

<b>Document Title</b>	RS_SoftwareComponentTemplate: Specification Changes contributing to this Requirement Document 4.3.0 - 4.3.1
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<b>Part of AUTOSAR Standard</b>	Classic Platform
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# 1 Requirement Item RS\_SWCT\_00120

**AUTOSAR shall provide protection/unlock mechanisms for software through appropriate services in the infrastructure**

Specification Items contributing to this requirement that have changed:

## 1.1 Specification Item TPS\_SWCT\_01714

### Trace References:

RS\_SWCT\_00120, RS\_SWCT\_02090

### Content:

If the value of attribute SwcExclusiveAreaPolicy.SwcExclusiveAreaPolicy.apiPrinciple is set to ApiPrincipleEnum.ApiPrincipleEnum.common perExecutable then the RTE provides individual sets of APIs for entering and exiting ExclusiveAreas for each affected Runnable Entity.

### Contribution paths:

- RS\_SWCT\_00120 ← TPS\_SWCT\_01714

### ITs affecting this spec item between releases 4.3.0 and 4.3.1:

- IT #77220: [RfC # 76898] Wrong value of ApiPrincipleEnum in TPS\_SWCT\_01714

## 2 Requirement Item RS\_SWCT\_02090

**Data-consistency for communication among RunnableEntities shall be supported**

Specification Items contributing to this requirement that have changed:

### 2.1 Specification Item TPS\_SWCT\_01714

**Trace References:**

RS\_SWCT\_00120, RS\_SWCT\_02090

**Content:**

If the value of attribute SwcExclusiveAreaPolicy.SwcExclusiveAreaPolicy.apiPrinciple is set to ApiPrincipleEnum.ApiPrincipleEnum.common perExecutable then the RTE provides individual sets of APIs for entering and exiting ExclusiveAreas for each affected Runnable Entity.

**Contribution paths:**

- RS\_SWCT\_02090 ← TPS\_SWCT\_01714

**ITs affecting this spec item between releases 4.3.0 and 4.3.1:**

- IT #77220: [RfC # 76898] Wrong value of ApiPrincipleEnum in TPS\_SWCT\_01714

### 3 Requirement Item RS\_SWCT\_02100

#### Definition of physical units shall be supported

Specification Items contributing to this requirement that have changed:

#### 3.1 Specification Item TPS\_SWCT\_01736

##### Trace References:

RS\_SWCT\_02100

##### Content:

If a Unit does not define the attribute `Unit.Unit.physicalDimension` the default `PhysicalDimension` with the `Referrable.shortNameNoDimension` applies where all physical exponents are set to 0.

##### Contribution paths:

- RS\_SWCT\_02100 ← TPS\_SWCT\_01736

##### ITs affecting this spec item between releases 4.3.0 and 4.3.1:

- IT #76597: [RfC # 74210] Clarify handling of `PhysicalDimensions`

#### 3.2 Specification Item TPS\_SWCT\_01737

##### Trace References:

RS\_SWCT\_02100

##### Content:

The default value of attributes `PhysicalDimension.currentExp`, `PhysicalDimension.lengthExp`, `PhysicalDimension.luminousIntensityExp`, `PhysicalDimension.massExp`, `PhysicalDimension.molarAmountExp`, `PhysicalDimension.temperatureExp`, `PhysicalDimension.timeExp` is 0.

##### Contribution paths:

- RS\_SWCT\_02100 ← TPS\_SWCT\_01737

##### ITs affecting this spec item between releases 4.3.0 and 4.3.1:

- IT #76597: [RfC # 74210] Clarify handling of `PhysicalDimensions`

## 4 Requirement Item RS\_SWCT\_03190

The SW-Component template shall support the ability to publish/specify the diagnostic capabilities and its resources of an SWC

Specification Items contributing to this requirement that have changed:

### 4.1 Specification Item TPS\_SWCT\_01746

**Trace References:**

RS\_SWCT\_03310, RS\_SWCT\_03190

**Content:**

**ServiceNeeds kind** FurtherActionByteNeeds

**RoleBasedPortAssignment valid roles:**

- CallbackGetFurtherActionByte [1]

**RoleBasedDataAssignment** N/A

**RepresentedPortGroups** N/A

**Contribution paths:**

- RS\_SWCT\_03190 ← TPS\_SWCT\_01746

**ITs affecting this spec item between releases 4.3.0 and 4.3.1:**

- IT #78450: [RfC # 74849] [DoIP] Further action code values (0x11 to 0xFF) missing

## 5 Requirement Item RS\_SWCT\_03210

The SW-Component template shall support integrity and scaling at ports

Specification Items contributing to this requirement that have changed:

### 5.1 Specification Item TPS\_SWCT\_01560

#### Trace References:

RS\_SWCT\_03210

#### Content:

Data conversion shall be supported for AutosarDataTypes that refer to CompuMethods of Identifiable.category **LINEAR, IDENTICAL,**

- **LINEAR,**
- **IDENTICAL,**
- **SCALE\_LINEAR\_AND\_TEXTTABLE, TEXTTABLE, and**
- **TEXTTABLE,**
- **BITFIELD\_TEXTTABLE. , and**
- **RAT\_FUNC - as long as the semantics of the latter comes down to a reciprocal linear data scaling.**

#### Contribution paths:

- RS\_SWCT\_03210 ← TPS\_SWCT\_01560

#### ITs affecting this spec item between releases 4.3.0 and 4.3.1:

- IT #76586: [RfC # 74570] Contradiction w.r.t data conversion [TPS\_SWCT\_01560] & [SWS\_Rte\_07928]
- IT #editorial

## 6 Requirement Item RS\_SWCT\_03221

**The SW-Component template shall allow port specific configuration of data transformation properties**

Specification Items contributing to this requirement that have changed:

### 6.1 Specification Item TPS\_SWCT\_01222

**Trace References:**

RS\_SWCT\_03221

**Content:**

This **OSEK 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).”

**Contribution paths:**

- RS\_SWCT\_03221 ← TPS\_SWCT\_01222

**ITs affecting this spec item between releases 4.3.0 and 4.3.1:**

- IT #78182: [RfC # 73564] References to OSEK

## 7 Requirement Item RS\_SWCT\_03225

**The SW-Component template shall support an enhanced non-volatile (NV) memory interface**

Specification Items contributing to this requirement that have changed:

### 7.1 Specification Item TPS\_SWCT\_01675

**Trace References:**

RS\_SWCT\_03225

**Content:**

The formal modeling of a NvBlockDescriptor should follow the recommendations given in table [REF table\_3a\_NvBlockNeeds\_20\_dependencies]. [7204072420](#) [720407242076548](#)

**Contribution paths:**

- RS\_SWCT\_03225 ← TPS\_SWCT\_01675

**ITs affecting this spec item between releases 4.3.0 and 4.3.1:**

- IT #76548: [RfC # 74703] ramBlockStatusControl recommendation in table 7.11

## 8 Requirement Item RS\_SWCT\_03310

The SW-Component template shall support **Diagnostics over IP**

Specification Items contributing to this requirement that have changed:

### 8.1 Specification Item TPS\_SWCT\_01746

**Trace References:**

RS\_SWCT\_03310, RS\_SWCT\_03190

**Content:**

**ServiceNeeds kind** FurtherActionByteNeeds

**RoleBasedPortAssignment valid roles:**

- CallbackGetFurtherActionByte [1]

**RoleBasedDataAssignment** N/A

**RepresentedPortGroups** N/A

**Contribution paths:**

- RS\_SWCT\_03310 ← TPS\_SWCT\_01746

**ITs affecting this spec item between releases 4.3.0 and 4.3.1:**

- IT #78450: [RfC # 74849] [DoIP] Further action code values (0x11 to 0xFF) missing