

T313- Applying Your Test Plan to the NTCIP 1204 v03 ESS Standard Chat Transcript

Date: November 21, 2011, 2:00-3:30 p.m. ET

Learning Assessment 1: Why Would an Agency Need to Remotely Monitor Environmental Conditions?

Answers:

Assist with Traffic Management
To help in winter road maintenance
Flooding conditions to divert traffic
High winds

Learning Assessment 2: Why Perform Formal Testing?

Answers:

To ensure NTCIP compliance
To make sure that the requirements are met
To verify the system is in compliance

Learning Assessment 3: _____ detail the testing to be performed.

Answer:

Test design,

Learning Assessment 4: _____ define the inputs, outputs and test conditions that apply to testing an ESS feature.

Answer:

Test case

Learning Assessment 5: _____ define the steps to be performed to test an ESS feature.

Answer:

Test procedure specification

Learning Assessment 6: _____ defines the test case(s) necessary to verify conformance to the selected requirements.

Answer:

RTCTM

Question: How would the process be different for purchasing off the shelf management and field stations versus custom development?

Answer:

In particular, you're still going to do the systems engineering process the same, which is you're going to start from a user need. As long as you have that clearly defined if you know exactly what you want the system to do when it's put in place then you have the ability to actually look at off-the-shelf systems that are available and see if they perform the functions that you really need. Once that has been done and you have your user needs, you're going to be working through the rest of the project life cycle as we saw it. But, in particular, you're going to want to be very specific about the system requirements. And make

sure that any off the shelf management software or field stations are going to meet the requirements that are necessary. Obviously, one of the benefits of an off-the-shelf solution is that it should be less expensive, hopefully, and it may be that it has all ready been tested, all ready installed other places, should drop into your system much easier.

Question: How do you determine the level of testing appropriate given the cost and criticality of the system?

Answer:

The more detailed the testing that's to be performed, the more expensive it's going to be, the longer it's going to take, et cetera. And it's all going to be dependent on exactly what that system is intended to do.

Question: If you are going to install 10 ESS stations in one project, do you test all 10 of them with the full test, or test one and hope the rest work?

Answer:

Typically, NTCIP testing is performed on a single unit. And in this case, what I'm referring to would be the full suite of testing, including failure modes, et cetera. But what you're going to want to do that's going to constitute your NTCIP conformance testing. Typically, what an agency will do after that is put in a testing of each individual unit as it's received and installed in the field. But it's simply going to test for, in essence, the hardware.