## 5.13 Extension to ETSI ES 201 873-1, annex A (BNF and static semantics)

### 5.13.0 New keywords and TTCN-3 syntax BNF productions

New TTCN-3 Keywords

The list of keywords is extended by the following keywords:

**apply**

New TTCN-3 syntax BNF productions

The BNF is extended with the following productions.

NOTE: [AdvancedParameterization] FormalTypeParList is applicable only when the advanced parameterization package [6] is also supported.

785001. BehaviourDef ::= ( AltstepKeyword TypeReference [FormalTypeParList]

[ "("[FunctionFormalParList] ")" ] [RunsOnSpec] [MtcSpec] [SystemSpec] ) |

( FunctionKeyword TypeReference [FormalTypeParList]

[ "("[FunctionFormalParList] ")" ] [RunsOnSpec] [MtcSpec] [SystemSpec]

[ReturnType] ) |

( TestcaseKeyword TypeReference [FormalTypeParList]

[ "("[TemplateOrValueFormalParList] ")"] ConfigSpec StatementBlock)

785002. NestedBehaviourDef ::= ( AltstepKeyword "("[FunctionFormalParList] ")" [RunsOnSpec] [MtcSpec] [SystemSpec] ) |

( FunctionKeyword "("[FunctionFormalParList] ")" [RunsOnSpec] [ReturnType] [MtcSpec] [SystemSpec] ) |

( TestcaseKeyword "("[TemplateOrValueFormalParList] ")"

ConfigSpec StatementBlock)

785003. BehaviourValue ::= ExtendedIdentifier /\*AltstepRef, FunctionRef or TestcaseRef \*/ | "null"

785004. ApplyKeyword ::= "apply"

### 5.13.1 Changes to ETSI ES 201 873-1, clause A.1.6 (TTCN-3 syntax BNF productions)

The following productions from [1] TTCN-3 Core Language clause A.1.6 are modified. When using this package the BNF rules below replace the corresponding BNF rules in the TTCN-3 core language document. The rule numbers define the correspondence of BNF rules.

Additions to clause A.1.6 of ETSI ES 201 873-1 are identified by underlined font, deletions are identified by strikethrough font. In case of contradiction between the above clause of part 1 and this clause (i.e. parts of the productions not marked by ~~strikethrough~~ font is changed in part 1), part 1 takes precedence, i.e. tools supporting the present document shall apply the insertions and deletions of this clause to the actual part 1 production or static semantics rule automatically.

12. StructuredTypeDef ::= RecordDef | UnionDef | SetDef | RecordOfDef | SetOfDef | EnumDef |

PortDef | ComponentDef | MapDef | BehaviourDef

18. NestedTypeDef ::= NestedRecordDef | NestedUnionDef | NestedSetDef |

NestedRecordOfDef | NestedSetOfDef | NestedEnumDef | NestedBehaviourDef

167. RunsOnSpec ::= RunsKeyword OnKeyword ( ComponentType | SelfOp )  
178. FunctionInstance ::= ( FunctionRef ~~[~~ "(" [ActualParList] ")" ~~]~~ ) |  
 ( ApplyKeyword "(" Primary "(" [ActualParList] ")" ")" ) |

( ExtendedIdentifier )

/\* STATIC SEMANTICS – the part is only optional if the *FunctionRef* uses the *ControlKeyword* and the referenced control function has no formal parameters \*/

193. TestcaseInstance ::= ExecuteKeyword "(" ( ExtendedIdentifier ["(" [ActualParList] ")"] ) |  
 ( ApplyKeyword "(" Primary "(" [TestcaseActualParList] ")" ")" )  
 [","(Expression | Minus) ["," SingleExpression]] ")"  
424. PredefinedValue ::= Bstring |

BooleanValue |

CharStringValue |

Number |  /\* IntegerValue \*/

Ostring |

Hstring |

VerdictTypeValue |

FloatValue |

AddressValue |

OmitKeyword |

BehaviourValue