Automotive SPICE® 4.0

The next major update of the most used process assessment model

Bernhard Sechser
February 9th, 2023

Bernhard Sechser

intacs®
- Principal Assessor & Instructor
- Member of the Advisory Board
- Head of the Regional Representatives

More than 26 years practical experience in Automotive domain as
- Software & System Developer
- Quality Manager
- Processes & Tools Responsible
- Trainer, Coach & Consultant

VW Software Quality Improvement Leader (SQIL)
Functional Safety Expert on ISO 26262
Cybersecurity "Rookie"
Managing Director of Process Fellows GmbH

Agenda

- Current situation – Assessments and their effects

- New challenges in Automotive industry – Cybersecurity and more

- Changes in Automotive SPICE® 4.0

- Current and future intacs® Training Architecture

- Influence on Assessor Skills and Certification Levels

- Outlook and Roadmap

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What is intacs®?

intacs.info
International Assessor Certification Scheme

"The intacs® scheme is a valid and accepted qualification scheme by the automotive industry and VDA QMC."
Source: VDA QMC Automotive SPICE® Guidelines, 1st edition

Main objective: Ensuring high quality assessment performance through
1. setting training and certification standards for ISO/IEC 330xx (SPICE) assessors
2. setting standards for maintaining assessor competence
3. promoting assessment models & community interactions

Which kind of projects are assessed?

- ECU with software-based functionalities for vehicle functions
- software-controlled safety measures on a second controller
- access control mechanisms, e.g., for vehicle doors
- smartphone apps for evaluation of vehicle data and controlling functions like climatic control
- "old fashioned" managed system development with "agile" sub-teams for software and/or hardware development
- complex (sub-)systems with several architectural layers and hierarchies distributed among several ECUs and developed by different (sub-)suppliers at different locations all over the world
- a mixture of all above …
- and much more!
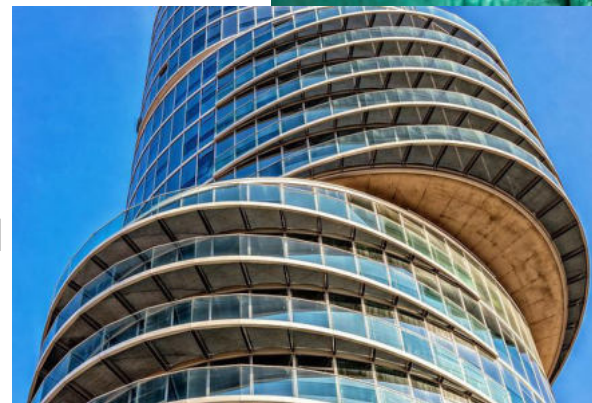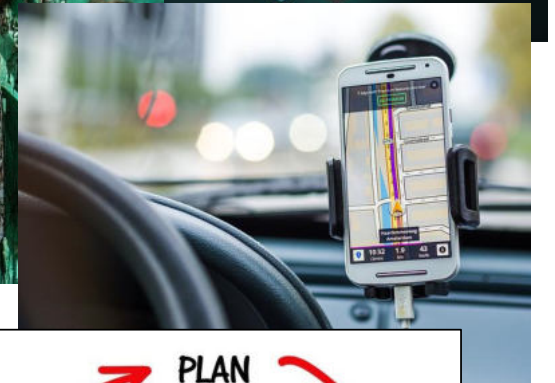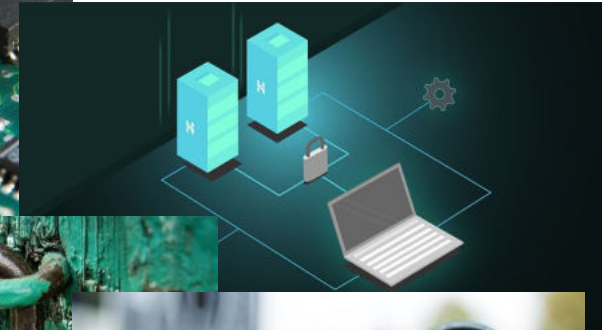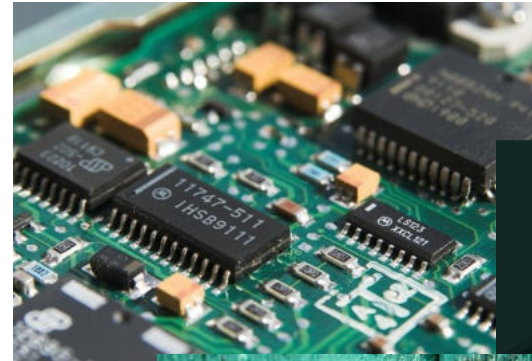
Which kind of projects are assessed?

And by whom?

By an assessor with a **basic intacs® education** according to the training scheme and **hopefully** additional skills from somewhere else that fit to the needs of the projects to be assessed !

Is this sufficient?

And does it matter?

Do assessor ratings have any effect on projects or organizations?

For becoming a supplier for the first time?
- → **Yes**, if you are one out of many suppliers offering a standard product and want to be classified as an A supplier (means "preferred")
- → **No**, if this supplier has a unique knowledge or product, just promising to work on an improvement plan

For accepting/approving a delivered product to be integrated into a vehicle?
- → **Yes**, if well performed processes are really respected (risk-based approach)
- → **No**, if the product passes all acceptance tests for expected functionality (even with higher risks)

For improving the own projects and processes?
- → **Yes**, if assessment findings are justified in an unambiguous and practical way
- → **No**, if rating is purely based on PAM and guideline rules without specific justifications

Will this be sufficient in the future?

A light at the end of the tunnel

Gate4SPICE Events

2023-02-10 Gate4SPICE Event "Multi -System Integration" - ONLINE
Online (10.02.2023 10:00)

2023-02-25 Gate4SPICE Event "Practice in ASPICE, Cybersecurity, Functional Safety" - ONLINE
Online (25.02.2023 09:00)
`fully booked.`

2023-05-11-Gate4SPICE Event "On the quest for the forgotten processes" - ONSITE
Vitesco Technologies GmbH, Siemensstraße 12, 93055 Regensburg, Entwicklungszentrum (11.05.2023 09:30)
`fully booked.`

Latest Results

- 2022-12-08-Gate4SPICE Event "Cyber Security und Hardware SPICE, Welche Auswirkungen gibt es?" - ONSITE 2022-12-08
- 2022-11-25-Gate4SPICE Event "Automotive SPICE® Model Compliance - Current & Future" - ONSITE 2022-11-25
- 2022-11-18-Gate4SPICE Event "Automotive SPICE in an Agile Environment" - ONLINE 2022-11-18
- 2022-11-04-Gate4SPICE Event "ASPICE and Cybersecurity" - ONSITE 2022-11-04
- 2022-10-14-01-Gate4SPICE Event "In sight of ASPICE Assessment and introduction of Cybersecurity" - ONSITE 2022-10-14
- 2022-10-13-Gate4SPICE Event "Looking into the future" - ONSITE 2022-10-13
- 2022-10-05-Gate4SPICE Event "Automotive SPICE und VDA-Bände – Widerspruch oder sinnvolle Ergänzung?" - ONSITE 2022-10-05
- 2022-09-22-Gate4SPICE Event "Rhetorik in ASPICE Assessments" - ONSITE 2022-09-22
- 2022-09-21-Gate4SPICE Event "Experience and pain points by applying the Automotive SPICE Guidelines in Spice Assessments" - ONLINE 2022-09-21
- 2022-09-20-Gate4SPICE Event "HW SPICE 2.0 and ASPICE 3.1 Configuration Management and Verification: What are the pain points?" - ONSITE 2022-09-20

Archive Gate4SPICE Results

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- Outlook and Roadmap

Many different opinions, but one goal: Cybersecurity

CANADA'S VEHICLE CYBER SECURITY GUIDANCE

UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE

Cybersecurity Law of the People's Republic of China

The "National Highway Traffic Safety Administration" is responsible for keeping people safe on America's roadways

Implementation in Automotive
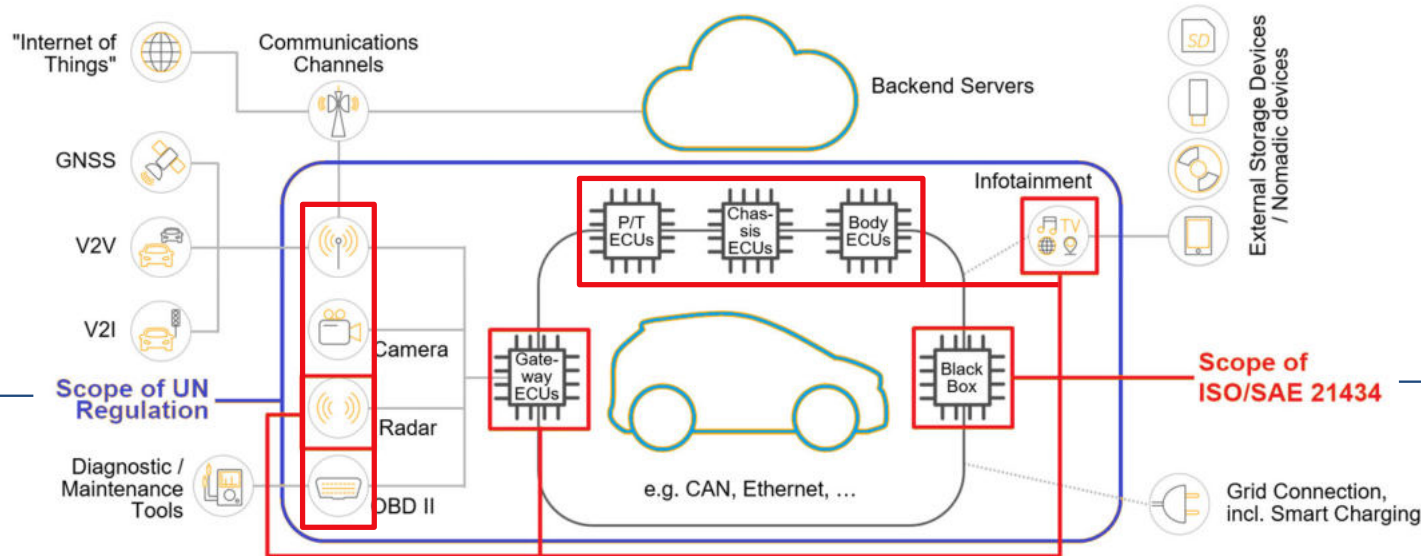
Remark:
ISO/SAE 21434 applies to series production road vehicle E/E systems. This includes their components and interfaces. It is applicable to all components whose development or modification began after the publication of the standard.

UN Regulation no.155
Approval of vehicles with regards to cybersecurity and cybersecurity management system

ISO/SAE 21434
Road Vehicles – Cybersecurity Engineering applicable to OEMs and Suppliers

VDA | QMC
Qualitäts Management Center
im Verband der Automobilindustrie

VDA ACSMS / (ISO PAS 5112)
Automotive Cybersecurity System Audit
(IATF Auditor & Experts)

Scope: **Cybersecurity Management System** of OEMs and the dependencies to contractual partners (value chain).

Automotive SPICE for Cybersecurity
Process Reference and Assessment Model for **Cybersecurity Engineering**

Scope: Individual Development Project

Company Certificate

Assessment Report

Automotive SPICE® Compliance – Now „really" important !

Recommendation from VDA QMC for Type Approval (homologation)

→ **Assessor's judgement will become more important than ever !**

Source: VDA QMC Automotive SPICE® for Cybersecurity

Target Profile for PASSED

Automotive SPICE VDA Scope

Process	PA 1.1
ACQ.4 Supplier Monitoring	F
SYS.2 System Requirements Analysis	F
SYS.3 System Architectural Design	F
SYS.4 System Integration and Integration Test	F
SYS.5 System Qualification Test	F
SWE.1 Software Requirements Analysis	F
SWE.2 Software Architectural Design	F
SWE.3 Software Detailed Design and Unit Construction	F
SWE.4 Software Unit Verification	F
SWE.5 Software Integration and Integration Test	F
SWE.6 Software Qualification Test	F
SUP.1 Quality Assurance	L
SUP.8 Configuration Management	L
SUP.9 Problem Resolution Management	F
SUP.10 Change Request Management	F
MAN.3 Project Management	L

Automotive SPICE for Cybersecurity

Process	PA 1.1
ACQ.2 Supplier request and selection	F
ACQ.4 Supplier Monitoring*	F
SEC.1 Cybersecurity Requirements Elicitation	F
SEC.2 Cybersecurity Implementation	F
SEC.3 Risk Treatment Verification	F
SEC.4 Risk Treatment Validation	F
MAN.7 Project Management	F
SUP.1 Quality Assurance**	F
SUP.8 Configuration Management**	F

Target Profile for PASSED WITH CONDITIONS

Automotive SPICE VDA Scope

Process	PA 1.1
ACQ.4 Supplier Monitoring	L
SYS.2 System Requirements Analysis	L
SYS.3 System Architectural Design	L
SYS.4 System Integration and Integration Test	L
SYS.5 System Qualification Test	L
SWE.1 Software Requirements Analysis	L
SWE.2 Software Architectural Design	L
SWE.3 Software Detailed Design and Unit Construction	L
SWE.4 Software Unit Verification	L
SWE.5 Software Integration and Integration Test	L
SWE.6 Software Qualification Test	L
SUP.1 Quality Assurance	L
SUP.8 Configuration Management	L
SUP.9 Problem Resolution Management	L
SUP.10 Change Request Management	L
MAN.3 Project Management	L

Automotive SPICE for Cybersecurity

Process	PA 1.1
ACQ.2 Supplier Request and Selection	L
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SEC.1 Cybersecurity Requirements Elicitation	L
SEC.2 Cybersecurity Implementation	L
SEC.3 Risk Treatment Verification	L
SEC.4 Risk Treatment Validation	L
MAN.7 Project Management	L
SUP.1 Quality Assurance**	L
SUP.8 Configuration Management**	L

Further Process Reference/Assessment Models

... but no further assessor qualification required today !

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Automotive SPICE® v3.1 with Automotive SPICE® for Cybersecurity v1.0

Acquisition Process Group (ACQ)

- **ACQ.2** Supplier Request and Selection
- **ACQ.3** Contract Agreement
- **ACQ.4** Supplier Monitoring
- **ACQ.11** Technical Requirements
- **ACQ.12** Legal and Administrative Requirements
- **ACQ.13** Project Requirements
- **ACQ.14** Request for Proposals
- **ACQ.15** Supplier Qualification

System Engineering Process Group (SYS)

- **SYS.1** Requirements Elicitation
- **SYS.2** System Requirements Analysis
- **SYS.3** System Architectural Design
- **SYS.5** System Qualification Test
- **SYS.4** System Integration and Integration Test

Software Engineering Process Group (SWE)

- **SWE.1** Software Requirements Analysis
- **SWE.2** Software Architectural Design
- **SWE.3** Software Detailed Design and Unit Construction
- **SWE.6** Software Qualification Test
- **SWE.5** Software Integration and Integration Test
- **SWE.4** Software Unit Verification

Cybersecurity Engineering Process Group (SEC)

- **SEC.1** Cybersecurity Requirements Elicitation
- **SEC.2** Cybersecurity Implementation
- **SEC.3** Risk Treatment Verification
- **SEC.4** Risk Treatment Validation

Management Process Group (MAN)

- **MAN.3** Project Management
- **MAN.5** Risk Management
- **MAN.6** Measurement
- **MAN.7** Cybersecurity Risk Management

Reuse Process Group (REU)

- **REU.2** Reuse Program Management

Supply Process Group (SPL)

- **SPL.1** Supplier Tendering
- **SPL.2** Product Release

Supporting Process Group (SUP)

- **SUP.1** Quality Assurance
- **SUP.2** Verification
- **SUP.4** Joint Review
- **SUP.7** Documentation
- **SUP.8** Configuration Management
- **SUP.9** Problem Resolution Management
- **SUP.10** Change Request Management

Process Improvement Process Group (PIM)

- **PIM.3** Process Improvement

Primary Life Cycle Processes | **Organizational Life Cycle Processes** | **Supporting Life Cycle Processes** | Scope ASPICE for Cybersecurity

Source: VDA QMC

Process Overview Automotive SPICE® v4.0 (Draft)

ASPICE Core Model

Management Process Group (MAN)
- MAN.3 Project Management
- MAN.5 Risk Management
- MAN.6 Measurement

System Engineering Process Group (SYS)
- SYS.1 Requirements Elicitation
- SYS.2 System Requirements Analysis
- SYS.3 System Architectural Design
- SYS.4 System Integration and Integration Verification
- SYS.5 System Verification
- VAL.1 Validation

Software Engineering Process Group (SWE)
- SWE.1 Software Requirements Analysis
- SWE.2 Software Architectural Design
- SWE.3 Software Detailed Design and Unit Construction
- SWE.4 Software Unit Verification
- SWE.5 Software Integration and Integration Verification
- SWE.6 Software Verification

Reuse Process Group (REU)
- REU.2 Reuse Program Management

Process Improvement Process Group (PIM)
- PIM.3 Process Improvement

Acquisition Process Group (ACQ)
- ACQ.4 Supplier Monitoring

Supply Process Group (SPL)
- SPL.2 Product Release

Supporting Process Group (SUP)
- SUP.1 Quality Assurance
- SUP.8 Configuration Management
- SUP.9 Problem Resolution Management
- SUP.10 Change Request Management
- SUP.11 Data Management Machine Learning

Primary Lifecycle Processes | Organizational Lifecycle Processes | Supporting Lifecycle Processes

Basic Scope | New Process | Scope PG13

PG 13 Extensions

Cybersecurity Engineering Process Group (SEC)
- SEC.1 Cybersecurity Requirements Elicitation
- SEC.2 Cybersecurity Implementation
- SEC.3 Risk Treatment Verification
- SEC.4 Risk Treatment Validation

Acquisition Process Group (ACQ)
- ACQ.2 Supplier Request and Selection

Management Process Group (MAN)
- MAN.7 Cybersecurity Risk Management

Machine and Deep Learning (MDL)
- MLE.1 Machine Learning Requirements Analysis
- MLE.2 Machine Learning Architectural Design
- MLE.3 Machine Learning Training
- MLE.4 Machine Learning Model Testing

Potential Analysis PAM
?

Extensions under review

Hardware Engineering Process Group (HWE)
- HWE.1 HW Requirements Analysis
- HWE.2 HW Design
- HWE.3 Verification against HW Design
- HWE.4 Verification against HW Requirements

Data Management PAM
✗

Mechanical Engineering Process Group (MEE)
- MEE.1
- MEE.5

Source: VDA QMC

Major Changes in the PAM v4.0

- Removed, New, and Revised processes

- „VDA Scope" will be replaced by new „Basic Scope"

- Interpretation of terms revised and used consistently, e.g., measure/metric, verification/test, …

- Notes are not normative but informative: implicit requirements or checklist-like enumerations will be revised or rephrased

- Traceability BP's re-integrated into the consistency BP's

- Planning-related aspects like "strategy" shifted to Level 2, but concepts and criteria must be available on Level 1

- "Work Product Characteristics" (WPC) replaced with the ISO 33060 concept of "Information Item Characteristics" (IIC)

- New tables for BP and IIC mappings to Process Outcomes

- Restructuring of Level 3 GP's for 1:1 mapping between PA 3.1 and PA 3.2 (semantics remain unchanged)

- Separate PAM for 'Potential Analysis' ?

Source: VDA QMC

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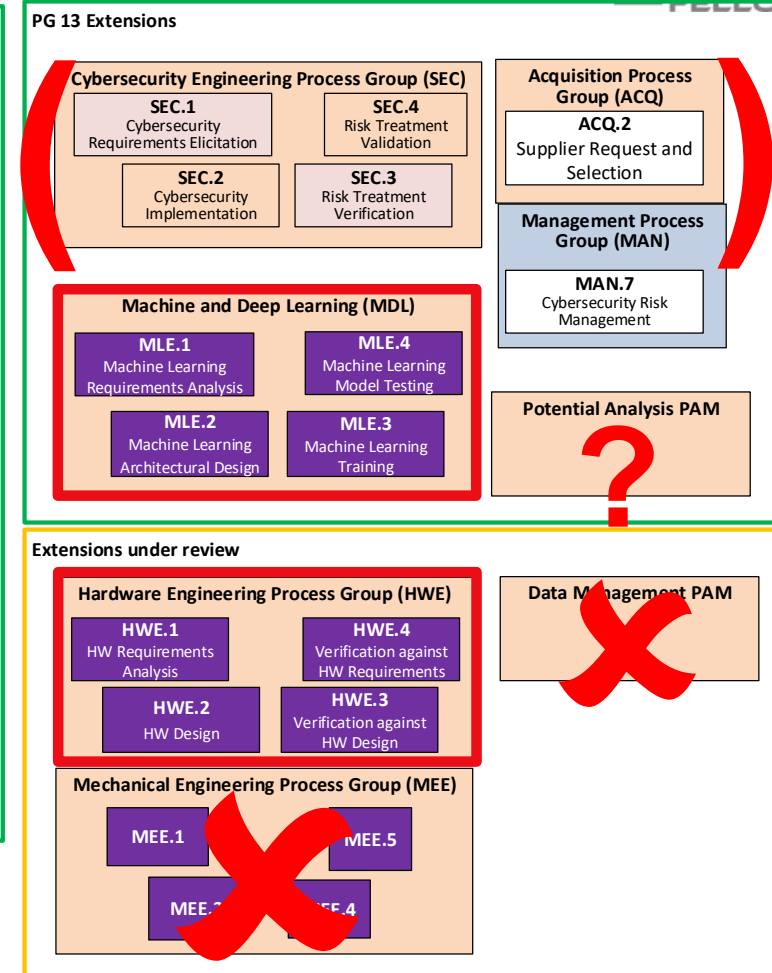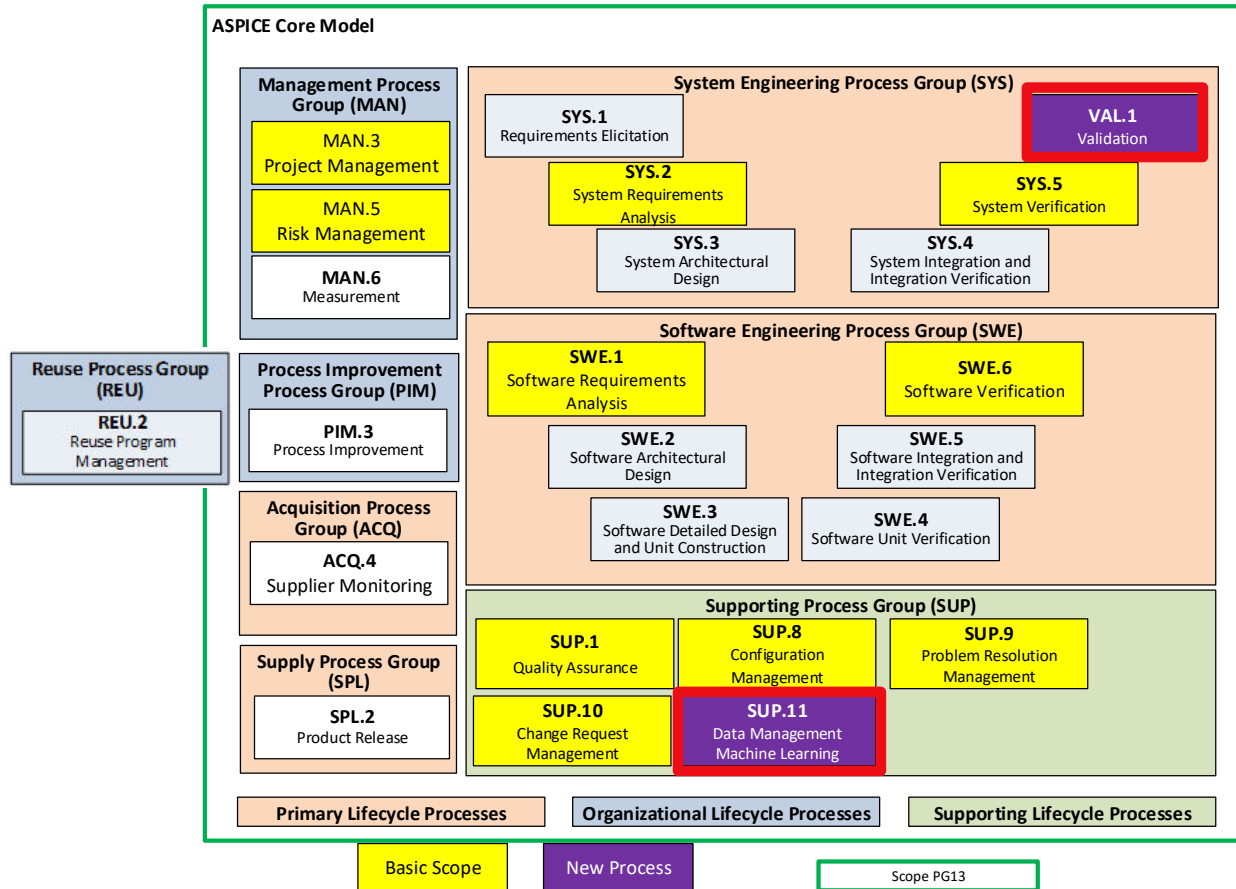
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Current intacs® Training Architecture

Path for assessors in Automotive SPICE®

Path for assessors in other models, e.g.
- ISO/IEC 15504-5 (SW Life Cycle)
- SPICE for IT Services
- Test SPICE

5d — intacs® certified Provisional Assessor (AS) — Exam

5d — intacs® certified Provisional Assessor <model> — Exam

5d — intacs® certified Competent Assessor (AS) — Exam

+ 2d — intacs® VDA Assessor Guidelines (AS)

5d — intacs® certified Competent Assessor <model> — Exam

Assessors need a training and certification for a PAM to perform official assessments with this PAM.

Future intacs® Training Architecture

Path for assessors in Automotive SPICE®

- intacs® certified Process Expert Automotive SPICE® incl. Guidelines) — 4d — Exam
- intacs® certified Provisional Assessor (AS) — 4d — Exam
- intacs® certified Competent Assessor (AS) — 5d — Exam

Model Extensions

- intacs® certified Process Expert <other models*> — xd — Exam
- Cyber Security SPICE — 3d — Exam
- Hardware SPICE — 2d — Exam
- Agile SPICE — xd — Exam
- Mechanical SPICE — 2d — Exam
- Machine Learning SPICE — xd — Exam
- Functional Safety SPICE — xd — Exam
- Process Improvement SPICE — xd — Exam
- < new extensions > — xd — Exam

Path for assessors in other models

- intacs® certified Provisional Assessor <model> — xd — Exam
- intacs® certified Competent Assessor <model> — 5d — Exam

At least one assessor of the assessment team needs a certification for a model extension to perform an official assessment with this extension.

Automotive SPICE® Introduction

<model SPICE> Introduction

intacs® independent trainings are available on the market with various durations (1-day, 2-day or more). These trainings could be booked independently from intacs™ to get brief insights into the model. These trainings are NOT acknowledged for the assessor education!

* Other models, e.g.
- Medical SPICE
- SPICE for IT Services
- Organizational SPICE
- Improvement SPICE
- Test SPICE
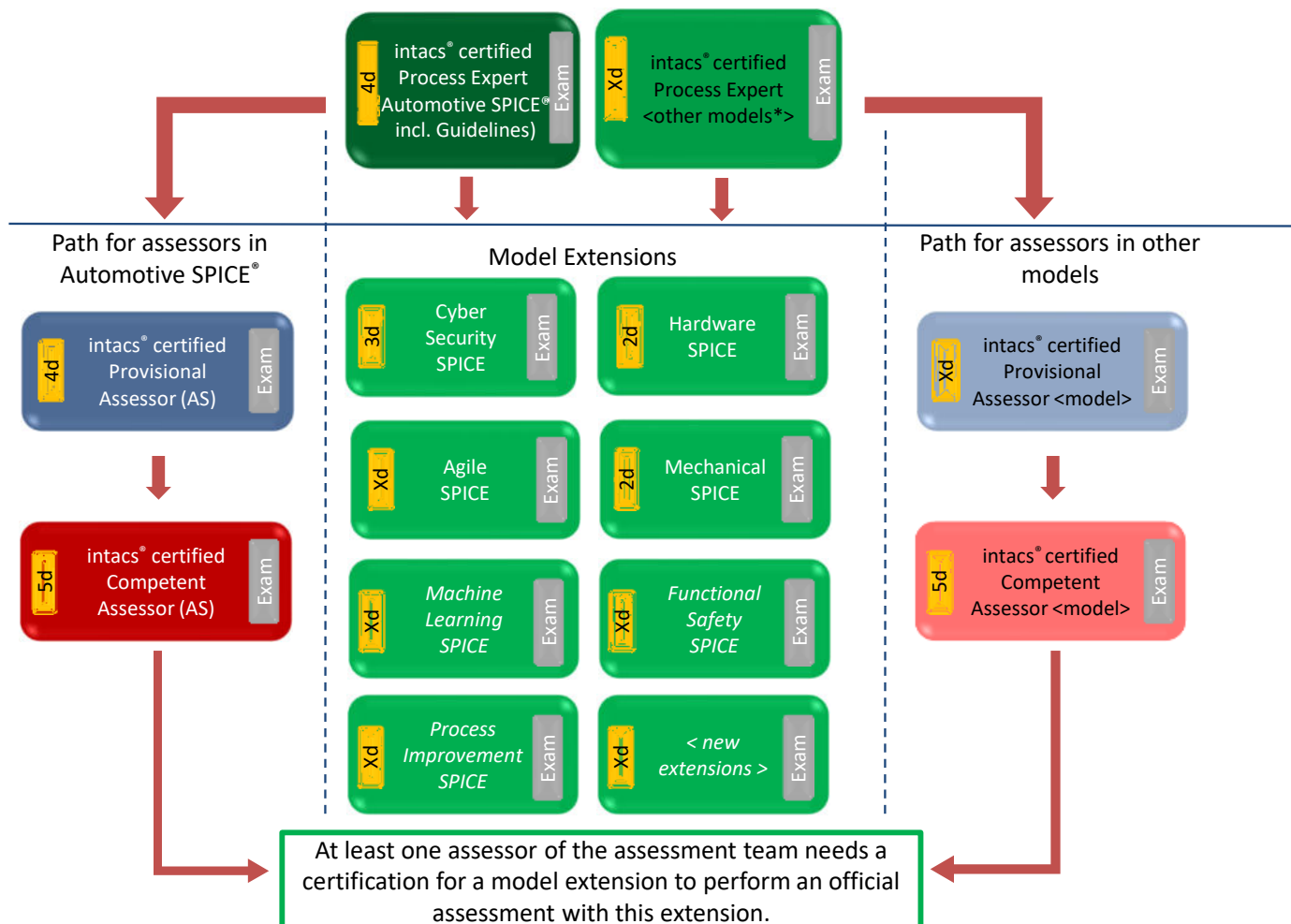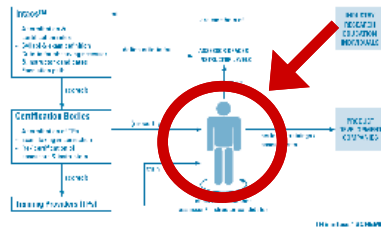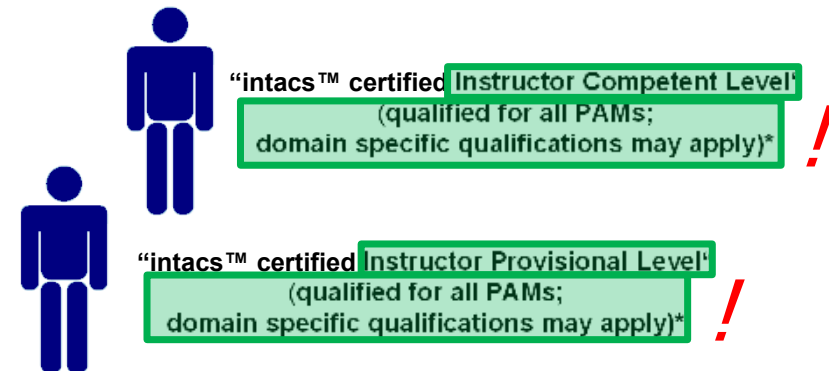- ISO/IEC TS 33061 (SW Life Cycle)
- …

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Current intacs® Certification Levels

- Proven teaching skills
- Approval by an accredited instructor (observation process)
- No training course or exam

"intacs™ certified Instructor Competent Level"
(qualified for all PAMs;
domain specific qualifications may apply)* !

"intacs™ certified Instructor Provisional Level"
(qualified for all PAMs;
domain specific qualifications may apply)* !

- Continuously and actively contributes to the international ISO/IEC 15504 community's knowledge & best practices
- No training course or exam

"intacs™ certified Principal Assessor"
(qualified for all PAMs;
domain specific qualifications may apply)* !

- Assessment experience
- Approval by an accredited assessor (observation process)
- Passed training course & exam
- Capable of leading assessments

"intacs™ certified Competent Assessor"
(e.g., ISO/IEC 15504-5, ISO/IEC 330xx, Automotive SPICE®, TestSPICE)

- Little or no assessment experience
- Passed training course & exam
- Capable of acting as a co-assessor

"intacs™ certified Provisional Assessor"
(e.g., ISO/IEC 15504-5, ISO/IEC 330xx, Automotive SPICE®, TestSPICE)

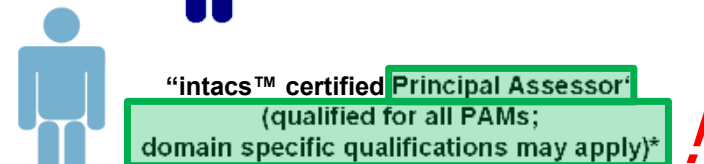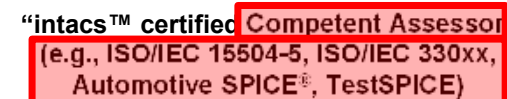* e.g. „VDA Assessor Guideline" for Automotive SPICE®

Current intacs® Certification Levels

- Proven teaching skills
- Approval by an accredited instructor (observation process)
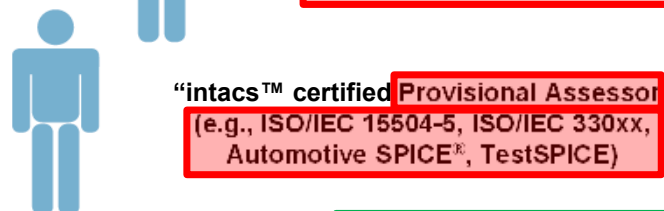- No training course or exam

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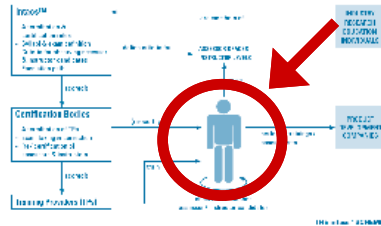- Passed training course & exam
- Capable of leading assessments

"intacs™ certified Competent Assessor"
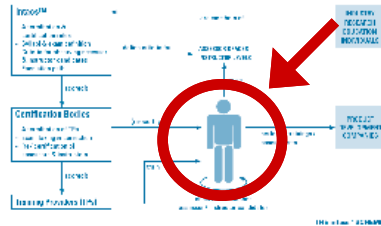**(e.g., ISO/IEC 15504-5, ISO/IEC 330xx,**
Automotive SPICE®, TestSPICE)

- Little or no assessment experience
- Passed training course & exam
- Capable of acting as a co-assessor

"intacs™ certified Provisional Assessor"
(e.g., ISO/IEC 15504-5, ISO/IEC 330xx,
Automotive SPICE®, TestSPICE)

* e.g. „VDA Assessor Guideline" for Automotive SPICE®

Future intacs® Certification Levels

- Proven teaching skills
- Approval by an accredited instructor (observation process)
- No training course or exam

"intacs™ certified Instructor Competent Level"
(qualified for all passed Process Expert PAMs and Extensions; domain specific qualifications may apply*)

"intacs™ certified Instructor Provisional Level"
(qualified for all passed Process Expert PAMs and Extensions; domain specific qualifications may apply*)

- Continuously and actively contributes to the international ISO/IEC 15504 community's knowledge & best practices
- No training course or exam

"intacs™ certified Principal Assessor"
(qualified for all passed Process Expert PAMs and Extensions; domain specific qualifications may apply*)

- Active assessment experience
- Passed training course & exam
- Capable of leading assessments

"intacs™ certified Competent Assessor"
(qualified for all passed Process Expert PAMs and Extensions; domain specific qualifications may apply*)

- Passive assessment experience
- Passed training course & exam
- Capable of acting as a co-assessor

"intacs™ certified Provisional Assessor"
(qualified for all passed Process Expert PAMs and Extensions; domain specific qualifications may apply*)

- Little or no assessment experience
- Passed training course & exam
- Capable of supporting internal improvement activities

"intacs™ certified Process Expert"
(Automotive SPICE®, Hardware SPICE, Mechanical SPICE, Test SPICE, Medical SPICE, IT Services, Agile SPICE, …)

* e.g. „VDA Assessor Guideline" for Automotive SPICE®

Current intacs® certification requirements for assessors and instructors

PROVISIONAL ASSESSOR	COMPETENT ASSESSOR	PRINCIPAL ASSESSOR	INSTRUCTOR PROVISIONAL	INSTRUCTOR COMPETENT

INITIAL CERTIFICATION

PROVISIONAL ASSESSOR
- ☐ Provisional training completed and exam passed

COMPETENT ASSESSOR
- ☐ Certificate Provisional level
- ☐ Competent training completed, exam and observation passed
- ☐ VDA Guideline training completed
- ☐ Lead Assessor observation passed
- ☐ AT AT AT AT AT
  - *within 60 month*

PRINCIPAL ASSESSOR
- ☐ Certificate Competent level
- ☐ AL AL AL AC / AC EP,AC

INSTRUCTOR PROVISIONAL
- ☐ Certificate Principal level
- ☐ Didactic skills
- ☐ Training observation passed (Provisional course)
- ☐ AT,AL AL AL EP,AC / AC AC CT
  - *within 36 month*

INSTRUCTOR COMPETENT
- ☐ Certificate Instructor (Provisional)
- ☐ Training observation passed (Competent course)

LICENSE RENEWAL

PROVISIONAL ASSESSOR
(no requirements)

COMPETENT ASSESSOR
- ☐ AT,AL AL AL EP,AC / any any
  - *within 36 month*

PRINCIPAL ASSESSOR
- ☐ AT,AL AL AL EP,AC / AC AC

INSTRUCTOR PROVISIONAL
- ☐ AT,AL AL AL EP,AC / AC, CT AC, CT CT

TYPES OF EXPERIENCE EVIDENCE

Assessment participation
- AT Assessment team member ≥ 50 h (Preparation, Execution, Reporting)
- AL Assessment team lead ≥ 50 h (Preparation, Execution, Reporting)

Passive event participation (intacs-accepted, ≥ 6 net hours)
- IP Internal event
- EP External event

Active contribution (intacs-accepted, ≥ 6 net hours)
- AC Examples:
  - Presentation at an intacs-accepted event
  - Member of an intacs working group
  - Publication of a SPICE-related paper

Assessor training course held
- CT
  - intacs Provisional Assessor training
  - intacs Competent Assessor training

Source: VDA-QMC

Future intacs® certification requirements for assessors and instructors

EXPERT	PROVISIONAL ASSESSOR	COMPETENT ASSESSOR	PRINCIPAL ASSESSOR	INSTRUCTOR PROVISIONAL

INITIAL CERTIFICATION

EXPERT	PROVISIONAL ASSESSOR	COMPETENT ASSESSOR	PRINCIPAL ASSESSOR	INSTRUCTOR PROVISIONAL
☐ Expert training completed and exam passed	☐ Certificate Expert level ☐ Provisional training completed and exam passed ☐ One assessment observed	☐ Certificate Provisional level ☐ Competent training completed, exam and observation passed ☐ Lead Assessor observation passed ☐ AT AT AT AT AT *within 60 month*	☐ Certificate Competent level ☐ AL AL AL AC / AC EP,AC	☐ Certificate Principal level ☐ Didactic skills ☐ Training observation passed (Provisional course) ☐ AT,AL AL AL EP,AC / AC AC CT *within 36 month*

LICENSE RENEWAL

EXPERT	PROVISIONAL ASSESSOR	COMPETENT ASSESSOR	PRINCIPAL ASSESSOR	INSTRUCTOR PROVISIONAL
(no requirements)	(no requirements)	☐ AT,AL AL AL EP,AC / any any	☐ AT,AL AL AL EP,AC / AC AC	☐ AT,AL AL AL EP,AC / AC, CT AC, CT CT
		within 36 month		

TYPES OF EXPERIENCE EVIDENCE

Assessment participation

AT	Assessment team member ≥ 50 h (Preparation, Execution, Reporting)
AL	Assessment team lead ≥ 50 h (Preparation, Execution, Reporting)

Passive event participation (intacs-accepted, ≥ 6 net hours)

IP	Internal event
EP	External event

Active contribution (intacs-accepted, ≥ 6 net hours)

AC	Examples: • Presentation at an intacs-accepted event • Member of an intacs working group • Publication of a SPICE-related paper

Assessor training course held

CT	• intacs Provisional Assessor training • intacs Competent Assessor training

Source: VDA-QMC

Requirements for becoming an intacs® certified Assessor for a specific extension

- Holding a valid certification as intacs® Provisional/Competent/Principal Assessor (see previous slides)
- Attending a model extension training and passing the exam successfully
- Submitting the assessor application form for (re-)certification to the corresponding Certification Body, e.g., VDA QMC (either during your standard re-certification after 3 years or in between if you need it before)
- Paying the certification fee to the Certification Body
- Getting an assessor ID card with your current assessor grade plus tags for all extensions

Schmied Jürgen		Process Fellows GmbH Assessor Qualification Principal Instructor Level Competent Course	intacs-DE21-2291-11651-23 ISO15504-5 (ISO12207), automotiveSPICE **Extension: Cybersecurity** valid until 16.01.2025
Schweigert Tomas		Expleo Technology Germany GmbH Assessor Qualification Principal Instructor Level Competent Course	intacs-DE21-2222-24077-23 ISO15504-5 (ISO12207), automotiveSPICE, Test SPICE Extension: Cybersecurity valid until 13.12.2025
Sechser Bernhard		Process Fellows GmbH Assessor Qualification Principal Instructor Level Competent Course	intacs-DE21-2291-11659-23 ISO15504-5 (ISO12207), automotiveSPICE Extension: Cybersecurity valid until 16.01.2025
Svimberský Petr		Assessor Qualification Principal Instructor Level Provisional Course	intacs-CZ21-2271-21424-13 ISO15504-5 (ISO12207), automotiveSPICE valid until 08.09.2025
Tabuchi Kazunari		BUSINESS CUBE & PARTNERS, INC. Assessor Qualification Principal Instructor Level Competent Course	intacs-JP21-2115-20125-23 ISO15504-5 (ISO12207), automotiveSPICE Extension: Cybersecurity valid until 02.12.2024

Source: https://intacs.info

ASSESSOR LICENSE CARD VDA | QMC

intacs-DE21-2291-11659-23 CS

Bernhard Sechser

intacs Instructor Competent Level
AUTOMOTIVE SPICE®

intacs.info

Valid until: **16.01.2025**

Process started in January 2023

Agenda

- Current situation – Assessments and their effects

- New challenges in Automotive industry – Cybersecurity and more

- Changes in Automotive SPICE® 4.0

- Current and future intacs® Training Architecture

- Influence on Assessor Skills and Certification Levels

- **Outlook and Roadmap**

intacs® Roadmap – New Trainings and Exams

Timeframe	Topic	
Jan. 2021 – Oct. 2021	Development of Training Material: Cybersecurity for Automotive SPICE®	✓
July 2021 – June 2022	Development of Training Material: Process Expert (Automotive SPICE®)	(✓)
July 2021 – June 2022	Development of Training Material: Provisional Assessor (Automotive SPICE®)	(✓)
July 2021 – June 2022	Development of Training Material: Competent Assessor (Automotive SPICE®)	(✓)
April 2021 – June 2022	Development of new Exam Questions database	(✓)
October 2021	Publication of VDA QMC Cybersecurity for Automotive SPICE® 1.0	✓
November 2021	First Pilot Training „Cybersecurity for Automotive SPICE®" for Instructors	✓
March 2022	Official Release of Training „Cybersecurity for Automotive SPICE®"	✓
Q4 / 2022	Publication of VDA QMC Automotive SPICE® 4.0 (draft for expert review)	✓
End of Q3 / 2023	Publication of VDA QMC Automotive SPICE® 4.0 (final) + Guideline (Yellow Draft)	
Q1 – End of Q4 / 2023	Update of Training Material and Exams (Expert, Provisional, Competent)	
Q1 – End of Q4 / 2023	Development/update of Training Material and Exams (Hardware, Machine Learning)	
Q1 / 2024	Start of new intacs® certified Trainings (Expert, Provisional, Competent, HW, ML)	

Thank you !

DO YOU HAVE ANY QUESTIONS ?

Bernhard Sechser

intacs™ Principal Assessor & Instructor

Member of the intacs™ Advisory Board

Head of intacs™ Regional Representatives

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