Document Title	SWS_FlexRayInterface: Complete Change Documentation 4.3.0 - 4.3.1
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Part of AUTOSAR Standard	Classic Platform
Part of Standard Release	4.3.1

Table of Contents

1 SWS_FlexRayInterface

1.1 Specification Item ECUC_FrIf_00014

Trace References:

Content:

Name	FrIfTxConfirmationNameFrIfTxPdu.FrIfTxConfirmationName		
Parent Container	FrIfTxPdu		
Description	This parameter defines the name of the <User_TxConfirmation>. This parameter depends on the parameter FrIfUserTxUL. If FrIfUserTxUL equals FR_TP, FR_AR_TP, FR_NM, PDUR , FR_TSYN or XCP, the name of the <User_TxConfirmation> is fixed. If FrIfUserTxUL equals CDD, the name of the <User_TxConfirmation> is selectable.		
Multiplicity	0..1		
Type	EcucFunctionNameDef		
Default value	–		
maxLength	–		
minLength	–		
regularExpression	–		
Post-Build Variant Multiplicity	true		
Post-Build Variant Value	true		
Multiplicity Configuration Class	Pre-compile time	X	VARIANT-PRE-COMPILE
	Link time	X	VARIANT-LINK-TIME
	Post-build time	X	VARIANT-POST-BUILD
Value Configuration Class	Pre-compile time	X	VARIANT-PRE-COMPILE
	Link time	X	VARIANT-LINK-TIME
	Post-build time	X	VARIANT-POST-BUILD
Scope / Dependency	scope: ECU		

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #76103: [FrIf] SWS_FrIf_05739 .. SWS_FrIf_05743 should not refer to <UL_TxConfirmation>

  Problem description:

  SWS_FrIf_05739 and the following SWS items require to set <UL_TxConfirmation>, when they talk about the configuration of UL_TriggerTransmit. This should be fixed.

  Agreed solution:

  Change ~SWS_FrIf_05739 from:
  Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to

FR_AR_TP, <UL_TxConfirmation> must be FrArTp_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_AR_TP, <UL_TriggerTransmit> must be FrArTp_TriggerTransmit.

Change ~SWS_FrIf_05740 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_NM, <UL_TxConfirmation> must be FrNm_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_NM, <UL_TriggerTransmit> must be FrNm_TriggerTransmit.

Change ~SWS_FrIf_05741 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TP, <UL_TxConfirmation> must be FrTp_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TP, <UL_TriggerTransmit> must be FrTp_TriggerTransmit.

Change ~SWS_FrIf_05742 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to PDUR, <UL_TxConfirmation> must be PduR_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to PDUR, <UL_TriggerTransmit> must be PduR_TriggerTransmit.

Change ~SWS_FrIf_05743 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to XCP , <UL_TxConfirmation> must be Xcp_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to XCP , <UL_TriggerTransmit> must be Xcp_TriggerTransmit.

Add after requirement SWS_FrIf_0574 a new one, i.e. +SWS_FrIf_05759:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TSYN , <UL_TriggerTransmit> must be FrTSyn_TriggerTransmit.

Change ~ECUC_FrIf_00016 from:
This parameter defines the name of the <User_RxIndication>. This parameter depends on the parameter FrIfUserRxIndicationUL. If FrIfUserRxIndicationUL equals FR_TP, FR_NM, PDUR, FR_TSYN or XCP, the name of the <User_RxIndication> is fixed. If FrIfUserRxIndicationUL equals CDD, the name of the <User_RxIndication> is selectable.
to:
This parameter defines the name of the <User_RxIndication>. This parameter depends on the parameter FrIfUserRxIndicationUL. If FrIfUserRxIndicationUL equals FR_TP, FR_AR_TP, FR_NM, PDUR, FR_TSYN or XCP, the name of the <User_RxIndication> is fixed. If FrIfUserRxIndicationUL equals CDD, the name of the <User_RxIndication> is selectable.

Change ~ECUC_FrIf_06084 from:
This parameter defines the name of the <User_TriggerTransmit>. This parameter depends on the parameter FrIfUserTxUL. If FrIfUserTxUL equals FR_TP, FR_NM, PDUR, FR_TSYN or XCP the name of the <User_TriggerTransmit> is fixed. If FrIfUserTxUL equals CDD, the name of the <User_TriggerTransmit> is selectable.
to:
This parameter defines the name of the <User_TriggerTransmit>. This parameter depends on the parameter FrIfUserTxUL. If FrIfUserTxUL equals FR_TP, FR_AR_TP, FR_NM, PDUR, FR_TSYN or XCP the name of the <User_TriggerTransmit> is fixed. If FrIfUserTxUL equals CDD, the name of the <User_TriggerTransmit> is selectable.

Remove FR_TSYN from the list of modules in the description of ECUC_FrIf_00014.

Add the following new SWS item below SWS_FrIf_05733:
[SWS_FrIf_0xxxx] /Configuration of <UL_RxIndication>: If the parameter FrIfUserRxIndicationUL is set to FR_TSYN, <UL_RxIndication> must be FrTSyn_RxIndication./
–Last change on issue 76103 comment 10–

BW-C-Level:

Application	Specification	Bus
1	1	1

1.2   Specification Item ECUC_FrIf_00016

Trace References:

Content:

Name	FrIfRxIndicationNameFrIfRxPdu.FrIfRxIndicationName
Parent Container	FrIfRxPdu
Description	This parameter defines the name of the <User_RxIndication>. This parameter depends on the parameter FrIfUserRxIndicationUL. If FrIfUserRxIndicationUL equals FR_TP, FR_AR_TP, FR_NM, PDUR, FR_TSYN or XCP, the name of the <User_RxIndication> is fixed. If FrIfUserRx IndicationUL equals CDD, the name of the <User_RxIndication> is selectable.
Multiplicity	0..1
Type	EcucFunctionNameDef
Default value	–
maxLength	–
minLength	–
regularExpression	–
Post-Build Variant Multiplicity	true
Post-Build Variant Value	true

Multiplicity Configuration Class	Pre-compile time	X	VARIANT-PRE-COMPILE
	Link time	X	VARIANT-LINK-TIME
	Post-build time	X	VARIANT-POST-BUILD
Value Configuration Class	Pre-compile time	X	VARIANT-PRE-COMPILE
	Link time	X	VARIANT-LINK-TIME
	Post-build time	X	VARIANT-POST-BUILD
Scope / Dependency	scope: ECU		

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #76103: [FrIf] SWS_FrIf_05739 .. SWS_FrIf_05743 should not refer to <UL_TxConfirmation>

Problem description:

SWS_FrIf_05739 and the following SWS items require to set <UL_TxConfirmation>, when they talk about the configuration of UL_TriggerTransmit. This should be fixed.

Agreed solution:

Change ~SWS_FrIf_05739 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_AR_TP, <UL_TxConfirmation> must be FrArTp_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_AR_TP, <UL_TriggerTransmit> must be FrArTp_TriggerTransmit.

Change ~SWS_FrIf_05740 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to

FR_NM, <UL_TxConfirmation> must be FrNm_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_NM, <UL_TriggerTransmit> must be FrNm_TriggerTransmit.

Change ~SWS_FrIf_05741 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TP, <UL_TxConfirmation> must be FrTp_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TP, <UL_TriggerTransmit> must be FrTp_TriggerTransmit.

Change ~SWS_FrIf_05742 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to PDUR, <UL_TxConfirmation> must be PduR_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to PDUR, <UL_TriggerTransmit> must be PduR_TriggerTransmit.

Change ~SWS_FrIf_05743 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to XCP , <UL_TxConfirmation> must be Xcp_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to XCP , <UL_TriggerTransmit> must be Xcp_TriggerTransmit.

Add after requirement SWS_FrIf_0574 a new one, i.e. +SWS_FrIf_05759:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TSYN , <UL_TriggerTransmit> must be FrTSyn_TriggerTransmit.

Change ~ECUC_FrIf_00016 from:
This parameter defines the name of the <User_RxIndication>. This parameter depends on the parameter FrIfUserRxIndicationUL. If FrIfUserRxIndicationUL equals FR_TP, FR_NM, PDUR, FR_TSYN or XCP, the name of the <User_RxIndication> is fixed. If FrIfUserRxIndicationUL equals CDD, the name of the <User_RxIndication> is selectable.
to:
This parameter defines the name of the <User_RxIndication>. This parameter

depends on the parameter FrIfUserRxIndicationUL. If FrIfUserRxIndicationUL equals FR_TP, FR_AR_TP, FR_NM, PDUR, FR_TSYN or XCP, the name of the <User_RxIndication> is fixed. If FrIfUserRxIndicationUL equals CDD, the name of the <User_RxIndication> is selectable.

Change ~ECUC_FrIf_06084 from:
This parameter defines the name of the <User_TriggerTransmit>. This parameter depends on the parameter FrIfUserTxUL. If FrIfUserTxUL equals FR_TP, FR_NM, PDUR, FR_TSYN or XCP the name of the <User_TriggerTransmit> is fixed. If FrIfUserTxUL equals CDD, the name of the <User_TriggerTransmit> is selectable.
to:
This parameter defines the name of the <User_TriggerTransmit>. This parameter depends on the parameter FrIfUserTxUL. If FrIfUserTxUL equals FR_TP, FR_AR_TP, FR_NM, PDUR, FR_TSYN or XCP the name of the <User_TriggerTransmit> is fixed. If FrIfUserTxUL equals CDD, the name of the <User_TriggerTransmit> is selectable.

Remove FR_TSYN from the list of modules in the description of ECUC_FrIf_00014.

Add the following new SWS item below SWS_FrIf_05733:
[SWS_FrIf_0xxxx] /Configuration of <UL_RxIndication>: If the parameter FrIfUserRxIndicationUL is set to FR_TSYN, <UL_RxIndication> must be FrTSyn_RxIndication./
–Last change on issue 76103 comment 10–

BW-C-Level:

Application	Specification	Bus
1	1	1

1.3   Specification Item ECUC_FrIf_06084

Trace References:

Content:

Name	FrIfUserTriggerTransmitNameFrIfTxPdu.FrIfUserTriggerTransmitName
Parent Container	FrIfTxPdu
Description	This parameter defines the name of the <User_TriggerTransmit>. This parameter depends on the parameter FrIfUserTxUL. If FrIfUserTxUL equals FR_TP, FR_AR_TP, FR_NM, PDUR, FR_TSYN or XCP the name of the <User_TriggerTransmit> is fixed. If FrIfUserTxUL equals CDD, the name of the <User_TriggerTransmit> is selectable.
Multiplicity	0..1
Type	EcucFunctionNameDef

Default value	–		
maxLength	–		
minLength	–		
regularExpression	–		
Post-Build Variant Multiplicity	true		
Post-Build Variant Value	true		
Multiplicity Configuration Class	Pre-compile time	X	VARIANT-PRE-COMPILE
	Link time	X	VARIANT-LINK-TIME
	Post-build time	X	VARIANT-POST-BUILD
Value Configuration Class	Pre-compile time	X	VARIANT-PRE-COMPILE
	Link time	X	VARIANT-LINK-TIME
	Post-build time	X	VARIANT-POST-BUILD
Scope / Dependency	scope: ECU dependency: FrIfImmediate		

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #76103: [FrIf] SWS_FrIf_05739 .. SWS_FrIf_05743 should not refer to <UL_TxConfirmation>

Problem description:

SWS_FrIf_05739 and the following SWS items require to set <UL_TxConfirmation>, when they talk about the configuration of UL_TriggerTransmit. This should be fixed.

Agreed solution:

Change ~SWS_FrIf_05739 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_AR_TP, <UL_TxConfirmation> must be FrArTp_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_AR_TP, <UL_TriggerTransmit> must be FrArTp_TriggerTransmit.

Change ~SWS_FrIf_05740 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_NM, <UL_TxConfirmation> must be FrNm_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_NM, <UL_TriggerTransmit> must be FrNm_TriggerTransmit.

Change ~SWS_FrIf_05741 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to

FR_TP, <UL_TxConfirmation> must be FrTp_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TP, <UL_TriggerTransmit> must be FrTp_TriggerTransmit.

Change ~SWS_FrIf_05742 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to PDUR, <UL_TxConfirmation> must be PduR_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to PDUR, <UL_TriggerTransmit> must be PduR_TriggerTransmit.

Change ~SWS_FrIf_05743 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to XCP , <UL_TxConfirmation> must be Xcp_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to XCP , <UL_TriggerTransmit> must be Xcp_TriggerTransmit.

Add after requirement SWS_FrIf_0574 a new one, i.e. +SWS_FrIf_05759:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TSYN , <UL_TriggerTransmit> must be FrTSyn_TriggerTransmit.

Change ~ECUC_FrIf_00016 from:
This parameter defines the name of the <User_RxIndication>. This parameter depends on the parameter FrIfUserRxIndicationUL. If FrIfUserRxIndicationUL equals FR_TP, FR_NM, PDUR, FR_TSYN or XCP, the name of the <User_RxIndication> is fixed. If FrIfUserRxIndicationUL equals CDD, the name of the <User_RxIndication> is selectable.
to:
This parameter defines the name of the <User_RxIndication>. This parameter depends on the parameter FrIfUserRxIndicationUL. If FrIfUserRxIndicationUL equals FR_TP, FR_AR_TP, FR_NM, PDUR, FR_TSYN or XCP, the name of the <User_RxIndication> is fixed. If FrIfUserRxIndicationUL equals CDD, the name of the <User_RxIndication> is selectable.

Change ~ECUC_FrIf_06084 from:
This parameter defines the name of the <User_TriggerTransmit>. This parameter depends on the parameter FrIfUserTxUL. If FrIfUserTxUL equals FR_TP, FR_NM,

PDUR, FR_TSYN or XCP the name of the <User_TriggerTransmit> is fixed. If FrIfUserTxUL equals CDD, the name of the <User_TriggerTransmit> is selectable.
to:
This parameter defines the name of the <User_TriggerTransmit>. This parameter depends on the parameter FrIfUserTxUL. If FrIfUserTxUL equals FR_TP, FR_AR_TP, FR_NM, PDUR, FR_TSYN or XCP the name of the <User_TriggerTransmit> is fixed. If FrIfUserTxUL equals CDD, the name of the <User_TriggerTransmit> is selectable.

Remove FR_TSYN from the list of modules in the description of ECUC_FrIf_00014.

Add the following new SWS item below SWS_FrIf_05733:
[SWS_FrIf_0xxxx] /Configuration of <UL_RxIndication>: If the parameter FrIfUserRxIndicationUL is set to FR_TSYN, <UL_RxIndication> must be FrTSyn_RxIndication./
–Last change on issue 76103 comment 10–

BW-C-Level:

Application	Specification	Bus
1	1	1

1.4   Specification Item SWS_FrIf_05043

Trace References:

Content:

API function	Description
Det_ReportRuntimeError	Service to report runtime errors. If a callout has been configured then this callout shall be called.
Fr_AbortCommunication	Invokes the CC CHI command 'FREEZE'.
Fr_AckAbsoluteTimerIRQ	Resets the interrupt condition of an absolute timer.
Fr_AllowColdstart	Invokes the CC CHI command 'ALLOW_COLDSTART'.
Fr_CancelAbsoluteTimer	Stops an absolute timer.
Fr_CheckTxLPduStatus	Checks the transmit status of the LSdu.
Fr_ControllerInit	Initialzes a FlexRay CC.
Fr_DisableAbsoluteTimerIRQ	Disables the interrupt line of an absolute timer.
Fr_EnableAbsoluteTimerIRQ	Enables the interrupt line of an absolute timer.
Fr_GetAbsoluteTimerIRQStatus	Gets IRQ status of an absolute timer.
Fr_GetGlobalTime	Gets the current global FlexRay time.
Fr_GetPOCStatus	Gets the POC status.
Fr_HaltCommunication	Invokes the CC CHI command 'DEFERRED_HALT'.

API function	Description
Fr_ReceiveRxLPdu	Receives data from the FlexRay network.
Fr_SendWUP	Invokes the CC CHI command 'WAKEUP'.
Fr_SetAbsoluteTimer	Sets the absolute FlexRay timer.
Fr_SetWakeupChannel	Sets a wakeup channel.
Fr_StartCommunication	Starts communication.
Fr_TransmitTxLPdu	Transmits data on the FlexRay network.
FrTrcv_CheckWakeupByTransceiver	–
FrTrcv_ClearTransceiverWakeup	This function clears a pending wake up event.
FrTrcv_GetTransceiverMode	This function returns the actual state of the transceiver.
FrTrcv_GetTransceiverWUReason	This function returns the wakeup reason.
FrTrcv_SetTransceiverMode	This service sets the transceiver mode.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #59085: Rollout of 'Runtime errors'

  Problem description:

  Inconsistencies in SWS with semantics of Default errors
  –Last change on issue 59085 comment 26–

  Agreed solution:

  solution in Column "G" of the new attachment
  https://www.autosar.org/bugzilla/attachment.cgi?id=4604

  Notes:
  - It is not enough just to migrate the error from one classification table to another.
  Please also check the related requirements (and background information) which is
  referring to that error and adapt them if needed.
  - The review task of the ITs shall be done by the WP to which the specification
  "belongs".

  *** BSW UML Model ***
  SWS_CanNm:
  ———-
  Chapter 8.6.1 Optional Interfaces:
  Add within SWS_CanNm_00325 the API function Det_ReportRunTimeError

  SWS_LinIf:
  ———-
  SWS_LinIf_00359: add Det_ReportRuntimeError

SWS_UdpNm:

———-

Replace UDPNM_E_NO_INIT with UDPNM_E_UNINIT in description of API UdpNm_MainFunction_<Instance Id> (SWS_UdpNm_00234)

*** ECUC XML ***

Not affected. No configuration of runtime error reporting required (see SWS BSW General).
–Last change on issue 59085 comment 88–

BW-C-Level:

Application	Specification	Bus
1	4	1

1.5 Specification Item SWS_FrIf_05073

Trace References:

Content:

Service name:	FrIf_GetNumOfStartupFramesFrIf_GetNumOfStartupFrames	
Syntax:	Std_ReturnType FrIf_GetNumOfStartupFrames(uint8 FrIf_CtrlIdx, uint8* FrIf_NumOfStartupFramesPtr)	
Service ID[hex]:	0x34	
Sync/Async:	Synchronous	
Reentrancy:	Non Reentrant for the same device	
Parameters (in):	FrIf_CtrlIdxFrIf_GetNumOfStartup Frames.FrIf_CtrlIdx	Index of FlexRay CC within the context of the FlexRay Interface.
Parameters (inout):	None	
Parameters (out):	FrIf_NumOfStartupFramesPtrFrIf_Get NumOfStartupFrames.FrIf_NumOf StartupFramesPtr	Address where the number of startup frames seen within the last even/odd cycle pair shall be stored.
Parameters (inout):	None	
Parameters (out):	None	
Return value:	Std_ReturnType	E_OK: API call finished successfully. E_NOT_OK: API call aborted due to errors.

Description:	Wraps the FlexRay Driver API function Fr_GetNumOfStartupFrames and gets a list of the the current number of startup frames seen on the cluster. See variable vStartup Pairs of [12] for details.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #68035: [diverse] Introduce rules defining which input parameters shall be passed per value and which ones per const reference

Problem description:

SWS_BSW_00186 especially states that input pointer parameters shall use the const qualifier (i.e., shall be P2CONST).

In addition to that there shall be a SWS item that states that input parameters of integral and enum type shall be passed by value whereas input parameters of structure type shall be passed by reference.

The various transformer SWS documents shall be adapted accordingly.
–Last change on issue 68035 comment 4–

Agreed solution:

BSW UML model
————-
The attachment "Changed Proposal in WP-A meeting" contains a list of changes to the APIs in the model (see column H). Afterwards all related documents (included in impact list) shall update their
generated artifacts.

General Requirements on Basic Software Modules
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Introduce the following requirements prior to SRS_BSW_00371:

SRS_BSW_xxxxx: Input parameters of scalar and enum types shall be passed as a value.
Type: valid
Description: All input parameters of scalar or enum type shall be passed as a value.
Rationale:

Use case: For example a function named <Mip>_SomeFunction with a return

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type of Std_ReturnType and a single parameter named SomeParameter of type uint8 is defined with the following signature:

Std_ReturnType <Mip>_SomeFunction(uint8 SomeParameter);
Dependencies: –
Supporting Material: —

SRS_BSW_yyyyy: Input parameters of structure type shall be passed as a reference to a constant structure
Type: valid
Description: All input parameters of structure type shall be passed as a reference constant structure
Rationale: Passing input parameters of structure type by value would result in additional run-time overhead due to efforts for copying the whole structure.
Use case: For example a function named <Mip>_SomeFunction with a return type of Std_ReturnType and a single parameter named SomeParameter of type SomeStructure (where SomeStructure is a struct) is defined with the following signature:

Std_ReturnType <Mip>_SomeFunction(P2CONST(SomeStructure, AUTOMATIC, <MIP>_APPL_DATA) SomeParameter);
Dependencies: –
Supporting Material: —

SRS_BSW_zzzzz: Input parameters of array type shall be passed as a reference to the constant array base type
Type: valid
Description: All input parameters of array type shall be passed as a reference to the constant array base type
Rationale: This effectively matches the behavior specified in the ISO-C:90 namely that a "declaration of a parameter as 'array of type' shall be adjusted to 'qualified pointer to
type'".
Use case: For example a function named <Mip>_SomeFunction with a return type of Std_ReturnType and a single parameter named SomeParameter of type array of uint8 is defined with the following signature:

Std_ReturnType <Mip>_SomeFunction(P2CONST(uint8, AUTOMATIC, <MIP>_APPL_DATA) SomeParameter);
Dependencies: –
Supporting Material: —

General Specification of Transformers
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

In SWS_Xfrm_00036 change

const <type>* dataElement

to

<paramtype> dataElement

and add the following to the where clause after the API table after the bullet
"type is data type of the data element
"

<paramtype> is derived from <type> according to the parameter passing rules
rules defined by the SRS BSW General (see SRS_BSW_xxxxx, SRS_BSW_yyyyy,
and SRS_BSW_zzzzz) and SWS BSW General (see SWS_BSW_00186 and
SWS_BSW_00187).

In SWS_Xfrm_00038 change

[<type> data_1,] ...
[<type> data_n]

to

[<paramtype> data_1,] ...
[<paramtype> data_n]

and add the following to the where clause after the API table after the bullet
"type is data type of the data element
"

<paramtype> is derived from <type> according to the parameter passing rules
rules defined by the SRS BSW General (see SRS_BSW_xxxxx, SRS_BSW_yyyyy,
and SRS_BSW_zzzzz) and SWS BSW General (see SWS_BSW_00186 and
SWS_BSW_00187).

The following paragraph shall then be removed:

For the arguments of ClientServerOperation which are handed over to the transformer as data_1, ..., data_n the requirements to API parameters stated in chapter API Parameters of [5, SWS RTE] are valid (especially [SWS_Rte_01017], [SWS_Rte_01018] and [SWS_Rte_05107]).

In SWS_Xfrm_00040 change

[<originalData1>, ...
<originalDataN>]

to

[<paramtype> originalData1,] ...
[<paramtype> originalDataN]

and add the following to the where clause after the API table after the bullet "type is data type of the data element
"

<paramtype> is derived from <type> according to the parameter passing rules rules defined by the SRS BSW General (see SRS_BSW_xxxxx, SRS_BSW_yyyyy, and SRS_BSW_zzzzz) and SWS BSW General (see SWS_BSW_00186 and SWS_BSW_00187).

In SWS_Xfrm_00044 change

<type> *data_1, ...
<type> *data_n

to

[<paramtype> data_1,] ...
[<paramtype> data_n]

and add the following to the where clause after the API table after the bullet "type is data type of the data element
"

<paramtype> is derived from <type> according to the parameter passing rules

rules defined by the SRS BSW General (see SRS_BSW_xxxxx, SRS_BSW_yyyyy, and SRS_BSW_zzzzz) and SWS BSW General (see SWS_BSW_00186 and SWS_BSW_00187).

The following paragraph shall then be removed:

For the arguments of ClientServerOperation which are handed over to the transformer as data_1, ..., data_n the requirements to API parameters stated in chapter API Parameters of [5, SWS RTE] are valid (especially [SWS_Rte_01017], [SWS_Rte_01018] and [SWS_Rte_05107]).

Speci?cation of SOME/IP Transformer
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In SWS_SomeIpXf_00138 change

const <type>* dataElement

to

<paramtype> dataElement

and add the following to the where clause after the API table after the bullet "type is data type of the data element
"

<paramtype> is derived from <type> according to the parameter passing rules rules defined by the SRS BSW General (see SRS_BSW_xxxxx, SRS_BSW_yyyyy, and SRS_BSW_zzzzz) and SWS BSW General (see SWS_BSW_00186 and SWS_BSW_00187).

In SWS_SomeIpXf_00141 change

[<type> data_1,] ...
[<type> data_n]

to

[<paramtype> data_1,] ...
[<paramtype> data_n]

and add the following to the where clause after the API table after the bullet "type is data type of the data element
"

<paramtype> is derived from <type> according to the parameter passing rules rules defined by the SRS BSW General (see SRS_BSW_xxxxx, SRS_BSW_yyyyy, and SRS_BSW_zzzzz) and SWS BSW General (see SWS_BSW_00186 and SWS_BSW_00187).

The following paragraph shall then be removed:

For the arguments of ClientServerOperation which are handed over to the transformer as data_1, ..., data_n the requirements to API parameters stated in chapter API Parameters of [5, SWS RTE] are valid (especially [SWS_Rte_01017], [SWS_Rte_01018] and [SWS_Rte_05107]).

In SWS_SomeIpXf_00145 change

<type> *data_1, ...
<type> *data_n

to

[<paramtype> data_1,] ...
[<paramtype> data_n]

and add the following to the where clause after the API table after the bullet "type is data type of the data element
"

<paramtype> is derived from <type> according to the parameter passing rules rules defined by the SRS BSW General (see SRS_BSW_xxxxx, SRS_BSW_yyyyy, and SRS_BSW_zzzzz) and SWS BSW General (see SWS_BSW_00186 and SWS_BSW_00187).

The following paragraph shall then be removed:

For the arguments of ClientServerOperation which are handed over to the transformer as data_1, ..., data_n the requirements to API parameters stated in

chapter API Parameters of [5, SWS RTE] are valid (especially [SWS_Rte_01017], [SWS_Rte_01018] and [SWS_Rte_05107]).

Specification of COM Based Transformer
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

In SWS_ComXf_00007 change

const <type>* dataElement

to

<paramtype> dataElement

and add the following to the where clause after the API table after the bullet "type is data type of the data element
"

<paramtype> is derived from <type> according to the parameter passing rules rules defined by the SRS BSW General (see SRS_BSW_xxxxx, SRS_BSW_yyyyy, and SRS_BSW_zzzzz) and SWS BSW General (see SWS_BSW_00186 and SWS_BSW_00187).

Specification of Time Sync over Ethernet
~~~~~~

In SWS_EthTSyn_00040 make the parameter DataPtr of EthTSyn_RxIndication const.

Specification of SWS FlexRay Interface
~~~~~~

Change SWS_FrIf_05073 from
FrIf_NumOfStartupFramesPtr (IN)
to
FrIf_NumOfStartupFramesPtr (OUT)

Specification of ADC

~~~~~~

~[SWS_Adc_00419] Adc_SetupResultBuffer: change Adc_ValueGroupType* to const Adc_ValueGroupType*

~[SWS_Adc_00369] Adc_ReadGroup: move Adc_ValueGroupType * from Parameters (in) to Parameters (out)

There is no need to change parameter from IN to INOUT in Adc_SetupResultBuffer

Specification of Com

~~~~~~

Change type of parameter MetaData of Com_TriggerIPDUSendWithMetaData from uint8* to const uint8*

Specification of ComM

~~~~~~

no change required

Specification of Dem

~~~~~~

no change required

Specification of DLT

~~~~~~

no change required

Specification of DoIP

~~~~~~

From:
Std_ReturnType <User>_DoIPRoutingActivationConfirmation(boolean* Confirmed, uint8* ConfirmationReqData, uint8* ConfirmationResData)
Std_ReturnType <User>_DoIPRoutingActivationAuthentication(boolean* Authentified, uint8* AuthenticationReqData, uint8* AuthenticationResData)

To:
Std_ReturnType <User>_DoIPRoutingActivationConfirmation(boolean* Confirmed, const uint8* ConfirmationReqData, uint8* ConfirmationResData)
Std_ReturnType <User>_DoIPRoutingActivationAuthentication(boolean* Authenti-

fied, const uint8* AuthenticationReqData, uint8* AuthenticationResData)

Specification of E2ELibrary
~~~~~~
no change required

Specification of Eth
~~~~~~
no change required

Specification of EthIf
~~~~~~
no change required

Specification of EthSwitchDriver
~~~~~~
no change required

Specification of ICUDriver
~~~~~~
SWS_Icu_00201: Icu_StartTimestamp
Parameter (IN): Icu_ValueType* BufferPtr shall be changed to Parameters (out) type

Specification of LdCom
~~~~~~
[SWS_LDCOM_00027]: LdCom_CopyTxData
BufReq_ReturnType LdCom_CopyTxData(PduIdType id, const PduInfoType* info,
RetryInfoType* retry, PduLengthType* availableDataPtr) shall be changed to
BufReq_ReturnType LdCom_CopyTxData(PduIdType id, const PduInfoType* info,
const RetryInfoType* retry, PduLengthType* availableDataPtr)

[SWS_LDCOM_00036]: Rte_LdComCbkCopyTxData_<sn>
BufReq_ReturnType Rte_LdComCbkCopyTxData_<sn>(const PduInfoType* info,
RetryInfoType* retry, PduLengthType* availableDataPtr) shall be changed to
BufReq_ReturnType Rte_LdComCbkCopyTxData_<sn>(const PduInfoType* info,
const RetryInfoType* retry, PduLengthType* availableDataPtr)

Specification of Lin

~~~~~~

PduInfoPtr needs to be const in Std_ReturnType Lin_SendFrame(uint8 Channel, const Lin_PduType* PduInfoPtr)

Specification of PduR

~~~~~~

* PduR_<User:LoTp>CopyTxData
add const to "RetryInfoType* retry"

Specification of J1939Nm

~~~~~~

Change parameter 'name' of User_AddressClaimedIndication to type 'const uint8*'

Specification of SoAd

~~~~~~

=> everything already fixed with RfC 65633

Specification of SPIHandlerDriver

~~~~~~

==> nothing to change for SWS SPI

Specification of SynchronizedTimeBaseManager

~~~~~~

"StbM not affected. All issues listed in the WP-A attachment have been already implemented by IT 69124 in context of RfC 65633"

Specification of TcpIp

~~~~~~

~[SWS_TCPIP_00040] TcpIp_DhcpReadOption: change DataPtr from (IN) to (OUT)
~[SWS_TCPIP_00189] TcpIp_DhcpV6ReadOption: change DataPtr from (IN) to (OUT)
=> everything else already fixed with RfC 65633

Specification of TimeSyncOverFlexRay
~~~~~~
"Change SWS_FrTSyn_00064: parameter versioninfo of type Std_VersionInfoType*
is marked wrongly as IN. Change to OUT"

Specification of EFX
~~~~~~~~~~~~~~~~~~~~~~
~ [SWS_Efx_00355] Efx_Debounce_u8_u8: Include constant for pointer Input-
parameter as like below.
uint8 Efx_Debounce_u8_u8(boolean X, Efx_DebounceState_Type * State, const
Efx_DebounceParam_Type * Param, sint32 dT)

~ [SWS_Efx_00376] Efx_MedianSort: The parameter <InType>* Array should
be InOut instead of In parameter as like below.
Parameters (in): N Size of an array
Parameters (inout): Array Pointer to an array

~ [SWS_Efx_00309] Efx_RampCheckActivity: Include constant for pointer Input-
parameter as like below.
boolean Efx_RampCheckActivity(const Efx_StateRamp_Type* State_cpst)

~ [SWS_Efx_00307] Efx_RampGetSwitchPos: Include constant for pointer
Input-parameter as like below.
boolean Efx_RampGetSwitchPos(const Efx_StateRamp_Type* State_cpst)

~ [SWS_Efx_00193] Efx_Array_Average: Include constant for pointer Input-
parameter as like below.
<OutType> Efx_Array_Average_<InTypeMn>_<OutTypeMn>(const <InType>*
Array, uint16 Count)

Specification of MFL
~~~~~~~~~~~~~~~~~~~~~~
~ [SWS_Mfl_00192] Mfl_Debounce_u8_u8: Include constant for pointer Input-
parameter as like below.
boolean Mfl_Debounce_u8_u8(boolean X, Mfl_DebounceState_Type* State, const
Mfl_DebounceParam_Type* Param, float32 dT)

~ [SWS_Mfl_00266] Mfl_DebounceInit: The parameter Mfl_DebounceState_Type*
State should be Out instead of In parameter as like below.
Parameters (in): X Initial value for the input state
Parameters (out): State Pointer to structure for debouncing state variables

~ [SWS_Mfl_00246] Mfl_HystDeltaRight_f32_u8: Include constant for pointer Input-parameter as like below.

boolean Mfl_HystDeltaRight_f32_u8(float32 X, float32 Delta, float32 Rsp, const uint8* State)

~ [SWS_Mfl_00285] Mfl_MedianSort_f32_f32: The parameter Array should be InOut instead of In parameter as like below.

Parameters (in): N Size of an array

Parameters (inout): Array Pointer to an array

~ [SWS_Mfl_00037] Mfl_PT1SetState: The parameter State_cpst should be Out instead of In parameter as like below.

Parameters (in): X1_f32 Initial value for input state

Y1_f32 Initial value for output state

Parameters (out): State_cpst Pointer to internal state structure

~ [SWS_Mfl_00225] Mfl_RampCheckActivity: Include constant for pointer Input-parameter as like below.

boolean Mfl_RampCheckActivity(const Mfl_StateRamp_Type* State_cpst)

~ [SWS_Mfl_00223] Mfl_RampGetSwitchPos: Include constant for pointer Input-parameter as like below.

boolean Mfl_RampGetSwitchPos(const Mfl_StateRamp_Type* State_cpst)

–Last change on issue 68035 comment 135–

BW-C-Level:

Application	Specification	Bus
1	4	1

1.6   Specification Item SWS_FrIf_05138

Trace References:

Content:

Upon invocation, the FlexRay Job List Execution Function shall perform the following steps:

1. Retrieve the FlexRay Global Time from the FlexRay CC providing the Cluster's absolute timer interrupt.

2. If the FlexRay Global Time cannot be retrieved or the global time delay compared to the jobs start time is larger than a maximum delay [Configuration Parameter Fr IfMaxIsrDelay, see FrIf06004], the execution of the FlexRay Job List is considered to be asynchronous to the FlexRay Global Time and thus the following actions are performed:

- Either set a flag (JobListAsyncFlag) indicating that the execution of the FlexRay Job List of this Cluster is asynchronous or directly resynchronize the Joblist as described in SWS_FrIf_95120

- If the JobListAsyncFlag was set, call the DET Runtime error FRIF_E_JLE_SYNC

- Disable absolute Timer Interrupt

- Terminate the execution of this FlexRay Job.

Otherwise, the FlexRay Job List Execution Function continues with step 3.

1. Retrieve the ordered list of Communication Operations of the current Job pointed to by the current job-pointer.

2. Forward the current job-pointer to the next job-list entry. If the job-pointer was pointed at the end of the job-list, wrap around and set it to the first job-list entry.

3. Retrieve the execution start time of the job marked by the job-pointer and set the absolute timer to this job's start time in order to invoke the FlexRay Job List Execution Function again.

4. Execute the retrieved Communication Operations.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #59085: Rollout of 'Runtime errors'

   Problem description:

   Inconsistencies in SWS with semantics of Default errors
   –Last change on issue 59085 comment 26–

   Agreed solution:

   solution in Column "G" of the new attachment
   https://www.autosar.org/bugzilla/attachment.cgi?id=4604

   Notes:
   - It is not enough just to migrate the error from one classification table to another. Please also check the related requirements (and background information) which is referring to that error and adapt them if needed.

- The review task of the ITs shall be done by the WP to which the specification "belongs".

*** BSW UML Model ***
SWS_CanNm:
————-
Chapter 8.6.1 Optional Interfaces:
Add within SWS_CanNm_00325 the API function Det_ReportRunTimeError

SWS_LinIf:
————-
SWS_LinIf_00359: add Det_ReportRuntimeError

SWS_UdpNm:
————-
Replace UDPNM_E_NO_INIT with UDPNM_E_UNINIT in description of API UdpNm_MainFunction_<Instance Id> (SWS_UdpNm_00234)

*** ECUC XML ***
Not affected. No configuration of runtime error reporting required (see SWS BSW General).
–Last change on issue 59085 comment 88–

BW-C-Level:

Application	Specification	Bus
1	4	1

1.7 Specification Item SWS_FrIf_05145

Trace References:

Content:

Type or error	Related error code	Value [hex]
Invalid pointer	FRIF_E_PARAM_POINTER	0x01
Invalid Controller index	FRIF_E_INV_CTRL_IDX	0x02
Invalid Cluster index	FRIF_E_INV_CLST_IDX	0x03
Invalid Channel index	FRIF_E_INV_CHNL_IDX	0x04
Invalid timer index	FRIF_E_INV_TIMER_IDX	0x05

Type or error	Related error code	Value [hex]
Invalid FrIf_TxPdu Index	FRIF_E_INV_TXPDUID	0x06
Invalid LPdu Index	FRIF_E_INV_LPDU_IDX	0x07
FrIf not initialized	FRIF_E_NOT_INITIALIZED UNINIT	0x08
Job List Execution lost synchronization to the FlexRay Global Time	FRIF_E_JLE_SYNC	0x09
Invalid parametFrIf state	FRIF_E_INV_FRIF_STATE	0x0A
Invalid Frame ID	FRIF_E_INV_FRAME_ID	0x0B
Initialization failed	FRIF_E_INIT_FAILED	0x0C
Invalid Pdu length	FRIF_E_INV_PDULENGTH	0x0D

Table [REF]-[REF]: Definition of Development Errors

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #59085: Rollout of 'Runtime errors'

  Problem description:

  Inconsistencies in SWS with semantics of Default errors
  –Last change on issue 59085 comment 26–

  Agreed solution:

  solution in Column "G" of the new attachment
  https://www.autosar.org/bugzilla/attachment.cgi?id=4604

  Notes:
  - It is not enough just to migrate the error from one classification table to another. Please also check the related requirements (and background information) which is referring to that error and adapt them if needed.
  - The review task of the ITs shall be done by the WP to which the specification "belongs".

  *** BSW UML Model ***
  SWS_CanNm:
  ———-
  Chapter 8.6.1 Optional Interfaces:
  Add within SWS_CanNm_00325 the API function Det_ReportRunTimeError

  SWS_LinIf:
  ———-
  SWS_LinIf_00359: add Det_ReportRuntimeError

SWS_UdpNm:

————-

Replace UDPNM_E_NO_INIT with UDPNM_E_UNINIT in description of API UdpNm_MainFunction_<Instance Id> (SWS_UdpNm_00234)

*** ECUC XML ***

Not affected. No configuration of runtime error reporting required (see SWS BSW General).

–Last change on issue 59085 comment 88–

BW-C-Level:

Application	Specification	Bus
1	4	1

1.8 Specification Item SWS_FrIf_05298

Trace References:

SRS_BSW_00406

Content:

If the FrIfDevErrorDetect switch is set to ON, all FrIf module API services other than FrIf_Init() and FrIf_GetVersionInfo() shall:

- not execute their normal operation,

- report to the DET module (using FRIF_E_NOT_INITIALIZEDUNINIT),

- and return E_NOT_OK,

unless the FrIf module has been initialized with a preceding call of FrIf_Init().

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #59085: Rollout of 'Runtime errors'

  Problem description:

  Inconsistencies in SWS with semantics of Default errors
  –Last change on issue 59085 comment 26–

  Agreed solution:

  solution in Column "G" of the new attachment
  https://www.autosar.org/bugzilla/attachment.cgi?id=4604

Document ID 695: ChangeDocumentation

Notes:

- It is not enough just to migrate the error from one classification table to another. Please also check the related requirements (and background information) which is referring to that error and adapt them if needed.
- The review task of the ITs shall be done by the WP to which the specification "belongs".

*** BSW UML Model ***

SWS_CanNm:

————-

Chapter 8.6.1 Optional Interfaces:

Add within SWS_CanNm_00325 the API function Det_ReportRunTimeError

SWS_LinIf:

————-

SWS_LinIf_00359: add Det_ReportRuntimeError

SWS_UdpNm:

————-

Replace UDPNM_E_NO_INIT with UDPNM_E_UNINIT in description of API UdpNm_MainFunction_<Instance Id> (SWS_UdpNm_00234)

*** ECUC XML ***

Not affected. No configuration of runtime error reporting required (see SWS BSW General).

–Last change on issue 59085 comment 88–

BW-C-Level:

Application	Specification	Bus
1	4	1

1.9 Specification Item SWS_FrIf_05307

Trace References:

Content:

If development error detection for the FrIf module is enabled: if the function FrIf_EnableTransceiverBranch is called before the Fr was initialized successfully, the function FrIf_EnableTransceiverBranch shall raise the development error FRIF_E_NOT_INITIALIZED UNINIT and return E_NOT_OK.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #59085: Rollout of 'Runtime errors'

    Problem description:

    Inconsistencies in SWS with semantics of Default errors
    –Last change on issue 59085 comment 26–

    Agreed solution:

    solution in Column "G" of the new attachment
    https://www.autosar.org/bugzilla/attachment.cgi?id=4604

    Notes:
    - It is not enough just to migrate the error from one classification table to another. Please also check the related requirements (and background information) which is referring to that error and adapt them if needed.
    - The review task of the ITs shall be done by the WP to which the specification "belongs".

    *** BSW UML Model ***
    SWS_CanNm:
    ————-
    Chapter 8.6.1 Optional Interfaces:
    Add within SWS_CanNm_00325 the API function Det_ReportRunTimeError

    SWS_LinIf:
    ————-
    SWS_LinIf_00359: add Det_ReportRuntimeError

    SWS_UdpNm:
    ————-
    Replace UDPNM_E_NO_INIT with UDPNM_E_UNINIT in description of API UdpNm_MainFunction_<Instance Id> (SWS_UdpNm_00234)

    *** ECUC XML ***
    Not affected. No configuration of runtime error reporting required (see SWS BSW

General).
–Last change on issue 59085 comment 88–

BW-C-Level:

Application	Specification	Bus
1	4	1

1.10   Specification Item SWS_FrIf_05432

Trace References:

Content:

Type or error	Related error code	Value [hex]
Job List Execution lost synchronization to the FlexRay Global Time	FRIF_E_JLE_SYNC	0x01

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #59085: Rollout of 'Runtime errors'

   Problem description:

   Inconsistencies in SWS with semantics of Default errors
   –Last change on issue 59085 comment 26–

   Agreed solution:

   solution   in   Column   "G"   of   the   new   attachment
   https://www.autosar.org/bugzilla/attachment.cgi?id=4604

   Notes:
   - It is not enough just to migrate the error from one classification table to another. Please also check the related requirements (and background information) which is referring to that error and adapt them if needed.
   - The review task of the ITs shall be done by the WP to which the specification "belongs".

   *** BSW UML Model ***
   SWS_CanNm:
   ———-

Chapter 8.6.1 Optional Interfaces:
Add within SWS_CanNm_00325 the API function Det_ReportRunTimeError

SWS_LinIf:
———-
SWS_LinIf_00359: add Det_ReportRuntimeError

SWS_UdpNm:
———-
Replace UDPNM_E_NO_INIT with UDPNM_E_UNINIT in description of API
UdpNm_MainFunction_<Instance Id> (SWS_UdpNm_00234)

*** ECUC XML ***
Not affected. No configuration of runtime error reporting required (see SWS BSW
General).
–Last change on issue 59085 comment 88–

BW-C-Level:

Application	Specification	Bus
1	4	1

1.11   Specification Item SWS_FrIf_05434

Trace References:

Content:

Configuration of <UL_RxIndication>: If the parameter FrIfUserRxIndicationUL is set to
FR_TSYN, <UL_RxIndication> must be FrTSyn_RxIndication.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #76103: [FrIf] SWS_FrIf_05739 .. SWS_FrIf_05743 should not refer to
  <UL_TxConfirmation>

Problem description:

SWS_FrIf_05739 and the following SWS items require to set <UL_TxConfirmation>,
when they talk about the configuration of UL_TriggerTransmit. This should be fixed.

Agreed solution:

Change ~SWS_FrIf_05739 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_AR_TP, <UL_TxConfirmation> must be FrArTp_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_AR_TP, <UL_TriggerTransmit> must be FrArTp_TriggerTransmit.

Change ~SWS_FrIf_05740 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_NM, <UL_TxConfirmation> must be FrNm_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_NM, <UL_TriggerTransmit> must be FrNm_TriggerTransmit.

Change ~SWS_FrIf_05741 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TP, <UL_TxConfirmation> must be FrTp_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TP, <UL_TriggerTransmit> must be FrTp_TriggerTransmit.

Change ~SWS_FrIf_05742 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to PDUR, <UL_TxConfirmation> must be PduR_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to PDUR, <UL_TriggerTransmit> must be PduR_TriggerTransmit.

Change ~SWS_FrIf_05743 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to XCP , <UL_TxConfirmation> must be Xcp_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to XCP , <UL_TriggerTransmit> must be Xcp_TriggerTransmit.

Add after requirement SWS_FrIf_0574 a new one, i.e. +SWS_FrIf_05759:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TSYN , <UL_TriggerTransmit> must be FrTSyn_TriggerTransmit.

Change ~ECUC_FrIf_00016 from:

This parameter defines the name of the <User_RxIndication>. This parameter depends on the parameter FrIfUserRxIndicationUL. If FrIfUserRxIndicationUL equals FR_TP, FR_NM, PDUR, FR_TSYN or XCP, the name of the <User_RxIndication> is fixed. If FrIfUserRxIndicationUL equals CDD, the name of the <User_RxIndication> is selectable.

to:

This parameter defines the name of the <User_RxIndication>. This parameter depends on the parameter FrIfUserRxIndicationUL. If FrIfUserRxIndicationUL equals FR_TP, FR_AR_TP, FR_NM, PDUR, FR_TSYN or XCP, the name of the <User_RxIndication> is fixed. If FrIfUserRxIndicationUL equals CDD, the name of the <User_RxIndication> is selectable.

Change ~ECUC_FrIf_06084 from:

This parameter defines the name of the <User_TriggerTransmit>. This parameter depends on the parameter FrIfUserTxUL. If FrIfUserTxUL equals FR_TP, FR_NM, PDUR, FR_TSYN or XCP the name of the <User_TriggerTransmit> is fixed. If FrIfUserTxUL equals CDD, the name of the <User_TriggerTransmit> is selectable.

to:

This parameter defines the name of the <User_TriggerTransmit>. This parameter depends on the parameter FrIfUserTxUL. If FrIfUserTxUL equals FR_TP, FR_AR_TP, FR_NM, PDUR, FR_TSYN or XCP the name of the <User_TriggerTransmit> is fixed. If FrIfUserTxUL equals CDD, the name of the <User_TriggerTransmit> is selectable.

Remove FR_TSYN from the list of modules in the description of ECUC_FrIf_00014.

Add the following new SWS item below SWS_FrIf_05733:

[SWS_FrIf_0xxxx] /Configuration of <UL_RxIndication>: If the parameter FrIfUserRxIndicationUL is set to FR_TSYN, <UL_RxIndication> must be FrTSyn_RxIndication./

–Last change on issue 76103 comment 10–

BW-C-Level:

Application	Specification	Bus
1	1	1

1.12   Specification Item SWS_FrIf_05700

Trace References:

Content:

If development error detection for the FrIf module is enabled: if the function FrIf_Get WakeupRxStatus is called before the Fr was initialized successfully, the function FrIf_Get WakeupRxStatus shall raise the development error FRIF_E_NOT_INITIALIZED UNINIT and return E_NOT_OK.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #59085: Rollout of 'Runtime errors'

    Problem description:

    Inconsistencies in SWS with semantics of Default errors
    –Last change on issue 59085 comment 26–

    Agreed solution:

    solution in Column "G" of the new attachment
    https://www.autosar.org/bugzilla/attachment.cgi?id=4604

    Notes:
    - It is not enough just to migrate the error from one classification table to another. Please also check the related requirements (and background information) which is referring to that error and adapt them if needed.
    - The review task of the ITs shall be done by the WP to which the specification "belongs".

    *** BSW UML Model ***
    SWS_CanNm:
    ———-
    Chapter 8.6.1 Optional Interfaces:
    Add within SWS_CanNm_00325 the API function Det_ReportRunTimeError

    SWS_LinIf:
    ———-
    SWS_LinIf_00359: add Det_ReportRuntimeError

    SWS_UdpNm:
    ———-
    Replace UDPNM_E_NO_INIT with UDPNM_E_UNINIT in description of API UdpNm_MainFunction_<Instance Id> (SWS_UdpNm_00234)

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*** ECUC XML ***
Not affected. No configuration of runtime error reporting required (see SWS BSW General).
–Last change on issue 59085 comment 88–

BW-C-Level:

Application	Specification	Bus
1	4	1

1.13   Specification Item SWS_FrIf_05703

Trace References:

Content:

If development error detection for the FrIf module is enabled: if the function FrIf_Cancel Transmit is called before the FrIf was initialized successfully, the function FrIf_Cancel Transmit shall raise the development error FRIF_E_NOT_INITIALIZED UNINIT and return E_NOT_OK.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #59085: Rollout of 'Runtime errors'

  Problem description:

  Inconsistencies in SWS with semantics of Default errors
  –Last change on issue 59085 comment 26–

  Agreed solution:

  solution in Column "G" of the new attachment
  https://www.autosar.org/bugzilla/attachment.cgi?id=4604

  Notes:
  - It is not enough just to migrate the error from one classification table to another. Please also check the related requirements (and background information) which is referring to that error and adapt them if needed.
  - The review task of the ITs shall be done by the WP to which the specification "belongs".

Document ID 695: ChangeDocumentation

*** BSW UML Model ***

SWS_CanNm:

———-

Chapter 8.6.1 Optional Interfaces:
Add within SWS_CanNm_00325 the API function Det_ReportRunTimeError

SWS_LinIf:

———-

SWS_LinIf_00359: add Det_ReportRuntimeError

SWS_UdpNm:

———-

Replace UDPNM_E_NO_INIT with UDPNM_E_UNINIT in description of API
UdpNm_MainFunction_<Instance Id> (SWS_UdpNm_00234)

*** ECUC XML ***

Not affected. No configuration of runtime error reporting required (see SWS BSW
General).

–Last change on issue 59085 comment 88–

BW-C-Level:

Application	Specification	Bus
1	4	1

1.14 Specification Item SWS_FrIf_05706

Trace References:

Content:

If development error detection for the FrIf module is enabled: if the function FrIf_AllSlots is
called before the FrIf was initialized successfully, the function FrIf_AllSlots shall raise the
development error FRIF_E_ NOT_INITIALIZED UNINIT and return E_NOT_OK.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #59085: Rollout of 'Runtime errors'

  Problem description:

Inconsistencies in SWS with semantics of Default errors
–Last change on issue 59085 comment 26–

Agreed solution:

solution in Column "G" of the new attachment
https://www.autosar.org/bugzilla/attachment.cgi?id=4604

Notes:
- It is not enough just to migrate the error from one classification table to another. Please also check the related requirements (and background information) which is referring to that error and adapt them if needed.
- The review task of the ITs shall be done by the WP to which the specification "belongs".

*** BSW UML Model ***
SWS_CanNm:
———-
Chapter 8.6.1 Optional Interfaces:
Add within SWS_CanNm_00325 the API function Det_ReportRunTimeError

SWS_LinIf:
———-
SWS_LinIf_00359: add Det_ReportRuntimeError

SWS_UdpNm:
———-
Replace UDPNM_E_NO_INIT with UDPNM_E_UNINIT in description of API UdpNm_MainFunction_<Instance Id> (SWS_UdpNm_00234)

*** ECUC XML ***
Not affected. No configuration of runtime error reporting required (see SWS BSW General).
–Last change on issue 59085 comment 88–

BW-C-Level:

Application	Specification	Bus
1	4	1

1.15 Specification Item SWS_FrIf_05708

Trace References:

Content:

If development error detection for the FrIf module is enabled: if the function FrIf_GetChannelStatus is called before the FrIf module was initialized successfully, the function FrIf_GetChannelStatus shall raise the development error FRIF_E_ NOT_INITIALIZED UNINIT and return E_NOT_OK.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #59085: Rollout of 'Runtime errors'

    Problem description:

    Inconsistencies in SWS with semantics of Default errors
    –Last change on issue 59085 comment 26–

    Agreed solution:

    solution in Column "G" of the new attachment
    https://www.autosar.org/bugzilla/attachment.cgi?id=4604

    Notes:
    - It is not enough just to migrate the error from one classification table to another. Please also check the related requirements (and background information) which is referring to that error and adapt them if needed.
    - The review task of the ITs shall be done by the WP to which the specification "belongs".

    *** BSW UML Model ***
    SWS_CanNm:
    ———-
    Chapter 8.6.1 Optional Interfaces:
    Add within SWS_CanNm_00325 the API function Det_ReportRunTimeError

    SWS_LinIf:
    ———-
    SWS_LinIf_00359: add Det_ReportRuntimeError

    SWS_UdpNm:

———-

Replace UDPNM_E_NO_INIT with UDPNM_E_UNINIT in description of API UdpNm_MainFunction_<Instance Id> (SWS_UdpNm_00234)

*** ECUC XML ***

Not affected. No configuration of runtime error reporting required (see SWS BSW General).

–Last change on issue 59085 comment 88–

BW-C-Level:

Application	Specification	Bus
1	4	1

1.16   Specification Item SWS_FrIf_05711

Trace References:

Content:

If development error detection for the FrIf module is enabled: if the function FrIf_GetClock Correction is called before the FrIf was initialized successfully, the function FrIf_GetClock Correction shall raise the development error FRIF_E_~~NOT_INITIALIZED~~ UNINIT and return E_NOT_OK.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #59085: Rollout of 'Runtime errors'

  Problem description:

  Inconsistencies in SWS with semantics of Default errors
  –Last change on issue 59085 comment 26–

  Agreed solution:

  solution   in   Column   "G"   of   the   new   attachment
  https://www.autosar.org/bugzilla/attachment.cgi?id=4604

  Notes:
  - It is not enough just to migrate the error from one classification table to another. Please also check the related requirements (and background information) which is referring to that error and adapt them if needed.

- The review task of the ITs shall be done by the WP to which the specification "belongs".

*** BSW UML Model ***
SWS_CanNm:
———-
Chapter 8.6.1 Optional Interfaces:
Add within SWS_CanNm_00325 the API function Det_ReportRunTimeError

SWS_LinIf:
———-
SWS_LinIf_00359: add Det_ReportRuntimeError

SWS_UdpNm:
———-
Replace UDPNM_E_NO_INIT with UDPNM_E_UNINIT in description of API UdpNm_MainFunction_<Instance Id> (SWS_UdpNm_00234)

*** ECUC XML ***
Not affected. No configuration of runtime error reporting required (see SWS BSW General).
–Last change on issue 59085 comment 88–

BW-C-Level:

Application	Specification	Bus
1	4	1

1.17 Specification Item SWS_FrIf_05715

Trace References:

Content:

If development error detection for the FrIf module is enabled: if the function FrIf_GetSync FrameList is called before the Fr was initialized successfully, the function FrIf_GetSync FrameList shall raise the development error FRIF_E_NOT_INITIALIZED UNINIT and return E_NOT_OK.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #59085: Rollout of 'Runtime errors'

Problem description:

Inconsistencies in SWS with semantics of Default errors
–Last change on issue 59085 comment 26–

Agreed solution:

solution in Column "G" of the new attachment
https://www.autosar.org/bugzilla/attachment.cgi?id=4604

Notes:
- It is not enough just to migrate the error from one classification table to another.
Please also check the related requirements (and background information) which is
referring to that error and adapt them if needed.
- The review task of the ITs shall be done by the WP to which the specification
"belongs".

*** BSW UML Model ***
SWS_CanNm:
————-
Chapter 8.6.1 Optional Interfaces:
Add within SWS_CanNm_00325 the API function Det_ReportRunTimeError

SWS_LinIf:
————-
SWS_LinIf_00359: add Det_ReportRuntimeError

SWS_UdpNm:
————-
Replace UDPNM_E_NO_INIT with UDPNM_E_UNINIT in description of API
UdpNm_MainFunction_<Instance Id> (SWS_UdpNm_00234)

*** ECUC XML ***
Not affected. No configuration of runtime error reporting required (see SWS BSW
General).
–Last change on issue 59085 comment 88–

BW-C-Level:

Application	Specification	Bus
1	4	1

Document ID 695: ChangeDocumentation

1.18 Specification Item SWS_FrIf_05717

Trace References:

Content:

If development error detection for the FrIf module is enabled: if the function FrIf_Disable LPdu is called before the FrIf was initialized successfully, the function FrIf_Disable LPdu shall raise the development error FRIF_E_NOT_INITIALIZED UNINIT and return E_NOT_OK.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #59085: Rollout of 'Runtime errors'

    Problem description:

    Inconsistencies in SWS with semantics of Default errors
    –Last change on issue 59085 comment 26–

    Agreed solution:

    solution in Column "G" of the new attachment
    https://www.autosar.org/bugzilla/attachment.cgi?id=4604

    Notes:
    - It is not enough just to migrate the error from one classification table to another. Please also check the related requirements (and background information) which is referring to that error and adapt them if needed.
    - The review task of the ITs shall be done by the WP to which the specification "belongs".

    *** BSW UML Model ***
    SWS_CanNm:
    ———-
    Chapter 8.6.1 Optional Interfaces:
    Add within SWS_CanNm_00325 the API function Det_ReportRunTimeError

    SWS_LinIf:
    ———-
    SWS_LinIf_00359: add Det_ReportRuntimeError

    SWS_UdpNm:

_____-

Replace UDPNM_E_NO_INIT with UDPNM_E_UNINIT in description of API UdpNm_MainFunction_<Instance Id> (SWS_UdpNm_00234)

*** ECUC XML ***

Not affected. No configuration of runtime error reporting required (see SWS BSW General).

–Last change on issue 59085 comment 88–

BW-C-Level:

Application	Specification	Bus
1	4	1

1.19 Specification Item SWS_FrIf_05718

Trace References:

Content:

If development error detection for the FrIf module is enabled: if the function FrIf_Get TransceiverError is called before the FrIf was initialized successfully, the function FrIf_Get TransceiverError shall raise the development error FRIF_E_NOT_INITIALIZED UNINIT and return E_NOT_OK.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #59085: Rollout of 'Runtime errors'

  Problem description:

  Inconsistencies in SWS with semantics of Default errors
  –Last change on issue 59085 comment 26–

  Agreed solution:

  solution in Column "G" of the new attachment https://www.autosar.org/bugzilla/attachment.cgi?id=4604

  Notes:
  - It is not enough just to migrate the error from one classification table to another. Please also check the related requirements (and background information) which is referring to that error and adapt them if needed.

- The review task of the ITs shall be done by the WP to which the specification "belongs".

*** BSW UML Model ***
SWS_CanNm:
————-
Chapter 8.6.1 Optional Interfaces:
Add within SWS_CanNm_00325 the API function Det_ReportRunTimeError

SWS_LinIf:
————-
SWS_LinIf_00359: add Det_ReportRuntimeError

SWS_UdpNm:
————-
Replace UDPNM_E_NO_INIT with UDPNM_E_UNINIT in description of API UdpNm_MainFunction_<Instance Id> (SWS_UdpNm_00234)

*** ECUC XML ***
Not affected. No configuration of runtime error reporting required (see SWS BSW General).
–Last change on issue 59085 comment 88–

BW-C-Level:

Application	Specification	Bus
1	4	1

1.20 Specification Item SWS_FrIf_05721

Trace References:

Content:

If development error detection for the FrIf module is enabled: if the function FrIf_GetNum OfStartupFrames is called before the FrIf was initialized successfully, the function FrIf_Get NumOfStartupFrames shall raise the development error FRIF_E_NOT_INITIALIZED UNINIT and return E_NOT_OK.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #59085: Rollout of 'Runtime errors'

Problem description:

Inconsistencies in SWS with semantics of Default errors
–Last change on issue 59085 comment 26–

Agreed solution:

solution   in   Column   "G"   of   the   new   attachment
https://www.autosar.org/bugzilla/attachment.cgi?id=4604

Notes:
- It is not enough just to migrate the error from one classification table to another.
Please also check the related requirements (and background information) which is
referring to that error and adapt them if needed.
- The review task of the ITs shall be done by the WP to which the specification
"belongs".

*** BSW UML Model ***
SWS_CanNm:
———-
Chapter 8.6.1 Optional Interfaces:
Add within SWS_CanNm_00325 the API function Det_ReportRunTimeError

SWS_LinIf:
———-
SWS_LinIf_00359: add Det_ReportRuntimeError

SWS_UdpNm:
———-
Replace UDPNM_E_NO_INIT with UDPNM_E_UNINIT in description of API
UdpNm_MainFunction_<Instance Id> (SWS_UdpNm_00234)

*** ECUC XML ***
Not affected. No configuration of runtime error reporting required (see SWS BSW
General).
–Last change on issue 59085 comment 88–

BW-C-Level:

Application	Specification	Bus
1	4	1

Document ID 695: ChangeDocumentation

1.21 Specification Item SWS_FrIf_05739

Trace References:

Content:

Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_AR_TP, <UL_TxConfirmationTriggerTransmit> must be FrArTp_TriggerTransmit.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #76103: [FrIf] SWS_FrIf_05739 .. SWS_FrIf_05743 should not refer to <UL_TxConfirmation>

  Problem description:

  SWS_FrIf_05739 and the following SWS items require to set <UL_TxConfirmation>, when they talk about the configuration of UL_TriggerTransmit. This should be fixed.

  Agreed solution:

  Change ~SWS_FrIf_05739 from:
  Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_AR_TP, <UL_TxConfirmation> must be FrArTp_TriggerTransmit.
  to:
  Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_AR_TP, <UL_TriggerTransmit> must be FrArTp_TriggerTransmit.

  Change ~SWS_FrIf_05740 from:
  Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_NM, <UL_TxConfirmation> must be FrNm_TriggerTransmit.
  to:
  Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_NM, <UL_TriggerTransmit> must be FrNm_TriggerTransmit.

  Change ~SWS_FrIf_05741 from:
  Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TP, <UL_TxConfirmation> must be FrTp_TriggerTransmit.
  to:
  Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TP, <UL_TriggerTransmit> must be FrTp_TriggerTransmit.

Document ID 695: ChangeDocumentation

Change ~SWS_FrIf_05742 from:

Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to PDUR, <UL_TxConfirmation> must be PduR_TriggerTransmit.

to:

Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to PDUR, <UL_TriggerTransmit> must be PduR_TriggerTransmit.

Change ~SWS_FrIf_05743 from:

Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to XCP , <UL_TxConfirmation> must be Xcp_TriggerTransmit.

to:

Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to XCP , <UL_TriggerTransmit> must be Xcp_TriggerTransmit.

Add after requirement SWS_FrIf_0574 a new one, i.e. +SWS_FrIf_05759:

Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TSYN , <UL_TriggerTransmit> must be FrTSyn_TriggerTransmit.

Change ~ECUC_FrIf_00016 from:

This parameter defines the name of the <User_RxIndication>. This parameter depends on the parameter FrIfUserRxIndicationUL. If FrIfUserRxIndicationUL equals FR_TP, FR_NM, PDUR, FR_TSYN or XCP, the name of the <User_RxIndication> is fixed. If FrIfUserRxIndicationUL equals CDD, the name of the <User_RxIndication> is selectable.

to:

This parameter defines the name of the <User_RxIndication>. This parameter depends on the parameter FrIfUserRxIndicationUL. If FrIfUserRxIndicationUL equals FR_TP, FR_AR_TP, FR_NM, PDUR, FR_TSYN or XCP, the name of the <User_RxIndication> is fixed. If FrIfUserRxIndicationUL equals CDD, the name of the <User_RxIndication> is selectable.

Change ~ECUC_FrIf_06084 from:

This parameter defines the name of the <User_TriggerTransmit>. This parameter depends on the parameter FrIfUserTxUL. If FrIfUserTxUL equals FR_TP, FR_NM, PDUR, FR_TSYN or XCP the name of the <User_TriggerTransmit> is fixed. If FrIfUserTxUL equals CDD, the name of the <User_TriggerTransmit> is selectable.

to:

This parameter defines the name of the <User_TriggerTransmit>. This parameter depends on the parameter FrIfUserTxUL. If FrIfUserTxUL equals FR_TP, FR_AR_TP,

FR_NM, PDUR, FR_TSYN or XCP the name of the <User_TriggerTransmit> is fixed.
If FrIfUserTxUL equals CDD, the name of the <User_TriggerTransmit> is selectable.

Remove FR_TSYN from the list of modules in the description of ECUC_FrIf_00014.

Add the following new SWS item below SWS_FrIf_05733:
[SWS_FrIf_0xxxx] /Configuration of <UL_RxIndication>: If the parameter FrI-
fUserRxIndicationUL is set to FR_TSYN, <UL_RxIndication> must be FrT-
Syn_RxIndication./
–Last change on issue 76103 comment 10–

BW-C-Level:

Application	Specification	Bus
1	1	1

1.22   Specification Item SWS_FrIf_05740

Trace References:

Content:

Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_NM,
<UL_TxConfirmationTriggerTransmit> must be FrNm_TriggerTransmit.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #76103: [FrIf] SWS_FrIf_05739 ..   SWS_FrIf_05743 should not refer to
  <UL_TxConfirmation>

  Problem description:

  SWS_FrIf_05739 and the following SWS items require to set <UL_TxConfirmation>,
  when they talk about the configuration of UL_TriggerTransmit. This should be fixed.

  Agreed solution:

  Change ~SWS_FrIf_05739 from:
  Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to
  FR_AR_TP, <UL_TxConfirmation> must be FrArTp_TriggerTransmit.
  to:
  Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to
  FR_AR_TP, <UL_TriggerTransmit> must be FrArTp_TriggerTransmit.

Change ~SWS_FrIf_05740 from:

Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_NM, <UL_TxConfirmation> must be FrNm_TriggerTransmit.

to:

Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_NM, <UL_TriggerTransmit> must be FrNm_TriggerTransmit.

Change ~SWS_FrIf_05741 from:

Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TP, <UL_TxConfirmation> must be FrTp_TriggerTransmit.

to:

Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TP, <UL_TriggerTransmit> must be FrTp_TriggerTransmit.

Change ~SWS_FrIf_05742 from:

Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to PDUR, <UL_TxConfirmation> must be PduR_TriggerTransmit.

to:

Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to PDUR, <UL_TriggerTransmit> must be PduR_TriggerTransmit.

Change ~SWS_FrIf_05743 from:

Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to XCP , <UL_TxConfirmation> must be Xcp_TriggerTransmit.

to:

Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to XCP , <UL_TriggerTransmit> must be Xcp_TriggerTransmit.

Add after requirement SWS_FrIf_0574 a new one, i.e. +SWS_FrIf_05759:

Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TSYN , <UL_TriggerTransmit> must be FrTSyn_TriggerTransmit.

Change ~ECUC_FrIf_00016 from:

This parameter defines the name of the <User_RxIndication>. This parameter depends on the parameter FrIfUserRxIndicationUL. If FrIfUserRxIndicationUL equals FR_TP, FR_NM, PDUR, FR_TSYN or XCP, the name of the <User_RxIndication> is fixed. If FrIfUserRxIndicationUL equals CDD, the name of the <User_RxIndication>

is selectable.
to:
This parameter defines the name of the <User_RxIndication>. This parameter depends on the parameter FrIfUserRxIndicationUL. If FrIfUserRxIndicationUL equals FR_TP, FR_AR_TP, FR_NM, PDUR, FR_TSYN or XCP, the name of the <User_RxIndication> is fixed. If FrIfUserRxIndicationUL equals CDD, the name of the <User_RxIndication> is selectable.

Change ~ECUC_FrIf_06084 from:
This parameter defines the name of the <User_TriggerTransmit>. This parameter depends on the parameter FrIfUserTxUL. If FrIfUserTxUL equals FR_TP, FR_NM, PDUR, FR_TSYN or XCP the name of the <User_TriggerTransmit> is fixed. If FrIfUserTxUL equals CDD, the name of the <User_TriggerTransmit> is selectable.
to:
This parameter defines the name of the <User_TriggerTransmit>. This parameter depends on the parameter FrIfUserTxUL. If FrIfUserTxUL equals FR_TP, FR_AR_TP, FR_NM, PDUR, FR_TSYN or XCP the name of the <User_TriggerTransmit> is fixed. If FrIfUserTxUL equals CDD, the name of the <User_TriggerTransmit> is selectable.

Remove FR_TSYN from the list of modules in the description of ECUC_FrIf_00014.

Add the following new SWS item below SWS_FrIf_05733:
[SWS_FrIf_0xxxx] /Configuration of <UL_RxIndication>: If the parameter FrIfUserRxIndicationUL is set to FR_TSYN, <UL_RxIndication> must be FrTSyn_RxIndication./
–Last change on issue 76103 comment 10–

BW-C-Level:

Application	Specification	Bus
1	1	1

1.23   Specification Item SWS_FrIf_05741

Trace References:

Content:

Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TP, <UL_TxConfirmationTriggerTransmit> must be FrTp_TriggerTransmit.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #76103: [FrIf] SWS_FrIf_05739 .. SWS_FrIf_05743 should not refer to <UL_TxConfirmation>

Problem description:

SWS_FrIf_05739 and the following SWS items require to set <UL_TxConfirmation>, when they talk about the configuration of UL_TriggerTransmit. This should be fixed.

Agreed solution:

Change ~SWS_FrIf_05739 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_AR_TP, <UL_TxConfirmation> must be FrArTp_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_AR_TP, <UL_TriggerTransmit> must be FrArTp_TriggerTransmit.

Change ~SWS_FrIf_05740 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_NM, <UL_TxConfirmation> must be FrNm_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_NM, <UL_TriggerTransmit> must be FrNm_TriggerTransmit.

Change ~SWS_FrIf_05741 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TP, <UL_TxConfirmation> must be FrTp_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TP, <UL_TriggerTransmit> must be FrTp_TriggerTransmit.

Change ~SWS_FrIf_05742 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to PDUR, <UL_TxConfirmation> must be PduR_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to PDUR, <UL_TriggerTransmit> must be PduR_TriggerTransmit.

Change ~SWS_FrIf_05743 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to XCP , <UL_TxConfirmation> must be Xcp_TriggerTransmit.
to:

Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to XCP , <UL_TriggerTransmit> must be Xcp_TriggerTransmit.

Add after requirement SWS_FrIf_0574 a new one, i.e. +SWS_FrIf_05759:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TSYN , <UL_TriggerTransmit> must be FrTSyn_TriggerTransmit.

Change ~ECUC_FrIf_00016 from:
This parameter defines the name of the <User_RxIndication>. This parameter depends on the parameter FrIfUserRxIndicationUL. If FrIfUserRxIndicationUL equals FR_TP, FR_NM, PDUR, FR_TSYN or XCP, the name of the <User_RxIndication> is fixed. If FrIfUserRxIndicationUL equals CDD, the name of the <User_RxIndication> is selectable.
to:
This parameter defines the name of the <User_RxIndication>. This parameter depends on the parameter FrIfUserRxIndicationUL. If FrIfUserRxIndicationUL equals FR_TP, FR_AR_TP, FR_NM, PDUR, FR_TSYN or XCP, the name of the <User_RxIndication> is fixed. If FrIfUserRxIndicationUL equals CDD, the name of the <User_RxIndication> is selectable.

Change ~ECUC_FrIf_06084 from:
This parameter defines the name of the <User_TriggerTransmit>. This parameter depends on the parameter FrIfUserTxUL. If FrIfUserTxUL equals FR_TP, FR_NM, PDUR, FR_TSYN or XCP the name of the <User_TriggerTransmit> is fixed. If FrIfUserTxUL equals CDD, the name of the <User_TriggerTransmit> is selectable.
to:
This parameter defines the name of the <User_TriggerTransmit>. This parameter depends on the parameter FrIfUserTxUL. If FrIfUserTxUL equals FR_TP, FR_AR_TP, FR_NM, PDUR, FR_TSYN or XCP the name of the <User_TriggerTransmit> is fixed. If FrIfUserTxUL equals CDD, the name of the <User_TriggerTransmit> is selectable.

Remove FR_TSYN from the list of modules in the description of ECUC_FrIf_00014.

Add the following new SWS item below SWS_FrIf_05733:
[SWS_FrIf_0xxxx] /Configuration of <UL_RxIndication>: If the parameter FrIfUserRxIndicationUL is set to FR_TSYN, <UL_RxIndication> must be FrTSyn_RxIndication./
–Last change on issue 76103 comment 10–

BW-C-Level:

Document ID 695: ChangeDocumentation

Application	Specification	Bus
1	1	1

1.24   Specification Item SWS_FrIf_05742

Trace References:

Content:

Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to PDUR, <UL_TxConfirmationTriggerTransmit> must be PduR_TriggerTransmit.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #76103: [FrIf] SWS_FrIf_05739 .. SWS_FrIf_05743 should not refer to <UL_TxConfirmation>

  Problem description:

  SWS_FrIf_05739 and the following SWS items require to set <UL_TxConfirmation>, when they talk about the configuration of UL_TriggerTransmit. This should be fixed.

  Agreed solution:

  Change ~SWS_FrIf_05739 from:
  Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_AR_TP, <UL_TxConfirmation> must be FrArTp_TriggerTransmit.
  to:
  Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_AR_TP, <UL_TriggerTransmit> must be FrArTp_TriggerTransmit.

  Change ~SWS_FrIf_05740 from:
  Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_NM, <UL_TxConfirmation> must be FrNm_TriggerTransmit.
  to:
  Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_NM, <UL_TriggerTransmit> must be FrNm_TriggerTransmit.

  Change ~SWS_FrIf_05741 from:
  Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TP, <UL_TxConfirmation> must be FrTp_TriggerTransmit.

to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to
FR_TP, <UL_TriggerTransmit> must be FrTp_TriggerTransmit.

Change ~SWS_FrIf_05742 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to
PDUR, <UL_TxConfirmation> must be PduR_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to
PDUR, <UL_TriggerTransmit> must be PduR_TriggerTransmit.

Change ~SWS_FrIf_05743 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to XCP
, <UL_TxConfirmation> must be Xcp_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to XCP
, <UL_TriggerTransmit> must be Xcp_TriggerTransmit.

Add after requirement SWS_FrIf_0574 a new one, i.e. +SWS_FrIf_05759:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to
FR_TSYN , <UL_TriggerTransmit> must be FrTSyn_TriggerTransmit.

Change ~ECUC_FrIf_00016 from:
This parameter defines the name of the <User_RxIndication>. This parameter de-
pends on the parameter FrIfUserRxIndicationUL. If FrIfUserRxIndicationUL equals
FR_TP, FR_NM, PDUR, FR_TSYN or XCP, the name of the <User_RxIndication> is
fixed. If FrIfUserRxIndicationUL equals CDD, the name of the <User_RxIndication>
is selectable.
to:
This parameter defines the name of the <User_RxIndication>. This parameter
depends on the parameter FrIfUserRxIndicationUL. If FrIfUserRxIndicationUL
equals FR_TP, FR_AR_TP, FR_NM, PDUR, FR_TSYN or XCP, the name of the
<User_RxIndication> is fixed. If FrIfUserRxIndicationUL equals CDD, the name of
the <User_RxIndication> is selectable.

Change ~ECUC_FrIf_06084 from:
This parameter defines the name of the <User_TriggerTransmit>. This parameter
depends on the parameter FrIfUserTxUL. If FrIfUserTxUL equals FR_TP, FR_NM,
PDUR, FR_TSYN or XCP the name of the <User_TriggerTransmit> is fixed. If

FrIfUserTxUL equals CDD, the name of the <User_TriggerTransmit> is selectable.
to:
This parameter defines the name of the <User_TriggerTransmit>. This parameter depends on the parameter FrIfUserTxUL. If FrIfUserTxUL equals FR_TP, FR_AR_TP, FR_NM, PDUR, FR_TSYN or XCP the name of the <User_TriggerTransmit> is fixed. If FrIfUserTxUL equals CDD, the name of the <User_TriggerTransmit> is selectable.

Remove FR_TSYN from the list of modules in the description of ECUC_FrIf_00014.

Add the following new SWS item below SWS_FrIf_05733:
[SWS_FrIf_0xxxx] /Configuration of <UL_RxIndication>: If the parameter FrIfUserRxIndicationUL is set to FR_TSYN, <UL_RxIndication> must be FrTSyn_RxIndication./
–Last change on issue 76103 comment 10–

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1	1	1

1.25   Specification Item SWS_FrIf_05743

Trace References:

Content:

Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to XCP, <UL_TxConfirmationTriggerTransmit> must be Xcp_TriggerTransmit.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #76103: [FrIf] SWS_FrIf_05739 .. SWS_FrIf_05743 should not refer to <UL_TxConfirmation>

  Problem description:

  SWS_FrIf_05739 and the following SWS items require to set <UL_TxConfirmation>, when they talk about the configuration of UL_TriggerTransmit. This should be fixed.

  Agreed solution:

  Change ~SWS_FrIf_05739 from:
  Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_AR_TP, <UL_TxConfirmation> must be FrArTp_TriggerTransmit.

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to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_AR_TP, <UL_TriggerTransmit> must be FrArTp_TriggerTransmit.

Change ~SWS_FrIf_05740 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_NM, <UL_TxConfirmation> must be FrNm_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_NM, <UL_TriggerTransmit> must be FrNm_TriggerTransmit.

Change ~SWS_FrIf_05741 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TP, <UL_TxConfirmation> must be FrTp_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TP, <UL_TriggerTransmit> must be FrTp_TriggerTransmit.

Change ~SWS_FrIf_05742 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to PDUR, <UL_TxConfirmation> must be PduR_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to PDUR, <UL_TriggerTransmit> must be PduR_TriggerTransmit.

Change ~SWS_FrIf_05743 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to XCP , <UL_TxConfirmation> must be Xcp_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to XCP , <UL_TriggerTransmit> must be Xcp_TriggerTransmit.

Add after requirement SWS_FrIf_0574 a new one, i.e. +SWS_FrIf_05759:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TSYN , <UL_TriggerTransmit> must be FrTSyn_TriggerTransmit.

Change ~ECUC_FrIf_00016 from:

This parameter defines the name of the <User_RxIndication>. This parameter depends on the parameter FrIfUserRxIndicationUL. If FrIfUserRxIndicationUL equals FR_TP, FR_NM, PDUR, FR_TSYN or XCP, the name of the <User_RxIndication> is fixed. If FrIfUserRxIndicationUL equals CDD, the name of the <User_RxIndication> is selectable.

to:

This parameter defines the name of the <User_RxIndication>. This parameter depends on the parameter FrIfUserRxIndicationUL. If FrIfUserRxIndicationUL equals FR_TP, FR_AR_TP, FR_NM, PDUR, FR_TSYN or XCP, the name of the <User_RxIndication> is fixed. If FrIfUserRxIndicationUL equals CDD, the name of the <User_RxIndication> is selectable.

Change ~ECUC_FrIf_06084 from:

This parameter defines the name of the <User_TriggerTransmit>. This parameter depends on the parameter FrIfUserTxUL. If FrIfUserTxUL equals FR_TP, FR_NM, PDUR, FR_TSYN or XCP the name of the <User_TriggerTransmit> is fixed. If FrIfUserTxUL equals CDD, the name of the <User_TriggerTransmit> is selectable.

to:

This parameter defines the name of the <User_TriggerTransmit>. This parameter depends on the parameter FrIfUserTxUL. If FrIfUserTxUL equals FR_TP, FR_AR_TP, FR_NM, PDUR, FR_TSYN or XCP the name of the <User_TriggerTransmit> is fixed. If FrIfUserTxUL equals CDD, the name of the <User_TriggerTransmit> is selectable.

Remove FR_TSYN from the list of modules in the description of ECUC_FrIf_00014.

Add the following new SWS item below SWS_FrIf_05733:
[SWS_FrIf_0xxxx] /Configuration of <UL_RxIndication>: If the parameter FrIfUserRxIndicationUL is set to FR_TSYN, <UL_RxIndication> must be FrTSyn_RxIndication./
–Last change on issue 76103 comment 10–

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1	1	1

1.26 Specification Item SWS_FrIf_05751

Trace References:

Content:

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Det.h contains the declarations of the API services of the Det optionally used by the Flex Ray Interface

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #59085: Rollout of 'Runtime errors'

  Problem description:

  Inconsistencies in SWS with semantics of Default errors
  –Last change on issue 59085 comment 26–

  Agreed solution:

  solution in Column "G" of the new attachment
  https://www.autosar.org/bugzilla/attachment.cgi?id=4604

  Notes:
  - It is not enough just to migrate the error from one classification table to another. Please also check the related requirements (and background information) which is referring to that error and adapt them if needed.
  - The review task of the ITs shall be done by the WP to which the specification "belongs".

  *** BSW UML Model ***
  SWS_CanNm:
  ———-
  Chapter 8.6.1 Optional Interfaces:
  Add within SWS_CanNm_00325 the API function Det_ReportRunTimeError

  SWS_LinIf:
  ———-
  SWS_LinIf_00359: add Det_ReportRuntimeError

  SWS_UdpNm:
  ———-
  Replace UDPNM_E_NO_INIT with UDPNM_E_UNINIT in description of API UdpNm_MainFunction_<Instance Id> (SWS_UdpNm_00234)

  *** ECUC XML ***
  Not affected. No configuration of runtime error reporting required (see SWS BSW General).
  –Last change on issue 59085 comment 88–

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1	4	1

1.27 Specification Item SWS_FrIf_05759

Trace References:

Content:

Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TSYN, <UL_TriggerTransmit> must be FrTSyn_TriggerTransmit.

RfCs affecting this spec item between releases 4.3.0 and 4.3.1:

- RfC #76103: [FrIf] SWS_FrIf_05739 .. SWS_FrIf_05743 should not refer to <UL_TxConfirmation>

   Problem description:

   SWS_FrIf_05739 and the following SWS items require to set <UL_TxConfirmation>, when they talk about the configuration of UL_TriggerTransmit. This should be fixed.

   Agreed solution:

   Change ~SWS_FrIf_05739 from:
   Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_AR_TP, <UL_TxConfirmation> must be FrArTp_TriggerTransmit.
   to:
   Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_AR_TP, <UL_TriggerTransmit> must be FrArTp_TriggerTransmit.

   Change ~SWS_FrIf_05740 from:
   Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_NM, <UL_TxConfirmation> must be FrNm_TriggerTransmit.
   to:
   Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_NM, <UL_TriggerTransmit> must be FrNm_TriggerTransmit.

   Change ~SWS_FrIf_05741 from:

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Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TP, <UL_TxConfirmation> must be FrTp_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TP, <UL_TriggerTransmit> must be FrTp_TriggerTransmit.

Change ~SWS_FrIf_05742 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to PDUR, <UL_TxConfirmation> must be PduR_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to PDUR, <UL_TriggerTransmit> must be PduR_TriggerTransmit.

Change ~SWS_FrIf_05743 from:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to XCP , <UL_TxConfirmation> must be Xcp_TriggerTransmit.
to:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to XCP , <UL_TriggerTransmit> must be Xcp_TriggerTransmit.

Add after requirement SWS_FrIf_0574 a new one, i.e. +SWS_FrIf_05759:
Configuration of <UL_TriggerTransmit>: If the parameter FrIfUserTxUL is set to FR_TSYN , <UL_TriggerTransmit> must be FrTSyn_TriggerTransmit.

Change ~ECUC_FrIf_00016 from:
This parameter defines the name of the <User_RxIndication>. This parameter depends on the parameter FrIfUserRxIndicationUL. If FrIfUserRxIndicationUL equals FR_TP, FR_NM, PDUR, FR_TSYN or XCP, the name of the <User_RxIndication> is fixed. If FrIfUserRxIndicationUL equals CDD, the name of the <User_RxIndication> is selectable.
to:
This parameter defines the name of the <User_RxIndication>. This parameter depends on the parameter FrIfUserRxIndicationUL. If FrIfUserRxIndicationUL equals FR_TP, FR_AR_TP, FR_NM, PDUR, FR_TSYN or XCP, the name of the <User_RxIndication> is fixed. If FrIfUserRxIndicationUL equals CDD, the name of the <User_RxIndication> is selectable.

Change ~ECUC_FrIf_06084 from:
This parameter defines the name of the <User_TriggerTransmit>. This parameter

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depends on the parameter FrIfUserTxUL. If FrIfUserTxUL equals FR_TP, FR_NM, PDUR, FR_TSYN or XCP the name of the <User_TriggerTransmit> is fixed. If FrIfUserTxUL equals CDD, the name of the <User_TriggerTransmit> is selectable.
to:
This parameter defines the name of the <User_TriggerTransmit>. This parameter depends on the parameter FrIfUserTxUL. If FrIfUserTxUL equals FR_TP, FR_AR_TP, FR_NM, PDUR, FR_TSYN or XCP the name of the <User_TriggerTransmit> is fixed. If FrIfUserTxUL equals CDD, the name of the <User_TriggerTransmit> is selectable.

Remove FR_TSYN from the list of modules in the description of ECUC_FrIf_00014.

Add the following new SWS item below SWS_FrIf_05733:
[SWS_FrIf_0xxxx] /Configuration of <UL_RxIndication>: If the parameter FrIfUserRxIndicationUL is set to FR_TSYN, <UL_RxIndication> must be FrTSyn_RxIndication./
–Last change on issue 76103 comment 10–

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