

# T101-Introduction to ITS Standards Testing Chat Transcript

Date: June 30, 2011, 2:00-3:06 p.m. ET

## Learning Assessment 1: What do you see as possible benefits of testing?

### Answers:

Ensures system will operate as expected.

Avoid costly surprises

Primary: Determine if system meets all requirements.

Secondary: Become familiar with new system.

To chart achievements during and after installation

Requirements verification

Better quality, even requirements can be misinterpreted. Best to have a dialogue to confirm mutual understanding.

## Learning Assessment 2: What should a Test Plan cover?

### Answers:

Is Validation testing recent to Standards testing in particular?

Are you going to go into more detail about test cases, what they are, examples, how to write them? How they compare to test procedures?

Difference between system testing and acceptance testing?

Test Plan covers: what you're going to test, how you're going to test, where you're going to test.

All operational aspects of the specification.

All procedures, test data, environment, outcomes.

The procedures, equipment, standards and when the test is successful.

If the systems work the way it's designed.

## Learning Assessment 3: Why is Conformance Necessary?

### Answers:

Time Line, Environmental test. Who will test, format of the Test report

Does the test plan include test cases i.e. higher level procedures?

Procedures: step by step? Key stroke by keystroke, expected results?

How can you test under "full load" (e.g. max # of users)?

There are devices designed to do that

You can simulate n number of devices using test stubs

Factory accept. Test different than System/Accept test? Seems to be geared more towards

widgets/devices/controllers/cameras, etc. versus central systems (ATMs, arterial mgt)

Is burn-in intended to be a partial cutover i.e. old system is still in place; new system is only controlling a portion of field devices?

I was thinking solely central systems

Reliability of system

To support interoperability

Reduce risk

**Comment:** Each step in the testing strategy you have described makes good sense. HOWEVER, the aggregate package requires extensive time, expertise, special-purpose test hardware/software, etc. Of course, there will be substantial costs! Does it make sense for "smaller" systems? Or for mature COTS items?

**Instructor comment:** So, by explaining what you've learned today hopefully that will help you in your case for spending a few extra dollars up front in developing your testing plan.

**Comment:** I won't hold my breath :-)

**Q:** Are there any examples of good test plan/ procedures available

**A:** Yes, the ITS standards web site has a lot of good information about testing and test procedures and test plans.

**Q:** Are there any software for building a test plan?

**A:** I do not know. I'm not aware of any.

**Comments:**

Thank you, Gary. Excellent presentation.

Thank you

Thanks