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Compliance Testing, LLC

Testing since 1963



2012
Recognition Body



P25 Recognized Lab



Specific Absorption Rate
Testing (SAR)

Wednesday, June 7, 2017

Via: Email

Mr. Jim Holthaus

Chair, TIA Private Radio Section

Vice President

BK Technologies

7100 Technology Drive West

Melbourne, FL 32904

Dear Jim:

Compliance Testing, LLC is a PRS member providing FCC/IC/CE equipment testing and certification, TCB filing and P25 CAP testing.

There is a strong probability that most of the industry will not meet the August 2017 deadline for submitting SDoC/STR's that comply with the 2016 CAB's.

If a significant number of Manufacturers do not accomplish the many "SDoC/STR Revision Dependencies," some of which are beyond their control by the current deadline, this will create negative impacts on both vendors and users as previously posted documents are "taken down" from the DHS website. The ability of manufacturers to meet the SDoC/STR deadlines should be discussed in PRS to see if a deadline extension request is appropriate.

I have attached an outline of the problem and suggested discussion points for the PRS meeting scheduled for 10:00 a.m., Wednesday, June 21, 2017, at the TIA-TR8 meeting in Chicago. Would it be possible for you to add it to the agenda and send out the discussions points prior to the meeting?

We appreciate your support in this endeavor.

Chris

2017 SDoC/STR Revision Dependencies

6/7/2017

Background

The P25 CAP Equipment Testing deadline remains August 2017 as affirmed by the P25 CAP AP at their Open Meeting on March 29, 2017.

The following text appears on the CAP website:

Equipment Testing Deadlines

DHS OIC will continue to accept SDOC and STR submissions for posting to the P25 CAP Approved (Grant-Eligible) Equipment list based on 2010 CABs until 8/31/2017. 2010 CABs can be found in the [Archive section of the Bulletins page](#). All posted SDOCs and STRs based on 2010 CABs are scheduled to be removed from the P25 CAP Approved (Grant-Eligible) Equipment list after 8/31/2017 unless otherwise noted by DHS OIC.

P25 CAP testing based on the 2016 CABs must be performed by a [DHS-recognized P25 test laboratory](#) with an ISO/IEC 17025:2005 accreditation for P25 CAP testing. SDOC's/STR's based on the 2016 CABs and tested at an accredited P25 laboratory may be submitted for posting on the P25 CAP Approved (Grant-Eligible) Equipment list as soon as they are available from a manufacturer. If you have any questions or concerns please email P25CAP@hq.dhs.gov.

While labeled as "Equipment Testing Deadlines" the text describes a deadline for submission of SDOCs/STRs associated with new testing CABs, newly recognized labs and new SDOC/STR reporting CABs and templates.

Given the dependencies and open questions for creating and submitting new SDOCs/STRs, there is a strong probability that most of the industry will not meet this deadline for submitting SDOC/STR's that comply with the 2016 CAB's.

If a significant number of Manufacturers feel that they may not accomplish the many "SDoC/STR Revision Dependencies," some of which are beyond their control by the current deadline, this will create negative impacts on both vendors and users as previously posted documents are "taken down" from the DHS website.

The ability of manufacturers to meet the SDOC/STR deadlines should be discussed in PRS to see if a deadline extension request is appropriate.

2017 SDoC/STR Revision Dependencies

Each manufacturer must resolve and meet each of these "dependencies."

1. Availability of an accredited test lab
2. Determine What Testing Is Required
3. Schedule and Perform Testing
4. Create SDOC/STR's
5. Apply for a waiver if unable to meet the deadline
6. Unresolved encryption issues

Availability of an accredited test lab

Additional labs must be accredited to provide choice and competition as only two labs are accredited now. This involves ISO assessment of both performance and interoperability testing labs. After passing ISO assessment they must wait for CAP recognition of the labs.

A2LA has been slow to respond to requests for accreditation visits. This has limited the number of test labs available for choice and competition. Other accreditation bodies may be available but would require establishing an entirely new relationship with no carry over from previous visits.

Determine What Testing Is Required

DHS has not published a policy statement, white paper or other definitive guidelines for manufacturers to use in making critical product management decisions. Some PRS members have received email guidance and were advised these would be published on the DHS website. It is not clear if this information will become adopted as official guidelines.

Manufacturers have been told to “do their best, submit their documents and DHS will either accept or reject.” We have been told “All radios have to be retested since new test cases were added as part of the 2016 CAB,” but there has been no guidance about the use of prior test data, manufacturer impact statements, or submitting documents without all tests being conducted.

LMR product managers require definitive rules and procedures on how to either combine legacy test data with data for new tests or retest the entire product. These decisions are crucial to the cost analysis required to bring a new product to market and recover these costs. With only 2 months remaining to the deadline, they do not have this critical information.

A delay would provide DHS ample time to prepare precise written guidelines and manufacturers to utilize them for decision making on what testing should be done.

Schedule and Perform Testing

Each manufacturer must schedule and perform performance and interoperability testing of products based on changes to products and/or new tests. At a minimum, Conventional Interoperability tests must be performed in 3 configurations with 3 manufacturers for each configuration.

The CAP AP is considering the use of test equipment in the “rule of 3.” This could have a significant impact on the cost of testing for a smaller manufacturer by reducing the time to test. Test equipment with this capability does not exist at the current time.

Create SDoC/STR's

After obtaining Detailed Test Reports for all new testing, create 508 compliant SDoC/STR pairs for every model class as determined by the manufacturer. Many questions on the SDoC/STR requirements CABs and templates have not been addressed.

Reporting according to the recent Encryption Requirements CAB is just one area that has yet to be addressed in the SDoC/STR CABs. Page 3 of the Encryption Requirements CAB states: "An agreement section will be added to the SDoC where the manufacturer must note which of the three shippable model options are supported by the product or model class." No updates to the SDoC Requirements CAB have been provided so it seems a revision is pending, which is necessary to create an SDoC.

Apply for a waiver if unable to meet the deadline

During the CAP AP meeting in Las Vegas, DHS stated that if Manufacturers are not able to submit updated SDoCs/STRs by the August 2017 deadline, they are to submit a waiver request that must include a description of the plan for completing the documentation and a target date for submission. See slide 6 of the attached presentation.

There is no documentation describing the waiver request process, format or acceptance criteria. DHS has not provided any clarification beyond what is stated on the meeting slides.

One manufacturer's request may be accepted while another is rejected due to undefined criteria. One manufacturer may receive a 2-month waiver while another receives a full year depending on their plan. This is not a fair process possibly putting some manufactures at a disadvantage while favoring others.

The current situation relies on "one off" decisions by DHS based on individual requests by manufacturers. DHS needs to provide a standard waiver process for all manufacturers with sufficient uniform guidelines for all.

Encryption Issues Unresolved

The PTIG May 2017 Conference Call Report, provided by Steve Nichols states: "Chris Wilson: SDOC and STR templates taking a long-time due to many internal approvals in DHS. CAP Encryption Issues need to be taken up at the TIA TR-8 meetings in June by the CAPPTG or User Needs committees."

The 2016 Encryption CAB is unclear and confusing, with several key points undefined and fully explained. These undefined requirements make it difficult to create an SDoC and may require a manufacturer to return to a test lab for additional testing.

From: [Espinoza, Chris \(CTR\)](#)
To: [Chris Lougee](#)
Cc: [Chris Wilson](#); [Kowdley, Sridhar](#)
Subject: RE: P25 CAP AP
Date: Thursday, May 11, 2017 6:58:16 AM

Hi Chris,

Below please find responses to your initial list of questions. Of course let us know if you have any follow up questions. In regards to your question about extending the August 31st deadline, during IWCE the AP members and DHS OIC requested that manufacturers who believe they won't be able to make the deadline reach out to DHS on an individual basis and provide a realistic date by which they believe they would be able to get their equipment tested. DHS will then take those individual requests into account and work with the manufacturer to possibly establish a revised date. Again, DHS is requesting manufacturers do this on a one on one basis because we believe each manufacturer has a unique situation in terms of access to laboratories or number of equipment that needs to be tested, etc.

Q1. It is still not clear in my mind **what testing (or retesting) is required by August.** The first read out was "if the radio changed, or the test changed, you must retest" to transition from the 2010 to 2016 CAB's. The next read out was "the change in language in the CAB's does not constitute a change in the test. No need to retest for these changes, but new tests have been added." I am looking for a GAP analysis for new tests added which would need retesting regardless? Is that available?

A1. The GAP analysis is as follows: The **Performance test cases for the 2016 CABs are the same as the 2010 CAB.** One test case for trunked performance access time was dropped for both the subscriber and repeater. The **Conventional Interoperability test cases are all new.** The Conventional Interoperability test cases were not part of the 2010 CABs. The **Trunked Interoperability test cases for the 2016 CABs are the same as the 2010 CABs.**

For clarity: **All radios have to be retested since new test cases were added as part of the 2016 CAB.** (Obviously if a radio is no longer manufactured or sold, it does not have to be retested). For those **test cases that were not changed (i.e., no changes between the 2010 and 2016) and if the vendor confirms that the results of those tests would be identical if retested, the vendor need not test but certify that the results would be identical by submitting 2016 SDOCs and STR.** As an example let's look at the following case-- a radio that was tested to 2010, is still being sold today and if the vendor states that the results if run again would be identical would simply have to **test the "new tests included in the CAB"** and would **re-use the test case results from the 2010 STR.** This example also **applies to a radio that upgrades firmware; need not be tested unless test results is expected to change in the STR.**

Q2. Third read out was regardless of testing, all 2010 STR and SDoC must be resubmitted in new

format. Those not resubmitted would be taken down.

A2. The SDOCs and STRs for the 2016 CABs need to be submitted in a format that will meet the DHS 508 accessibility requirements. The majority of the 2010 SDOCs and STRs do not meet the 508 requirements and are being allowed on the DHS web site today under a waiver which has a time limit. The SDOCs and STRs based on 2010 CABs will eventually be taken down. (See the previous question for clarification—resubmitting the STR/SDOC provides the “assurance” from the vendor that tests results will not change.)

Q3. What about those resubmitted without data for the "added tests," will those be taken down or not accepted?

A3. DHS expects the SDOCs and STRs submitted according to the 2016 CABs to address all the test cases in the CAI TEST REQ CAB. If the equipment is not tested for any of the new test cases in the 2016 CABs, the STR test case result must indicate that the untested test case is 'Unsupported'. Let's look at another example here—if we have two “models” of a subscriber one with a screen and full keypad and one without. The vendor can run a single test with the most capable radio but generate two STRs and SDOCs to address each of the two models since the results will be different.

Q4. Can the legacy data be resubmitted, in the new format, with new tests listed as "not tested"?

A4. If the equipment is not tested for any of the new test cases in the 2016 CABs, the STR test case result must indicate that the untested test case is 'Unsupported'. This was done to ensure that all tests are conducted and that the vendor does not have the latitude to select which tests he/she wants to run.

Q5. If data for "added tests" is submitted, does existing test data need to be re-tested or can previous STR data be used to complete a new combined SDoC?

A5. The existing test case results for test cases found in the 2010 CABs can be used in conjunction with the new test case results from the added test cases in the 2016 CABs. Answered in A1.

Q6. What constitutes a "change in the radio"? Added P25 features and services?

A6. The P25-CAP-STR-REQ document discusses changes. See section 3.8 of that document. If capability is added to equipment already on the Approved Equipment list and the added capability impacts test case results of the existing SDOC and STR on the website, a new SDOC and STR must be submitted to indicate the new test case results of the equipment. If the capability does not change the STR/SDOC; the radio does not need to be retested.

Q7. Would only the new features/services need to be tested and those results combined with the legacy data? Or, entire radio needs retesting?

A7. If the new features/services impact the test case results of the SDOC and STR, those new features/services must be tested and the test case results submitted in an updated SDOC and STR.

Answered in A1.

Q8. Does each of these only apply if no change in model number or FCC ID? Any change in either of those would require entire retesting as a "new radio?"

A8. Please review section 3.8 of the P25-CAP-STR-REQ document. The specific reasons behind the change or no change in either model number or FCC ID need to be understood to determine whether equipment requires entire new testing. Clearly, if it is new product consists of new hardware and new software, the equipment needs to be tested. But, when multiple models of equipment are based on a common 'software/hardware' platform, it is not always clear which tests need to be 'retested'. If it is unclear, please contact OIC at P25CAP@hq.dhs.gov to ask the question or set up a one on one discussion.

Q9. Revised firmware? Does manufacturer self-declaration of "no impact" still apply or does new firmware require complete retesting?

A9. The manufacturer is expected to make the determination whether the revised firmware would impact the test case results that were previously submitted with the previous firmware release.

Q10. The original roll out stated "it is up to the manufacturer to determine these answers, submit the docs and we will advise if not acceptable."

A10. Correct. The vendor "assures" that the results of the tests will not change by giving OIC a new STR and SDOC. If there is any question with retesting of previously approved equipment, please contact OIC at P25CAP@hq.dhs.gov to ask the question or set up a one on one discussion.

From: Chris Lougee [mailto:Chrislougee@5x9comm.com]
Sent: Friday, May 5, 2017 9:50 AM
To: Espinoza, Chris (CTR) <chris.espinoza@associates.hq.dhs.gov>
Cc: Chris Wilson <wilsonc@apcointl.org>
Subject: Re: P25 CAP AP

Chris

Great.

It is still not clear in my mind what testing (or retesting) is required by August.

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