

Document Title	SRS_NetworkManagement: Complete Change Documentation 4.3.0 - 4.3.1
Document Owner	AUTOSAR
Document Responsibility	AUTOSAR
Document Identification No	695

Document Status	Final
Part of AUTOSAR Standard	Classic Platform
Part of Standard Release	4.3.1

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1 SRS_NetworkManagement

1.1 Specification Item SRS_Nm_00142

Trace References:

none

Content:

Type:	
Description:	NM shall not exceed a specified upper limit of bus load. This bus load has to be specified.
Rationale:	Determinism
Applies to:	
Use Case:	Avoid solution like in OSEK ISO 17356-5: NM 2.5.3 Specification: alive messages after bus wakeup
Supporting Material:	–

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #73564: References to OSEK

Problem description:

The OSEK web site is not available.
 References need to be updated.

OSEK was pushed to ISO 17356
 ISO 17356-2: introduction?
 ISO 17356-3: OS
 ISO 17356-4: COM
 ISO 17356-5: NM (not sure we need to have such reference)
 ISO 17356-6: OIL (not sure we need to have such reference)

I tried to select the documents where it would make sense to get a fix.

Agreed solution:

Replace references to
 * OSEK web site
 * the OSEK file name / version
 with an ISO reference (with ISO version)

Check references to OSEK subsection (or avoid such references), to make sure that the section numbering in ISO is the same.

SWS OS

=====

Change references in chapter 3.2.1 to ISO. Remove [16], [18], [19] and [20]

Remove [22] from chapter 3.2.2

Remove "OSEKtime OS [16] and the HIS Protected OSEK [22] are immature specifications that contain concepts necessary for AUTOSAR and satisfy specific application domains. It is the purpose of this document to identify these needs and to recommend the use of parts (or all) of these specifications as appropriate." from chapter 4.1.

Change "OSEK OS" to new ISO reference ("OSEK OS[..]" - many occurrences, also in chapter 10)

Remove "So called hard and smooth synchronization from OSEKtime [16] are supported by this single unified concept in AUTOSAR OS. Smooth synchronization may be emulated by setting the small adjustment values on the final expiry point. Hard synchronization may be emulated by setting large adjustment values on the final expiry point." from 7.4.2.2.3

Remove "and provides the type of protection given by the OSEKtime Interrupt re-enable schedule event [16]." from 7.7.2.1

Remove chapter 12.3

SWCT:

=====

Replace reference to OSEK COM:

Fifteen filter algorithms formally described by the enumeration type DataFilter-TypeEnum in the meta-model are taken from OSEK COM 3.0.3 specification [18] that is referenced by the RTE specification [2].

by:

Fifteen filter algorithms formally described by the enumeration type DataFilter-

TypeEnum in the meta-model are taken from the ISO 17356-4 specification [18] that is referenced by the RTE specification [2].

Replace:

[TPS_SWCT_01222] Applicability of DataFilter

This OSEK specification states that filtering is only used for messages that can be interpreted as C language unsigned integer types (characters, unsigned integers and enumerations).(RS_SWCT_03221)

by:

[TPS_SWCT_01222] Applicability of DataFilter

The ISO 17356-4 specification states that filtering is only used for messages that can be interpreted as C language unsigned integer types (characters, unsigned integers and enumerations).(RS_SWCT_03221)

Replace:

[constr_1044] Applicability of DataFilter

According to the origin of DataFilter, i.e. OSEK COM 3.0.3 specification [18], DataFilters can only be applied to values with an integer base type.()

by:

[constr_1044] Applicability of DataFilter

According to the origin of DataFilter, i.e. ISO 17356-4 specification [18], DataFilters can only be applied to values with an integer base type.()

Replace footnote to [constr_1090]:

This constraint is valid at least in the OSEK standard where an extended task (that can have wait points) can only exist a single time in the context of the scheduler.

by:

This constraint is valid at least in the ISO 17356-3 standard where an extended task (that can have wait points) can only exist a single time in the context of the scheduler.

=====

Dem

=====

Replace the reference [17] Communication in Chapter 3.1 Input documents &

related standards and norms Bibliography by : ISO 17356-3 in www.iso.org/

=====

Dcm

=====

Replace the reference [8]Communication in Chapter 3.1 Input documents & related standards and norms Bibliography by : ISO 17356-3 in www.iso.org/

=====

EXP_VFB

Add an entry in chapter "13 References" related to ISO 17356-4:
ISO 17356-4
OSEK/VDX Communication (COM)
www.iso.org

Change the references to "OSEK-COM V3.0.3" in Table 4.2 (4.3.2 From the point of view of the receiver) and EXP_Vfb_00028 (4.3.4 Filtering between the sender and the receiver) to "ISO 17356-4". Link the references to the entry in chapter "13 References".

=====

SRS_BSWGeneral

5 General Requirements on Basic Software

Replace "OSEK OS" by "ISO 17356-3"

5.2.3.4 Standard header Files

Replace in [SRS_BSW_00348]

Because E_OK is already defined within OSEK OS, E_OK has to be checked for being already defined:

```
/* for OSEK compliance this typedef has been added */
```

by

Because E_OK is already defined within ISO 17356-3, E_OK has to be checked for being already defined

```
/* for ISO 17356 compliance this typedef has been added */
```

6.2 Related Standards and Norms

Remove

6.2.1 OSEK

[STD_OSEK_OS] OSEK/VDX Operating System Specification

<http://www.osek-vdx.org>

Replace with ISO 17356-3 norm

=====

SRS_COM

1)

Remove [DOC_OSEK_GLOS] and all its references, since a) AUTOSAR has an own wording and glossary b) the references to (old) OSEK-terms most probably create more confusion than guidance

2)

Set reference of [DOC_OSEK_COM] to: ISO 17356-4: COM

Move reference to Chapter 7.3 ISO and remove Chapter 7.2 OSEK

3)

Remove section references to [DOC_OSEK_COM], just keep the textual references no numbers

4)

Search and replace textual references to OSEK COM 3.0.3 by ISO 17356-4: COM

5)

[SRS_Com_02084]: Change following text in Description,

from

< The possibilities to define those conditions shall be the same as defined in [DOC_OSEK_COM] reception filter algorithms (see [DOC_OSEK_GLOS], Section 2.2.2).

to

> The possibilities to define those conditions shall be the same as defined in [DOC_ISO_COM] reception filter algorithms (see [DOC_ISO_COM], Section 3.2.3).

6)

[SRS_Com_02058]: Change following text in Supporting Material,

from

< If no update bits are used, the AUTOSAR COM module provides the deadline monitoring defined in [DOC_OSEK_COM] (Section 2.5.1).

to

> If no update bits are used, the AUTOSAR COM module provides the deadline monitoring defined in [DOC_ISO_COM] (Section 3.5.1).

=====

SRS_Os

in chapter 6.2.1 OSEK:

Replace "[STD_OSEK_OS] OSEK/VDX Operating System, Version 2.2.3, <http://www.osek-vdx.org/mirror/os223.pdf>"
by "[STD_OSEK_OS] ISO 17356-3: OS"

Replace "[STD_OSEK_OIL] OSEK / VDX Implementation Language (OIL) V2.5, OSEK Implementation Language, <http://www.osek-vdx.org/mirror/oil25.pdf>"
by "[STD_OSEK_OIL] ISO 17356-6: OIL"

Remove "[STD_OSEK_TTOS] OSEK/VDX Time-Triggered Operating System, Version 1.0, July 24, 2001, <http://www.osek-vdx.org/mirror/ttos10.pdf>"

Remove "[STD_OSEK_ORTI] OSEK/VDX ORTI (OSEK RunTime Interface) Part A Version 2.1.1, Part B Version 2.1, <http://www.osek-vdx.org/mirror/ORTI-A-211.pdf>"

in [SRS_Os_11002]: remove [STD_OSEK_TTOS] from Supporting Material

=====

SWS_COM

1)

Set reference of [17] to ISO 17356-4: COM

Set reference of [18] to ISO 17356-6: OIL

2)

Search and replace textual references to OSEK COM 3.0.3 by ISO 17356-4: COM or [17] (if suitable)

and textual references to OSEK OIL by ISO 17356-6: OIL or [18] (if suitable)

=====

SWS_StandardTypes:

In Section 3.2: replace

[7] OSEK/VDX Operating System, Version 2.2.2 www.osek-vdx.org/os222.pdf

by

[7] OSEK/VDX Operating System, ISO 17356-3: OS

=====
 CP_TR_AutosarModelConstraints
 see PS for the SWCT.
 =====

 SRS_NetworkManagement:

- 1) Change Section 7.2.1 name from "OSEK" to "ISO 17356-5"
 Remove the description:
 [5] [STD_OSEK_NM]
 OSEK/VDX NM Specification (ISO 17356-5), Version 2.5.3
 [STD_OSEK_NM] OSEK/VDX NM Specification (ISO 17356-5), V2.5.3
<http://www.osek-vdx.org/>
 Change to :
 OSEK/VDX NM Specification
www.iso.org
 ==>
 7.2.1 ISO 17356-5
 [5] ISO 17356-5: NM Specification
www.iso.org

- 2) Replace "OSEK-NM" to "ISO 17356-5: NM Specification" in [SRS_Nm_02515]

- 3) Replace "OSEK NM 2.5.3" to "ISO 17356-5: NM Specification" in [SRS_Nm_00142]
 –Last change on issue 73564 comment 28–

BW-C-Level:

Application	Specification	Bus
1	1	1

1.2 Specification Item SRS_Nm_02515

Trace References:

RS_BRF_02280

Content:

Type:	
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Description:	Support for managing a non AUTOSAR-NM based network shall be done either by extending/modifying an existing bus-specific NM or by introducing a Complex Device Driver (CDD) which uses the generic interfaces of the NM.
Rationale:	–
Applies to:	
Use Case:	Running OSEK-NM ISO 17356-5: NM Specification or another Legacy-NM on one of the networks.
Supporting Material:	–

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #73564: References to OSEK

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Replace references to
 * OSEK web site
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SWS OS
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Change references in chapter 3.2.1 to ISO. Remove [16], [18], [19] and [20]

Remove [22] from chapter 3.2.2

Remove "OSEKtime OS [16] and the HIS Protected OSEK [22] are immature specifications that contain concepts necessary for AUTOSAR and satisfy specific application domains. It is the purpose of this document to identify these needs and to recommend the use of parts (or all) of these specifications as appropriate." from chapter 4.1.

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Remove "and provides the type of protection given by the OSEKtime Interrupt re-enable schedule event [16]." from 7.7.2.1

Remove chapter 12.3

SWCT:

=====

Replace reference to OSEK COM:

Fifteen filter algorithms formally described by the enumeration type DataFilter-TypeEnum in the meta-model are taken from OSEK COM 3.0.3 specification [18] that is referenced by the RTE specification [2].

by:

Fifteen filter algorithms formally described by the enumeration type DataFilter-TypeEnum in the meta-model are taken from the ISO 17356-4 specification [18] that is referenced by the RTE specification [2].

Replace:

[TPS_SWCT_01222] Applicability of DataFilter

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and enumerations).(RS_SWCT_03221)

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The ISO 17356-4 specification states that filtering is only used for messages that can be interpreted as C language unsigned integer types (characters, unsigned integers and enumerations).(RS_SWCT_03221)

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This constraint is valid at least in the OSEK standard where an extended task (that can have wait points) can only exist a single time in the context of the scheduler.

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Replace the reference [17] Communication in Chapter 3.1 Input documents & related standards and norms Bibliography by : ISO 17356-3 in www.iso.org/

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Replace the reference [8]Communication in Chapter 3.1 Input documents & related standards and norms Bibliography by : ISO 17356-3 in www.iso.org/

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www.iso.org

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=====
SRS_BSWGeneral

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Replace "OSEK OS" by "ISO 17356-3"

5.2.3.4 Standard header Files
Replace in [SRS_BSW_00348]

Because E_OK is already defined within OSEK OS, E_OK has to be checked for being already defined:
/* for OSEK compliance this typedef has been added */

by

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/* for ISO 17356 compliance this typedef has been added */

6.2 Related Standards and Norms

Remove
6.2.1 OSEK
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<http://www.osek-vdx.org>

Replace with ISO 17356-3 norm

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2)

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Move refernce to Chapter 7.3 ISO and remove Chapter 7.2 OSEK

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Search and replace textual references to OSEK COM 3.0.3 by ISO 17356-4: COM

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[SRS_Com_02084]: Change following text in Description,
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< If no update bits are used, the AUTOSAR COM module provides the deadline monitoring defined in [DOC_OSEK_COM] (Section 2.5.1).

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SRS_Os

in chapter 6.2.1 OSEK:

Replace "[STD_OSEK_OS] OSEK/VDX Operating System, Version 2.2.3,
<http://www.osek-vdx.org/mirror/os223.pdf>"
by "[STD_OSEK_OS] ISO 17356-3: OS"

Replace "[STD_OSEK_OIL] OSEK / VDX Implementation Language (OIL) V2.5,
OSEK Implementation Language, <http://www.osek-vdx.org/mirror/oil25.pdf>"
by "[STD_OSEK_OIL] ISO 17356-6: OIL"

Remove "[STD_OSEK_TTOS] OSEK/VDX Time-Triggered Operating System,
Version 1.0, July 24, 2001, <http://www.osek-vdx.org/mirror/ttos10.pdf>"

Remove "[STD_OSEK_ORTI] OSEK/VDX ORTI (OSEK RunTime Interface)
Part A Version 2.1.1, Part B Version 2.1, <http://www.osek-vdx.org/mirror/ORTI-A-211.pdf>"

in [SRS_Os_11002]: remove [STD_OSEK_TTOS] from Supporting Material

=====
SWS_COM

1)
Set reference of [17] to ISO 17356-4: COM
Set reference of [18] to ISO 17356-6: OIL

2)
Search and replace textual references to OSEK COM 3.0.3 by ISO 17356-4: COM
or [17] (if suitable)
and textual references to OSEK OIL by ISO 17356-6: OIL or [18] (if suitable)

=====
SWS_StandardTypes:
In Section 3.2: replace
[7] OSEK/VDX Operating System, Version 2.2.2 www.osek-vdx.org/os222.pdf
by
[7] OSEK/VDX Operating System, ISO 17356-3: OS

=====
CP_TR_AutosarModelConstraints
see PS for the SWCT.

=====

=====
SRS_NetworkManagement:

1) Change Section 7.2.1 name from "OSEK" to "ISO 17356-5"

Remove the description:

[5] [STD_OSEK_NM]

OSEK/VDX NM Specification (ISO 17356-5), Version 2.5.3

[STD_OSEK_NM] OSEK/VDX NM Specification (ISO 17356-5), V2.5.3

<http://www.osek-vdx.org/>

Change to :

OSEK/VDX NM Specification

www.iso.org

====>

7.2.1 ISO 17356-5

[5] ISO 17356-5: NM Specification

www.iso.org

2) Replace "OSEK-NM" to "ISO 17356-5: NM Specification" in [SRS_Nm_02515]

3) Replace "OSEK NM 2.5.3" to "ISO 17356-5: NM Specification" in
 [SRS_Nm_00142]

–Last change on issue 73564 comment 28–

BW-C-Level:

Application	Specification	Bus
1	1	1