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Document Change History			
Date	Release	Changed by	Change Description
2016-11-30	4.3.0	Release Management	Initial release

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1 Introduction

1.1 Scope of this document

This document provides an overview of the complement of AUTOSAR specifications of the AUTOSAR standard "Classic Platform" comprising the initial Release 4.3 and its latest Revision 0.

1.2 Dependencies to other standards

This release of the Classic Platform depends on the standard "Foundation" in Release 1.0.0, which

- defines protocols implemented by Classic Platform and
- contains main requirements to complete the trace hierarchy.

These dependencies are refined in the trace information of the requirements in the respective specifications, i.e. requirement in SWS DLT refers to the protocol specification in the Foundation standard.

1.3 Content of chapters

This document is structured as follows:

- Chapter 2 provides a list of documentation references.
- Chapter 3 provides a summary of changes that were implemented since the preceding Release 4.2.
- Chapter 4 contains the overview of specifications comprising the Release 4.3 in its latest Revision 0. This chapter is structured according to the clusters being in use in AUTOSAR Release 4.3.
- Chapter 5 contains remarks about known technical deficiencies.
- Chapter 6 contains the detailed revision history of all released specifications.
- Chapter 7.1 provides a set of definitions aimed to increase the understanding of the content of this document and the Release 4.3.

2 Related documentation

1) Release Overview and Revision History
2) AUTOSAR Specifications in general
3) Change Documentation
4) Glossary

3 Summary of changes

This chapter contains a summary of changes which were implemented since the previous Release 4.2.

3.1 Release 4.3.0

In AUTOSAR R4.3.0, the concept work focused on improving the sustainability of the AUTOSAR standard by introducing the first-time support of Vehicle2X communication and by extending the cryptographic faculties of AUTOSAR towards a complete cryptographic protection stack. The SOME/IP data handling has been extended to newly support large messages.

Additionally, further improvements have been applied to the Diagnostic information handling and Rapid Prototyping.

3.1.1 Concepts

3.1.1.1 Introduced Concepts

The following concepts in 3.1.1.1.1 – 3.1.1.1.7 have been introduced.

3.1.1.1.1 Hardware Test Management on Startup and Shutdown

The concept introduces interfaces that allow the monitoring of the startup and shutdown hardware tests on a running AUTOSAR system.

3.1.1.1.2 Crypto Interface

The concept completes the AUTOSAR crypto stack by adding Crypto Interface and Crypto Driver. These new modules allow the integration of heterogeneous hardware and software solutions.

Together with the concept, the Crypto Service Manager has been reworked to provide a unique interface, meeting all requirements of today's automotive security.

3.1.1.1.3 V2X Support

The concept V2X Support adds support of Vehicle2X communication mechanisms to the AUTOSAR standard, especially the support of wireless ITS-G5 message handling and support of V2X applications distributed over multiple ECUs in a vehicle network.

3.1.1.1.4 Decentralized Configuration Extension 01

Based on the already implemented concept "Decentralized Configuration", the concept Extension 01 extends the functional capabilities of the Diagnostic Extract (OBD / WWH-OBD, FIM, J1939) and adds capabilities for creation and maintenance of the DEXT e.g. "Roles&Rights Management".

3.1.1.1.5 Profile for Data Exchange Points

The concept "Profile for Data Exchange Points" aims for improving the inter-operability between AUTOSAR tools by providing means for describing which data is expected for a given data exchange point.

3.1.1.1.6 Extended Buffer Access for Rapid Prototyping

The "Extended Buffer Access Method for Rapid Prototyping" concept enhances the existing AUTOSAR rapid prototyping (RP) methods by adding support for the use case of a quick validation of a software algorithm in the context of an ECU environment before final integration into a production ECU build. This is achieved by providing a well-defined memory interface that ensures that all communicated AUTOSAR signals are accessible by rapid prototyping tools (RPT) and to support the modification of existing ECU images to insert such memory interfaces.

3.1.1.1.7 SOME/IP Transport Protocol (Segmenter)

The concept introduces a SOME/IP segmenter module to enable handling of SOME/IP messages bigger than 127kByte.

3.1.1.2 Impacts of Concepts

The introduced concepts had impact on several specifications. The following table provides a detailed overview.

Please note that some of the specifications are marked by special text formatting:

- Specifications in **bold** font are completely new specifications originating from the particular concept.
- Specifications in *italic* font are affected indirectly as they provide artefacts for the actually impacted specifications.

Concept Name	Affected specifications		
	Specification Long Name	Class.	Standard
Hardware Test Management on Startup and Shutdown	**Specification of Hardware Test Manager on start up and shutdown**	aux	CP
	Requirements on Hardware Test Manager on start up and shutdown		
	Specification and Integration of Hardware Test Management at start up and shutdown		
Crypto Interface	**Specification of Crypto Interface**	std	CP
	Specification of Crypto Driver		
	Specification of Crypto Interface		
	Specification of Crypto Service Manager		
	Specification of Secure Onboard Communication		
	Specification of ECU Configuration Parameters (XML)		
	Software Component Template		
	Requirements on Crypto Stack	aux	CP
	Requirements on AUTOSAR Features		
	Basic Software UML Model		
	Layered Software Architecture		
	List of Basic Software Modules		
	Main Requirements		FO
	Glossary		
V2X Support	**Specification of Vehicle-2-X Geo Networking**	std	CP
	Specification of Vehicle-2-X Basic Transport		
	Specification of Vehicle-2-X Facilities		
	Specification of Vehicle-2-X Management		
	Specification of Wireless Ethernet Driver		
	Specification of Wireless Ethernet Transceiver Driver		
	Specification of Ethernet Interface		
	Predefined Names in AUTOSAR		
	System Template		
	Specification of ECU Configuration Parameters (XML)		
	Software Component Template		
	Requirements on Vehicle-2-X Communication	aux	CP
	Requirements on AUTOSAR Features		
	Basic Software UML Model		
	Layered Software Architecture		
	List of Basic Software Modules		
	Main Requirements		FO
	Glossary		

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Concept Name	Specification Long Name	Class.	Standard
	Affected specifications		
Profile for Data Exchange Points	*Meta Model-generated XML Schema*	std	CP
	Standardization Template		
	Generic Structure Template		
	Meta Model	aux	
	Interoperability Of Autosar Tools Supplement		
	Requirements on Interoperability of AUTOSAR Tools		
	Interoperability of AUTOSAR Tools		
	Requirements on Methodology		
	Methodology		
	Requirements on Standardization Template		
	Predefined Names in AUTOSAR		
	Supplementary material of the AUTOSAR XML Schema		
	Main Requirements		FO
Decentralized Configuration Extension 01	Diagnostic Extract Template	std	CP
	System Template		
	Requirements on Diagnostic Extract Template	aux	
Extended Buffer Access	Specification of RTE Software	std	CP
	Basic Software Module Description Template		
	Software Component Template		
	Specification of ECU Configuration Parameters (XML)		
	Basic Software UML Model	aux	
	Requirements on Runtime Environment		
	Requirements on Basic Software Module Description Template		
	Requirements on Software Component Template		
	Methodology		
	Requirements on AUTOSAR Features		
Rework of DLT for Classic- and Adaptive Platform	**Diagnostic, Log and Trace Protocol Specification**	std	FO
	Specification of PDU Router		CP
	Specification of Diagnostic Communication Manager		
	Specification of Diagnostic Log and Trace		
	Specification of ECU Configuration Parameters (XML)		
	System Template		
	Software Component Template		
	Basic Software UML Model	aux	
	Requirements on Diagnostic Log and Trace		
	Layered Software Architecture		
	List of Basic Software Modules		

	Affected specifications		
Concept Name	**Specification Long Name**	**Class.**	**Standard**
SOME/IP Transport Protocol	**Specification on SOME/IP Transport Protocol**	std	CP
	General Specification on Transformers		
	Specification of COM Based Transformer		
	Specification of E2E Transformer		
	Specification of SOME/IP Transformer		
	Specification of Socket Adaptor		
	System Template		
	SOME/IP Protocol Specification		FO
	Basic Software UML Model	aux	CP
	Specification of ECU Configuration Parameters (XML)		
	Layered Software Architecture		
	List of Basic Software Modules		

3.1.2 Specifications

3.1.2.1 New Specifications

In addition to the above listed new specifications which were introduced via Concepts, the following documents and templates were added with R4.3.0:

- ARXML Serialization Rules (UID 779, TPS, std)
- Modeling Show Cases Report (UID 789, TR, aux)
- Modeling Show Cases Examples (UID 790, EXP, aux)
- Macro Encapsulation of Library Calls (UID 808, EXP, aux)
- NV Data Handling Guideline (UID 810, EXP, aux)

3.1.2.2 Migrated Specifications

With this release, the following specifications were moved from AUTOSAR Classic Platform to the AUTOSAR Foundation standard:

- Requirements on Diagnostic (UID 004, SRS, aux)
- Main Requirements (UID 054, RS, aux)
- Glossary (UID 055, TR, aux)
- Project Objectives (UID 599, RS, aux)

3.1.2.3 Obsolete Specifications

The following specification is set to status "obsolete" in this release:

- Specification of Crypto Abstraction Library (UID 438, SWS, std)

3.1.2.4 Reworked specifications

The following documents have been changed fundamentally in R4.3.0:

- Requirements on Synchronized Time-Base Manager (UID 420, SRS, aux)
- Specification of Synchronized Time-Base Manager (UID 421, SWS, std)
- Specification of Time Synchronization over CAN (UID 674, SWS, std)
- Specification of Time Synchronization over FlexRay (UID 675, SWS, std)
- Specification of Time Synchronization over Ethernet (UID 676, SWS, std)

The following main aspects have been addressed to fulfill user needs for improved precision of Global Time Synchronization and better support of automotive use cases:

- Rate Correction added
- Time precision measurement support added
- Time/status notification mechanism added
- Resident time compensation for Ethernet switches added
- AUTOSAR specific TLV for Ethernet added
- Harmonization of <Bus>TSyn interface to StbM
- Offset message formats changed (for CAN / FlexRay)
- Support for immediate Time Synchronization added

Additionally, the Diagnostic Log and Trace has been reworked in the course of the "Rework of DLT for Classic- and Adaptive Platform" concept:

- Specification of Diagnostic Log and Trace (UID 351, SWS, std)

3.1.3 Release Documentation

There were no major changes regarding the Release Documentation.

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4 Specification overview

The published specifications are divided up into the clusters

- Release Documentation,
- Main Specifications,
- Basic Software Architecture and Runtime Environment,
- Methodology and Templates and
- Application Interfaces.

These clusters are then further structured by subcategories to provide a better orientation to the specification users. The assignment of the specifications to those clusters is shown below.

Long Name	Classi-fication	File Name	Life cycle changes
Cluster: Release Documentation			
Change Documentation	inf	AUTOSAR_TR_ChangeDocumentation	
Release Overview and Revision History	inf	AUTOSAR_TR_ReleaseOverviewAndRevHistory	
AUTOSAR Specification Hashes	inf	AUTOSAR_TR_SpecificationHashes	
Cluster: Main Specifications			
Requirements on AUTOSAR Features	aux	AUTOSAR_RS_Features	
Predefined Names in AUTOSAR	aux	AUTOSAR_TR_PredefinedNames	
Virtual Functional Bus	aux	AUTOSAR_EXP_VFB	
Cluster: Basic Software Architecture and Runtime Environment			
Basic Software UML Model	aux	AUTOSAR_MOD_BSWUMLModel	
Complex Driver design and integration guideline	aux	AUTOSAR_EXP_CDDDesignAndIntegrationGuideline	
Description of the AUTOSAR standard errors	aux	AUTOSAR_EXP_ErrorDescription	
Explanation of Error Handling on Application Level	aux	AUTOSAR_EXP_ApplicationLevelErrorHandling	
Explanation of Interrupt Handling within AUTOSAR	aux	AUTOSAR_EXP_InterruptHandlingExplanation	
General Requirements on Basic Software Modules	aux	AUTOSAR_SRS_BSWGeneral	
General Requirements on SPAL	aux	AUTOSAR_SRS_SPALGeneral	
General Specification of Basic Software Modules	std	AUTOSAR_SWS_BSWGeneral	
General Specification on Transformers	std	AUTOSAR_ASWS_TransformerGeneral	
Guide to BSW Distribution	aux	AUTOSAR_EXP_BSWDistributionGuide	
Guide to Mode Management	aux	AUTOSAR_EXP_ModeManagementGuide	

Long Name	Classi-fication	File Name	Life cycle changes
Layered Software Architecture	aux	AUTOSAR_EXP_LayeredSoftwareArchitecture	
List of Basic Software Modules	aux	AUTOSAR_TR_BSWModuleList	
Macro Encapsulation of Library Calls	aux	AUTOSAR_EXP_MacroEncapsulationofInterpolationCalls	New in R4.3.0
Modeling Guidelines of Basic Software EA UML Model	aux	AUTOSAR_TR_BSWUMLModelModelingGuide	
NV Data Handling Guideline	aux	AUTOSAR_EXP_NVDataHandling	New in R4.3.0
Overview of Functional Safety Measures in AUTOSAR	aux	AUTOSAR_EXP_FunctionalSafetyMeasures	
Requirements on ADC Driver	aux	AUTOSAR_SRS_ADCDriver	
Requirements on BSW Modules for SAE J1939	aux	AUTOSAR_SRS_SAEJ1939	
Requirements on CAN	aux	AUTOSAR_SRS_CAN	
Requirements on Communication	aux	AUTOSAR_SRS_COM	
Requirements on Core Test	aux	AUTOSAR_SRS_CoreTest	
Requirements on Crypto Stack	aux	AUTOSAR_SRS_CryptoStack	
Requirements on Diagnostic Log and Trace	aux	AUTOSAR_SRS_DiagnosticLogAndTrace	
Requirements on DIO Driver	aux	AUTOSAR_SRS_DIODriver	
Requirements on E2E Communication Protection	aux	AUTOSAR_SRS_E2E	
Requirements on EEPROM Driver	aux	AUTOSAR_SRS_EEPROMDriver	
Requirements on Ethernet Support in AUTOSAR	aux	AUTOSAR_SRS_Ethernet	
Requirements on Flash Driver	aux	AUTOSAR_SRS_FlashDriver	
Requirements on Flash Test	aux	AUTOSAR_SRS_FlashTest	
Requirements on FlexRay	aux	AUTOSAR_SRS_FlexRay	
Requirements on Free Running Timer	aux	AUTOSAR_SRS_FreeRunningTimer	
Requirements on Function Inhibition Manager	aux	AUTOSAR_SRS_FunctionInhibitionManager	
Requirements on Gateway	aux	AUTOSAR_SRS_Gateway	
Requirements on GPT Driver	aux	AUTOSAR_SRS_GPTDriver	
Requirements on Hardware Test Manager on start up and shutdown	aux	AUTOSAR_SRS_HWTestManager	New in R4.3.0
Requirements on I/O Hardware Abstraction	aux	AUTOSAR_SRS_IOHWAbstraction	
Requirements on ICU Driver	aux	AUTOSAR_SRS_ICUDriver	
Requirements on I-PDU Multiplexer	aux	AUTOSAR_SRS_IPDUMultiplexer	
Requirements on Libraries	aux	AUTOSAR_SRS_Libraries	
Requirements on LIN	aux	AUTOSAR_SRS_LIN	
Requirements on MCU Driver	aux	AUTOSAR_SRS_MCUDriver	
Requirements on Memory Hardware Abstraction Layer	aux	AUTOSAR_SRS_MemoryHWAbstractionLayer	
Requirements on Memory Services	aux	AUTOSAR_SRS_MemoryServices	
Requirements on Mode Management	aux	AUTOSAR_SRS_ModeManagement	

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Long Name	Classi-fication	File Name	Life cycle changes
Requirements on Module XCP	aux	AUTOSAR_SRS_XCP	
Requirements on Network Management	aux	AUTOSAR_SRS_NetworkManagement	
Requirements on OCU Driver	aux	AUTOSAR_SRS_OCUDriver	
Requirements on Operating System	aux	AUTOSAR_SRS_OS	
Requirements on Port Driver	aux	AUTOSAR_SRS_PortDriver	
Requirements on PWM Driver	aux	AUTOSAR_SRS_PWMDriver	
Requirements on RAM Test	aux	AUTOSAR_SRS_RAMTest	
Requirements on Runtime Environment	aux	AUTOSAR_SRS_RTE	
Requirements on Secure Onboard Communication	aux	AUTOSAR_SRS_SecureOnboardCommunication	
Requirements on SPI Handler/Driver	aux	AUTOSAR_SRS_SPIHandlerDriver	
Requirements on Synchronized Time-Base Manager	aux	AUTOSAR_SRS_SynchronizedTimeBaseManager	
Requirements on Time Service	aux	AUTOSAR_SRS_TimeService	
Requirements on Transformer	aux	AUTOSAR_SRS_Transformer	
Requirements on TTCAN	aux	AUTOSAR_SRS_TTCAN	
Requirements on Vehicle-2-X Communication	aux	AUTOSAR_SRS_V2XCommunication	New in R4.3.0
Requirements on Watchdog Driver	aux	AUTOSAR_SRS_WatchdogDriver	
Safety Use Case Example	aux	AUTOSAR_EXP_SafetyUseCase	
Specification and Integration of Hardware Test Management at start up and shutdown	aux	AUTOSAR_TR_HWTestManagementIntegrationGuide	New in R4.3.0
Specification of Large Data COM	std	AUTOSAR_SWS_LargeDataCOM	
Specification of RTE Software	std	AUTOSAR_SWS_RTE	
Specification of a Diagnostic Communication Manager for SAE J1939	std	AUTOSAR_SWS_SAEJ1939DiagnosticCommunicationManager	
Specification of a Request Manager for SAE J1939	std	AUTOSAR_SWS_SAEJ1939RequestManager	
Specification of a Transport Layer for SAE J1939	std	AUTOSAR_SWS_SAEJ1939TransportLayer	
Specification of ADC Driver	std	AUTOSAR_SWS_ADCDriver	
Specification of Basic Software Mode Manager	std	AUTOSAR_SWS_BSWModeManager	
Specification of Bit Handling Routines	std	AUTOSAR_SWS_BFXLibrary	
Specification of CAN Driver	std	AUTOSAR_SWS_CANDriver	
Specification of CAN Interface	std	AUTOSAR_SWS_CANInterface	
Specification of CAN Network Management	std	AUTOSAR_SWS_CANNetworkManagement	
Specification of CAN State Manager	std	AUTOSAR_SWS_CANStateManager	
Specification of CAN Transceiver Driver	std	AUTOSAR_SWS_CANTransceiverDriver	
Specification of CAN Transport	std	AUTOSAR_SWS_CANTransport	

Long Name	Classi-fication	File Name	Life cycle changes
Layer		Layer	
Specification of COM Based Transformer	std	AUTOSAR_SWS_COMBasedTransformer	
Specification of Communication	std	AUTOSAR_SWS_COM	
Specification of Communication Manager	std	AUTOSAR_SWS_COMManager	
Specification of Communication Stack Types	std	AUTOSAR_SWS_CommunicationStackTypes	
Specification of Compiler Abstraction	std	AUTOSAR_SWS_CompilerAbstraction	
Specification of Core Test	std	AUTOSAR_SWS_CoreTest	
Specification of CRC Routines	std	AUTOSAR_SWS_CRCLibrary	
Specification of Crypto Abstraction Library	std	AUTOSAR_SWS_CryptoAbstractionLibrary	Obsolete in R4.3.0
Specification of Crypto Driver	std	AUTOSAR_SWS_CryptoDriver	New in R4.3.0
Specification of Crypto Interface	std	AUTOSAR_SWS_CryptoInterface	New in R4.3.0
Specification of Crypto Service Manager	std	AUTOSAR_SWS_CryptoServiceManager	
Specification of Default Error Tracer	std	AUTOSAR_SWS_DefaultErrorTracer	
Specification of Diagnostic Communication Manager	std	AUTOSAR_SWS_DiagnosticCommunicationManager	
Specification of Diagnostic Event Manager	std	AUTOSAR_SWS_DiagnosticEventManager	
Specification of Diagnostic Log and Trace	std	AUTOSAR_SWS_DiagnosticLogAndTrace	
Specification of Diagnostic over IP	std	AUTOSAR_SWS_DiagnosticOverIP	
Specification of DIO Driver	std	AUTOSAR_SWS_DIODriver	
Specification of ECU State Manager	std	AUTOSAR_SWS_ECUStateManager	
Specification of ECU State Manager with fixed state machine	std	AUTOSAR_SWS_ECUStateManagerFixed	
Specification of EEPROM Abstraction	std	AUTOSAR_SWS_EEPROMAbstraction	
Specification of EEPROM Driver	std	AUTOSAR_SWS_EEPROMDriver	
Specification of Ethernet Driver	std	AUTOSAR_SWS_EthernetDriver	
Specification of Ethernet Interface	std	AUTOSAR_SWS_EthernetInterface	
Specification of Ethernet State Manager	std	AUTOSAR_SWS_EthernetStateManager	
Specification of Ethernet Transceiver Driver	std	AUTOSAR_SWS_EthernetTransceiverDriver	
Specification of Extended Fixed Point Routines	std	AUTOSAR_SWS_EFXLibrary	
Specification of Fixed Point Interpolation Routines	std	AUTOSAR_SWS_IFXLibrary	
Specification of Fixed Point Math Routines	std	AUTOSAR_SWS_MFXLibrary	
Specification of Flash Driver	std	AUTOSAR_SWS_FlashDriver	
Specification of Flash EEPROM	std	AUTOSAR_SWS_FlashEEPRO	

Long Name	Classi-fication	File Name	Life cycle changes
Emulation		MEmulation	
Specification of Flash Test	std	AUTOSAR_SWS_FlashTest	
Specification of FlexRay AUTOSAR Transport Layer	std	AUTOSAR_SWS_FlexRayARTransportLayer	
Specification of FlexRay Driver	std	AUTOSAR_SWS_FlexRayDriver	
Specification of FlexRay Interface	std	AUTOSAR_SWS_FlexRayInterface	
Specification of FlexRay ISO Transport Layer	std	AUTOSAR_SWS_FlexRayISOTransportLayer	
Specification of FlexRay Network Management	std	AUTOSAR_SWS_FlexRayNetworkManagement	
Specification of FlexRay State Manager	std	AUTOSAR_SWS_FlexRayStateManager	
Specification of FlexRay Transceiver Driver	std	AUTOSAR_SWS_FlexRayTransceiverDriver	
Specification of Floating Point Interpolation Routines	std	AUTOSAR_SWS_IFLLibrary	
Specification of Floating Point Math Routines	std	AUTOSAR_SWS_MFLLibrary	
Specification of Function Inhibition Manager	std	AUTOSAR_SWS_FunctionInhibitionManager	
Specification of GPT Driver	std	AUTOSAR_SWS_GPTDriver	
Specification of Hardware Test Manager on start up and shutdown	aux	AUTOSAR_SWS_HWTestManager	New in R4.3.0
Specification of I/O Hardware Abstraction	aux	AUTOSAR_SWS_IOHardwareAbstraction	
Specification of ICU Driver	std	AUTOSAR_SWS_ICUDriver	
Specification of I-PDU Multiplexer	std	AUTOSAR_SWS_IPDUMultiplexer	
Specification of LIN Driver	std	AUTOSAR_SWS_LINDriver	
Specification of LIN Interface	std	AUTOSAR_SWS_LINInterface	
Specification of LIN Network Management	std	AUTOSAR_SWS_LINNetworkManagement	
Specification of LIN State Manager	std	AUTOSAR_SWS_LINStateManager	
Specification of LIN Transceiver Driver	std	AUTOSAR_SWS_LINTransceiverDriver	
Specification of MCU Driver	std	AUTOSAR_SWS_MCUDriver	
Specification of Memory Abstraction Interface	std	AUTOSAR_SWS_MemoryAbstractionInterface	
Specification of Memory Mapping	std	AUTOSAR_SWS_MemoryMapping	
Specification of Module E2E Transformer	std	AUTOSAR_SWS_E2ETransformer	
Specification of Module XCP	std	AUTOSAR_SWS_XCP	
Specification of Network Management for SAE J1939	std	AUTOSAR_SWS_SAEJ1939NetworkManagement	
Specification of Network Management Interface	std	AUTOSAR_SWS_NetworkManagementInterface	
Specification of NVRAM Manager	std	AUTOSAR_SWS_NVRAMManager	
Specification of OCU Driver	std	AUTOSAR_SWS_OCUDriver	

Long Name	Classi-fication	File Name	Life cycle changes
Specification of Operating System	std	AUTOSAR_SWS_OS	
Specification of PDU Router	std	AUTOSAR_SWS_PDURouter	
Specification of Platform Types	std	AUTOSAR_SWS_PlatformTypes	
Specification of Port Driver	std	AUTOSAR_SWS_PortDriver	
Specification of PWM Driver	std	AUTOSAR_SWS_PWMDriver	
Specification of RAM Test	std	AUTOSAR_SWS_RAMTest	
Specification of Secure Onboard Communication	std	AUTOSAR_SWS_SecureOnboardCommunication	
Specification of Service Discovery	std	AUTOSAR_SWS_ServiceDiscovery	
Specification of Socket Adaptor	std	AUTOSAR_SWS_SocketAdaptor	
Specification of SOME/IP Transformer	std	AUTOSAR_SWS_SOMEIPTransformer	
Specification of SPI Handler/Driver	std	AUTOSAR_SWS_SPIHandlerDriver	
Specification of Standard Types	std	AUTOSAR_SWS_StandardTypes	
Specification of SW-C End-to-End Communication Protection Library	std	AUTOSAR_SWS_E2ELibrary	
Specification of Synchronized Time-Base Manager	std	AUTOSAR_SWS_SynchronizedTimeBaseManager	
Specification of TCP/IP Stack	std	AUTOSAR_SWS_TcpIp	
Specification of Time Service	std	AUTOSAR_SWS_TimeService	
Specification of Time Synchronization over CAN	std	AUTOSAR_SWS_TimeSyncOverCAN	
Specification of Time Synchronization over Ethernet	std	AUTOSAR_SWS_TimeSyncOverEthernet	
Specification of Time Synchronization over FlexRay	std	AUTOSAR_SWS_TimeSyncOverFlexRay	
Specification of TTCAN Driver	std	AUTOSAR_SWS_TTCANDriver	
Specification of TTCAN Interface	std	AUTOSAR_SWS_TTCANInterface	
Specification of UDP Network Management	std	AUTOSAR_SWS_UDPNetworkManagement	
Specification of Vehicle-2-X Basic Transport	std	AUTOSAR_SWS_V2XBasicTransport	New in R4.3.0
Specification of Vehicle-2-X Facilities	std	AUTOSAR_SWS_V2XFacilities	New in R4.3.0
Specification of Vehicle-2-X Geo Networking	std	AUTOSAR_SWS_V2XGeoNetworking	New in R4.3.0
Specification of Vehicle-2-X Management	std	AUTOSAR_SWS_V2XManagement	New in R4.3.0
Specification of Watchdog Driver	std	AUTOSAR_SWS_WatchdogDriver	
Specification of Watchdog Interface	std	AUTOSAR_SWS_WatchdogInterface	
Specification of Watchdog Manager	std	AUTOSAR_SWS_WatchdogManager	
Specification of Wireless Ethernet Driver	std	AUTOSAR_SWS_WirelessEthernetDriver	New in R4.3.0
Specification of Wireless Ethernet Transceiver Driver	std	AUTOSAR_SWS_WirelessEthernetTransceiverDriver	New in R4.3.0

Long Name	Classi-fication	File Name	Life cycle changes
Specification on Ethernet Switch Driver	std	AUTOSAR_SWS_EthernetSwitchDriver	
Specification on SOME/IP Transport Protocol	std	AUTOSAR_SWS_SOMEIPTransportProtocol	New in R4.3.0
Technical Safety Concept Status Report	aux	AUTOSAR_TR_SafetyConceptStatusReport	
Utilization of Crypto Services	aux	AUTOSAR_EXP_UtilizationOfCryptoServices	
Cluster: Methodology and Templates			
ARXML Serialization Rules	std	AUTOSAR_TPS_ARXMLSerializationRules	New in R4.3.0
AUTOSAR Feature Model Exchange Format Requirements	aux	AUTOSAR_RS_FeatureModelExchangeFormat	
AUTOSAR Feature Model Exchange Format	std	AUTOSAR_TPS_FeatureModelExchangeFormat	
AUTOSAR Miscellaneous Support Files	aux	AUTOSAR_MOD_MiscSupport	
Basic Software Module Description Template	std	AUTOSAR_TPS_BSWModuleDescriptionTemplate	
Collection of blueprints for AUTOSAR M1 models	aux	AUTOSAR_MOD_GeneralBlueprints	
Collection of constraints on AUTOSAR M1 models	std	AUTOSAR_TR_AutosarModelConstraints	
Diagnostic Extract Template	std	AUTOSAR_TPS_DiagnosticExtractTemplate	
General Requirements on Methodology and Templates	aux	AUTOSAR_RS_MethodologyAndTemplatesGeneral	
Generic Structure Template	std	AUTOSAR_TPS_GenericStructureTemplate	
Integration of Franca IDL Software Component Descriptions	aux	AUTOSAR_TR_FrancaIntegration	
Interaction with Behavioral Models	aux	AUTOSAR_TR_InteractionWithBehavioralModels	
Interoperability of AUTOSAR Tools	aux	AUTOSAR_TR_InteroperabilityOfAutosarTools	
Interoperability Of Autosar Tools Supplement	aux	AUTOSAR_TR_InteroperabilityOfAutosarToolsSupplement	
Meta Model	aux	AUTOSAR_MMOD_MetaModel	
Meta Model-generated XML Schema	std	AUTOSAR_MMOD_XMLSchema	
Methodology	aux	AUTOSAR_TR_Methodology	
Modeling Show Cases Examples	aux	AUTOSAR_EXP_ModelingShowCases	New in R4.3.0
Modeling Show Cases Report	aux	AUTOSAR_TR_ModelingShowCases	New in R4.3.0
Recommended Methods and Practices for Timing Analysis and Design within the AUTOSAR Development Process	aux	AUTOSAR_TR_TimingAnalysis	
Requirements on Basic Software Module Description Template	aux	AUTOSAR_RS_BSWModuleDescriptionTemplate	
Requirements on Diagnostic Extract Template	aux	AUTOSAR_RS_DiagnosticExtractTemplate	

Long Name	Classi-fication	File Name	Life cycle changes
Requirements on ECU Configuration	aux	AUTOSAR_RS_ECUConfiguration	
Requirements on ECU Resource Template	aux	AUTOSAR_RS_ECUResourceTemplate	
Requirements on Interaction with Behavioral Models	aux	AUTOSAR_RS_InteractionWithBehavioralModels	
Requirements on Interoperability of AUTOSAR Tools	aux	AUTOSAR_RS_InteroperabilityOfAutosarTools	
Requirements on Methodology	aux	AUTOSAR_RS_Methodology	
Requirements on Safety Extensions	aux	AUTOSAR_RS_SafetyExtensions	
Requirements on Software Component Template	aux	AUTOSAR_RS_SoftwareComponentTemplate	
Requirements on Standardization Template	aux	AUTOSAR_RS_StandardizationTemplate	
Requirements on System Template	aux	AUTOSAR_RS_SystemTemplate	
Requirements on Timing Extensions	aux	AUTOSAR_RS_TimingExtensions	
Software Component Template	std	AUTOSAR_TPS_SoftwareComponentTemplate	
Specification of ECU Configuration	std	AUTOSAR_TPS_ECUConfiguration	
Specification of ECU Configuration Parameters (XML)	std	AUTOSAR_MOD_ECUConfigurationParameters	
Specification of ECU Resource Template	std	AUTOSAR_TPS_ECUResourceTemplate	
Specification of Timing Extensions	std	AUTOSAR_TPS_TimingExtensions	
Specifications of Safety Extensions	std	AUTOSAR_TPS_SafetyExtensions	
Standardization Template	std	AUTOSAR_TPS_StandardizationTemplate	
Standardized M1 Models used for the Definition of AUTOSAR	std	AUTOSAR_MOD_GeneralDefinitions	
Supplementary material of general blueprints for AUTOSAR	aux	AUTOSAR_TR_GeneralBlueprintsSupplement	
Supplementary material of the AUTOSAR XML Schema	aux	AUTOSAR_TR_XMLSchemaSupplement	
System Template	std	AUTOSAR_TPS_SystemTemplate	
XML Schema Production Rules	std	AUTOSAR_TPS_XMLSchemaProductionRules	
Cluster: Application Interfaces			
Application Design Patterns Catalogue	aux	AUTOSAR_TR_AIDesignPatternsCatalogue	
Application Interface Examples	aux	AUTOSAR_MOD_AISpecificationExamples	
Application Interfaces User Guide	aux	AUTOSAR_EXP_AIUserGuide	
Explanation of Application Interfaces of Occupant and Pedestrian Safety Systems Domain	aux	AUTOSAR_EXP_AIOccupantAndPedestrianSafety	

Long Name	Classi-fication	File Name	Life cycle changes
Explanation of Application Interfaces of the Body and Comfort Domain	aux	AUTOSAR_EXP_AIBodyAndComfort	
Explanation of Application Interfaces of the Chassis Domain	aux	AUTOSAR_EXP_AIChassis	
Explanation of Application Interfaces of the HMI, Multimedia and Telematics Domain	aux	AUTOSAR_EXP_AIHMIMultimediaAndTelematics	
Explanation of Application Interfaces of the Powertrain Engine Domain	aux	AUTOSAR_EXP_AIPowertrain	
Requirements on SW-C and System Modeling	aux	AUTOSAR_RS_SWCModeling	
SW-C and System Modeling Guide	aux	AUTOSAR_TR_SWCModelingGuide	
Unique Names for Documentation, Measurement and Calibration: Modeling and Naming Aspects including Automatic Generation	aux	AUTOSAR_TR_AIMeasurementCalibrationDiagnostics	
XML Specification of Application Interfaces	std	AUTOSAR_MOD_AISpecification	

5 Remarks to known technical deficiencies

The technical deficiencies per specification are – if applicable – mentioned inside the respective specification in a chapter called "Known Limitations" which is located after the table of contents.

There are the following technical deficiencies to be mentioned which are not related to a specific specification:

- none

There are major changes or major extension on/of specifications which shall be pointed out here:

- **AUTOSAR_EXP_UtilizationOfCryptoServices (UID 602):**
  This document was impacted by the Crypto Interface concept released with R4.3.0 but not yet updated accordingly. The update is planned for R4.3.1.

- **V2X-Modules:**
  - Wireless Communication supports IEEE 802.11p only.
    Other 802.11 standards (e. g. for infrastructure networks and integration with TCP/IP) can be extended in future releases of the AUTOSAR standard.
  - The V2X modules follow the guidance regarding the Day-1 scenarios defined by the Basic System Standards Profile from Car-2-Car-Consortium.
  - The Car-2-Car-Consortium supports also American and Japanese regional versions of C2C. AUTOSAR R4.3.0 only focuses on the European version of car-to-car communication as defined by ETSI. Extensions to other regions are planned for future releases of the AUTOSAR standard.

- **AUTOSAR_SWS_ServiceDiscovery (UID 616):**
  This document does not yet contain trace links to the SRS Ethernet, therefore, the trace table is empty.

- **AUTOSAR_SRS_SynchronizedTimeBaseManager (UID 420),
  AUTOSAR_SWS_SynchronizedTimeBaseManager (UID 421),
  AUTOSAR_SWS_TimeSyncOverCAN (UID 674),
  AUTOSAR_SWS_TimeSyncOverFlexRay (UID 675),
  AUTOSAR_SWS_TimeSyncOverEthernet (UID 676),
  AUTOSAR_SWS_DiagnosticLogAndTrace (UID 351):**
  Due to the major changes which were applied to these documents (see 3.1.2.4 "Reworked specifications"), existing implementations need to be thoroughly checked regarding their conformance to the updated specifications listed above.

6 Revision history

6.1 Release 4.3.0

Revision 0 of Release 4.3. has been released on the 30th of November 2016. The following deliverables had major changes.

Name	Specification history entry
Application Design Patterns Catalogue	• generalization of arbitration pattern, three examples: several setpoint requesters, several providers of estimated values, several providers of consolidated values • minor changes
Application Interfaces User Guide	• Add chapter about implementation of data types as integer or floating point data types – Chapter ID 4.2.3.3.
ARXML Serialization Rules	• Initial Release
AUTOSAR Feature Model Exchange Format Requirements	• Editorial changes
AUTOSAR Feature Model Exchange Format	• Editorial changes
Basic Software Module Description Template	• Standarization of Rapid Prototyping Support • Improve Callout handling • Extended Uses-Case descriptions for BSW modules • Editorial changes
Collection of constraints on AUTOSAR M1 models	• minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
Complex Driver design and integration guideline	• Add chapter to interface with StbM module • Update for Module ID
Description of the AUTOSAR standard errors	• Editorial changes
Diagnostic Extract Template	• Support for OBD • Support for J1939 • Support for Fim configuration • Support for environmental conditions • Minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation

Name	Specification history entry
Explanation of Application Interfaces of Occupant and Pedestrian Safety Systems Domain	• Editorial changes
Explanation of Application Interfaces of the Body and Comfort Domain	• Extension of number of ports of Body composition • Editorial changes
Explanation of Application Interfaces of the Chassis Domain	• Editorial changes
Explanation of Application Interfaces of the HMI, Multimedia and Telematics Domain	• Editorial changes
Explanation of Application Interfaces of the Powertrain Engine Domain	• Chapters "Terminology – Torque within the Powertrain Domain" and "Overview of AUTOSAR torque application interfaces" updated by new torque signals requested by WP-I-TRSM. • Update Chapter "Appendix: Mapping Ports to Display Names - Powertrain Domain" according Sensor/Actuator Pattern Definitions. Keep elements from earlier AUTOSAR Releases inside.
Explanation of Error Handling on Application Level	• minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
Explanation of Interrupt Handling within AUTOSAR	• Editorial changes
General Requirements on Basic Software Modules	• Interfaces for C90 has been added • Support for MISRA 2012 updated • Obsolete references removed • Editorial Changes
General Requirements on Methodology and Templates	• Editorial changes
General Requirements on SPAL	• Editorial changes
General Specification of Basic Software Modules	• Meta Data handling • Changed to MISRA C 2012 Standard • Debugging support was removed • minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
General Specification on Transformers	• Minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation

Name	Specification history entry
Generic Structure Template	• Extend AttributeValuePattern for enumeration • Editorial changes • Control the production of specification documents • Added section on Special Data Group Definitions
Guide to BSW Distribution	• Editorial changes
Guide to Mode Management	• Explanation of multicore BswM interaction • Minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
Integration of Franca IDL Software Component Descriptions	• editorial changes
Interaction with Behavioral Models	• Reference to AUTOSAR_TR_Methodology.pdf corrected
Interoperability of AUTOSAR Tools	• Clean-up • Minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
Layered Software Architecture	• Incorporated new 4.3 concepts for Crypto Stack, Vehicle-2-X Communication, SOME/IP Transport Protocol, DLT rework • Removed obsolete Dbg module • Editorial changes
List of Basic Software Modules	• Corrected DLT layer assignment after DLT rework • Deprecated Debugging module removed • Added SOME/IP-Transport Protocol • Introduced modules for Vehicle-2-X communication • Introduced modules for new Crypto stack
Macro Encapsulation of Library Calls	• Initial Release
Methodology	• Support for Data Exchange Points added • Minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
Modeling Guidelines of Basic Software EA UML Model	• Editorial changes
Modeling Show Cases Examples	• Initial Release
Modeling Show Cases Report	• Initial Release
NV Data Handling Guideline	• Initial Release
Overview of Functional Safety Measures in AUTOSAR	• New Chapter: „Use of AUTOSAR features for functional safety" is based on Chapters 4.2 and 4.3 from document "TR_SafetyConceptStatusReport_233" • Minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation.

Name	Specification history entry
Predefined Names in AUTOSAR	• Include abbreviations for PDEP
Recommended Methods and Practices for Timing Analysis and Design within the AUTOSAR Development Process	• Section 1.9 added roles and their benefits from reading this document • Section 2.6 introduced function-level Use-cases • Some ECU UCs are consolidated in chapter 3 • New figure for overview of E2E Use-cases is improved (figures 5.1) • Improved timing tasks in section 6.3 • References to methods and properties are consolidated in chapter 6
Requirements on ADC Driver	• Chapter 5 added with requirements tracing table
Requirements on AUTOSAR Features	• Obsolete Debugging features removed • Incorporation of features for new R4.3 concepts
Requirements on Basic Software Module Description Template	• Removed Debugging support requirement [RS_BSWMD_00061]. • Added further rapid prototyping support with [RS_BSWMD_00070] and [RS_BSWMD_00071].
Requirements on BSW Modules for SAE J1939	• Added traceability matrix • Support for Request2
Requirements on CAN	• Added method to obtain error active/passive state of a CAN
Requirements on Communication	• restricted I-PDU groups to contain only PDUs with the same direction • minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
Requirements on Core Test	• Added Requirements Tracing section
Requirements on Crypto Stack	• Added requirements for the whole Crypto Stack and renamed the document • Introduced crypto job concept • Introduced key management concept
Requirements on Diagnostic Extract Template	• Add requirements for OBD • Add requirements for the support of Fim • Add requirements for the support of J1939 • Minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
Requirements on Diagnostic Log and Trace	• Editorial changes
Requirements on DIO Driver	• Add section 5 Requirements Tracing
Requirements on E2E Communication Protection	• Update requirements considering new profiles 7, 11, 22 • Update requirements tracing

Name	Specification history entry
Requirements on ECU Configuration	• Updated title of [RS_ECUC_00066]
Requirements on ECU Resource Template	• Layout update
Requirements on EEPROM Driver	• Editorial changes
Requirements on Ethernet Support in AUTOSAR	• Improvements of switch related requirements • Introduction of testing and diagnostics features • Editorial changes
Requirements on Flash Driver	• Editorial changes
Requirements on Flash Test	• Editorial changes
Requirements on FlexRay	• Minor corrections
Requirements on Free Running Timer	• Editorial changes
Requirements on Function Inhibition Manager	• Editorial Changes
Requirements on Gateway	• FIFO shall be enabled for TP Gateway
Requirements on GPT Driver	• Editorial changes
Requirements on Hardware Test Manager on start up and shutdown	• Initial Release
Requirements on I/O Hardware Abstraction	• Requirement Tracing section added
Requirements on ICU Driver	• Editorial changes
Requirements on Interaction with Behavioral Models	• Editorial changes
Requirements on Interoperability of AUTOSAR Tools	• added use case and requirements for the description of data exchange points
Requirements on I-PDU Multiplexer	• minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
Requirements on Libraries	• Removal of the requirement SRS_LIBS_00006 • Addition of Requirements Tracing section • Addition of details about 64-bit CRC
Requirements on LIN	• Added requirement tracing section

Name	Specification history entry
Requirements on MCU Driver	• Added "Chapter 5 – Requirement Tracing" to trace against AUTOSAR features. • Editorial changes
Requirements on Memory Hardware Abstraction Layer	• Added Requirements Tracing chapter
Requirements on Memory Services	• Added Requirements Tracing chapter
Requirements on Methodology	• Support for Data Exchange Points added • Minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
Requirements on Mode Management	• Clarification of Network Management requirements • Introduced Requirements Tracing information
Requirements on Module XCP	• Added requirements tracing
Requirements on Network Management	• Added Requirements Tracing section • Editorial changes
Requirements on OCU Driver	• Add section 3 Requirements Tracing
Requirements on Operating System	• minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
Requirements on Port Driver	• Editorial changes
Requirements on PWM Driver	• Added requirements tracing section
Requirements on RAM Test	• Add section 5 Requirements Tracing
Requirements on Runtime Environment	• Added support for • ExtendedBufferAccess: • [SRS_Rte_00254], • [SRS_Rte_00255], • [SRS_Rte_00256], • [SRS_Rte_00257], • [SRS_Rte_00258], • [SRS_Rte_00259], • [SRS_Rte_00260]
Requirements on Safety Extensions	• minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
Requirements on Secure Onboard Communication	• Minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
Requirements on Software Component Template	• Added requirements for rapid prototyping support.

Name	Specification history entry
Requirements on SPI Handler/Driver	• New chapter "Requirements tracing"
Requirements on Standardization Template	• Profiles for Data Exchange Points • restructure chapters • editorial changes
Requirements on SW-C and System Modeling	• Editorial changes
Requirements on Synchronized Time-Base Manager	• Rate Correction added • Time precision measurement support added • AUTOSAR specific TLV and resident time compensation for switches added for Ethernet • Various enhancements and corrections (e.g. support for immediate Timesync message transmission)
Requirements on System Template	• minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
Requirements on Time Service	• Add section 5 Requirements Tracing
Requirements on Timing Extensions	• Editorial changes
Requirements on Transformer	• Minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
Requirements on TTCAN	• Update Requirements Tracing
Requirements on Vehicle-2-X Communication	• Initial Release
Requirements on Watchdog Driver	• Added chapter 5: Requirements Tracing
Safety Use Case Example	• Editorial changes
Software Component Template	• Improved support for Unions • Improved upstream mapping • Improved description of service use cases • Minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
Specification and Integration of Hardware Test Management at start up and shutdown	• Initial Release
Specification of Large Data COM	• Introduced reliable TxConfirmation • Minor corrections
Specification of RTE Software	• Service-based bypass support • Minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation

Name	Specification history entry
Specification of a Diagnostic Communication Manager for SAE J1939	• Clarifications, Corrections and Optimization • DM1 max number of DTC to be set to configurable • Support of DM53, DM54, and DM55 • Extend J1939DcmBusType with new enumerators
Specification of a Request Manager for SAE J1939	• Request2 support • Improved handling of meta data • Reliable TxConfirmation replaces timeout • Separate configuration of different users
Specification of a Transport Layer for SAE J1939	• Improved handling of meta data • Reliable TxConfirmation replaces timeout • Clarification on concurrent connections • Support of link time configuration variant
Specification of ADC Driver	• Variant-Post-Build requirements removed • Variant specific requirements for initialization API removed • Error classification table update • Editorial changes
Specification of Basic Software Mode Manager	• Added some actions/indications to allow for more BswM interaction with following BSW Modules: EthIf, EcuM • Waiting functionality added using the BswMTimer mode request source • Some mode requests are now modeled using BswMEventRequestPort, instead of BswMModeRequestPort • Editorial changes, increased requirement traceability and minor changes to configuration containers/parameters
Specification of Bit Handling Routines	• Removal of the requirement SWS_Bfx_00204 • Updation of MISRA violation comment format • Updation of unspecified value range for BitPn, BitStartPn, BitLn and ShiftCnt • Clarifications
Specification of CAN Driver	• Added API's Can_GetControllerErrorState Can_DeInit, Can_GetControllerMode, Types Can_ControllerStateType, Can_ErrorStateType and new requirements Can_91002 to SWS_Can_91018. • Modified minimum range of MainFunctionPeriod parameters and replaced Word "DLC" by "Data Length". • Removed unresolved BSW SRS references, definition of the "configuration variants", Can_StateTransitionType, WAKEUP related, Can_ChangeBaudrate API support, MISRA references, requirements related to module initialization check for scheduled functions. • Small improvements and minor bug-fixes.
Specification of CAN Interface	• Remove CCMSM • Rework MetaData handling • Reliable TxConfirmation • Error Active/Passive State API

Name	Specification history entry
Specification of CAN Network Management	• API Harmonizations • Improved post-build parameter support and dependencies • Transmission of additional NM message on NM Coordinator Ready Sleep Bit change • Introduction of Reliable TX Confirmation
Specification of CAN State Manager	• Provide DeInit-API • ECU passive mode clarified and fixed • Editorial changes
Specification of CAN Transceiver Driver	• Added CanTrcv_DeInit API • Sequence diagram updated • CanTrcvGetVersionInfo renamed to CanTrcvVersionInfoApi • Updated Configuration class for configuration parameters • Minor corrections in the MainFunction periods
Specification of CAN Transport Layer	• Harmonized API functions description • Parallel handling of CAN 2.0 and CAN-FD clarification • Introduction of reliable TxConfirmation • Clarification of addressing in Upper Layers using MetaData
Specification of COM Based Transformer	• Updated include file structure figure 5.1. • Clarification on postBuild configuration in chapter 10. • Added support for unqueued communication when no data is available in [SWS_ComXf_00035]
Specification of Communication	• updated TX-confirmation handling • revised Signal Based Gateway • Com-Stack API harmonization • minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
Specification of Communication Manager	• Added the possiblity to switch ehternet switch ports according to ComM channel request / release • Added the wake up handling in case of a ECU which is controlling a Ethernet switch and using PNCs. • Minor corrections
Specification of Communication Stack Types	• Removed Type BusTrcvErrorType because it is not used at all • Updated PduInfoType for addressing in Upper Layers using MetaData • Update of SWS document as per BSW General document
Specification of Compiler Abstraction	• Removed chapter 'Variants' • Removed obsolete elements
Specification of Core Test	• Replaced Development Error Tracer with Default Error Tracer • Removed Debugging Support section • Removed Variants section
Specification of CRC Routines	• Introduction of a new CRC-64 for E2E Profile 7 • Editorial changes
Specification of Crypto Driver	• Initial Release
Specification of Crypto Interface	• Initial Release

Name	Specification history entry
Specification of Crypto Service Manager	• Introduced crypto job concept • Introduced key management concept • Removed Cry_XXX functions from the Csm and introduced two new layers in the crypto stack: Crypto Interface (CryIf) and Crypto Driver (Crypto)
Specification of Default Error Tracer	• Improved Sequence Diagrams • Added Description of Callouts (8.1.5) • Changed Port Defined Arguments in Service • Improved traceability • Added DetModuleInstance parameter • Made TransientFaults an BSW-Service
Specification of Diagnostic Communication Manager	• Redesign interfaces between Dem and Dcm • Rework Security Access management • Add management for parallel support for OBD and UDS protocols • Clarify usage of Diagnosis scaling • minor corrections / clarifications / editorial changes; For details please refer to the BWCStatement
Specification of Diagnostic Event Manager	• Removal of context workarounds and reworked callback behaviour. Introduced monitor status and updated point in time of callback processing. • Introduced client concept for multiple access to the Dem. Optimized APIs for better runtime performance and aligned return values to allow the Dcm mapping to return values according to ISO 14229-1 [1]. • Supporting event memories for multiple diagnostic servers Clarified thresholds and operation cycle handling • minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
Specification of Diagnostic Log and Trace	• Major rework of the SWS Dlt • Dlt Protocol moved to PRS Dlt Protocol specification • Removed interaction with DCM
Specification of Diagnostic over IP	• Support for DoIP Activation line switch • Support for UDP multicast vehicle announcement • Introduction of reliable TxConfirmation • Harmonization of identical APIs functions within BSW
Specification of DIO Driver	• Removed SWS_Dio_00065 • Replaced content of "7.6.2 Runtime Errors" by "There are no runtime errors." • Replaced content of "7.6.3 Transient Faults" by "There are no transient faults • Removed the definition of the "configuration variants" from 10.1.1 • Changed Figure 2: Include File Structure
Specification of ECU Configuration	• Minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation

Name	Specification history entry
Specification of ECU Resource Template	• Layout update
Specification of ECU State Manager	• Partial Network Cluster Support • Initialization BSW scheduler slipt • Added a driver initialization list • Removed EcuM_StateType
Specification of ECU State Manager with fixed state machine	• Minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
Specification of EEPROM Abstraction	• Rules for request acceptance/rejection and related error reporting updated • Updated tracing information • Range / limits on main function changed
Specification of EEPROM Driver	• Obsolete chapter "7.11 Support for Debugging" and sub chapter "10.2.1 Variants" are removed • Byte-wise read/write/erase access adaptation • Alignment of DataBuffers passed to functions
Specification of Ethernet Driver	• Quality of Service (QoS) support • Ethernet statistics counter access
Specification of Ethernet Interface	• Diagnostics access APIs added • gPTP Timestamp rework • Ethernet Switch enhancements (Port Groups) • Wireless Ethernet support
Specification of Ethernet State Manager	• Remove Set and Get Transceiver mode functionality • Correct EthSM_TcpIpModeIndication callback return value • Harmonize main function period with the other modules • Remove Get current internal mode
Specification of Ethernet Transceiver Driver	• Configuration via Switch or Mii • 100BASE-T1 test mode support
Specification of Extended Fixed Point Routines	• Modified: • Updated the correct reference to SRS_BSW_General (SRS_BSW_00437) & (SRS_BSW_00448) for SWS_Efx_00810 & SWS_Efx_00822 requirements. • Updated EFX document to support MISRA 2012 standard. (Removed redundant statements in SWS_Efx_00809 which already exist in SWS_BSW document and SWS_SRS document) • Updated SWS_Efx_00275 & SWS_Efx_00276 to provide more clarity on resolution of parameters. • Updated SWS_Efx_00278 & SWS_Efx_00279 to provide more clarity on rounding and minimum value of Param_cpcst->SlopeXXX_u32 * dT_s32. Provided the correct IT number. • Updated the section 8.5.3.1 for Structure definitions for controller routines. •

Name	Specification history entry
Specification of Fixed Point Interpolation Routines	Added: • Added a new requirement (SWS_Ifx_00250) to provide info on symmetricity for interpolation services. • A note has been added in SWS_Ifx_00016 as a suggestion to provide hardware independent solution too. Modified: • Section 2 has been updated to include abbreviation for (DET) Default Error tracer. • Updated IFX document to support MISRA 2012 standard. (Removed redundant statements in SWS_Ifx_00809 which already exist in SWS_BSW document and SWS_SRS document) • Modified the reference to SRS_BSW_General (SRS_BSW_00437) & (SRS_BSW_00448) for SWS_Ifx_00436 & SWS_Ifx_00999 requirements.
Specification of Fixed Point Math Routines	Modified • The renaming of "Development Error Tracer" to "Default Error Tracer" is done in abbreviations • Removal of the requirement SWS_Mfx_00204 • Maximum shift value updated for SWS_Mfx_00064 • Updated SWS_Mfx_00073 for clarity in min/max handling • Clarifications
Specification of Flash Driver	• Updated tracing information • Internal buffer alignment clarified • Error handling refined, new configuration parameters added
Specification of Flash EEPROM Emulation	• Updated tracing information • Behaviour during MEMIF_BUSY_INTERNAL reworked • Range of main function adapted
Specification of Flash Test	• ECUC_FlsTst_00172: FlsTstMainFunctionPeriod added; • SWS_FlsTst_00081 removed; • Unresolved references BSW00431, BSW00434, SRS_BSW_00326, SRS_BSW_00435, SRS_BSW_00436 deleted
Specification of FlexRay AUTOSAR Transport Layer	• Chapters Runtime Errors, and Transient Faults have been established • Development Error Tracer has been replaced by Default Error Tracer • Meta Data handling has been introduced • Requirements about handling negative TxConfirmations has been added.
Specification of FlexRay Driver	• Added TX conflict detectionsupport • Editorial changes
Specification of FlexRay Interface	• New feature to get the "TxConflictState" • Introduce reliable TxConfirmation • Unused bit handling reworked • Several bug fixes

Name	Specification history entry
Specification of FlexRay ISO Transport Layer	• Removed configuration parameters FrTpMaxBufferSize, FrTpMaxAs, FrTpMaxAr, FrTpMaxFrIf, FrTpTimeFrIf, FrTpTimeoutBr, FrTpTimeoutCs. • Addressing in Upper Layers using MetaData. • Introduced reliable TxConfirmation. • Editorial changes.
Specification of FlexRay Network Management	• API Harmonizations • Clarification on initiatlization of FrNm • Introduction of Reliable TX Confirmation • Update in TriggerTransmit • Minor corrections
Specification of FlexRay State Manager	• Added wakeup forwarding for dual channel FlexRay networks • Minor corrections / clarifications / editorial changes; for details please refer to the ChangeDocumentation
Specification of FlexRay Transceiver Driver	• Icu APIs are used to activate/de-activate the ISR that indicates a wakeup • Clarification in configuration of SPI sequence • Correction of mainfunction period
Specification of Floating Point Interpolation Routines	Modified: • Section 2 has been revisited to update Default Error Tracer instead of Development Error tracer. • Updated IFL document to support MISRA 2012 standard. (Removed redundant statements in SWS_Ifl_00209 which already exist in SWS_BSW document and SWS_SRS document) • Updated the correct reference to SRS_BSW_General (SRS_BSW_00437) & (SRS_BSW_00448) for SWS_Ifl_00210 & SWS_Ifl_00224 requirements.
Specification of Floating Point Math Routines	Modified: • Section 2 has been revisited to update Default Error Tracer instead of Development Error tracer. • SWS_Mfl_00362 has been updated to provide clarity in requirements. • SWS_Mfl_00363 has been modified to provide clear requirements. • Updated the parameters in SWS_Mfl_00360 for Mfl_ArcTan2_f32 service to be in sync with standard C library. • Updated SWS_Mfl_00122 to provide better clarity on the input parameter limits. • Verified that the spec SWS_Mfl_00122 has been updated to provide better clarity on input parameter limits. • Updated MFL document to support MISRA 2012 standard. (Removed Reference related to MISRA 2004 from chapter 3.2 ans redundant statements in SWS_Mfl_00809 which already exist in SWS_BSW document and SWS_SRS document) • Modified the reference to SRS_BSW_General (SRS_BSW_00437) & (SRS_BSW_00448) for SWS_Mfl_00810 & SWS_Mfl_00822 requirements.

Name	Specification history entry
Specification of Function Inhibition Manager	• Editorial changes
Specification of GPT Driver	• Variant chapter reworked. Remove redundant requirement SWS_Gpt_00342. Remove any reference to Dem. •
Specification of Hardware Test Manager on start up and shutdown	• Initial Release
Specification of I/O Hardware Abstraction	• minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation •
Specification of ICU Driver	• Removed chapter "10.2.1 Variants" • Changed upper multiplicity of the ICU_EcuModuleDef to 1 in figure of section 10.2.2 • Removed config parameter IcuIndex(ECUC_Icu_00221) from IcuGeneral section 10.2.3 and in figure of section 10.2.3 • Requirement ID SWS_Icu_00383 given to additional test "EcuM_WakeupSourceType shall be imported from EcuM_Types.h" • Removed requirement SWS_Icu_00346 • Editorial changes
Specification of I-PDU Multiplexer	• updated TX-confirmation handling • added support for MetaData • Com-Stack API harmonization • minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
Specification of LIN Driver	• Updated tracing information • Removed chapter 'Variants'
Specification of LIN Interface	• Changed the call of MainFunction_<ChannelId> of each channel • Added the new function for schedule table change • Changed the signature of User_TxConfirmation
Specification of LIN Network Management	• Updated requirement ECUC_LinNm_00028 for LinNm_MainFunction calling period (0..INF). • Harmonize descriptions of identical API functions. • Introduced reliable TxConfirmation. • Editorial changes.
Specification of LIN State Manager	• Editorial changes
Specification of LIN Transceiver Driver	• Change in GetVersionInfo API • minor corrections / editorial changes; For details please refer to the ChangeDocumentation
Specification of MCU Driver	• Removed chapter "Variants" • Cleaned up unresolved references in traceability

Name	Specification history entry
Specification of Memory Abstraction Interface	• Updated tracing information • Editorial changes
Specification of Memory Mapping	• Support dedicated allocation of pointer variables • Remove obsolete specification content • Amend examples • Editorial changes
Specification of Module E2E Transformer	• Added support for Profiles P7, P11, P22 • Various minor improvements
Specification of Module XCP	• Editorial corrections. • Harmonize descriptions of identical API functions. • Removal of unused artifacts and obsolete elements.
Specification of Network Management for SAE J1939	• Address coordination for gateways • Improved handling of meta data • Reliable TxConfirmation replaces timeout • SetEventStatus replaces ReportErrorStatus
Specification of Network Management Interface	• Add functionality for synchronizing channel A and channel B • removed dependencies of ComMChannels to each other in respect to NMVariants • minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
Specification of NVRAM Manager	• Added NvM_FirstInitAll and NvM_GetActiveService functionalities • NvM_SetRamBlockStatus works also for explicit synchronization blocks • The interaction between NvM and BswM is clarified. • Other small clarifications and updates.
Specification of OCU Driver	• Removed SWS_Ocu_00134 and SWS_Ocu_00135 • Renamed "SRS_BSW_000386" to "SRS_BSW_00386" • Removed SRS_BSW_00157, SRS_BSW_00326, SRS_BSW_00329, SRS_BSW_00338, SRS_BSW_00355, SRS_BSW_00370, SRS_BSW_00376, SRS_BSW_00434 • Removed SRS_BSW_0431 • Changed "SRS_SPAL12448" to "SRS_SPAL_12448"
Specification of Operating System	• Added new API for peripheral access • Added new API for interrupt handling • Minor updates/clarification of descriptions • Editorial changes
Specification of PDU Router	• Reliable TxConfirmation • Addressing in Upper Layers using MetaData • Clarification on unknown message length handling for the TP gateway • Added support for n:1 routing • Added support for FIFO for TP messages • Removed module specific dependencies when calling DET
Specification of Platform Types	• Support for 64 bit MCU's added. • Editorial changes.

Name	Specification history entry
Specification of Port Driver	• Removed remaining references to DEM • Removed section "Variants"
Specification of PWM Driver	• Updated Pwm_GetOutputState return value requirement SWS_Pwm_30051 and its references • Updated Configuration Class for PwmChannelID • Removed definition of Configuration variants • Removed Unresolved References of BSW requirements • Updated Header file structure diagram
Specification of RAM Test	• Removed subsection 7.5 Debugging • Renamed "RamTstGetVersionInfoApi" to "RamTstVersionInfoApi" • Removed SWS_RamTst_00167 and SWS_RamTst_00168 • Added line "Supported Config Variants" to the table of the module definition in 10.2.1 • Added sections 7.2.2 Runtime Errors and 7.2.3 Transient Faults • Renamed "RS_SPAL_12448" to "SRS_SPAL_12448" • Removed BSW00434, BSW00443, BSW00444, SRS_BSW_00370, SRS_BSW_00435, SRS_BSW_00436
Specification of Secure Onboard Communication	• Handle freshness in external freshness manager • New feature to send authenticator in an additional message • Secured diagnostic communication • Increase minimum value of parameter AuthInfoTxLength to 1 • Changed the type of the parameter keyID of the interface SecOC_AssociateKey() to uint16
Specification of Service Discovery	• Major improvement (SoAd interaction) • Several bugfixes • Editorial changes
Specification of Socket Adaptor	• Support for decoupled data transmission • Optimization for Client/Server communication • Introduction of reliable TxConfirmations • Clarifications and corrections of requirements
Specification of SOME/IP Transformer	• Sizes of length fields can be configured independently from each other • Support of union data types • Minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
Specification of SPI Handler/Driver	• Requirements removed: SWS_Spi_00339, SWS_Spi_00191, SWS_Spi_00367, SWS_Spi_00239, SWS_Spi_00056, SWS_Spi_00076, SWS_Spi_00148 • Requirements updated: SWS_Spi_00999, SWS_Spi_00092 • Improvement of the traceability with SRS BSW General requirements • Editorial changes
Specification of Standard Types	• Corrected editorial traceability issues

Name	Specification history entry
Specification of SW-C End-to-End Communication Protection Library	• Added new Profiles 7, 11 and 22. • Fixed initialization of profile 1 and 2 in the init function. Now properly sets WaitForFirstData to TRUE. • Corrected/unified initialization of Counter state variable and bit/byte conversion in configuration data in profiles 4, 5, and 6. • Removed chapter 8.3.7 elementary protocol functions that were marked obsolete since several releases.
Specification of Synchronized Time-Base Manager	• Rate Correction added • Time precision measurement support added • Time/status notification mechanism added • Various enhancements and corrections
Specification of TCP/IP Stack	• Improvements for robustness • Introduction of diagnostic features • Clarifications and corrections of requirements • Editorial changes
Specification of Time Service	• Removed the definition of the "configuration variants" from 10.2.1 Variants • Added line "Supported Config Variants" to the table of the module definition in 10.2.2 Tm • Removed SWS_Tm_00058 • Removed SRS_BSW_00326, SRS_BSW_00338, SRS_BSW_00376, SRS_BSW_00435, SRS_BSW_00436
Specification of Time Synchronization over CAN	• Offset message formats changed • Extended Offset message formats added • Immediate Time Synchronization message transmission • Various enhancements and corrections
Specification of Time Synchronization over Ethernet	• Resident time compensation for switches added • AUTOSAR specific TLV added • Interface to StbM and EthIf reworked (incl. support for immediate Timesync message transmission) • Various enhancements and corrections (e.g. postbuild configuration)
Specification of Time Synchronization over FlexRay	• Offset message formats changed • Immediate Time Synchronization message transmission • Various enhancements and corrections
Specification of Timing Extensions	• Added support for conditional timing • Added support for timing constraints for Ethernet communications • Added timing function to support mode dependency • Minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
Specification of TTCAN Driver	• Remove CCMSM • Editorial changes
Specification of TTCAN Interface	• Remove CCMSM • Dem API update • Editorial changes

Name	Specification history entry
Specification of UDP Network Management	• Added Trigger Transmit feature • Car Wakeup support completed • Immediate TX Transmission corrected • Editorial changes
Specification of Vehicle-2-X Basic Transport	• Initial Release
Specification of Vehicle-2-X Facilities	• Initial Release
Specification of Vehicle-2-X Geo Networking	• Initial Release
Specification of Vehicle-2-X Management	• Initial Release
Specification of Watchdog Driver	• Removed chapter 10.2.1 "Variants" including req SWS_Wdg_00157, SWS_Wdg_00158 SWS_Wdg_00159 • Removed Chapter "7.8 Debugging" • In table ECUC_Wdg_00073 added row for "Supported Config Variants" • minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
Specification of Watchdog Interface	• Minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
Specification of Watchdog Manager	• Deprecated features removed • Service interfaces modified/corrected • Removed duplicate type definitions • Several minor fixes.
Specification of Wireless Ethernet Driver	• Initial Release
Specification of Wireless Ethernet Transceiver Driver	• Initial Release
Specification on Ethernet Switch Driver	• Restructured VLAN-membership as a port-related configuration parameter • Introduced configuration of rate policers on ingress side • Introduced filter configuration for double tagged frames • Introduced configuration of minimum buffer size for FIFOS • Introduced Types to read HW-statistic by List pointer; reorganized interfaces to read HW-statistics. • Introduced Compensation of Ethernet switch delays for Global Time Synchronization • Add / update elements to describe MAC interface and physical interface • Added testing functionality for diagnostic use cases • Added Possibility to switch off ports and switch instances according to VLAN or PNC. • Introduced interfaces for verification of switch configuration

Name	Specification history entry
Specification on SOME/IP Transport Protocol	• Initial Release •
Specifications of Safety Extensions	• improved modeling of decomposition • relation of safety requirements; • minor corrections / clarifications / • editorial changes; For details please • refer to the ChangeDocumentation
Standardization Template	• extend Blueprintables • update specification levels • convert constraints in specification items • introduction of platform based document structure • introduction of Profiles for Data Exchange Points
SW-C and System Modeling Guide	• New modeling rules for Units and Physical Dimensions elements. • Extended formulas expression for Units in Display names.
System Template	• Added support for new E2E Profiles 7, 11 and 22 • Improved configuration of Ethernet • Switch Ports • Introduced Security Profiles • Minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
Technical Safety Concept Status Report	• Aligning coverage justification with SWS requirements
Unique Names for Documentation, Measurement and Calibration: Modeling and Naming Aspects including Automatic Generation	• Editorial changes
Utilization of Crypto Services	• Editorial changes
Virtual Functional Bus	• minor corrections / clarifications / editorial changes; For details please refer to the ChangeDocumentation
XML Schema Production Rules	• Renamed Document • Removed chapter "6 XML description production rules" • Removed section about XML description conformance from chapter 7

More specifications might have been changed, which are not listed here. Those specifications have then only "minor corrections, clarifications or editorial changes; for details please refer to the Change Documentation [3].

7 Appendix

7.1 Definitions

As far as not explained in this chapter, a collection of AUTOSAR definitions is provided in 1).

7.1.1 Release number

AUTOSAR applies a two-digit numbering scheme Rx.y to identify Releases. Its primary purpose is to identify a Release as a major (upgrade, can contain non-backward-compatible extensions) or as minor (update, backward compatible extensions) Release. Referring to previous Releases (e.g. R2.0), incrementing the first digit "x" does identify a Release as major, whereas incrementing "y" will mark a Release as only minor by nature.

7.1.2 Revision number

The Revision Number was first time introduced with Release 2.1 and extends the Release Numbering scheme as explained in section 7.1.1. Combined with the Release Number, the Revision Number shall:

1) Precisely identify the actual content (set of specifications) of a given Release.

2) As depicted in every specification, precisely identify a given specification (with its unique name and three-digit version ID) as being part of the Release.

Item 1) addresses the fact that the set of specifications comprising a Release (in the meaning of a baseline) is rarely established once at a certain point in time ("Big Bang"), but rather evolves and/or varies over a certain timeframe. The maximum duration, which is limited by the timeframe, a Release is declared as "valid" by the AUTOSAR Partnership (see section 7.1.3).

Hence with Item 1), a major prerequisite will be put in place to enable the Standard Maintenance as planned by the AUTOSAR Partnership. In general, the primary objective is to avoid the provision of an additional – previously not planned – Release in case only one or a few specifications were to be modified as part of the Standard Maintenance. Conversely, without the application of a Revision Number, if the AUTOSAR partnership wants to avoid the provision of (an) additional intermediate Release(s), one would have to defer the introduction of any changes until the next planned Release – even in case of changes urgently needed by the applicants of the AUTOSAR Standard.

Item 2) is complementary to Item 1) in that for every specification a unique identifier is provided upon which Revision a) a specification was either 1st time added to/removed from a Release or b) a specification was modified as being part of one and the same Release, as long the latter is valid and therefore subject to Standard Maintenance.

Hence with item 2), the combination of Release and Revision Number in a specification can be interpreted either as a) "specification was (1st time) added to the Release x.y Rev n" or b) as "specification was modified as part of Release x.y Rev m", with m > n.

Conversely, the Revision number will only change for specifications subject to addition or modification of a valid Release (baseline). After their 1st time addition to the Release (baseline), it will not change for specifications which are not modified.

In the light of the above provided background, as an additional remark, the Revision Number will only be applied for each specification's Release version, i.e. it will not be applied to working versions.

7.1.3 Release life cycle of a major release

Each major release goes through four consecutive steps within its lifecycle:

1. Development: Between start of life cycle and the initial release (e.g. R4.0.1)
2. Evolution: Following the initial release with zero, one or several minor releases and/or revisions (e.g. R4.0.2, R4.1.1)
3. Maintenance: No new contents is added to a major release but only maintenance of the existing content with zero, one or several revisions (e.g. R3.2.2) is provided
4. Issue Notice: No more revisions but zero, one or several issue notices, i.e. updates of the list of known issues until end of life cycle.

7.1.4 Standard specifications and auxiliary material

Standard Specifications are documents, models or formats which comprise the main result of the AUTOSAR Partnership. It includes the standardized results which have to be fulfilled to achieve AUTOSAR conformance.

In Release 4.3, Standard Specifications are stored at the following URL:
https://svn.autosar.org/repos/work/26_Products/10_CP_R4/02_Releases/R4.3/01_Standard

Auxiliary Material is a supporting document, model or format meant to further explain and/or improve the usability of standard specifications of the AUTOSAR partnership. Auxiliary material is recommended to read and/or use for a better understanding or harmonized usage of the AUTOSAR standard but is not mandatory to follow for AUTOSAR conformance.

In Release 4.3, Auxiliary Material is stored at the following URL:
https://svn.autosar.org/repos/work/26_Products/10_CP_R4/02_Releases/R4.3/02_Auxiliary

Contents of auxiliary documents remain of auxiliary nature even if they are referenced from standard documents.

7.1.5 History information in AUTOSAR

The following diagram shows where which changes are documented.

	Information at release / revision
Scope / abstraction	*Release only:* • Changes on AUTOSAR by concepts (lists also affected docs) *Release and revision:* Chapter "Summary of changes" : • Maintenance work • e.g. Service interfaces • Known deficiencies • Major changes (high impact) Chapter 7: • A subset of external histories of documents shall be given: that would be major changes but not the standard entries
Specification (all docs) — **Release Overview**	
Document — **Document external history**	*Release only:* • Changes / "influence" on document by concepts • Major changes *Guidance for DocOwner:* Please: • state major changes with high impact (e.g. high BWC or usage) or • put a standard entry: "minor corrections / clarifications/editorial changes; For details please refer to the ChangeDocumentation"
Requirement — **ChangeDocumentation**	• Changes on RfC granularity
Number of entries	