

## NeSSI Workshop – IFPAC January 23, 2002 [Scribe: Jim Tatera]

- Thirty-five people attended the [late] evening NeSSI workshop at IFPAC2002. The purpose of the workshop was to keep the NeSSI initiative in the public domain (i.e. an open initiative) as well as solicit feedback to help guide in further development. [Other workshops or open forums have been conducted at IFPAC2001, Pittcon2001, as well as ISA2000 and 2001.]
- Rob Dubois and Peter van Vuuren presented a short recap of NeSSI Gen. II needs contained in the specification.
  - It was noted that the specification (definition) stage for Gen II nearing completion and we are now entering into the PROJECT stage. Further in depth (x-industry representation) review of the key elements have or will be done by...
  - A-team end of 1<sup>st</sup> quarter, 2002 (review of hazardous location issues)
  - C-team end of 2<sup>nd</sup> quarter, 2002 (review of connectivity issues)
  - A-team end of 2<sup>nd</sup> quarter, 2002 (review of simple applications for the Sensor Analytical Mgr.)

### The floor was opened to questions and comments....

Q. Some **liquid** analyzers such as spectrometers need high rates of sample and quick turn around for large volume cells. How can the miniature, modular manifold handle this need? [E. Baughmann]

R. The miniature, modular manifolds are intended for lower flows of liquid. If the need exists for very high flows than one solution could use a “conventional” fast bypass loop just before the manifold and pass only the “sample” portion in the miniature, modular manifold to the measuring cell. [R. Dubois]

Comment.... “only a few of our applications require this higher liquid flow rate.”

Comment.... “a fast loop is a critical need for liquids.”

Q. Many of our current systems for pH and conductivity are inline by means of hot taps. Why do we need substrate type sample systems? [CD Feng]

R. Unlike the pharmaceutical or food industry many of the processes are required to run continuously in the petrochemical industry. There is a need to safely calibrate and maintain using an extractive system. [P. van Vuuren]

Q. Where is the appropriate home for NeSSI information and collaboration information?

R. CPAC web site to NeSSI. [Center for Process Analytical Chemistry – University of Washington]

Q. Should we start by building some of the NeSSI original Request for Proposal examples?

R. NeSSI needs both standardization and flexibility to meet unique systems requirements. We don't need to overstandardize. Most of the needed sensors exist in some form. We need to get them on board NeSSI and get them communicating. We need to actually build demonstration models and samples – the Request for Proposals contain all of the elements we need and the Gen II prototype must cover these requirements.

Comment... “Consider adding analytical applications/sensors to A-team charter.

Comment... “There are at least four versions of CANbus. [Also many other device protocols] We need to decide how to specify which one is acceptable. SEMI has addressed this issue by creating a standard USER [software] layer so any device level communication scheme can be adopted. [R. Ales/D. Simko Swagelok Co.]

Q. A few end users/suppliers may want to pitch into funding the Gen II prototypes. Any one has any ideas about possible external funding sources. [Peter van Vuuren]

R. Possible sources include DoE and other agencies. How about CMA or API?

Q. What is the scope of the project?

R. A White Paper will be written to cover the key elements (schedule, number of prototypes and path to commercialization). The intention is to build 10-20 prototypes to allow interested End Users to evaluate Gen II NeSSI systems.

[The workshop adjourned after 1 hour]