25 | NegSyn_23_toplevel_002 | Ensure timer operations are not allowed outside of module control, test case, function, altstep | Clause 23 | m | |
| 26 | Syn_23_toplevel_001 | Ensure timer allowed in module control, test case, function, altstep | Clause 23 | m | |
| 27 | Syn_23_toplevel_002 | Ensure timer allowed in module control, test case, function, altstep | Clause 23 | m | |

A.3.129The stop timer operation

Table A.128: The stop timer operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------|---|------------------------------|--------|---------|
| 1 | NegSyn_2303_timer_stop_001 | Ensure timer stop syntax | Clause 23.3 | m | |
| 2 | NegSyn_2303_timer_stop_002 | Ensure timer stop syntax | Clause 23.3 | m | |
| 3 | NegSyn_2303_timer_stop_003 | Ensure all timer stop syntax | Clause 23.3 | m | |
| 4 | NegSyn_2303_timer_stop_004 | Ensure all timer stop syntax | Clause 23.3 | m | |
| 5 | NegSyn_2303_timer_stop_005 | Ensure all timer stop syntax | Clause 23.3 | m | |
| 6 | NegSyn_2303_timer_stop_006 | Ensure all timer stop syntax | Clause 23.3 | m | |
| 7 | Sem_2303_timer_stop_002 | Ensure timer stop sets elapsed time to zero | Clause 23.3 | m | |
| 8 | Sem_2303_timer_stop_003 | Ensure timer all timer identifier | Clause 23.3 | m | |
| 9 | Sem_2303_timer_stop_004 | Ensure can be stopped after timeout | Clause 23.3 | m | |
| 10 | Syn_2303_timer_stop_006 | Ensure timer stop syntax | Clause 23.3 | m | |
| 11 | Syn_2303_timer_stop_007 | Ensure all timer stop syntax | Clause 23.3 | m | |

A.3.130 The running timer operation

Table A.129: The running timer operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------------|---|------------------------------|--------|---------|
| 1 | NegSyn_2305_timer_running_001 | Ensure timer running syntax | Clause 23.5 | m | |
| 2 | NegSyn_2305_timer_running_002 | Ensure timer running syntax | Clause 23.5 | m | |
| 3 | NegSyn_2305_timer_running_003 | Ensure timer running syntax | Clause 23.5 | m | |
| 4 | NegSyn_2305_timer_running_004 | Ensure timer running syntax | Clause 23.5 | m | |
| 5 | NegSyn_2305_timer_running_005 | Ensure timer running syntax | Clause 23.5 | m | |
| 6 | NegSyn_2305_timer_running_006 | Ensure timer running syntax: disallow all timer.running | Clause 23.5 | m | |
| 7 | Sem_2305_timer_running_001 | Ensure timer running any timer identifier works | Clause 23.5 | m | |
| 8 | Sem_2305_timer_running_002 | Ensure timer running operation works | Clause 23.5 | m | |
| 9 | Sem_2305_timer_running_003 | Ensure timer running operation works | Clause 23.5 | m | |
| 10 | Sem_2305_timer_running_004 | Ensure timer running operation works | Clause 23.5 | m | |
| 11 | Syn_2306_timer_timeout_001 | Ensure timer runnig syntax | Clause 23.5 | m | |

A.3.131 The timeout operation

Table A.130: The timeout operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------------|---|------------------------------|--------|---------|
| 1 | NegSyn_2306_timer_timeout_001 | Ensure timer timeout syntax | Clause 23.6 | m | |
| 2 | NegSyn_2306_timer_timeout_002 | Ensure timer timeout can't be used in boolean expressions | Clause 23.6 | m | |
| 3 | NegSyn_2306_timer_timeout_003 | Ensure timer timeout syntax | Clause 23.6 | m | |
| 4 | NegSyn_2306_timer_timeout_004 | Ensure timer timeout syntax | Clause 23.6 | m | |
| 5 | NegSyn_2306_timer_timeout_005 | Ensure timer timeout syntax | Clause 23.6 | m | |
| 6 | NegSyn_2306_timer_timeout_006 | Ensure timer timeout syntax | Clause 23.6 | m | |
| 7 | NegSyn_2306_timer_timeout_007 | Ensure timer timeout syntax | Clause 23.6 | m | |
| 8 | Sem_2306_timer_timeout_001 | Ensure timer timeout operations: non-started timer does not timeout | Clause 23.6 | m | |
| 9 | Sem_2306_timer_timeout_002 | Ensure timer timeout operations: timed-out timer does not timeout until restarted | Clause 23.6 | m | |
| 10 | Sem_2306_timer_timeout_003 | Ensure timer timeout happen in order from the shortest to the longest | Clause 23.6 | m | |
| 11 | Sem_2306_timer_timeout_004 | Ensure any timer.timeout operation | Clause 23.6 | m | |
| 12 | Sem_2306_timer_timeout_005 | Ensure any timer.timeout operation for timeouts that are not in scope | Clause 23.6 | m | |
| 13 | Sem_2306_timer_timeout_006 | Ensure any timer.timeout operation handles timeout of any timer in the component, not only visible from a function or altstep | Clause 23.6 | m | |
| 14 | Sem_2306_timer_timeout_007 | Ensure timer timeout happen in order from the shortest to the longest | Clause 23.6 | m | |

A.3.132 Test verdict operations

Table A.131: Test verdict operations

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------------------------|--|------------------------------|--------|---------|
| 1 | Sem_13_declaring_msg_002 | Ensure received messages can't be matched with wrong template | Clause 24 | m | |
| 2 | Sem_13_declaring_msg_003 | Ensure instances of messages can be declared by in-line templates | Clause 24 | m | |
| 3 | Sem_13_declaring_msg_004 | Ensure instances of messages can be declared by global templates | Clause 24 | m | |
| 4 | Sem_13_declaring_msg_005 | Ensure instances of messages can be declared and passed via template variables | Clause 24 | m | |
| 5 | Sem_13_declaring_msg_006 | Ensure instances of messages can be declared and passed via inline template | Clause 24 | m | |
| 6 | Sem_13_declaring_msg_007 | Ensure instances of messages can be declared and passed via parameter | Clause 24 | m | |
| 7 | Sem_13_declaring_msg_008 | Ensure instances of messages can be declared and passed via template parameter | Clause 24 | m | |
| 8 | Sem_13_declaring_msg_009 | Ensure instances of messages can be declared and passed via template parameter | Clause 24 | m | |
| 9 | NegSem_2402_setverdict_params_001 | Ensure setverdict accepts parameters of verdicttype only | Clause 24 | m | |
| 10 | NegSem_2402_setverdict_params_002 | Ensure setverdict accepts parameters of verdicttype only | Clause 24 | m | |
| 11 | NegSem_2402_setverdict_params_003 | Ensure setverdict accepts values of verdicttype only | Clause 24 | m | |
| 12 | NegSem_2402_setverdict_params_004 | Ensure setverdict accepts values only as the parameter | Clause 24 | m | |
| 13 | NegSem_2402_setverdict_params_005 | Ensure setverdict accepts values only as the parameter | Clause 24 | m | |
| 14 | Sem_2402_setverdict_logging_001 | Ensure logging constraints | Clause 24 | m | |
| 15 | Sem_2402_setverdict_params_001 | Ensure setverdict accepts values only as the parameter | Clause 24 | m | |
| 16 | Sem_2402_setverdict_params_002 | Ensure setverdict accepts values only as the parameter | Clause 24 | m | |
| 17 | Sem_2402_setverdict_params_003 | Ensure logging constraints | Clause 24 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------|--|------------------------------|--------|---------|
| 18 | NegSem_24_toplevel_001 | Ensure getverdict is not allowed in constant initialization in control part | Clause 24 | m | |
| 19 | NegSem_24_toplevel_002 | Ensure getverdict is not allowed in parameter initialization in control part. | Clause 24 | m | |
| 20 | NegSem_24_toplevel_003 | Ensure getverdict is not allowed in variable definition in control part. | Clause 24 | m | |
| 21 | NegSem_24_toplevel_004 | Ensure setverdict is not allowed in part whithin compound statement. | Clause 24 | m | |
| 22 | NegSem_24_toplevel_005 | Ensure setverdict is not allowed in control part at the top level. | Clause 24 | m | |
| 23 | Syn_24_toplevel_001 | Ensure setverdict and getverdict are allowed in functions | Clause 24 | m | |
| 24 | Syn_24_toplevel_002 | Ensure setverdict and getverdict are allowed in test cases | Clause 24 | m | |
| 25 | Syn_24_toplevel_003 | Ensure setverdict and getverdict are allowed in atsteps | Clause 24 | m | |

A.3.133The verdict mechanism

Table A.132: The verdict mechanism

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_2401_SetverdictError | Setverdict can not set error verdict | Clause 24.1 | m | |
| 2 | Sem_2401_GlobalVerdict_001 | Ensure overwriting rules for global verdict: pass can overwrite none. | Clause 24.1 | m | |
| 3 | Sem_2401_GlobalVerdict_002 | Ensure overwriting rules for global verdict: inconc can overwrite none. | Clause 24.1 | m | |
| 4 | Sem_2401_GlobalVerdict_003 | Ensure overwriting rules for global verdict: fail can overwrite none. | Clause 24.1 | m | |
| 5 | Sem_2401_GlobalVerdict_004 | Ensure overwriting rules for global verdict: none can not overwrite pass. | Clause 24.1 | m | |
| 6 | Sem_2401_GlobalVerdict_005 | Ensure overwriting rules for global verdict: inconc can overwrite pass. | Clause 24.1 | m | |
| 7 | Sem_2401_GlobalVerdict_006 | Ensure overwriting rules for global verdict: fail can overwrite pass. | Clause 24.1 | m | |
| 8 | Sem_2401_GlobalVerdict_007 | Ensure overwriting rules for global verdict: none can not overwrite inconc. | Clause 24.1 | m | |
| 9 | Sem_2401_GlobalVerdict_008 | Ensure overwriting rules for global verdict: pass can not overwrite inconc. | Clause 24.1 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------|---|------------------------------|--------|---------|
| 10 | Sem_2401_GlobalVerdict_009 | Ensure overwriting rules for global verdict: fail can overwrite inconc. | Clause 24.1 | m | |
| 11 | Sem_2401_GlobalVerdict_010 | Ensure overwriting rules for global verdict: none can not overwrite fail. | Clause 24.1 | m | |
| 12 | Sem_2401_GlobalVerdict_011 | Ensure overwriting rules for global verdict: pass can not overwrite fail. | Clause 24.1 | m | |
| 13 | Sem_2401_GlobalVerdict_012 | Ensure overwriting rules for global verdict: inconc can not overwrite fail. | Clause 24.1 | m | |
| 14 | Sem_2401_InitiallyNone_001 | Local verdicts initializes with none | Clause 24.1 | m | |
| 15 | Sem_2401_LocalVerdict_001 | Ensure overwriting rules for local verdict: pass can overwrite none. | Clause 24.1 | m | |
| 16 | Sem_2401_LocalVerdict_002 | Ensure overwriting rules for local verdict: inconc can overwrite none. | Clause 24.1 | m | |
| 17 | Sem_2401_LocalVerdict_003 | Ensure overwriting rules for local verdict: fail can overwrite none. | Clause 24.1 | m | |
| 18 | Sem_2401_LocalVerdict_004 | Ensure overwriting rules for local verdict: none can not overwrite pass. | Clause 24.1 | m | |
| 19 | Sem_2401_LocalVerdict_005 | Ensure overwriting rules for local verdict: inconc can overwrite pass. | Clause 24.1 | m | |
| 20 | Sem_2401_LocalVerdict_006 | Ensure overwriting rules for local verdict: fail can overwrite pass. | Clause 24.1 | m | |
| 21 | Sem_2401_LocalVerdict_007 | Ensure overwriting rules for local verdict: none can not overwrite inconc. | Clause 24.1 | m | |
| 22 | Sem_2401_LocalVerdict_008 | Ensure overwriting rules for local verdict: pass can not overwrite inconc. | Clause 24.1 | m | |
| 23 | Sem_2401_LocalVerdict_009 | Ensure overwriting rules for local verdict: fail can overwrite inconc. | Clause 24.1 | m | |
| 24 | Sem_2401_LocalVerdict_010 | Ensure overwriting rules for local verdict: none can not overwrite fail. | Clause 24.1 | m | |
| 25 | Sem_2401_LocalVerdict_011 | Ensure overwriting rules for local verdict: pass can not overwrite fail. | Clause 24.1 | m | |
| 26 | Sem_2401_LocalVerdict_012 | Ensure overwriting rules for local verdict: inconc can not overwrite fail. | Clause 24.1 | m | |
| 27 | Syn_2401_FiveValues_001 | There are five values of verdicttype | Clause 24.1 | m | |

A.3.134The getverdict mechanism

Table A.133: The getverdict mechanism

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------|---|------------------------------|--------|---------|
| 1 | Sem_2403_getverdict_001 | Ensure getverdict returns the actual verdict none | Clause 24.3 | m | |
| 2 | Sem_2403_getverdict_002 | Ensure getverdict returns the actual verdict inconc | Clause 24.3 | m | |
| 3 | Sem_2403_getverdict_003 | Ensure getverdict returns the actual verdict pass | Clause 24.3 | m | |
| 4 | Sem_2403_getverdict_004 | Ensure getverdict returns the actual verdict fail | Clause 24.3 | m | |
| 5 | Sem_2403_getverdict_005 | Ensure getverdict none for uninitialized verdict | Clause 24.3 | m | |

A.3.135 Module control

Table A.134: Module control

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------|--|------------------------------|--------|---------|
| 1 | Syn_26_ModuleControl_001 | Assignments in the control part are accepted. | Clause 26 | m | |
| 2 | Syn_26_ModuleControl_002 | If-else constructs in the control part are accepted. | Clause 26 | m | |
| 3 | Syn_26_ModuleControl_003 | Select-case constructs in the control part are accepted. | Clause 26 | m | |
| 4 | Syn_26_ModuleControl_004 | For loop constructs in the control part are accepted. | Clause 26 | m | |
| 5 | Syn_26_ModuleControl_005 | While loop constructs in the control part are accepted. | Clause 26 | m | |
| 6 | Syn_26_ModuleControl_006 | Label and goto constructs in the control part are accepted. | Clause 26 | m | |
| 7 | Syn_26_ModuleControl_007 | The stop construct in the control part is accepted. | Clause 26 | m | |
| 8 | Syn_26_ModuleControl_008 | The break construct in the control part is accepted. | Clause 26 | m | |
| 9 | Syn_26_ModuleControl_009 | The continue construct in the control part is accepted. | Clause 26 | m | |
| 10 | Syn_26_ModuleControl_010 | The continue construct in the control part is accepted. | Clause 26 | m | |
| 11 | Syn_26_ModuleControl_011 | The alt/timeout construct in the control part is accepted. | Clause 26 | m | |
| 12 | Syn_26_ModuleControl_012 | The repeat construct in the control part is accepted. | Clause 26 | m | |
| 13 | Syn_26_ModuleControl_013 | The interleave construct in the control part is accepted. | Clause 26 | m | |
| 14 | Syn_26_ModuleControl_015 | Start/stop/read/running timer constructs in the control part are accepted. | Clause 26 | m | |
| 15 | Syn_26_ModuleControl_016 | The action construct in the control part is accepted. | Clause 26 | m | |
| 16 | Syn_26_ModuleControl_017 | The execute construct in the control part is accepted. | Clause 26 | m | |

A.3.136The execute statement

Table A.135: The execute statement

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_2601_ExecuteStatement_001 | Non-float timeout parameters in the execute statement are rejected (in this case int). | Clause 26.1 | m | |
| 2 | NegSem_2601_ExecuteStatement_002 | Non-float timeout parameters in the execute statement are rejected (in this case charstring). | Clause 26.1 | m | |
| 3 | NegSem_2601_ExecuteStatement_003 | Host id can be only charstring. | Clause 26.1 | m | |
| 4 | NegSem_2601_ExecuteStatement_004 | Execution rejects test case execution with infinity timer guard | Clause 26.1 | m | |
| 5 | Sem_2601_ExecuteStatement_001 | Parameters are passed correctly into the test case. | Clause 26.1 | m | |
| 6 | Sem_2601_ExecuteStatement_002 | Multiple parameters of different types are passed correctly into the test case. | Clause 26.1 | m | |
| 7 | Sem_2601_ExecuteStatement_003 | The timeout specified with the execute statement is respected. | Clause 26.1 | m | |
| 8 | Sem_2601_ExecuteStatement_004 | The verdict none works correctly. | Clause 26.1 | m | |
| 9 | Sem_2601_ExecuteStatement_005 | The verdict pass works correctly. | Clause 26.1 | m | |
| 10 | Sem_2601_ExecuteStatement_006 | The verdict inconc works correctly. | Clause 26.1 | m | |
| 11 | Sem_2601_ExecuteStatement_007 | The timeout specified with the execute statement is respected. | Clause 26.1 | m | |
| 12 | Sem_2601_ExecuteStatement_008 | The user error sets the verdict error correctly. | Clause 26.1 | m | |
| 13 | Sem_2601_ExecuteStatement_009 | Host id restriction is correctly handled. | Clause 26.1 | m | |

A.3.137 The control part

Table A.136: The control part

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_2602_TheControlPart_001 | Setverdict statements are not allowed in the control part. | Clause 26.2 | m | |
| 2 | NegSem_2602_TheControlPart_002 | The create component is not allowed in the control part. | Clause 26.2 | m | |
| 3 | NegSem_2602_TheControlPart_003 | The create alive component is not allowed in the control part. | Clause 26.2 | m | |
| 4 | NegSem_2602_TheControlPart_004 | The start statement is not allowed in the control part. | Clause 26.2 | m | |
| 5 | NegSem_2602_TheControlPart_005 | The stop statement is not allowed in the control part. | Clause 26.2 | m | |
| 6 | NegSem_2602_TheControlPart_006 | The kill statement is not allowed in the control part. | Clause 26.2 | m | |
| 7 | NegSem_2602_TheControlPart_007 | The alive operation is not allowed in the control part. | Clause 26.2 | m | |
| 8 | NegSem_2602_TheControlPart_008 | The running operation is not allowed in the control part. | Clause 26.2 | m | |
| 9 | NegSem_2602_TheControlPart_009 | The done operation is not allowed in the control part. | Clause 26.2 | m | |
| 10 | NegSem_2602_TheControlPart_010 | The killed operation is not allowed in the control part. | Clause 26.2 | m | |
| 11 | NegSem_2602_TheControlPart_011 | The connect statements are not allowed in the control part. | Clause 26.2 | m | |
| 12 | NegSem_2602_TheControlPart_012 | The disconnect statements are not allowed in the control part. | Clause 26.2 | m | |
| 13 | NegSem_2602_TheControlPart_013 | The map statements are not allowed in the control part. | Clause 26.2 | m | |
| 14 | NegSem_2602_TheControlPart_014 | The unmap statements are not allowed in the control part. | Clause 26.2 | m | |
| 15 | NegSem_2602_TheControlPart_015 | The send statements are not allowed in the control part. | Clause 26.2 | m | |
| 16 | NegSem_2602_TheControlPart_016 | The receive statements are not allowed in the control part. | Clause 26.2 | m | |
| 17 | NegSem_2602_TheControlPart_017 | The call statements are not allowed in the control part. | Clause 26.2 | m | |
| 18 | NegSem_2602_TheControlPart_018 | The reply statements are not allowed in the control part. | Clause 26.2 | m | |
| 19 | NegSem_2602_TheControlPart_019 | The raise statements are not allowed in the control part. | Clause 26.2 | m | |
| 20 | NegSem_2602_TheControlPart_020 | The trigger statements are not allowed in the control part. | Clause 26.2 | m | |
| 21 | NegSem_2602_TheControlPart_021 | The getcall statements are not allowed in the control part. | Clause 26.2 | m | |
| 22 | NegSem_2602_TheControlPart_022 | The getreply statements are not allowed in the control part. | Clause 26.2 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------|---|------------------------------|--------|---------|
| 23 | NegSem_2602_TheControlPart_023 | The catch statements are not allowed in the control part. | Clause 26.2 | m | |
| 24 | NegSem_2602_TheControlPart_024 | The check statements are not allowed in the control part. | Clause 26.2 | m | |
| 25 | NegSem_2602_TheControlPart_025 | The clear statements are not allowed in the control part. | Clause 26.2 | m | |
| 26 | NegSem_2602_TheControlPart_026 | The start statements on ports are not allowed in the control part. | Clause 26.2 | m | |
| 27 | NegSem_2602_TheControlPart_027 | The stop statements on ports are not allowed in the control part. | Clause 26.2 | m | |
| 28 | NegSem_2602_TheControlPart_028 | The halt statements are not allowed in the control part. | Clause 26.2 | m | |
| 29 | NegSem_2602_TheControlPart_029 | Alternative behaviours are only used to control timer behavior in the control part. | Clause 26.2 | m | |
| 30 | NegSem_2602_TheControlPart_030 | Getverdict statements are not allowed in the control part. | Clause 26.2 | m | |
| 31 | NegSem_2602_TheControlPart_031 | Execute statements are not executed from test cases. | Clause 26.2 | m | |
| 32 | NegSem_2602_TheControlPart_032 | The create alive named component is not allowed in the control part. | Clause 26.2 | m | |
| 33 | NegSem_2602_TheControlPart_033 | The create named component is not allowed in the control part. | Clause 26.2 | m | |
| 34 | NegSem_2602_TheControlPart_034 | The create named component on host is not allowed in the control part. | Clause 26.2 | m | |
| 35 | NegSem_2602_TheControlPart_035 | Alternative behaviours are only used to control timer behavior in the control part. | Clause 26.2 | m | |
| 36 | Sem_2602_TheControlPart_001 | The selection/deselection of test cases using boolean conditions works as expected. | Clause 26.2 | m | |
| 37 | Sem_2602_TheControlPart_002 | The execution of test cases works from within a function. | Clause 26.2 | m | |
| 38 | Sem_2602_TheControlPart_003 | The selection of test cases can be achieven based on resulting verdict types. | Clause 26.2 | m | |

A.3.138 Scope of attributes

Table A.137: Scope of attributes

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------------|--|------------------------------|--------|---------|
| 1 | Syn_270101_ScopeOfAttributes_001 | Attributes for language elements are accepted. | Clause 27.1.1 | m | |
| 2 | Syn_270101_ScopeOfAttributes_002 | Attributes for language elements are accepted. | Clause 27.1.1 | m | |
| 3 | Syn_270101_ScopeOfAttributes_003 | Attributes for individual fields are accepted. | Clause 27.1.1 | m | |
| 4 | Syn_270101_ScopeOfAttributes_004 | Attributes for individual fields are accepted. | Clause 27.1.1 | m | |

A.3.139 Optional attributes

Table A.138: Optional attributes

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_2707_OptionalAttributes_002 | The IUT correctly handles attribute definitions and their scoping rules | Clause 27.7 | m | |
| 2 | NegSem_2707_OptionalAttributes_003 | The IUT correctly handles attribute definitions and their scoping rules | Clause 27.7 | m | |
| 3 | Sem_2707_OptionalAttributes_001 | The IUT correctly handles attribute definitions and their scoping rules | Clause 27.7 | m | |
| 4 | Sem_2707_OptionalAttributes_002 | The IUT correctly handles attribute definitions and their scoping rules | Clause 27.7 | m | |
| 5 | Sem_2707_OptionalAttributes_003 | The IUT correctly handles attribute definitions and their scoping rules | Clause 27.7 | m | |
| 6 | Sem_2707_OptionalAttributes_004 | The IUT correctly handles attribute definitions and their scoping rules | Clause 27.7 | m | |
| 7 | Sem_2707_OptionalAttributes_005 | The IUT correctly handles attribute definitions and their scoping rules | Clause 27.7 | m | |
| 8 | Sem_2707_OptionalAttributes_006 | The IUT correctly handles attribute definitions and their scoping rules | Clause 27.7 | m | |
| 9 | Sem_2707_OptionalAttributes_007 | The IUT correctly handles attribute definitions and their scoping rules | Clause 27.7 | m | |
| 10 | Sem_2707_OptionalAttributes_008 | The IUT correctly handles attribute definitions and their scoping rules | Clause 27.7 | m | |
| 11 | Syn_2707_OptionalAttributes_001 | The IUT correctly handles attribute definitions and their scoping rules | Clause 27.7 | m | |

A.3.140 Matching specific values

Table A.139: Matching specific values

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---------------------------------------|--|------------------------------|--------|---------|
| 1 | Sem_B0101_matching_specific_value_001 | The IUT correctly handles template matching of specific values | Clause B.1.1 | m | |
| 2 | Sem_B0101_matching_specific_value_002 | The IUT correctly handles template matching of specific values | Clause B.1.1 | m | |
| 3 | Sem_B0101_matching_specific_value_003 | The IUT correctly handles template matching of specific values | Clause B.1.1 | m | |
| 4 | Sem_B0101_matching_specific_value_004 | The IUT correctly handles template matching of specific values | Clause B.1.1 | m | |
| 5 | Sem_B0101_matching_specific_value_005 | The IUT correctly handles template matching of specific values | Clause B.1.1 | m | |
| 6 | Sem_B0101_matching_specific_value_006 | The IUT correctly handles template matching of specific values | Clause B.1.1 | m | |
| 7 | Sem_B0101_matching_specific_value_007 | The IUT correctly handles template matching of specific values | Clause B.1.1 | m | |
| 8 | Sem_B0101_matching_specific_value_008 | The IUT correctly handles template matching of specific values | Clause B.1.1 | m | |
| 9 | Sem_B0101_matching_specific_value_009 | The IUT correctly handles template matching of specific values | Clause B.1.1 | m | |
| 10 | Sem_B0101_matching_specific_value_010 | The IUT correctly handles template matching of specific values | Clause B.1.1 | m | |
| 11 | Sem_B0101_matching_specific_value_011 | The IUT correctly handles template matching of specific values | Clause B.1.1 | m | |

A.3.141 Value list

Table A.140: Value list

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------|---|------------------------------|--------|---------|
| 1 | Sem_B010201_value_list_001 | The IUT correctly handles template matching of listed multiple values | Clause B.1.2.1 | m | |

A.3.142 Complemented value list

Table A.141: Complemented value list

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|---|------------------------------|--------|---------|
| 1 | NegSem_B010202_complemented_value_list_001 | The IUT correctly handles template matching of complemented value listing | Clause B.1.2.2 | m | |
| 2 | NegSem_B010202_complemented_value_list_002 | The IUT correctly handles template matching of complemented value listing | Clause B.1.2.2 | m | |
| 3 | NegSem_B010202_complemented_value_list_003 | The IUT correctly handles template matching of complemented value listing | Clause B.1.2.2 | m | |
| 4 | Sem_B010202_complemented_value_list_001 | The IUT correctly handles template matching of complemented value listing | Clause B.1.2.2 | m | |
| 5 | Sem_B010202_complemented_value_list_002 | The IUT correctly handles template matching of complemented value listing | Clause B.1.2.2 | m | |
| 6 | Sem_B010202_complemented_value_list_003 | The IUT correctly handles template matching of complemented value listing | Clause B.1.2.2 | m | |
| 7 | Sem_B010202_complemented_value_list_004 | The IUT correctly handles template matching of complemented value listing | Clause B.1.2.2 | m | |
| 8 | Sem_B010202_complemented_value_list_005 | The IUT correctly handles template matching of complemented value listing | Clause B.1.2.2 | m | |
| 9 | Sem_B010202_complemented_value_list_006 | The IUT correctly handles template matching of complemented value listing | Clause B.1.2.2 | m | |
| 10 | Sem_B010202_complemented_value_list_007 | The IUT correctly handles template matching of complemented value listing | Clause B.1.2.2 | m | |

A.3.143 Any value

Table A.142: Any value

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---------------------------|---|------------------------------|--------|---------|
| 1 | Sem_B010203_any_value_001 | The IUT correctly handles template matching of ? values | Clause B.1.2.3 | m | |
| 2 | Sem_B010203_any_value_002 | The IUT correctly handles template matching of ? values | Clause B.1.2.3 | m | |

A.3.144 Any value or none

Table A.143: Any value or none

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_B010204_any_value_or_none_001 | The IUT correctly handles template matching of * values | Clause B.1.2.4 | m | |
| 2 | NegSem_B010204_any_value_or_none_002 | The IUT correctly handles template matching of * values | Clause B.1.2.4 | m | |
| 3 | NegSem_B010204_any_value_or_none_003 | AnyValueOrNone cannot be used for matching non-optional value | Clause B.1.2.4 | m | |
| 4 | NegSem_B010204_any_value_or_none_004 | AnyValueOrNone cannot be used for matching compulsory fields | Clause B.1.2.4 | m | |
| 5 | Sem_B010204_any_value_or_none_001 | The IUT correctly handles template matching of * values | Clause B.1.2.4 | m | |
| 6 | Sem_B010204_any_value_or_none_002 | AnyValueOrNone can be assigned to top-level template | Clause B.1.2.4 | m | |
| 7 | Sem_B010204_any_value_or_none_003 | AnyValueOrNone can be used for matching optional fields | Clause B.1.2.4 | m | |

A.3.145 Value range

Table A.144: Value range

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_B010205_value_range_001 | The IUT correctly handles template matching of value range definitions | Clause B.1.2.5 | m | |
| 2 | NegSem_B010205_value_range_002 | The IUT correctly handles template matching of value range definitions | Clause B.1.2.5 | m | |
| 3 | NegSem_B010205_value_range_003 | The IUT correctly handles template matching of value range definitions | Clause B.1.2.5 | m | |
| 4 | Sem_B010205_value_range_001 | The IUT correctly handles template matching of value range definitions | Clause B.1.2.5 | m | |
| 5 | Sem_B010205_value_range_002 | The IUT correctly handles template matching of value range definitions | Clause B.1.2.5 | m | |
| 6 | Sem_B010205_value_range_003 | The IUT correctly handles template matching of value range definitions | Clause B.1.2.5 | m | |
| 7 | Sem_B010205_value_range_004 | The IUT correctly handles template matching of value range definitions | Clause B.1.2.5 | m | |
| 8 | Sem_B010205_value_range_005 | The IUT correctly handles template matching of value range definitions | Clause B.1.2.5 | m | |
| 9 | Sem_B010205_value_range_006 | The IUT correctly handles template matching of value range definitions | Clause B.1.2.5 | m | |
| 10 | Sem_B010205_value_range_007 | The IUT correctly handles template matching of value range definitions | Clause B.1.2.5 | m | |
| 11 | Sem_B010205_value_range_008 | The IUT correctly handles template matching of value range definitions | Clause B.1.2.5 | m | |

A.3.146 SuperSet

Table A.145: SuperSet

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_B010206_superset_001 | The IUT correctly handles template matching of superset definitions | Clause B.1.2.6 | m | |
| 2 | NegSem_B010206_superset_002 | The IUT correctly handles template matching of superset definitions | Clause B.1.2.6 | m | |
| 3 | Sem_B010206_superset_001 | The IUT correctly handles template matching of superset definitions | Clause B.1.2.6 | m | |
| 4 | Sem_B010206_superset_002 | The IUT correctly handles template matching of superset definitions | Clause B.1.2.6 | m | |
| 5 | Sem_B010206_superset_003 | The IUT correctly handles template matching of superset definitions | Clause B.1.2.6 | m | |

A.3.147 SubSet

Table A.146: SubSet

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_B010207_subset_001 | The IUT correctly handles template matching of superset definitions | Clause B.1.2.7 | m | |
| 2 | NegSem_B010207_subset_002 | The IUT correctly handles template matching of superset definitions | Clause B.1.2.7 | m | |
| 3 | Sem_B010207_subset_001 | The IUT correctly handles template matching of superset definitions | Clause B.1.2.7 | m | |
| 4 | Sem_B010207_subset_002 | The IUT correctly handles template matching of superset definitions | Clause B.1.2.7 | m | |
| 5 | Sem_B010207_subset_003 | The IUT correctly handles template matching of superset definitions | Clause B.1.2.7 | m | |

A.3.148 Omitting optional fields

Table A.147: Omitting optional fields

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_B010208_omit_value_001 | The IUT correctly handles template matching of omit values | Clause B.1.2.8 | m | |
| 2 | NegSem_B010208_omit_value_002 | The IUT correctly handles template matching of omit values | Clause B.1.2.8 | m | |
| 3 | NegSem_B010208_omit_value_003 | The IUT correctly handles template matching of omit values | Clause B.1.2.8 | m | |
| 4 | Sem_B010208_omit_value_001 | The IUT correctly handles template matching of omit values | Clause B.1.2.8 | m | |
| 5 | Sem_B010208_omit_value_002 | The IUT correctly handles template matching of omit values | Clause B.1.2.8 | m | |
| 6 | Sem_B010208_omit_value_003 | The IUT correctly handles template matching of omit values | Clause B.1.2.8 | m | |
| 7 | Sem_B010208_omit_value_004 | The IUT correctly handles template matching of omit values | Clause B.1.2.8 | m | |

A.3.149 Any element

Table A.148: Any element

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------------------|--|------------------------------|--------|---------|
| 1 | Sem_B010301_any_element_001 | The IUT correctly handles template matching of ? symbols in value elements | Clause B.1.3.1 | m | |
| 2 | Sem_B010301_any_element_002 | The IUT correctly handles template matching of ? symbols in value elements | Clause B.1.3.1 | m | |
| 3 | Sem_B010301_any_element_003 | The IUT correctly handles template matching of ? symbols in value elements | Clause B.1.3.1 | m | |
| 4 | Sem_B010301_any_element_004 | The IUT correctly handles template matching of ? symbols in value elements | Clause B.1.3.1 | m | |
| 5 | Sem_B010301_any_element_005 | The IUT correctly handles template matching of ? symbols in value elements | Clause B.1.3.1 | m | |
| 6 | Sem_B010301_any_element_006 | The IUT correctly handles template matching of ? symbols in value elements | Clause B.1.3.1 | m | |
| 7 | Sem_B010301_any_element_007 | The IUT correctly handles template matching of ? symbols in value elements | Clause B.1.3.1 | m | |
| 8 | Sem_B010301_any_element_008 | The IUT correctly handles template matching of ? symbols in value elements | Clause B.1.3.1 | m | |

A.3.150 Any number of elements of no element

Table A.149: Any number of elements of no element

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|-----------------------------------|---------------------------|--------|---------|
| 1 | Sem_B010302_any_number_of_elements_or_none_001 | · · · · · · · · · · · · · · · · · | Clause B.1.3.2 | m | |
| 2 | Sem_B010302_any_number_of_elements_or_none_002 | , | Clause B.1.3.2 | m | |
| 3 | Sem_B010302_any_number_of_elements_or_none_003 | , | Clause B.1.3.2 | m | |

A.3.151 Permutation

Table A.150: Permutation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_B010303_permutation_001 | The IUT correctly handles template matching of ? symbols in value elements | Clause B.1.3.3 | m | |
| 2 | NegSem_B010303_permutation_002 | All from operand can be a record of or set of only | Clause B.1.3.3 | m | |
| 3 | NegSem_B010303_permutation_003 | Type restriction for permutation elements is applied | Clause B.1.3.3 | m | |
| 4 | NegSem_B010303_permutation_004 | Type restriction for all from clause in permutation is applied | Clause B.1.3.3 | m | |
| 5 | NegSem_B010303_permutation_005 | Verify restriction on individual members of all from operand in permutation | Clause B.1.3.3 | m | |
| 6 | NegSem_B010303_permutation_006 | Verify restriction on individual members of all from operand in permutation | Clause B.1.3.3 | m | |
| 7 | Sem_B010303_permutation_001 | The IUT correctly handles template matching of ? symbols in value elements | Clause B.1.3.3 | m | |
| 8 | Sem_B010303_permutation_002 | The IUT correctly handles template matching of ? symbols in value elements | Clause B.1.3.3 | m | |
| 9 | Sem_B010303_permutation_003 | The IUT correctly handles template matching of ? symbols in value elements | Clause B.1.3.3 | m | |
| 10 | Sem_B010303_permutation_004 | The IUT correctly handles template matching of ? symbols in value elements | Clause B.1.3.3 | m | |
| 11 | Sem_B010303_permutation_005 | The IUT correctly handles template matching of ? symbols in value elements | Clause B.1.3.3 | m | |
| 12 | Sem_B010303_permutation_006 | The IUT correctly handles permutation within arrays | Clause B.1.3.3 | m | |
| 13 | Sem_B010303_permutation_007 | All from clause can be used inside permutation | Clause B.1.3.3 | m | |
| 14 | Sem_B010303_permutation_008 | All from clause operand can be a set of value | Clause B.1.3.3 | m | |

A.3.152 Length restrictions

Table A.151: Length restrictions

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|---|------------------------------|--------|---------|
| 1 | NegSem_B010401_length_restrictions_001 | The IUT correctly handles template matching of value length definitions | Clause B.1.4.1 | m | |
| 2 | NegSem_B010401_length_restrictions_002 | The IUT correctly handles template matching of value length definitions | Clause B.1.4.1 | m | |
| 3 | NegSem_B010401_length_restrictions_003 | The IUT correctly handles template matching of value length definitions | Clause B.1.4.1 | m | |
| 4 | NegSem_B010401_length_restrictions_004 | The IUT correctly handles template matching of value length definitions | Clause B.1.4.1 | m | |
| 5 | Sem_B010401_length_restrictions_001 | The IUT correctly handles template matching of value length definitions | Clause B.1.4.1 | m | |
| 6 | Sem_B010401_length_restrictions_002 | The IUT correctly handles template matching of value length definitions | Clause B.1.4.1 | m | |

A.3.153The ifpresent indicator

Table A.152: The ifpresent indicator

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|---|------------------------------|--------|---------|
| 1 | NegSem_B010402_ifPresent_indicator_001 | The IUT correctly handles template matching of ifpresent indicators | Clause B.1.4.2 | m | |
| 2 | Sem_B010402_ifPresent_indicator_001 | The IUT correctly handles template matching of ifpresent indicators | Clause B.1.4.2 | m | |
| 3 | Sem_B010402_ifPresent_indicator_002 | The IUT correctly handles template matching of ifpresent indicators | Clause B.1.4.2 | m | |

A.3.154 Matching character pattern

Table A.153: Matching character pattern

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------|-------------------------------|------------------------------|--------|---------|
| 1 | Sem_B0105_toplevel_001 | The IUT correctly handles | Clause B.1.5 | m | |
| | · | template matching of | | | |
| | | character pattern definitions | | | |

A.3.155 Set expression

Table A.154: Set expression

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_B010501_set_expression_001 | The IUT correctly handles template matching of character pattern set expressions | Clause B.1.5.1 | m | |
| 2 | Sem_B010501_set_expression_001 | The IUT correctly handles template matching of character pattern set expressions | Clause B.1.5.1 | m | |
| 3 | Sem_B010501_set_expression_002 | The IUT correctly handles template matching of character pattern set expressions | Clause B.1.5.1 | m | |
| 4 | Sem_B010501_set_expression_003 | The IUT correctly handles template matching of character pattern set expressions | Clause B.1.5.1 | m | |
| 5 | Sem_B010501_set_expression_004 | The IUT correctly handles template matching of character pattern set expressions | Clause B.1.5.1 | m | |
| 6 | Sem_B010501_set_expression_005 | The IUT correctly handles template matching of character pattern set expressions | Clause B.1.5.1 | m | |

A.3.156 Reference expression

Table A.155: Reference expression

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------------|--|------------------------------|--------|---------|
| 1 | Sem_B010502_reference_expression_001 | The IUT correctly handles template matching of character pattern reference expressions | Clause B.1.5.2 | m | |
| 2 | Sem_B010502_reference_expression_002 | The IUT correctly handles template matching of character pattern reference expressions | Clause B.1.5.2 | m | |
| 3 | Sem_B010502_reference_expression_003 | The IUT correctly handles template matching of character pattern reference expressions | Clause B.1.5.2 | m | |
| 4 | Sem_B010502_reference_expression_004 | The IUT correctly handles template matching of character pattern reference expressions | Clause B.1.5.2 | m | |
| 5 | Sem_B010502_reference_expression_005 | The IUT correctly handles template matching of character pattern reference expressions | Clause B.1.5.2 | m | |
| 6 | Sem_B010502_reference_expression_006 | The IUT correctly handles template matching of character pattern reference expressions | Clause B.1.5.2 | m | |
| 7 | Sem_B010502_reference_expression_007 | The IUT correctly handles template matching of character pattern reference expressions | Clause B.1.5.2 | m | |
| 8 | Sem_B010502_reference_expression_008 | The IUT correctly handles template matching of character pattern reference expressions | Clause B.1.5.2 | m | |
| 9 | Sem_B010502_reference_expression_009 | The IUT correctly handles template matching of character pattern reference expressions | Clause B.1.5.2 | m | |

A.3.157 Match expression n times

Table A.156: Match expression n times

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------------|--|------------------------------|--------|---------|
| 1 | Sem_B010503_match_n_times_001 | The IUT correctly handles template matching of character pattern expression multiplicity | Clause B.1.5.3 | m | |
| 2 | Sem_B010503_match_n_times_002 | The IUT correctly handles template matching of character pattern expression multiplicity | Clause B.1.5.3 | m | |
| 3 | Sem_B010503_match_n_times_003 | The IUT correctly handles template matching of character pattern expression multiplicity | Clause B.1.5.3 | m | |
| 4 | Sem_B010503_match_n_times_004 | The IUT correctly handles template matching of character pattern expression multiplicity | Clause B.1.5.3 | m | |
| 5 | Sem_B010503_match_n_times_005 | The IUT correctly handles template matching of character pattern expression multiplicity | Clause B.1.5.3 | m | |

A.3.158 Match a referenced character set

Table A.157: Match a referenced character set

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|---|------------------------------|--------|---------|
| 1 | NegSem_B010504_match_referenced_characters_001 | The IUT correctly handles template matching of character pattern reference characters | Clause B.1.5.4 | m | |
| 2 | Sem_B010504_match_referenced_characters_001 | The IUT correctly handles template matching of character pattern reference characters | Clause B.1.5.4 | m | |
| 3 | Sem_B010504_match_referenced_characters_002 | The IUT correctly handles template matching of character pattern reference characters | Clause B.1.5.4 | m | |
| 4 | Sem_B010504_match_referenced_characters_003 | The IUT correctly handles template matching of character pattern reference characters | Clause B.1.5.4 | m | |
| 5 | Sem_B010504_match_referenced_characters_004 | The IUT correctly handles template matching of character pattern reference characters | Clause B.1.5.4 | m | |
| 6 | Sem_B010504_match_referenced_characters_005 | The IUT correctly handles template matching of character pattern reference characters | Clause B.1.5.4 | m | |
| 7 | Sem_B010504_match_referenced_characters_006 | The IUT correctly handles template matching of character pattern reference characters | Clause B.1.5.4 | m | |
| 8 | Sem_B010504_match_referenced_characters_007 | The IUT correctly handles template matching of character pattern reference characters | Clause B.1.5.4 | m | |

A.3.159Type compatibility rules for patterns

Table A.158: Type compatibility rules for patterns

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---------------------------------------|--|------------------------------|--------|---------|
| 1 | Sem_B010505_pattern_compatibility_001 | The IUT correctly handles character pattern compatibility rules of template matching | Clause B.1.5.5 | m | |
| 2 | Sem_B010505_pattern_compatibility_002 | The IUT correctly handles character pattern compatibility rules of template matching | Clause B.1.5.5 | m | |

A.3.160 Preprocessing macros

Table A.159: Preprocessing macros

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------|--|------------------------------|--------|---------|
| 1 | Sem_D01_macro_module_001 | MODULE replaces the module name | Clause D | m | |
| 2 | Sem_D02_macro_file_001 | FILE macro stores the path and file name in a charstring | Clause D | m | |
| 3 | Sem_D03_macro_bfile_001 | TheBFILE macro replaces the actual file name | Clause D | m | |
| 4 | Sem_D04_macro_line_001 | LINE macro stores the actual line number when it is called | Clause D | m | |
| 5 | NegSem_D05_macro_scope_001 | SCOPE replaces the actual higher named basic scope unit | Clause D | m | |
| 6 | Sem_D05_macro_scope_001 | SCOPE replaces the actual higher basic unit | Clause D | m | |
| 7 | Sem_D05_macro_scope_002 | SCOPE replaces the actual higher basic unit | Clause D | m | |

A.4 Additional information for ICS

This clause contains all additional comments provided by the supplier of the implementation.

Annex B (normative):

TTCN-3 rev 4.6.1 (2014 edition) conformance ICS proforma

B.1 Instructions for completing the ICS proforma

The instructions are equivalent to those given in annex A.1.

B.2 Identification of the implementation

Identification of the Implementation under Test (IUT) and the system in which it resides - the System Under Test (SUT) should be filled in so as to provide as much detail as possible regarding version numbers and configuration options.

The product supplier information and client information should both be filled in if they are different.

A person who can answer queries regarding information supplied in the ICS should be named as the contact person.

B.2.1 Date of the statement

| Date of the statement: | |
|------------------------|--|

B.2.2 Implementation under Test (IUT) identification

| IUT name: | |
|--------------|--|
| IUT version: | |

B.2.3 System under Test (SUT) identification

| SUT name: | |
|-------------------------|--|
| Hardware configuration: | |
| Operating system: | |

B.2.4 Product supplier

| Name: | |
|-------------------------|--|
| Address: | |
| Telephone number: | |
| Facsimile number: | |
| E-mail address: | |
| Additional information: | |

B.2.5 Client

| Name: | |
|-------------------------|--|
| Address: | |
| Telephone number: | |
| Facsimile number: | |
| E-mail address: | |
| Additional information: | |

B.2.6 ICS contact person

| Name: | |
|-------------------------|--|
| Telephone number: | |
| Facsimile number: | |
| E-mail address: | |
| Additional information: | |

B.3 ICS proforma tables

B.3.1 Global statement of conformance

| | (Yes/No) |
|---|----------|
| Are all mandatory capabilities implemented? | |

NOTE: Answering "No" to this question indicates non-conformance to the TTCN-3 core language.

Non-supported mandatory capabilities are to be identified in the ICS, with an explanation of why the implementation is non-conforming.

B.3.2 Records and sets of single types

Table B.1: Records and sets of single types

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|---|------------------------------|--------|---------|
| 1 | NegSem_060203_records_and_sets_of_single_types_016 | integer set of type can not be used as an index notation for multi-dimensional nested set of type | Clause 6.2.3 | m | |
| 2 | Sem_060203_records_and_sets_of_single_types_023 | Arrays can be used as index notation for multi-dimensional nested record of type | Clause 6.2.3 | m | |
| 3 | Sem_060203_records_and_sets_of_single_types_024 | Integer record of type can be used an index notation for multi-dimensional nested record of type | Clause 6.2.3 | m | |
| 4 | Sem_060203_records_and_sets_of_single_types_025 | Array can be used index notation for multi-dimensional nested set of type | Clause 6.2.3 | m | |
| 5 | Sem_060203_records_and_sets_of_single_types_026 | An integer record of can be used as index notation for multi-dimensional nested set of type | Clause 6.2.3 | m | |

B.3.3 Communication port types

Table B.2: Communication port types

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|---|------------------------------|--------|---------|
| 1 | NegSem_060209_CommunicationPortTypes_009 | Verify that an error is generated when a map param declaration contains a template | Clause 6.2.9 | m | |
| 2 | NegSem_060209_CommunicationPortTypes_010 | Verify that an error is generated when an unmap param declaration contains a template | Clause 6.2.9 | m | |
| 3 | NegSem_060209_CommunicationPortTypes_011 | Verify that an error is generated when a map param declaration contains a port | Clause 6.2.9 | m | |
| 4 | NegSem_060209_CommunicationPortTypes_012 | Verify that an error is generated when an unmap param declaration contains a port | Clause 6.2.9 | m | |
| 5 | NegSem_060209_CommunicationPortTypes_013 | Verify that an error is generated when a map param declaration contains a component | Clause 6.2.9 | m | |
| 6 | NegSem_060209_CommunicationPortTypes_014 | Verify that an error is generated when an unmap param declaration contains a component | Clause 6.2.9 | m | |
| 7 | NegSem_060209_CommunicationPortTypes_015 | Verify that an error is generated when a map param declaration contains a timer | Clause 6.2.9 | m | |
| 8 | NegSem_060209_CommunicationPortTypes_016 | Verify that an error is generated when an unmap param declaration contains a timer | Clause 6.2.9 | m | |
| 9 | NegSem_060209_CommunicationPortTypes_017 | Verify that an error is generated when a map param declaration contains the default type | Clause 6.2.9 | m | |
| 10 | NegSem_060209_CommunicationPortTypes_018 | Verify that an error is generated when an unmap param declaration contains the default type | Clause 6.2.9 | m | |
| 11 | NegSem_060209_CommunicationPortTypes_019 | Verify that an error is generated when a map param declaration references a component containing type | Clause 6.2.9 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|--|------------------------------|--------|---------|
| 12 | NegSem_060209_CommunicationPortTypes_020 | Verify that an error is generated when an unmap param declaration references a component containing type | Clause 6.2.9 | m | |
| 13 | NegSem_060209_CommunicationPortTypes_021 | Verify that an error is generated when a map param declaration references a type that contains default | Clause 6.2.9 | m | |
| 14 | NegSem_060209_CommunicationPortTypes_022 | Verify that an error is generated when an unmap param declaration references a type that contains default | Clause 6.2.9 | m | |

B.3.4 List operator

Table B.3: List operator

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_070102_ListOperator_001 | When the list concatenation operator is used for record of-s, its operands shall be at least partially initialized | Clause 7.1.2 | m | |
| 2 | NegSem_070102_ListOperator_002 | When the list concatenation operator is used for set of-s, its operands shall be at least partially initialized | Clause 7.1.2 | m | |
| 3 | NegSem_070102_ListOperator_003 | When the list concatenation operator is used for array-s, its operands shall be at least partially initialized | Clause 7.1.2 | m | |
| 4 | Sem_070102_ListOperator_007 | The list operator on record- of with partially initialized operands is evaluated correctly. | Clause 7.1.2 | m | |
| 5 | Sem_070102_ListOperator_008 | The list operator on set-of with partially initialized operands is evaluated correctly. | Clause 7.1.2 | m | |
| 6 | Sem_070102_ListOperator_009 | The list operator on arrays with partially initialized operands is evaluated correctly. | Clause 7.1.2 | m | |

B.3.5 Relational operators

Table B.4: Relational operators

| Item | TC/TP reference | purpose | Reference in ES 201 873-1 | Status | Support |
|------|------------------------------------|--|------------------------------|--------|---------|
| 1 | Sem_070103_RelationalOperators_035 | The equals operator on records is evaluated correctly. | Clause 7.1.3 | m | |
| 2 | Sem_070103_RelationalOperators_036 | Compound expression shall be compatible with the root type | Clause 7.1.3 | m | |

B.3.6 Template variables

Table B.5: Template variables

| Item | TC/TP reference | Purpose | Reference in | Status | Support |
|------|-----------------|--|--------------|--------|---------|
| | | | ES 201 873-1 | | |
| 1 | | Uninitialized template variables in return statement cause an error. | Clause 11.2 | m | |

B.3.7 Declaring procedure signatures

Table B.6: Declaring procedure signatures

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_1400_procedure_signatures_003 | Default type can not be a signature parameter | Clause 14 | m | |
| 2 | NegSem_1400_procedure_signatures_004 | Component type can not be a signature parameter | Clause 14 | m | |
| 3 | NegSem_1400_procedure_signatures_005 | Port type can not be signature parameter | Clause 14 | m | |
| 4 | NegSem_1400_procedure_signatures_006 | Record type can not be signature parameter if contains a default type | Clause 14 | m | |
| 5 | NegSyn_1400_procedure_signatures_001 | Timer can not be a signature parameter | Clause 14 | m | |

B.3.8 Match operation

Table B.7: Match operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_1509_MatchOperation_002 | The match operation refuses partially initialized value in the first parameter | Clause 15.9 | m | |
| 2 | NegSem_1509_MatchOperation_003 | The match operation refuses partially initialized value in the first parameter | Clause 15.9 | m | |

B.3.9 Concatenating templates of string and list types

Table B.8: Concatenating templates of string and list types

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---|---|---------------------------|--------|---------|
| 1 | NegSem_1511_ConcatenatingTemplatesOfStringAndListTypes_007 | Concatenation of strings types returns an error if specified ranges are not fixed length. | Clause 15.11 | m | |
| 2 | NegSem_1511_ConcatenatingTemplatesOfStringAndListTypes_008 | Concatenation of strings types returns an error if operands are uninitialized. | Clause 15.11 | m | |
| 3 | NegSem_1511_ConcatenatingTemplatesOfStringAn dListTypes_009 | Concatenation of strings types returns an error if operands are uninitialized. | Clause 15.11 | m | |
| 4 | NegSem_1511_ConcatenatingTemplatesOfStringAndListTypes_010 | Concatenation of strings types returns an error if operands are uninitialized. | Clause 15.11 | m | |

B.3.10 Invoking functions

Table B.9: Invoking functions

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_160101_invoking_functions_001 | The IUT detects mtc incompatibility between a test case and an invoked function | Clause 16.1.1 | m | |
| 2 | NegSem_160101_invoking_functions_002 | The IUT detects mtc incompatibility of invoked functions | Clause 16.1.1 | m | |
| 3 | NegSem_160101_invoking_functions_003 | The IUT detects system incompatibility of invoked functions | Clause 16.1.1 | m | |
| 4 | NegSem_160101_invoking_functions_004 | The IUT detects incompatibility between function system clause and test case runs on clause | Clause 16.1.1 | m | |
| 5 | NegSem_160101_invoking_functions_005 | The function without mtc clause can not handle an mtc component | Clause 16.1.1 | m | |
| 6 | Sem_160101_invoking_functions_002 | The IUT checks mtc compatibility between a test case and an invoked function | Clause 16.1.1 | m | |
| 7 | Sem_160101_invoking_functions_003 | The IUT checks mtc compatibility of invoked functions | Clause 16.1.1 | m | |
| 8 | Sem_160101_invoking_functions_004 | The IUT checks system compatibility of invoked functions | Clause 16.1.1 | m | |
| 9 | Sem_160101_invoking_functions_005 | The IUT checks compatibility of a function system clause and test case runs on clause | Clause 16.1.1 | m | |
| 10 | Sem_160101_invoking_functions_006 | The function with mtc clause can handle mtc component | Clause 16.1.1 | m | |
| 11 | Sem_160101_invoking_functions_007 | The function with mtc and system clause can handle mtc and system component | Clause 16.1.1 | m | |
| 12 | Sem_160101_invoking_functions_008 | The function can be declared to as deterministic | Clause 16.1.1 | m | |

B.3.11 Predefined functions

Table B.10: Predefined functions

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------------------|--|------------------------------|--------|---------|
| 1 | Sem_160102_predefined_functions_026 | The IUT recognizes predefined functions and correctly evaluates them (as specified by Annex C) | Clause 16.1.2 | m | |
| 2 | Sem_160102_predefined_functions_027 | Predefined encvalue function works correctly | Clause 16.1.2 | m | |

B.3.12 External functions

Table B.11: External functions

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_160103_external_functions_004 | Default parameter cannot be used as input parameter of an external functions | Clause 16.1.3 | m | |
| 2 | NegSem_160103_external_functions_005 | External function can not have component as input parameter | Clause 16.1.3 | m | |
| 3 | Sem_160103_external_functions_004 | The external function be declared to be deterministic | Clause 16.1.3 [1] | m | |
| 4 | Sem_160103_external_functions_005 | Running and alive operation can be used as a boolean input parameter of an external function | Clause 16.1.3 | m | |
| 5 | Sem_160103_external_functions_006 | Checkstate operation can be used as a boolean input parameter of an external function | Clause 16.1.3 | m | |
| 6 | Sem_160103_external_functions_007 | Read and running operation for a timer can be used as a input parameter of an external function | Clause 16.1.3 | m | |

B.3.13 Invoking altsteps

Table B.12: Invoking altsteps

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_160201_invoking_altsteps_002 | The IUT detects mtc incompatibility between a test case and an invoked altstep | Clause 16.2.1 | m | |
| 2 | NegSem_160201_invoking_altsteps_003 | The IUT detects mtc incompatibility of invoked altsteps | Clause 16.2.1 | m | |
| 3 | NegSem_160201_invoking_altsteps_004 | The IUT detects system incompatibility of invoked altsteps | Clause 16.2.1 | m | |
| 4 | NegSem_160201_invoking_altsteps_005 | The IUT detects incompatibility between altstep system clause and test case runs on clause | Clause 16.2.1 | m | |
| 5 | Sem_160201_invoking_altsteps_005 | The IUT checks mtc compatibility between a test case and an invoked altstep | Clause 16.2.1 | m | |
| 6 | Sem_160201_invoking_altsteps_006 | The IUT checks mtc compatibility of invoked altsteps | Clause 16.2.1 | m | |
| 7 | Sem_160201_invoking_altsteps_007 | The IUT checks system compatibility of invoked altsteps | Clause 16.2.1 | m | |
| 8 | Sem_160201_invoking_altsteps_008 | The IUT checks compatibility of an altstep system clause and test case runs on clause | Clause 16.2.1 | m | |

B.3.14 The activate operation

Table B.13: The activate operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--|--|------------------------------|--------|---------|
| 1 | NegSem_200502_the_activate_operation_006 | verify an error is generated when using a local timer in an activate call invoked from the control part | Clause 20.5.2 | m | |
| 2 | NegSem_200502_the_activate_operation_007 | verify an error is generated when using a local timer in an activate call invoked from the control part | Clause 20.5.2 | m | |
| 3 | Sem_200502_the_activate_operation_005 | verify that timers declared in the control part can be passed to activated altstep as parameters | Clause 20.5.2 | m | |
| 4 | Sem_200502_the_activate_operation_006 | verify that timers declared in the control part can be passed to activated altstep as parameters | Clause 20.5.2 | m | |

B.3.15 The connect and map operations

Table B.14: The connect and map operations

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---|---|---------------------------|--------|---------|
| 1 | Sem_210101_connect_and_map_operations_011 | Using connect operation between an already connected ports has no effect | Clause 21.1.1 | m | |
| 2 | Sem_210101_connect_and_map_operations_012 | Using map operation between an already mapped ports has no effect | Clause 21.1.1 | m | |

B.3.16 The alive operation

Table B.15: The alive operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_210305_alive_operation_001 | Verify that error occurs when any from alive is applied to single component | Clause 21.3.5 | m | |
| 2 | NegSem_210305_alive_operation_002 | Verify that error occurs when any from alive is applied to 1D array and index target is array | Clause 21.3.5 | m | |
| 3 | NegSem_210305_alive_operation_003 | Verify that error occurs when any from alive is applied to 1D array and index target has wrong type | Clause 21.3.5 | m | |
| 4 | NegSem_210305_alive_operation_004 | Verify that any from alive index redirection for multi-D arrays requires arrays of correct size | Clause 21.3.5 | m | |
| 5 | NegSem_210305_alive_operation_005 | Verify that any from alive index redirection for multi-D arrays requires arrays | Clause 21.3.5 | m | |
| 6 | NegSyn_210305_alive_operation_001 | Verify that error occurs when using index redirection in component.alive operation | Clause 21.3.5 | m | |
| 7 | NegSyn_210305_alive_operation_002 | Verify that error occurs when using index redirection in any component.alive operation | Clause 21.3.5 | m | |
| 8 | NegSyn_210305_alive_operation_003 | Verify that error occurs when using index redirection in all component.alive operation | Clause 21.3.5 | m | |
| 9 | NegSyn_210305_alive_operation_004 | Verify that error occurs when using index redirection in function instance.alive operation | Clause 21.3.5 | m | |
| 10 | Sem_210305_alive_operation_005 | Verify that any from alive returns false if no component is alive | Clause 21.3.5 | m | |
| 11 | Sem_210305_alive_operation_006 | Verify that any from alive returns true if at least one component is inactive | Clause 21.3.5 | m | |
| 12 | Sem_210305_alive_operation_007 | Verify that any from alive returns true if at least one component is running | Clause 21.3.5 | m | |
| 13 | Sem_210305_alive_operation_008 | Verify that any from alive does not assign index when no component is alive | Clause 21.3.5 | m | |
| 14 | Sem_210305_alive_operation_009 | Verify that any from alive assigns index | Clause 21.3.5 | m | |
| 15 | Sem_210305_alive_operation_010 | Verify that any from alive can be used inside expressions | Clause 21.3.5 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------|---|------------------------------|--------|---------|
| 16 | Sem_210305_alive_operation_011 | Verify that any from alive index redirection works for multidimensional arrays | Clause 21.3.5 | m | |
| 17 | Sem_210305_alive_operation_012 | Verify that any from alive does not change index variable when no component is alive | Clause 21.3.5 | m | |
| 18 | Sem_210305_alive_operation_013 | Verify any from alive index redirection to lazy variable | Clause 21.3.5 | m | |
| 19 | Sem_210305_alive_operation_014 | Verify any from alive index redirection to fuzzy variable | Clause 21.3.5 | m | |

B.3.17 The running operation

Table B.16: The running operation

| Item | TC/TP reference | Purpose | Reference in | Status | Support |
|------|-------------------------------------|---|---------------|--------|---------|
| | N 0 040000 : 1' 004 | V '' (1) | ES 201 873-1 | | |
| 1 | NegSem_210306_running_operation_001 | Verify that error occurs when any from running is applied to single | Clause 21.3.6 | m | |
| 2 | NegSem_210306_running_operation_002 | component Verify that error occurs | Clause 21.3.6 | m | |
| 2 | nvegSem_210300_rummg_operation_002 | when any from running is applied to 1D array and index target is array | Clause 21.3.0 | m | |
| 3 | NegSem_210306_running_operation_003 | Verify that error occurs when any from running is applied to 1D array and index target has wrong type | Clause 21.3.6 | m | |
| 4 | NegSem_210306_running_operation_004 | Verify that any from running index redirection for multi-D arrays requires arrays of correct size | Clause 21.3.6 | m | |
| 5 | NegSem_210306_running_operation_005 | Verify that any from running index redirection for multi-D arrays requires arrays | Clause 21.3.6 | m | |
| 6 | NegSyn_210306_running_operation_001 | Verify that error occurs when using index redirection in component.running operation | Clause 21.3.6 | m | |
| 7 | NegSyn_210306_running_operation_002 | Verify that error occurs when using index redirection in any component.running operation | Clause 21.3.6 | m | |
| 8 | NegSyn_210306_running_operation_003 | Verify that error occurs when using index redirection in all component.running operation | Clause 21.3.6 | m | |
| 9 | NegSyn_210306_running_operation_004 | Verify that error occurs when using index redirection in function instance.running operation | Clause 21.3.6 | m | |
| 10 | Sem_210306_running_operation_003 | Verify that any from running returns false if no component is running | Clause 21.3.6 | m | |
| 11 | Sem_210306_running_operation_004 | Verify that any from running returns true if at least one component is running | Clause 21.3.6 | m | |
| 12 | Sem_210306_running_operation_005 | Verify that any from running does not assign index when no component is running | Clause 21.3.6 | m | |
| 13 | Sem_210306_running_operation_006 | Verify that any from running does not change index variable when no component is running | Clause 21.3.6 | m | |
| 14 | Sem_210306_running_operation_007 | Verify that any from running assigns index | Clause 21.3.6 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------------|--|---------------------------|--------|---------|
| 15 | Sem_210306_running_operation_008 | Verify that any from running can be used inside expressions | Clause 21.3.6 | m | |
| 16 | Sem_210306_running_operation_009 | Verify that any from running index redirection works for multidimensional arrays | Clause 21.3.6 | m | |
| 17 | Sem_210306_running_operation_010 | Verify any from running index redirection to lazy variable | Clause 21.3.6 | m | |
| 18 | Sem_210306_running_operation_011 | Verify any from running index redirection to fuzzy variable | Clause 21.3.6 | m | |
| 19 | Sem_210306_running_operation_012 | Verify that all component.running produces true if some components have not been started | Clause 21.3.6 | m | |
| 20 | Sem_210306_running_operation_013 | Check that running operator provides information about test components. | Clause 21.3.6 | m | |
| 21 | Sem_210307_done_operation_012 | Check that done operator matches after starting ptc. | Clause 21.3.6 | m | |

B.3.18 The done operation

Table B.17: The done operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_210307_done_operation_002 | Verify that error occurs when any from done is applied to single component | Clause 21.3.7 | m | |
| 2 | NegSem_210307_done_operation_003 | Verify that error occurs when any from done is applied to 1D array and index target is array | Clause 21.3.7 | m | |
| 3 | NegSem_210307_done_operation_004 | Verify that error occurs when any from done is applied to 1D array and index target has wrong type | Clause 21.3.7 | m | |
| 4 | NegSem_210307_done_operation_005 | Verify that any from done index redirection for multi-D arrays requires arrays of correct size | Clause 21.3.7 | m | |
| 5 | NegSem_210307_done_operation_006 | Verify that any from done index redirection for multi-D arrays requires arrays | Clause 21.3.7 | m | |
| 6 | NegSyn_210307_done_operation_001 | Verify that error occurs when using index redirection in component.done operation | Clause 21.3.7 | m | |
| 7 | NegSyn_210307_done_operation_002 | Verify that error occurs when using index redirection in any component.done operation | Clause 21.3.7 | m | |
| 8 | NegSyn_210307_done_operation_003 | Verify that error occurs when using index redirection in all component.done operation | Clause 21.3.7 | m | |
| 9 | NegSyn_210307_done_operation_004 | Verify that error occurs when using index redirection in function instance.done operation | Clause 21.3.7 | m | |
| 10 | Sem_210307_done_operation_002 | Verify that any from done is not triggered if no component has been started | Clause 21.3.7 | m | |
| 11 | Sem_210307_done_operation_003 | Verify that any from done matches if at least one component is stopped or killed | Clause 21.3.7 | m | |
| 12 | Sem_210307_done_operation_004 | Verify that any from done does not assign index when no component has been stopped or killed | Clause 21.3.7 | m | |
| 13 | Sem_210307_done_operation_005 | Verify that any from done does not change index variable when no component has been stopped or killed | Clause 21.3.7 | m | |
| 14 | Sem_210307_done_operation_006 | Verify that any from done assigns index | Clause 21.3.7 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------------|---|------------------------------|--------|---------|
| 15 | Sem_210307_done_operation_007 | Verify that any from done is not triggered if all components are executing function | Clause 21.3.7 | m | |
| 16 | Sem_210307_done_operation_008 | Verify that any from done index redirection works for multidimensional arrays | Clause 21.3.7 | m | |
| 17 | Sem_210307_done_operation_009 | Verify any from done index redirection to lazy variable | Clause 21.3.7 | m | |
| 18 | Sem_210307_done_operation_010 | Verify any from done index redirection to fuzzy variable | Clause 21.3.7 | m | |
| 19 | Sem_210307_done_operation_011 | Verify that all component.done produces true if some components have not been started | Clause 21.3.7 | m | |

B.3.19 The killed operation

Table B.18: The killed operation

| Item | TC/TP reference | Purpose | Reference in | Status | Support |
|------|------------------------------------|--|-----------------------------------|--------|---------|
| 1 | NegCom 210200 killed energtion 002 | Varify that arran agains | ES 201 873-1 Clause 21.3.8 | | |
| 1 | NegSem_210308_killed_operation_002 | Verify that error occurs when any from killed is applied to single component | | m | |
| 2 | NegSem_210308_killed_operation_003 | Verify that error occurs when any from killed is applied to 1D array and index target is array | Clause 21.3.8 | m | |
| 3 | NegSem_210308_killed_operation_004 | Verify that error occurs when any from killed is applied to 1D array and index target has wrong type | Clause 21.3.8 | m | |
| 4 | NegSem_210308_killed_operation_005 | Verify that any from killed index redirection for multi-D arrays requires arrays of correct size | Clause 21.3.8 | m | |
| 5 | NegSem_210308_killed_operation_006 | Verify that any from killed index redirection for multi-D arrays requires arrays | Clause 21.3.8 | m | |
| 6 | NegSyn_210308_killed_operation_001 | Verify that error occurs when using index redirection in component.killed operation | Clause 21.3.8 | m | |
| 7 | NegSyn_210308_killed_operation_002 | Verify that error occurs when using index redirection in any component.killed operation | Clause 21.3.8 | m | |
| 8 | NegSyn_210308_killed_operation_003 | Verify that error occurs when using index redirection in all component.killed operation | Clause 21.3.8 | m | |
| 9 | NegSyn_210308_killed_operation_004 | Verify that error occurs when using index redirection in function instance.killed operation | Clause 21.3.8 | m | |
| 10 | Sem_210308_killed_operation_004 | Verify that any from killed is not triggered if no component has been started | Clause 21.3.8 | m | |
| 11 | Sem_210308_killed_operation_005 | Verify that any from killed matches if at least one component is stopped or killed | Clause 21.3.8 | m | |
| 12 | Sem_210308_killed_operation_006 | Verify that any from killed does not assign index when no component has been killed | Clause 21.3.8 | m | |
| 13 | Sem_210308_killed_operation_007 | Verify that any from killed does not change index variable when no component has been killed | Clause 21.3.8 | m | |
| 14 | Sem_210308_killed_operation_008 | Verify that any from killed assigns index | Clause 21.3.8 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|---------------------------------|--|------------------------------|--------|---------|
| 15 | Sem_210308_killed_operation_009 | Verify that any from killed is not triggered if all components are executing function | Clause 21.3.8 | m | |
| 16 | Sem_210308_killed_operation_010 | Verify that any from killed index redirection works for multidimensional arrays | Clause 21.3.8 | m | |
| 17 | Sem_210308_killed_operation_011 | Verify any from killed index redirection to lazy variable | Clause 21.3.8 | m | |
| 18 | Sem_210308_killed_operation_012 | Verify any from killed index redirection to fuzzy variable | Clause 21.3.8 | m | |
| 19 | Sem_210308_killed_operation_013 | Verify that any from killed is not triggered if when alive component has stopped execution | Clause 21.3.8 | m | |

B.3.20 The getcall operation

Table B.19: The getcall operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_220302_getcall_operation_004 | Verify that error occurs when any from getcall is applied to single port | Clause 22.3.2 | m | |
| 2 | NegSem_220302_getcall_operation_005 | Verify that error occurs when any from getcall is applied to 1D array and index target is array | Clause 22.3.2 | m | |
| 3 | NegSem_220302_getcall_operation_006 | Verify that error occurs when any from getcall is applied to 1D array and index target has wrong type | Clause 22.3.2 | m | |
| 4 | NegSem_220302_getcall_operation_007 | Verify that any from getcall index redirection for multi-D arrays requires arrays of correct size | Clause 22.3.2 | m | |
| 5 | NegSem_220302_getcall_operation_008 | Verify that any from getcall index redirection for multi-D arrays requires arrays | Clause 22.3.2 | m | |
| 6 | NegSyn_220302_getcall_operation_001 | Verify that error occurs when using index redirection in port.getcall operation | Clause 22.3.2 | m | |
| 7 | NegSyn_220302_getcall_operation_002 | Verify that error occurs when using index redirection in any port.getcall operation | Clause 22.3.2 | m | |
| 8 | Sem_220302_getcall_operation_006 | Verify that any from getcall is not triggered if there has not been any call | Clause 22.3.2 | m | |
| 9 | Sem_220302_getcall_operation_007 | Verify that any from getcall matches if at least one port contains enqueued call | Clause 22.3.2 | m | |
| 10 | Sem_220302_getcall_operation_008 | Verify that any from getcall does not assign index when there's no suitable match | Clause 22.3.2 | m | |
| 11 | Sem_220302_getcall_operation_009 | Verify that any from getcall does not change index variable when no there's no suitable match | Clause 22.3.2 | m | |
| 12 | Sem_220302_getcall_operation_010 | Verify that any from getcall assigns index | Clause 22.3.2 | m | |
| 13 | Sem_220302_getcall_operation_011 | Verify that any from getcall index redirection works for multidimensional arrays | Clause 22.3.2 | m | |
| 14 | Sem_220302_getcall_operation_012 | Verify any from getcall index redirection to lazy variable | Clause 22.3.2 | m | |
| 15 | Sem_220302_getcall_operation_013 | Verify any from getcall index redirection to fuzzy variable | Clause 22.3.2 | m | |

B.3.21 The getreply operation

Table B.20: The getreply operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------------|--|------------------------------|--------|---------|
| 1 | NegSem_220304_getreply_operation_001 | Verify that error occurs when any from getreply is applied to single port | Clause 22.3.4 | m | |
| 2 | NegSem_220304_getreply_operation_002 | Verify that error occurs when any from getreply is applied to 1D array and index target is array | Clause 22.3.4 | m | |
| 3 | NegSem_220304_getreply_operation_003 | Verify that error occurs when any from getreply is applied to 1D array and index target has wrong type | Clause 22.3.4 | m | |
| 4 | NegSem_220304_getreply_operation_004 | Verify that any from getreply index redirection for multi-D arrays requires arrays of correct size | Clause 22.3.4 | m | |
| 5 | NegSem_220304_getreply_operation_005 | Verify that any from getreply index redirection for multi-D arrays requires arrays | Clause 22.3.4 | m | |
| 6 | NegSyn_220304_getreply_operation_001 | Verify that error occurs when using index redirection in port.getreply operation | Clause 22.3.4 | m | |
| 7 | NegSyn_220304_getreply_operation_002 | Verify that error occurs when using index redirection in any port.getreply operation | Clause 22.3.4 | m | |
| 8 | Sem_220304_getreply_operation_001 | Verify that any from getreply is not triggered if there has not been any reply | Clause 22.3.4 | m | |
| 9 | Sem_220304_getreply_operation_002 | Verify that any from getreply matches if at least one port contains enqueued reply | Clause 22.3.4 | m | |
| 10 | Sem_220304_getreply_operation_003 | Verify that any from getreply does not assign index when there's no suitable match | Clause 22.3.4 | m | |
| 11 | Sem_220304_getreply_operation_004 | Verify that any from getreply does not change index variable when no there's no suitable match | Clause 22.3.4 | m | |
| 12 | Sem_220304_getreply_operation_005 | Verify that any from getreply assigns index | Clause 22.3.4 | m | |
| 13 | Sem_220304_getreply_operation_006 | Verify that any from getreply index redirection works for multidimensional arrays | Clause 22.3.4 | m | |
| 14 | Sem_220304_getreply_operation_007 | Verify any from getreply index redirection to lazy variable | Clause 22.3.4 | m | |
| 15 | Sem_220304_getreply_operation_008 | Verify any from getreply index redirection to fuzzy variable | Clause 22.3.4 | m | |

B.3.22 The catch operation

Table B.21: The catch operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_220306_catch_operation_001 | Verify that error occurs when any from catch is applied to single port | Clause 22.3.6 | m | |
| 2 | NegSem_220306_catch_operation_002 | Verify that error occurs when any from catch is applied to 1D array and index target is array | Clause 22.3.6 | m | |
| 3 | NegSem_220306_catch_operation_003 | Verify that error occurs when any from catch is applied to 1D array and index target has wrong type | Clause 22.3.6 | m | |
| 4 | NegSem_220306_catch_operation_004 | Verify that any from catch index redirection for multi-D arrays requires arrays of correct size | Clause 22.3.6 | m | |
| 5 | NegSem_220306_catch_operation_005 | Verify that any from catch index redirection for multi-D arrays requires arrays | Clause 22.3.6 | m | |
| 6 | NegSyn_220306_catch_operation_001 | Verify that error occurs when using index redirection in port.catch operation | Clause 22.3.6 | m | |
| 7 | NegSyn_220306_catch_operation_002 | Verify that error occurs when using index redirection in any port.catch operation | Clause 22.3.6 | m | |
| 8 | NegSyn_220306_catch_operation_003 | Verify that error occurs when any from catch is applied to 1D array and index target has wrong type | Clause 22.3.6 | m | |
| 9 | Sem_220306_catch_operation_001 | Verify that any from catch is not triggered if there has not been any exception | Clause 22.3.6 | m | |
| 10 | Sem_220306_catch_operation_002 | Verify that any from catch matches if at least one port contains enqueued reply | Clause 22.3.6 | m | |
| 11 | Sem_220306_catch_operation_003 | Verify that any from catch does not assign index when there's no suitable match | Clause 22.3.6 | m | |
| 12 | Sem_220306_catch_operation_004 | Verify that any from catch does not change index variable when no there's no suitable match | Clause 22.3.6 | m | |
| 13 | Sem_220306_catch_operation_005 | Verify that any from catch assigns index | Clause 22.3.6 | m | |
| 14 | Sem_220306_catch_operation_006 | Verify that any from catch index redirection works for multidimensional arrays | Clause 22.3.6 | m | |
| 15 | Sem_220306_catch_operation_007 | Verify any from catch index redirection to lazy variable | Clause 22.3.6 | m | |

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|--------------------------------|---|------------------------------|--------|---------|
| 16 | Sem_220306_catch_operation_008 | Verify any from catch index redirection to fuzzy variable | Clause 22.3.6 | m | |

B.3.23 The check operation

Table B.22: The check operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------------------|---|------------------------------|--------|---------|
| 1 | NegSem_2204_the_check_operation_001 | Verify that error occurs when any from check is applied to single port | Clause 22.4 | m | |
| 2 | NegSem_2204_the_check_operation_002 | Verify that error occurs when any from check is applied to 1D array and index target is array | Clause 22.4 | m | |
| 3 | NegSem_2204_the_check_operation_003 | Verify that error occurs when any from check is applied to 1D array and index target has wrong type | Clause 22.4 | m | |
| 4 | NegSem_2204_the_check_operation_004 | Verify that any from check index redirection for multi-D arrays requires arrays of correct size | Clause 22.4 | m | |
| 5 | NegSem_2204_the_check_operation_005 | Verify that any from check index redirection for multi-D arrays requires arrays | Clause 22.4 | m | |
| 6 | NegSyn_2204_the_check_operation_001 | Verify that error occurs when using index redirection in port.check operation | Clause 22.4 | m | |
| 7 | NegSyn_2204_the_check_operation_002 | Verify that error occurs when using index redirection in any port.check operation | Clause 22.4 | m | |
| 8 | Sem_2204_the_check_operation_121 | Verify that any from check is not triggered if there has not been any message | Clause 22.4 | m | |
| 9 | Sem_2204_the_check_operation_122 | Verify that any from check matches if at least one port contains enqueued data | Clause 22.4 | m | |
| 10 | Sem_2204_the_check_operation_123 | Verify that any from check does not assign index when there's no suitable match | Clause 22.4 | m | |
| 11 | Sem_2204_the_check_operation_124 | Verify that any from check does not change index variable when no there's no suitable match | Clause 22.4 | m | |
| 12 | Sem_2204_the_check_operation_125 | Verify that any from check assigns index | Clause 22.4 | m | |
| 13 | Sem_2204_the_check_operation_126 | Verify that any from check index redirection works for multidimensional arrays | Clause 22.4 | m | |
| 14 | Sem_2204_the_check_operation_127 | Verify any from check index redirection to lazy variable | Clause 22.4 | m | |
| 15 | Sem_2204_the_check_operation_128 | Verify any from check index redirection to fuzzy variable | Clause 22.4 | m | |

B.3.24 The running timer operation

Table B.23: The running timer operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------|--|------------------------------|--------|---------|
| 1 | • | Correct number of timers from a timer array is still running | Clause 23.5 | m | |

B.3.25 The timeout operation

Table B.24: The timeout operation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|----------------------------|---|------------------------------|--------|---------|
| 1 | Sem_2306_timer_timeout_008 | Timeout of a timer from a timer array works correctly | Clause 23.6 | m | |

B.3.26 Module control

Table B.25: Module control

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------------------|--|------------------------------|--------|---------|
| 1 | , , , , , , , , , , , , , , , , , , | Activate/deactivate/default constructs in the control part are accepted. | Clause 26 | m | |

B.3.27 Value list

Table B.26: Value list

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-------------------------------|---|------------------------------|--------|---------|
| 1 | NegSyn_B010201_value_list_001 | The IUT correctly handles template matching of listed multiple values | Clause B.1.2.1 | m | |
| 2 | Sem_B010201_value_list_002 | The IUT correctly handles template matching with all from clause | Clause B.1.2.1 | m | |

B.3.28 Permutation

Table B.27: Permutation

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------|---|------------------------------|--------|---------|
| 1 | • | Verify that it is possible to use permutations to | Clause B.1.3.3 | m | |
| | | match arrays | | | |

B.3.29 Match expression n times

Table B.28: Match expression n times

| Item | TC/TP reference | Purpose | Reference in ES 201 873-1 | Status | Support |
|------|-----------------|--|------------------------------|--------|---------|
| 1 | | The IUT correctly handles template matching of character pattern expression multiplicity | Clause B.1.5.3 | m | |

History

| | Document history | | | | |
|--------|------------------|-------------|--|--|--|
| V1.1.1 | April 2011 | Publication | | | |
| V1.2.1 | April 2012 | Publication | | | |
| V1.3.1 | October 2013 | Publication | | | |
| V1.4.1 | August 2014 | Publication | | | |
| | | | | | |