# Data Network & Management Task Team (DNMTT) Minutes

Co-leads, Jim McNierney (JMcNierney@nyiso.com) and
Dan Brancaccio (dbrancaccio@bridgeenergygroup.com)
Teresa Carlon, NASPI web site and listserv contact (teresa.carlon@pnnl.gov)
November 11, 2015

**Attendees**
Roll call – see list below. Dan Brancaccio led today's DNMTT call.

**Meeting Notes**

Considerations for future efforts yielding tangible work products are:

- Middleware – there still seems to be very little use of Middleware within synchrophasor applications systems deployed today. The group was considering putting together a work product paper that would outline the potential benefits of deploying middleware in a utility centric environment.
- Fragmentation of UDP packets in communications networks. In deployments of a large amount of PMUs and the utilization of C37.118-2005, fragmentation of UDP has been cited as a pain point in a lot of synchrophasor networking deployments. It was discussed that the group could put together some lessons learned and best practices in contending with excessive fragmentation of UDP.
- The need and use of a registry – again for large number of PMUs, how are utilities tracking all of these and as the entities are building out infrastructure to share the data with other entities it sees that the deployment of a registry would facilitate a great many benefits. Within the original NASPI net specification there was detail around the role of a registry in a large publish/subscribe paradigm. The group is considering what items would need to be included in such a registry, the benefits of a common registry and the future build-out of APIs that might be able to systemically access and use the data housed in the registry. The Internet's use of DNS might prove to be a useful model.
- Software Defined Networking – The group discussed putting together a paper that would describe some of the benefits and roles that SDN could bring to networks that are supporting the exchange of synchrophasor data.

**New Business**
- Registry
  - o Dan Brancaccio - RC is getting ready to roll out updates to the registry. Export the registry in XML, human readable XML. Dan would like to see a description of what that registry should look like. Dan took a first cut at this task. Share the registration hierarchy with other organizations if needed. Dan would like a document that would describe the registry and have it posted on the NASPI web site. Ryan – self reporting data from PMU should be useful. David ~26 …. Step 1; come up with a suggested format for exporting data out of a registry that would be useful for people to import.

**Action Items**
- **Adam Reiss;** will reach out to organization to see what can be put together for middleware piece.

- **Dan Brancaccio;** document containing information that would be useful in a registry (first deliverable). What kind of attributes do you want for particular elements? Signals? Names or some way to reference where it is archived. Dan would like this to be discussed as a group. **Dan will send a file to the DNMTT as a starting point for discussion.**

**Reference Documents**
NASPI DNMTT web site

**Next D&MTT Conference Call**
- **January 13, 2016 @ 12:30pm PT / 3:30pm ET**. The conference calls are typically scheduled for the **second** Wednesday of the month unless otherwise noted.

**Attendees**
Anton Matsiuk
Bob Braden
Dan Brancaccio
David McKinnon
Dayna Aronson
Dick Willson
Frank Tuffner
Ryan Nice
Teresa Carlon
Yi Hu