

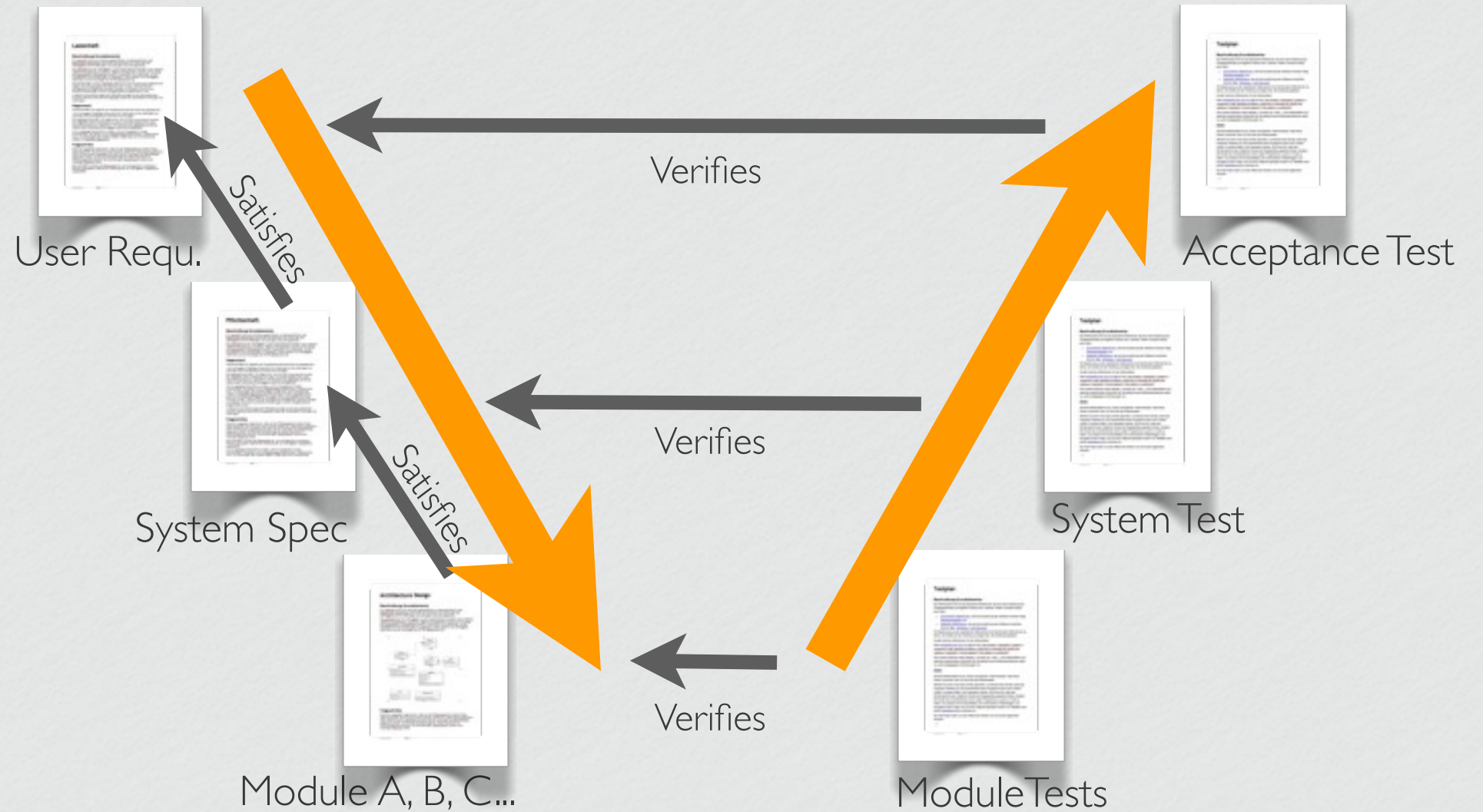
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Marco Matuschek  
[mmatuschek@willert.de](mailto:mmatuschek@willert.de)

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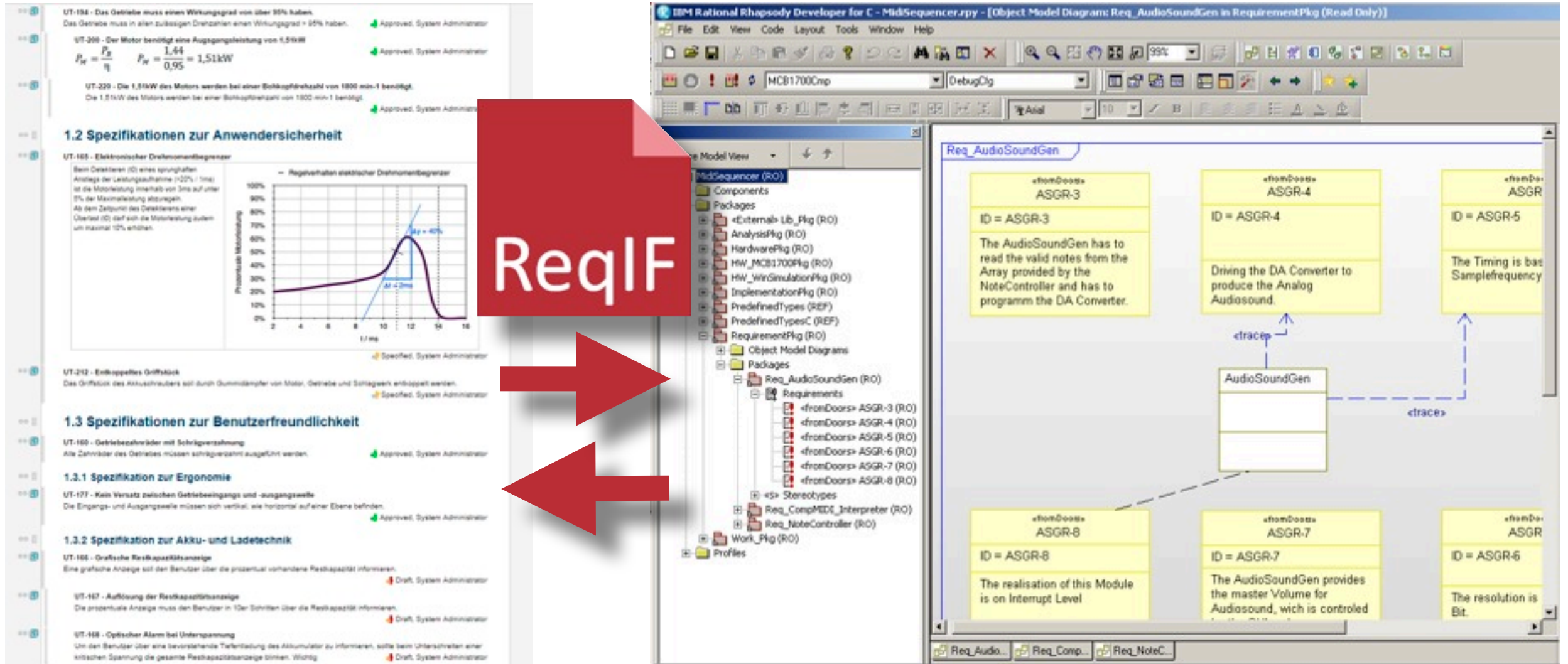
# Closing the Gap between Requirements and Modelling

# Broken Traceability



UML - / SysML - Diagrams and Artefacts

# Data Exchange via ReqIF



ReqManagement - Solution

UML / SysML - Modelling Solution

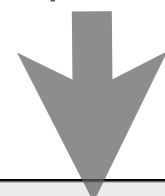
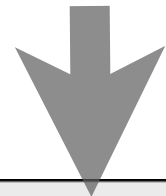


# Full Traceability

User Requirements

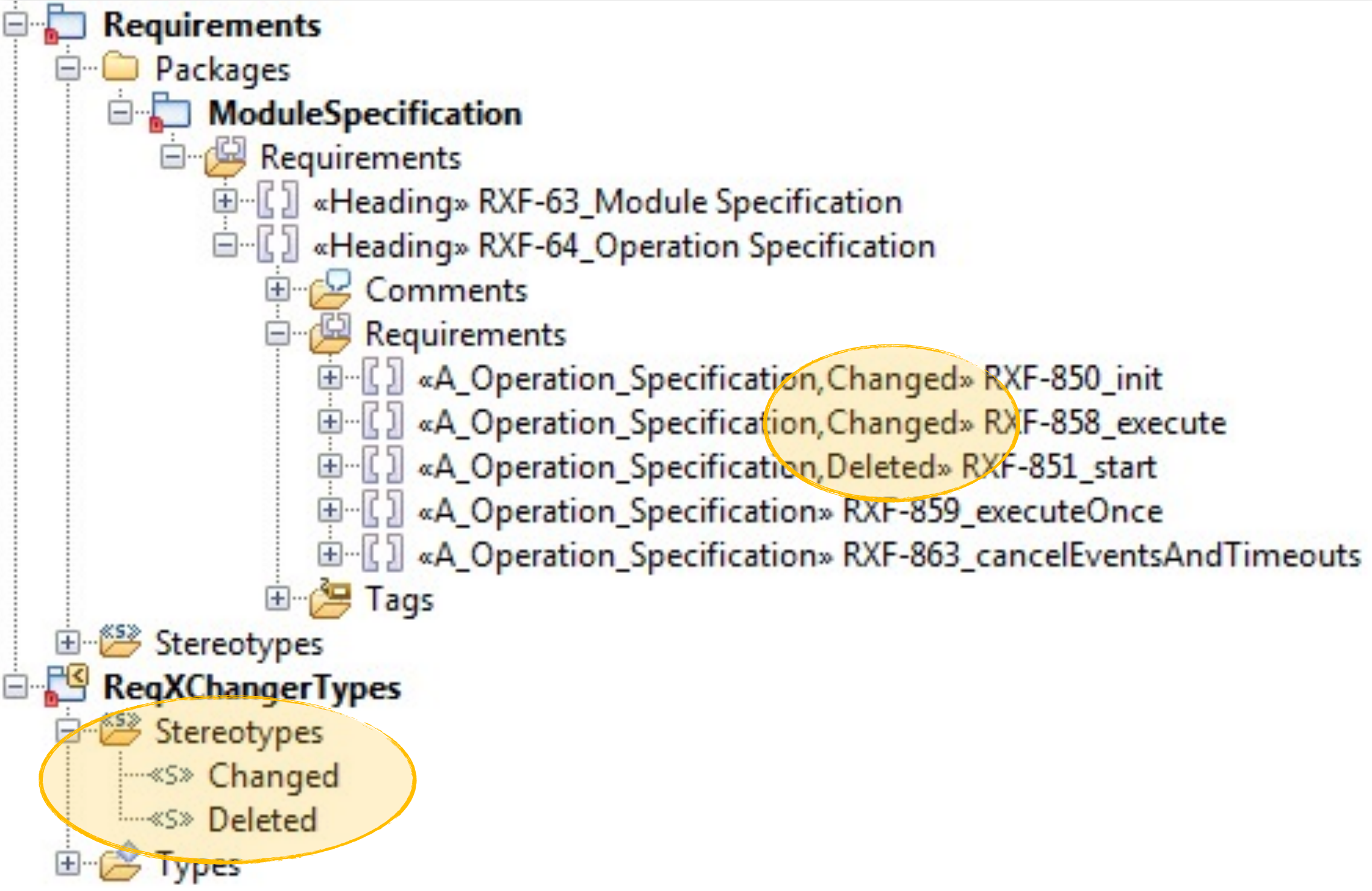
Software Specifications

UML- / SysML-Artefacts



User Requirements	Software Specifications	RXC Software Artefact Type
IC-3 - Self Check functionality Description: A faulty system has to be detected before the engine startup.	IC-7 - Check Sensors before Engine Startup Description: The controller must check all connected sensors before the engine can be started.	
	IC-10 - Fatal Errors Behaviour Description: Fatal errors may not allow an engine startup.	
	IC-11 - Minor Errors Behaviour Description: Minor errors should allow an emergency run in order to reach the next garage.	
IC-42 - Camshaft Position Detection Description: The ignition controller requires the exact position of the camshaft to determine the startup for every firing sequence.	IC-58 - A Hall Sensor has to detect the Camshaft Position Description: A hall sensor has to detect every finalised (trigger is piston 1 in Top Dead Center ) rotation of the camshaft.	IC-81 - Ignition_Controller Artefact Path: System::Ignition_Controller
	IC-59 - An Ignition Distributor must determine the correct Ignition Timing and Order Description: An ignition distributor must determine the correct ignition timing and order for each piston within each ignition sequence.	IC-80 - Ignition_Distributor Artefact Path: System::Ignition_Distributor
IC-43 - Crankshaft Rotational Speed Detection Description: The ignition controller requires the rotational speed of the crankshaft to determine the ignition timing.	IC-66 - Software Timer Description: A Software Timer is required to calculate the rotational speed of the crankshaft.	IC-85 - Timer Artefact Path: System::Timer

# Suspect Links



# QUESTIONS ?



MARCO MATUSCHEK

[mmatuschek@willert.de](mailto:mmatuschek@willert.de)