

**SLOVENSKI STANDARD**  
**SIST EN IEC 61158-6-10:2019****01-november-2019****Nadomešča:****SIST EN 61158-6-10:2015**

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**Industrijska komunikacijska omrežja - Specifikacije za procesna vodila - 6-10. del:  
Specifikacija protokola na aplikacijski ravni - Elementi tipa 10 (IEC 61158-6-  
10:2019)**Industrial communication networks - Fieldbus specifications - Part 6-10: Application layer  
protocol specification - Type 10 elements (IEC 61158-6-10:2019)**iTeh STANDARD PREVIEW**  
Industrielle Kommunikationsnetze - Feldbusse - Teil 6-10: Protokollspezifikation des  
Application Layer (Anwendungsschicht) - Typ 10-Elemente (IEC 61158-6-10:2019)**SIST EN IEC 61158-6-10:2019**  
Réseaux de communication industriels - Specifications des bus de terrain - Partie 6-10:  
Spécification du protocole de la couche application - Éléments de type 10 (IEC 61158-6-  
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25.040.40	Merjenje in krmiljenje industrijskih postopkov	Industrial process measurement and control
35.100.70	Uporabniški sloj	Application layer
35.110	Omreževanje	Networking

**SIST EN IEC 61158-6-10:2019****en,fr,de**

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EUROPEAN STANDARD

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NORME EUROPÉENNE

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August 2019

ICS 25.040.40; 35.100.70; 35.110

Supersedes EN 61158-6-10:2014 and all of its  
amendments and corrigenda (if any)

English Version

Industrial communication networks - Fieldbus specifications -  
Part 6-10: Application layer protocol specification - Type 10  
elements  
(IEC 61158-6-10:2019)

Réseaux de communication industriels - Spécifications des  
bus de terrain - Partie 6-10: Spécification du protocole de la  
couche application - Eléments de type 10  
(IEC 61158-6-10:2019)

Industrielle Kommunikationsnetze - Feldbusse - Teil 6-10:  
Protokollspezifikation des Application Layer  
(Anwendungsschicht) - Typ 10-Elemente  
(IEC 61158-6-10:2019)

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European Committee for Electrotechnical Standardization  
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Europäisches Komitee für Elektrotechnische Normung

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**EN IEC 61158-6-10:2019 (E)****European foreword**

The text of document 65C/948/FDIS, future edition 4 of IEC 61158-6-10, prepared by SC 65C "Industrial networks" of IEC/TC 65 "Industrial-process measurement, control and automation" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61158-6-10:2019.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2020-04-25
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-07-25

This document supersedes EN 61158-6-10:2014 and all of its amendments and corrigenda (if any).

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The text of the International Standard IEC 61158-6-10:2019 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

- IEC 60793-2-30 NOTE Harmonized as EN 60793-2-30
- IEC 60793-2-40 NOTE Harmonized as EN 60793-2-40
- IEC 61784-3-3 NOTE Harmonized as EN 61784-3-3

## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61131-9	-	Programmable controllers - Part 9: Single-drop digital communication interface for small sensors and actuators (SDCI)	EN 61131-9	-
IEC 61158-1	2019	Industrial communication networks - Fieldbus specifications - Part 1: Overview and guidance for the IEC 61158 and IEC 61784 series	EN IEC 61158-1	2019
IEC 61158-2	-	Industrial communication networks - Fieldbus specifications - Part 2: Physical layer specification and service definition	EN 61158-2	-
IEC 61158-5-10	2019	Industrial communication networks - Fieldbus specifications - Part 5-10: Application layer service definition - Type 10 elements	EN IEC 61158-5-10	2019
IEC 61158-6-3	2019	Industrial communication networks - Fieldbus specifications - Part 6-3: Application layer protocol specification - Type 3 elements	--	-
IEC 62439-2	-	Industrial communication networks – High availability automation networks – Part 2: Media Redundancy Protocol (MRP)	EN 62439-2	-
ISO 8601	-	Data elements and interchange formats -- Information interchange - Representation of dates and times	--	-
ISO/IEC 646	1991	Information technology - ISO 7-bit coded-character set for information interchange	--	-
ISO/IEC 7498-1	-	Information technology - Open Systems-Interconnection - Basic Reference Model: The Basic Model	--	-
ISO/IEC 8822	-	Information technology - Open Systems-Interconnection - Presentation service definition	--	-
ISO/IEC 8824-1	-	Information technology - Abstract Syntax-Notation One (ASN.1): Specification of basic notation	--	-
ISO/IEC 9545	-	Information technology - Open Systems-Interconnection - Application Layer structure	--	-

## EN IEC 61158-6-10:2019 (E)

ISO/IEC 9834-8	-	Information technology - Procedures for the operation of object identifier registration authorities - Part 8: Generation of universally unique identifiers (UUIDs) and their use in object identifiers	-
ISO/IEC 10646	-	Information technology - Universal Coded-Character Set (UCS)	-
ISO/IEC 10731	-	Information technology - Open Systems-Interconnection - Basic Reference Model - Conventions for the definition of OSI services	-
IEEE Std 802	-	IEEE Standard for Local and metropolitan-area networks: Overview and Architecture	-
IEEE Std 802.15.1	-	IEEE Standard for Information technology -- Telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements. - Part 15.1: Wireless medium access control (MAC) and physical layer (PHY) specifications for wireless personal area networks (WPANs)	-
IEEE Std 802.1AB	2016	IEEE Standard for Local and metropolitan-area networks: Station and Media Access Control Connectivity Discovery	-
IEEE Std 802.1AC	-	IEEE Standard for Local and metropolitan area networks: Media Access Control (MAC) Service definition	-
IEEE Std 802.1AS	-	IEEE Standard for Local and metropolitan-area networks - Timing and Synchronization for Time-Sensitive Applications in Bridged Local Area Networks	-
IEEE Std 802.1Q	2018	IEEE Standard for Local and metropolitan-area networks - Bridges and Bridged Networks	-
IEEE Std 802.3	-	IEEE Standard for Ethernet	-
IEEE Std 802.11	-	IEEE Standard for Information technology – Telecommunications and information exchange between systems – Local and metropolitan area networks – Specific requirements – Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications	-
IETF RFC 1034	-	Domain names - concepts and facilities	-
IETF RFC 1213	-	Management Information Base for Network-Management of TCP/IP-based Internets: MIB-II	-
IETF RFC 2131	-	Dynamic Host Configuration Protocol	-
IETF RFC 2132	-	DHCP Options and BOOTP Vendor-Extensions	-
IETF RFC 2236	-	Internet Group Management Protocol,- Version 2	-
IETF RFC 2365	-	Administratively Scoped IP Multicast	-
IETF RFC 2474	-	Definition of the Differentiated Services-Field (DS Field) in the IPv4 and IPv6 Headers	-
IETF RFC 2674	-	Definitions of Managed Objects for Bridges-with Traffic Classes, Multicast Filtering and Virtual LAN Extensions	-
IETF RFC 2863	-	The Interfaces Group MIB	-

IETF RFC 3418	-	Management Information Base (MIB) for the Simple Network Management Protocol (SNMP)	-
IETF RFC 3621	-	Power Ethernet MIB	-
IETF RFC 4361	-	Node-specific Client Identifiers for Dynamic-Host Configuration Protocol Version Four (DHCPv4)	-
IETF RFC 4363	-	Definitions of Managed Objects for Bridges-with Traffic Classes, Multicast Filtering, and Virtual LAN Extensions	-
IETF RFC 4604	-	Using Internet Group Management-Protocol Version 3 (IGMPv3) and Multicast Listener Discovery Protocol Version 2 (MLDv2) for Source-Specific Multicast	-
IETF RFC 4632	-	Classless Inter-domain Routing (CIDR): The Internet Address Assignment and Aggregation Plan	-
IETF RFC 4836	-	Definitions of Managed Objects for IEEE-802.3 Medium Attachment Units (MAUs)	-
IETF RFC 5227	-	IPv4 Address Conflict Detection	-
IETF RFC 5890	-	Internationalized Domain Names for Applications (IDNA): Definitions and Document Framework	-
IETF RFC 5905	-	Network Time Protocol Version 4: Protocol and Algorithms Specification	-
IETF RFC 6151	-	Updated Security Considerations for the MD5 Message-Digest and the HMAC-MD5 Algorithms	-
IETF RFC 6890	-	Special-Purpose IP Address Registries	-
IETF RFC 768	-	User Datagram Protocol	-
IETF RFC 791	-	Internet protocol darpa internet program-protocol specification	-
IETF RFC 792	-	Internet Control Message Protocol	-
IETF RFC 826	-	Ethernet Address Resolution Protocol Or-Converting Network Protocol Addresses to 48.bit Ethernet Address for Transmission on Ethernet Hardware	-
IETF RFC 950	-	Internet Standard Subnetting Procedure	-
ISO/IEC/IEEE 60559	2011	Information technology - Microprocessor-Systems - Floating-Point arithmetic	-
The Open Group,- Publication C706	-	Technical standard DCE1.1: Remote Procedure Call	-

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# INTERNATIONAL STANDARD



Industrial communication networks – Fieldbus specifications –  
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## CONTENTS

FOREWORD.....	37
INTRODUCTION.....	39
1 Scope.....	41
1.1 General.....	41
1.2 Specifications .....	41
1.3 Conformance .....	41
2 Normative references .....	42
3 Terms, definitions, abbreviated terms, symbols and conventions .....	45
3.1 Referenced terms and definitions.....	45
3.1.1 ISO/IEC 7498-1 terms.....	45
3.1.2 ISO/IEC 8822 terms.....	45
3.1.3 ISO/IEC 8824-1 terms.....	45
3.1.4 ISO/IEC 9545 terms.....	45
3.2 Terms and definitions for decentralized periphery .....	46
3.3 Abbreviated terms and symbols .....	54
3.3.1 Abbreviated terms and symbols for media redundancy .....	54
3.3.2 Abbreviated terms and symbols for decentralized periphery.....	54
3.3.3 Abbreviated terms and symbols for services.....	58
3.3.4 Abbreviated terms and symbols for IEEE 802.1Q.....	58
3.3.5 Abbreviated terms and symbols for IETF RFC 2474.....	58
3.3.6 Abbreviated terms and symbols for IETF RFC 4291.....	58
3.4 Conventions.....	58
3.4.1 General concept.....	58
3.4.2 Conventions for decentralized periphery.....	58
3.4.3 Conventions used in state machines.....	67
4 Application layer protocol specification for common protocols.....	72
4.1 FAL syntax description.....	72
4.1.1 DLPDU abstract syntax reference .....	72
4.1.2 Data types .....	74
4.2 Transfer syntax.....	75
4.2.1 Coding of basic data types .....	75
4.2.2 Coding section related to common basic fields .....	83
4.3 Discovery and basic configuration.....	94
4.3.1 DCP syntax description .....	94
4.3.2 DCP protocol state machines.....	122
4.3.3 DLL Mapping Protocol Machines.....	139
4.4 Precision working time control .....	140
4.4.1 FAL syntax description .....	140
4.4.2 AP-Context state machine .....	151
4.4.3 FAL Service Protocol Machines .....	151
4.4.4 Application Relationship Protocol Machines.....	152
4.4.5 DLL Mapping Protocol Machines.....	215
4.5 Time synchronization .....	215
4.5.1 General .....	215
4.5.2 GlobalTime .....	216
4.5.3 WorkingClock .....	216
4.6 Media redundancy .....	217

4.6.1	Media redundancy and loop prevention.....	217
4.6.2	Seamless media redundancy .....	220
4.7	Real time cyclic.....	220
4.7.1	FAL syntax description .....	220
4.7.2	FAL transfer syntax .....	221
4.7.3	FAL Service Protocol Machines .....	231
4.7.4	Application Relationship Protocol Machines.....	231
4.7.5	DLL Mapping Protocol Machines.....	249
4.8	Real time acyclic.....	249
4.8.1	RTA syntax description .....	249
4.8.2	RTA transfer syntax.....	250
4.8.3	FAL Service Protocol Machines .....	254
4.8.4	Application Relationship Protocol Machines.....	254
4.8.5	DLL Mapping Protocol Machines.....	269
4.9	Fragmentation.....	269
4.9.1	General .....	269
4.9.2	FRAG syntax description .....	272
4.9.3	FRAG transfer syntax .....	273
4.9.4	FAL Service Protocol Machines .....	275
4.9.5	Application Relationship Protocol Machines.....	275
4.9.6	DLL Mapping Protocol Machines.....	275
4.10	Remote procedure call .....	286
4.10.1	General .....	286
4.10.2	RPC syntax description .....	286
4.10.3	RPC Transfer syntax.....	288
4.10.4	FAL Service Protocol Machines.....	304
4.10.5	Application Relationship Protocol Machines.....	304
4.10.6	DLL Mapping Protocol Machines.....	305
4.11	Link layer discovery .....	305
4.11.1	General .....	305
4.11.2	FAL common syntax description .....	305
4.11.3	LLDP transfer syntax .....	307
4.11.4	FAL Service Protocol Machines .....	317
4.11.5	Application Relation Protocol Machines .....	317
4.11.6	DLL Mapping Protocol Machines.....	317
4.12	Bridges and End Stations.....	317
4.12.1	General .....	317
4.12.2	Model .....	318
4.12.3	Traffic Shaping .....	333
4.12.4	Bridge extensions .....	334
4.12.5	QueueHandler .....	335
4.12.6	FAL Service Protocol Machines .....	335
4.12.7	Application Relation Protocol Machines .....	335
4.12.8	DLL Mapping Protocol Machines.....	335
4.13	IP suite .....	374
4.13.1	Overview .....	374
4.13.2	IP/UDP syntax description .....	374
4.13.3	IP/UDP transfer syntax .....	375
4.13.4	ARP.....	378

4.14	Domain name system.....	380
4.14.1	General .....	380
4.14.2	Primitive definitions .....	380
4.14.3	DNS state transition diagram .....	381
4.14.4	State machine description .....	381
4.14.5	DNS state table .....	381
4.14.6	Functions, Macros, Timers and Variables .....	381
4.15	Dynamic host configuration .....	381
4.15.1	General .....	381
4.15.2	Primitive definitions .....	382
4.15.3	DHCP state transition diagram.....	382
4.15.4	State machine description .....	382
4.15.5	DHCP state table .....	382
4.15.6	Functions, Macros, Timers and Variables .....	382
4.16	Simple network management .....	383
4.16.1	Overview .....	383
4.16.2	IETF RFC 1213-MIB .....	383
4.16.3	Enterprise number for PNIO MIB .....	383
4.16.4	MIB cross reference .....	384
4.16.5	Behavior in case of modular built bridges .....	384
4.16.6	LLDP EXT MIB .....	384
4.17	Common DLL Mapping Protocol Machines.....	384
4.17.1	Overview .....	384
4.17.2	Data Link Layer Mapping Protocol Machine .....	385
4.18	Additional definitions.....	390
5	Application layer protocol specification for decentralized periphery.....	390
5.1	FAL syntax description.....	390
5.1.1	DLPDU abstract syntax reference .....	390
5.1.2	APDU abstract syntax.....	390
5.2	Transfer syntax.....	409
5.2.1	Coding section related to BlockHeader specific fields .....	409
5.2.2	Coding section related to RTA-SDU specific fields.....	424
5.2.3	Coding section related to common address fields .....	429
5.2.4	Coding section related to AL services .....	445
5.2.5	Coding section related to ARVendorBlock.....	479
5.2.6	Coding section related to PNIOStatus.....	481
5.2.7	Coding section related to I&M Records .....	498
5.2.8	Coding section related to Alarm and Diagnosis PDUs .....	505
5.2.9	Coding section related to upload and retrieval .....	527
5.2.10	Coding section related to iParameter .....	527
5.2.11	Coding section related to Physical Device Interface Data .....	528
5.2.12	Coding section related to Physical Device Port Data.....	528
5.2.13	Coding section related to Physical Device IR Data.....	531
5.2.14	Coding section related to Physical Sync Data .....	554
5.2.15	Coding section related to Isochrone Mode Data .....	559
5.2.16	Coding section related to Physical Time Data .....	561
5.2.17	Coding section related to Media Redundancy .....	564
5.2.18	Coding section related to fiber optics .....	575
5.2.19	Coding section related to network components .....	577

5.2.20	Coding section related port statistic .....	578
5.2.21	Coding section related to fast startup.....	581
5.2.22	Coding section related to DFP .....	583
5.2.23	Coding section related to MRPD .....	587
5.2.24	Coding section related to auto configuration .....	588
5.2.25	Coding section related to controller to controller communication.....	591
5.2.26	Coding section related to system redundancy .....	592
5.2.27	Coding section related to energy saving .....	595
5.2.28	Coding section related to asset management.....	595
5.2.29	Coding section related to reporting system .....	600
5.2.30	Coding section related to Logbook.....	606
5.2.31	Coding section related to Time .....	607
5.2.32	Coding section related to Channel Related Process Alarm Reason.....	607
5.2.33	PDU checking rules .....	610
5.3	FAL protocol state machines.....	643
5.3.1	Overall structure .....	643
5.4	AP-Context state machine.....	645
5.5	FAL Service Protocol Machines .....	645
5.5.1	Overview .....	645
5.5.2	FAL Service Protocol Machine Device .....	645
5.5.3	FAL Service Protocol Machine Controller .....	654
5.6	Application Relationship Protocol Machines .....	665
5.6.1	Alarm Protocol Machine Initiator .....	665
5.6.2	Alarm Protocol Machine Responder .....	669
5.6.3	Device .....	673
5.6.4	Controller .....	756
5.7	DLL Mapping Protocol Machines.....	818
Annex A	(normative) Unified establishing of an AR for all RT classes .....	819
A.1	General.....	819
A.2	AR establishing.....	820
A.3	Startup of Alarm transmitter and receiver .....	825
Annex B	(normative) Compatible establishing of an AR.....	828
Annex C	(informative) Establishing of a device access AR.....	831
Annex D	(informative) Establishing of an AR (accelerated procedure).....	832
Annex E	(informative) Establishing of an AR (fast startup procedure).....	835
Annex F	(informative) Example of the upload, storage and retrieval procedure .....	837
Annex G	(informative) OSI reference model layers.....	839
Annex H	(informative) Overview of the IO controller and the IO device state machines .....	840
Annex I	(informative) Priority regeneration .....	842
Annex J	(informative) Overview of the PTCP synchronization master hierarchy .....	843
Annex K	(informative) Optimization of bandwidth usage.....	845
Annex L	(informative) Time constraints for bandwidth allocation .....	847
Annex M	(informative) Time constraints for the forwarding of a frame .....	849
M.1	Principle .....	849
M.2	Forwarding.....	849
Annex N	(informative) Principle of dynamic frame packing .....	851
Annex O	(informative) Principle of Fragmentation .....	855

Annex P (informative) MRPD – Principle of seamless media redundancy .....	858
Annex Q (normative) Principle of a RED_RELAY without forwarding information in PDIRFrameData .....	860
Annex R (informative) Optimization for fast startup without autonegotiation .....	863
Annex S (informative) Example of a PrmBegin, PrmEnd and ApplRdy sequence .....	866
Annex T (informative) List of supported MIBs .....	867
Annex U (informative) Structure and content of BLOB .....	868
Annex V (normative) LLDP EXT MIB .....	869
Annex W (normative) Cross reference to the IEC 62439-2 .....	887
W.1 Cross reference to the IEC 62439-2 .....	887
W.1.1 General .....	887
W.1.2 Ring .....	887
W.1.3 Interconnection .....	888
Annex X (normative) Maintaining statistic counters for Ethernet .....	890
X.1 General .....	890
X.2 Counting model .....	890
X.3 Explanation of the IETF RFC defined statistic counters .....	892
X.4 Value range of the IETF RFC defined statistic counters .....	893
Bibliography .....	894

## iTeh STANDARD PREVIEW

Figure 1 – Common structure of specific fields for octet 1 (high) .....	60
Figure 2 – Common structure of specific fields for octet 2 .....	60
Figure 3 – Common structure of specific fields for octet 3 .....	60
Figure 4 – Common structure of specific fields for octet 4 .....	61
Figure 5 – Common structure of specific fields for octet 5 .....	61
Figure 6 – Common structure of specific fields for octet 6 .....	61
Figure 7 – Common structure of specific fields for octet 7 .....	62
Figure 8 – Common structure of specific fields for octet 8 .....	62
Figure 9 – Common structure of specific fields for octet 9 .....	62
Figure 10 – Common structure of specific fields for octet 10 .....	63
Figure 11 – Common structure of specific fields for octet 11 .....	63
Figure 12 – Common structure of specific fields for octet 12 .....	63
Figure 13 – Common structure of specific fields for octet 13 .....	64
Figure 14 – Common structure of specific fields for octet 14 .....	64
Figure 15 – Common structure of specific fields for octet 15 .....	64
Figure 16 – Common structure of specific fields for octet 16 (low) .....	65
Figure 17 – Coding of the data type BinaryDate .....	77
Figure 18 – Encoding of TimeOfDay with date indication value .....	77
Figure 19 – Encoding of TimeOfDay without date indication value .....	78
Figure 20 – Encoding of TimeDifference with date indication value .....	78
Figure 21 – Encoding of TimeDifference without date indication value .....	78
Figure 22 – Encoding of a NetworkTime value .....	79
Figure 23 – Encoding of NetworkTimeDifference value .....	79
Figure 24 – Encoding of TimeStamp value .....	80

Figure 25 – Encoding of TimeStampDifference value .....	81
Figure 26 – Encoding of TimeStampDifferenceShort value.....	82
Figure 27 – FastForwardingMulticastMACAdd.....	88
Figure 28 – State transition diagram of DCPUCS .....	123
Figure 29 – State transition diagram of DCPUCR.....	127
Figure 30 – State transition diagram of DCPMCS.....	131
Figure 31 – State transition diagram of DCPMCR .....	134
Figure 32 – State transition diagram of DCPHMCS .....	137
Figure 33 – State transition diagram of DCPHMCR.....	139
Figure 34 – PTCP_SequenceID value range .....	144
Figure 35 – Timescale correspondence between PTCP_Time and CycleCounter .....	147
Figure 36 – Message timestamp point.....	152
Figure 37 – Timer model.....	152
Figure 38 – Four message timestamps .....	153
Figure 39 – Line delay protocol with follow up.....	154
Figure 40 – Line delay protocol without follow up.....	154
Figure 41 – Line delay measurement .....	156
Figure 42 – Model parameter for GSDML usage.....	158
Figure 43 – Bridge delay measurement.....	159
Figure 44 – Delay accumulation.....	160
Figure 45 – Worst case accumulated time deviation of synchronization .....	161
Figure 46 – Signal generation for measurement of deviation.....	161
Figure 47 – Measurement of deviation.....	162
Figure 48 – PTCP master sending Sync-Frame without Follow Up-Frame .....	163
Figure 49 – PTCP master sending Sync-Frame with FollowUp-Frame.....	163
Figure 50 – !FU Sync Slave Forwarding Sync-Frame .....	164
Figure 51 – FU Sync Slave Forwarding Sync- and FollowUp-Frame.....	165
Figure 52 – FU Sync Slave Forwarding Sync- and Generating FollowUp-Frame.....	166
Figure 53 – Principle of the monitoring of the line delay measurement.....	167
Figure 54 – State transition diagram of DELAY_REQ.....	169
Figure 55 – State transition diagram of DELAY_RSP .....	177
Figure 56 – Overview of PTCP.....	181
Figure 57 – State transition diagram of SYN_BMA.....	184
Figure 58 – State transition diagram of SYN_MPSM .....	193
Figure 59 – State transition diagram of SYN_SPSM.....	199
Figure 60 – State transition diagram of SYNC_RELAY.....	206
Figure 61 – State transition diagram of SCHEDULER .....	212
Figure 62 – GlobalTime timer model .....	216
Figure 63 – WorkingClock timer model.....	217
Figure 64 – Media redundancy – Ring.....	217
Figure 65 – Media redundancy – Interconnection.....	219
Figure 66 – CycleCounter value range .....	222
Figure 67 – Structure of the CycleCounter .....	223