### **SSC-WG4** Certification Process

# Document WINNF-15-P-0060-V1.0.0 19 October 2015





## **Terms and Conditions**

This document has been prepared by the SSC WG4 to assist The Software Defined Radio Forum Inc. (or its successors or assigns, hereafter "the Forum"). It may be amended or withdrawn at a later time and it is not binding on any member of the Forum or of SSC WG4.

Contributors to this document that have submitted copyrighted materials (the Submission) to the Forum for use in this document retain copyright ownership of their original work, while at the same time granting the Forum a non-exclusive, irrevocable, worldwide, perpetual, royalty-free license under the Submitter's copyrights in the Submission to reproduce, distribute, publish, display, perform, and create derivative works of the Submission based on that original work for the purpose of developing this document under the Forum's own copyright.

Permission is granted to the Forum's participants to copy any portion of this document for legitimate purposes of the Forum. Copying for monetary gain or for other non-Forum related purposes is prohibited.





# Intellectual Property Rights

THIS DOCUMENT IS BEING OFFERED WITHOUT ANY WARRANTY WHATSOEVER, AND IN PARTICULAR, ANY WARRANTY OF NON-INFRINGEMENT IS EXPRESSLY DISCLAIMED. ANY USE OF THIS SPECIFICATION SHALL BE MADE ENTIRELY AT THE IMPLEMENTER'S OWN RISK, AND NEITHER THE FORUM, NOR ANY OF ITS MEMBERS OR SUBMITTERS, SHALL HAVE ANY LIABILITY WHATSOEVER TO ANY IMPLEMENTER OR THIRD PARTY FOR ANY DAMAGES OF ANY NATURE WHATSOEVER, DIRECTLY OR INDIRECTLY, ARISING FROM THE USE OF THIS DOCUMENT.

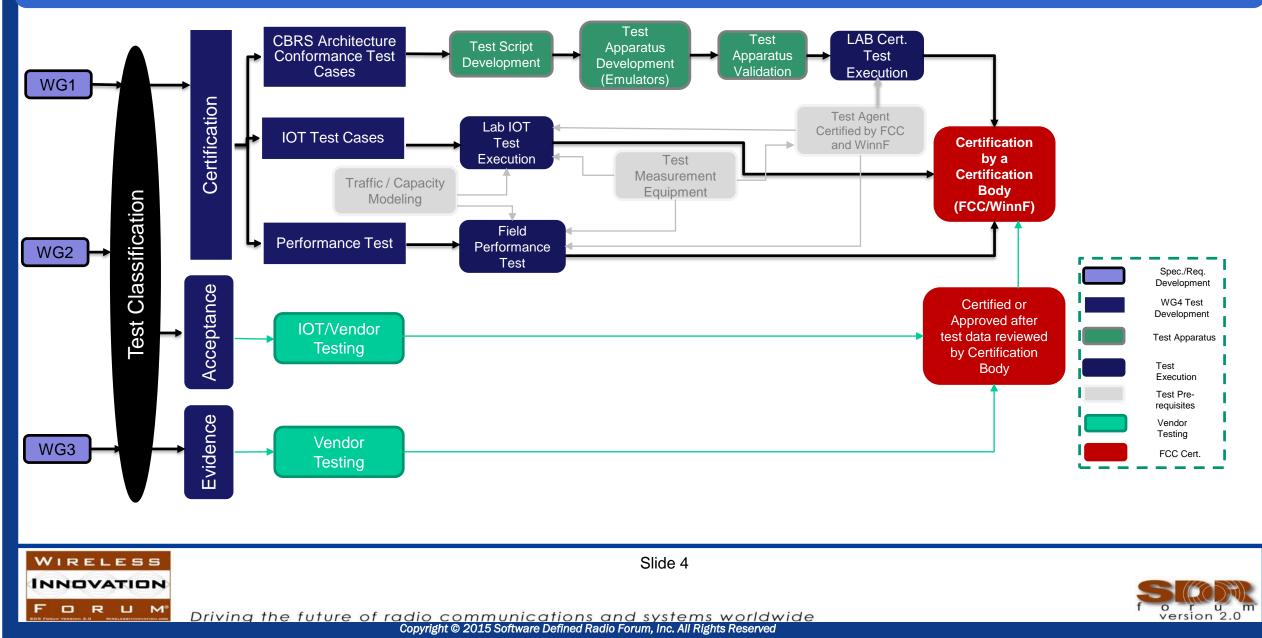
Recipients of this document are requested to submit, with their comments, notification of any relevant patent claims or other intellectual property rights of which they may be aware that might be infringed by any implementation of the specification set forth in this document, and to provide supporting documentation.



Slide 3



## **WINN Forum Certification Flow**



### Comments

The requirements, protocols, specifications, and interfaces are defined by SSC-WinnF Working Groups 1, 2, and 3. The specifications are derived from FCC, NTIA, and DoD requirements

According to Requirements and specifications defined by other working groups, Working Group 4 develops the test cases. The test case document would be published WG4

- Functional Test cases
- Interoperability test cases
- Field/Performance test cases
- Tests should distinguish between results which must be the same among conforming systems and results which need not be the same among conforming systems.
- Tests should be developed for all systems which intervene in the signaling from the SAS to a CBSD emitter.
- The test cases developed in WinnF addresses the requirements specifically determined by FCC and/or WinnF WG1, WG2, and WG3. However, a technology-specific test and/or certification, as defined by another standard or standard body, might be a pre-requisite of this certification process.

The functional test cases, are converted to test scripts, to facilitate the development of test apparatus (Emulator), which has to be validated through a process defined by FCC/WinnF

WIRELESS Innovation F d r u m<sup>o</sup>





### Comments

The testing might require simulated traffic generation capability and measurement equipment

- A lab is certified by FCC/DoD/WinnF to perform the certification of SSC components
- The lab publishes the test report

#### Vendors testing could be either considered as

- a pre-requisite for certification process,
- By discretion of the certification management entity, they could be partially or fully considered as part of certification plan

Slide 6

The Certification is governed by a certification body designated by FCC, DoD, and WinnF



### **Test Classification**

#### Review all requirements and assign appropriate classification. Classification used as WG4 guidance for further Test and Certificate artifacts, test flow and deliverables

- 1. Certification Testing takes place in an independent, secure and supervised test center or by "Certification partners" where selected requirements are tested and officially approved as having met a standard.
- 2. Acceptance Testing conducted to determine if the requirements or specifications (e.g. WG2/WG3 specifications) are met. This testing can be done in lab IOT testing similar to how telecommunications equipment is currently tested. This would be focused on black-box system level testing . (Functional and Performance)
- 3. Evidence Material that is presented that furnishes proof of compliance or operation that will satisfy outside regulators that all necessary tests have been executed and passed

WIRELESS Innovation F d r u m<sup>\*</sup>

Slide 7

