5GACIA

5G Alliance for Connected Industries and Automation

WG 5 "Validation and Test"

14 March 2019

WG 5: Validation and Tests Scope



Aspects of testing

- Test objects (stack implementation, device, system, logical link, etc.)
- Test objectives (conformance, interoperability, safety, security, etc.)
- Overview over 5G relevant standards and regulations for manufacturers
- Test procedures and certification
- Requirements on test procedures (application-related, vendor independent, etc.)
- Requirements on object under test
- Metrics and verdicts
- Test cases & test procedures
- Certification process

Testbeds and trials

- Requirements on testbeds and trials
- Initiation and development of testbeds, trials and laboratories

3

Communication with 5G Technologies Introduction and executive summary Terms and definitions

Selected Testing and Validation Considerations for Industrial

2. Terms and definitions

WG 5: Validation and Tests

- 3. Requirements to be tested
- 4. Current status of standardised tests for communication
- 5. Test objects
- 6. Test types and test objectives
- 7. Recommendations
- 8. References

	5GACIA					1(
5G Alli	ance for Connected Industries and Automation					
JUAN						
Prepared WGS Team Released			Doc No. 5G-ACIA_WI_0			
			Date	Rev	Reference	
Not Re	eleased		2019-03-12	00.92		
	Selected Testing and Valida Communication	n wi	ith 5G Te	chnolo	gies	
	ms and definitions					
2.1	Application					
2.2	Base station					
2.3	Certification					
2.4	Certification testing					
2.5	Characteristic parameter					
2.6	Commissioning and acceptance testing					
2.7	Communication function					
2.8	Conformance testing					
2.9	Demonstration					6
2.10) Diagnosis					6
2.11	I Equipment under test					7
2.12	2 Failure analysis					7
2.13	3 Field trial					7
2.14	Implementation conformance statement	t (ICS	S)			7
2.15	5 Implementation under test					7
	6 Influencing parameter					
2.17	Infrastructure device					8
2.18	3 Interoperability testing					8

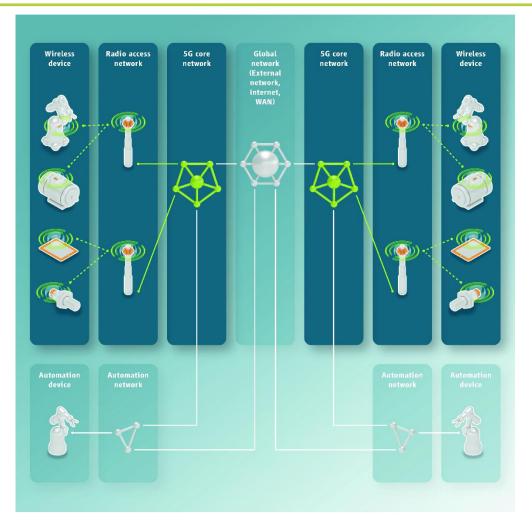
2.19 Local application function 2.20 Logical endpoint...... 2.21 Logical link

2.22 Mobile network operator

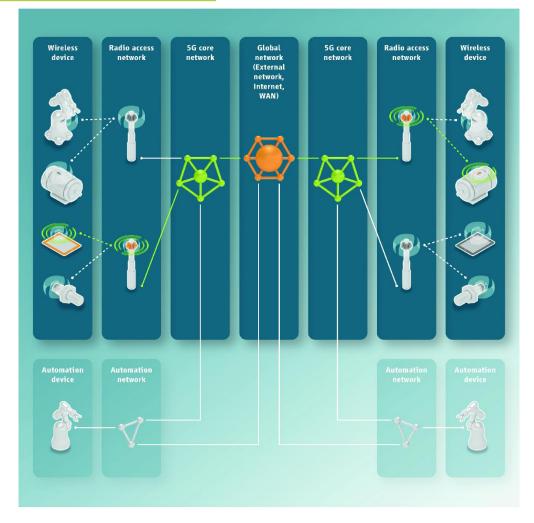
2.23 Node B.....
2.24 Operational technology
2.25 Periodic audit.....
2.26 Plugfest....
2.27 Product validation



WG 5: Validation and Tests Test objects

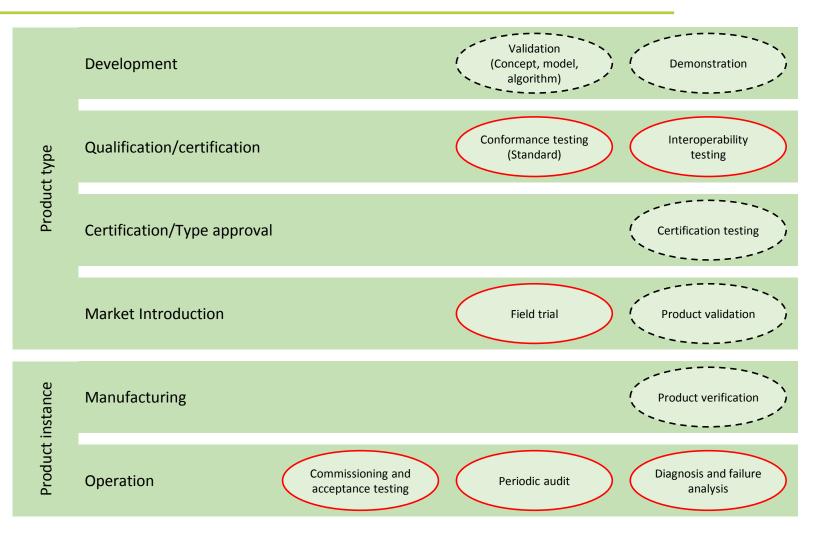


5G Alliance for Connected Industries and Automation



WG 5: Validation and Tests Test types and test objectives





Lutz Rauchhaupt - WG Validation and test

WG 5: Validation and Tests Recommendation for the next step



Test Object	Validation	Demonstration	Conformance testing, Interoperability testing	Field trial	Commissioning and acceptance testing, Periodic audit	Diagnosis and failure analysis
Concept, methods, algorithms	Required	Recommended	-	-	-	-
Wireless communication solution	-	Recommended	-	Specification by 5G-ACIA	Minimum requirements spec. by 5G-ACIA	Minimum requirements spec. by 5G-ACIA
Core network	-	-	-	Required	Required	Required
Base station	Recommended	-	Required	-	-	Recommended
Wireless device	Recommended	Recommended	Contribution to Specification by 5G-ACIA	Specification by 5G-ACIA	-	Minimum requirements spec. by 5G-ACIA
Logical link	-	-	-	Specification by 5G-ACIA	-	Minimum requirements spec. by 5G-ACIA
Wireless module	Recommended	-	Required	Specification by 5G-ACIA	-	Minimum requirements spec. by 5G-ACIA