## ETSI TS 124 519 V17.1.0 (2022-05)



### 5G;

5G System (5GS);

Time-Sensitive Networking (TSN) Application Function (AF) to Device-Side TSN Translator (DS-TT) and Network-Side TSN Translator (NW-TT) protocol aspects;

Stage 3 (3GPP TS 24.519 version 17.1.0 Release 17)



# Reference RTS/TSGC-0124519vh10 Keywords 5G,SECURITY

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## Modal verbs terminology

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

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

## Contents

Intellectual Property Rights		2
Toreword		4
Annex A (informative):	Change history	6
History		7

#### **Foreword**

This Technical Specification has been produced by the 3rd Generation Partnership Project (3GPP).

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

where:

- x the first digit:
  - 1 presented to TSG for information;
  - 2 presented to TSG for approval;
  - 3 or greater indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

In the present document, modal verbs have the following meanings:

shall indicates a mandatory requirement to do somethingshall not indicates an interdiction (prohibition) to do something

The constructions "shall" and "shall not" are confined to the context of normative provisions, and do not appear in Technical Reports.

The constructions "must" and "must not" are not used as substitutes for "shall" and "shall not". Their use is avoided insofar as possible, and they are not used in a normative context except in a direct citation from an external, referenced, non-3GPP document, or so as to maintain continuity of style when extending or modifying the provisions of such a referenced document.

**should** indicates a recommendation to do something

**should not** indicates a recommendation not to do something

may indicates permission to do something

**need not** indicates permission not to do something

The construction "may not" is ambiguous and is not used in normative elements. The unambiguous constructions "might not" or "shall not" are used instead, depending upon the meaning intended.

can indicates that something is possiblecannot indicates that something is impossible

The constructions "can" and "cannot" are not substitutes for "may" and "need not".

will indicates that something is certain or expected to happen as a result of action taken by an agency

the behaviour of which is outside the scope of the present document

will not indicates that something is certain or expected not to happen as a result of action taken by an

agency the behaviour of which is outside the scope of the present document

might indicates a likelihood that something will happen as a result of action taken by some agency the

behaviour of which is outside the scope of the present document

might not indicates a likelihood that something will not happen as a result of action taken by some agency

the behaviour of which is outside the scope of the present document

In addition:

is (or any other verb in the indicative mood) indicates a statement of fact

is not (or any other negative verb in the indicative mood) indicates a statement of fact

The constructions "is" and "is not" do not indicate requirements.

The contents of the present document were transferred to 3GPP TS 24.539 with necessary modifications.

## Annex A (informative): Change history

Change history									
Date	Meeting	TDoc	CR	R e v		Subject/Comment	New version		
2019-11	CT1#121	C1-198752				Draft skeleton provided by the rapporteur	0.0.0		
2019-11	CT1#121					Implementation of the following pseudo CRs agreed by CT1: C1-198019, C1-198174, C1-198482, C1-198753, C1-198757, C1-198758, and C1-199024 Corrections made by the rapporteur	0.1.0		
2019-12	CT#86	CP-193159				Presentation for information at TSG CT	1.0.0		
2019-12	CT#86	CP-193292				A title corrected	1.0.1		
2020-03	CT1#122					Implementation of the following pseudo CRs agreed by CT1: C1-200330, C10200331, C1-200573, C1-200687, C1-200706, C1-200708, C1-200832 Corrections made by the rapporteur	1.1.0		
2020-03	CT-87e	CP-200166				Presentation for approval at TSG CT	2.0.0		
2020-03	CT-87e	CP-200288				Revision after implementation of CP-200095. Presentation for approval at TSG CT	2.1.0		
2020-03	CT-87e	CP-200292				Correction of implementation of CP-200095	2.2.0		
2020-03	CT-87e					Version 16.0.0 created after approval	16.0.0		
2020-06	CT-88e	CP-201137	0001	1	F	Correction of the abnormal case in NW-TT-initiated Ethernet port management procedure	16.1.0		
2020-06	CT-88e	CP-201137	0002		D	Abbreviation correction	16.1.0		
2020-06	CT-88e	CP-201137	0003		F	IEEE Std 802.1Qbv-2016 rolled into IEEE Std 802.1Q-2018	16.1.0		
2020-06	CT-88e	CP-201137	0004	1	F	Introduction of Bridge management information	16.1.0		
2020-06	CT-88e	CP-201137	0005		F	Updating definitions for Ethernet port management messages	16.1.0		
2020-06	CT-88e	CP-201137	0006	1	F	Assignment of timer numbers and IEIs	16.1.0		
2020-06	CT-88e	CP-201137	0007		F	Splitting port management information into port- and bridge-specific information	16.1.0		
2020-06	CT-88e	CP-201137	8000		F	Correct the ETHERNET PORT MANAGEMENT NOTIFY ACK message name	16.1.0		
2020-09	CT-89e	CP-202170	0009		F	Clarification on CNC	16.2.0		
2020-09	CT-89e	CP-202170	0010r2		F	Update PSFP stream identification parameters	16.2.0		
2020-09	CT-89e	CP-202170	0011		F	Maximum size of EPMS/BMS messages	16.2.0		
2020-09	CT-89e	CP-202170	0012		F	Bridge management information correction	16.2.0		
2020-12	CT-90e	CP-203219	0016		F	The "Set parameter" operation not applicable for read-only parameters	16.3.0		
2020-12	CT-90e	CP-203219	0017		F	Correction in stream parameters in BMIC	16.3.0		
2020-12	CT-90e	CP-203219	0018	1	F	Adding NW-TT port numbers to BMIC	16.3.0		
2020-12	CT-90e	CP-203219	0019		F	Adding Stream parameters to PMIC	16.3.0		
2020-12	CT-90e	CP-203219	0020	1	F	Bridge name and Chassis ID no more needed	16.3.0		
2020-12	CT-90e	CP-203219	0021	2	F	Correction to transfer of Ethernet port management information between a time-sensitive networking (TSN) AF and the DS-TT at the UE	16.3.0		
2020-12	CT-90e	CP-203267	0022	2	F	Per-instance parameter handling for stream filter table	16.3.0		
2020-12	CT-90e	CP-203219	0023		F	Clarification on max BMS message length	16.3.0		
2021-03	CT-91e	CP-210134	0025	1	F	Location of the Ethernet port parameter name and bridge parameter name	17.0.0		
2021-03	CT-91e	CP-210134	0026	1	F	StreamFilterInstanceIndex value usage	17.0.0		
2021-06	CT-92e	CP-211337	0029	1	F	Removal of contents of the TS	17.1.0		

## History

Document history						
V17.1.0	May 2022	Publication				