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NG layer 1
(3GPP TS 38.411 version 15.0.0 Release 15)**



Reference

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Keywords

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Foreword

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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.

1 Scope

The present document specifies the standards allowed to implement layer 1 on the NG interface.

The specification of transmission delay requirements and O&M requirements are not in the scope of the present document.

In the following, 'layer 1' and 'physical layer' are assumed to be synonymous.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
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[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

3 Abbreviations

For the purposes of the present document, the abbreviations given in 3GPP TR 21.905 [1] and the following apply. An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in 3GPP TR 21.905 [1].

4 Introduction

The main functions of layer 1 are summarized in the following:

- Interface to physical medium;
 - Frame delineation;
 - Line clock extraction capability;
 - Layer 1 alarms extraction and generation;
 - Transmission quality control.
-

5 Layer 1 specifications

The support of any suitable layer 1 technique - like point-to-point or point-to-multipoint techniques - shall not be prevented.

6 Interface to management plane

The description of the interface towards the management plane is out of scope of this document, but at least the following O&M functions should be foreseen:

- Performance monitoring functions;

- Alarm status reporting functions;
- Synchronisation source management.

Annex A (informative): Change history

Change history							
Date	Meeting	TDoc	CR	Rev	Cat	Subject/Comment	New version
2017-04	R3#95b	R3-171214	-	-	-	TS skeleton	0.0.0
2017-04	R3#95b	R3-171309	-	-	-	Update of the new template and Editor's note	0.0.1
2017-05	R3#96	R3-171861	-	-	-	Update of title page and change history	0.0.2
2017-05	R3#96	R3-171970	-	-	-	Adding the contents of introduction	0.1.0
2017-11	R3#98	R3-174662	-	-	-	Adding the contents of layer 1 specifications, Interface to management plane and abbreviations	0.2.0
2018-01	R3#NR AH1801	R3-180510	-	-	-	Updating the title of specification and removing the NG-RAN in Abbreviations section	0.3.0
2018-06	RAN#80	RP-180986	-	-	-	Version submitted to RAN for approval	1.0.0
2018-06	RAN#80					Specification approved at TSG-RAN and placed under change control	15.0.0

History

Document history		
V15.0.0	July 2018	Publication