



# **Data and Network Management Task Team Work Plan**

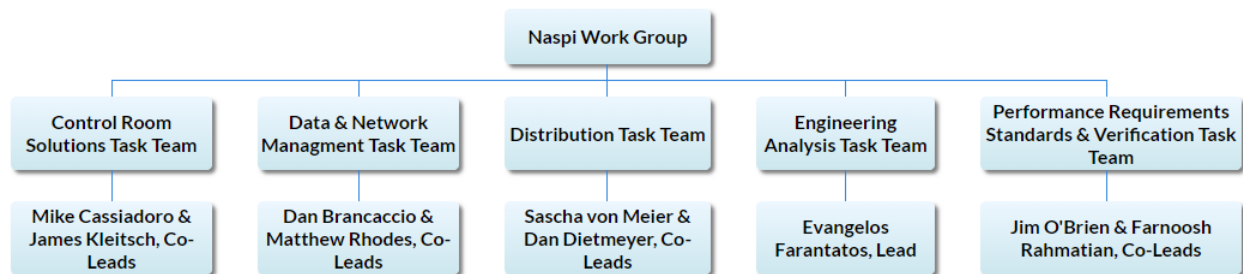
**March 2020**

## Background

The North American Synchrophasor Initiative (NASPI) is a collaborative effort between the U.S. Department of Energy, North American Electric Reliability Corporation (NERC), and electric utilities, vendors, consultants, federal and private researchers, and academics. The NASPI mission is to improve power system reliability and visibility through wide area measurement and control. The NASPI community is working to advance the deployment and use of networked phasor measurement devices, phasor data-sharing, applications development and use, and research and analysis. Important applications today include wide-area monitoring, real-time operations, power system planning, and forensic analysis of grid disturbances.

The NASPI Data and Network Management Task Team is one of five task teams formed by the NASPI community to help advance the deployment and use of networked phasor measurement devices, phasor data-sharing, applications development and use, and research and analysis.

An overview of the NASPI Work Group structure is provided below.



## 1 Introduction

This document defines the DNMTT's mission, project definition categories and project activities.

The DNMTT will review and update this plan annually to ensure a common understanding of the team's purpose and direction.

## 2 Mission Statement

The mission of the Data & Network Management Task Team (DNMTT) is to provide guidance for synchrophasor data networking, archiving and access issues and to review new archiving and networking technologies for the best fit to synchrophasor application realization.

## 3 Project Definition Categories

This team divides projects into two categories: Review new archiving and network strategies to support developing application requirements and address existing network and archive issues to provide industry guidance.

Archive and Network application development support (A projects): Review new data networking/archiving/access strategies to best serve industry applications.

Archive and Network Issue Guidance (B projects): Provide guidance for data network and archiving issues discovered in industry.

## 4 Planned Activities

The DNMTT will interact with other NASPI Task Teams, PRSVTT, DisTT, EATT and CRSTT to provide data network and archive management guidance for applications realized for industry consumption.

This task team's planned activities are as follows:

### **A1 NASPI Report on utility and industry archive strategies – Data as Service Report (tentative title)**

#### Scope:

Utility survey of those collecting PMUs for architecture structure and analytics interface.

Vendor paper summary of those actual and theoretical archives.

Milestones:

Utility Survey Pre-Report: **Fall 2020 NASPI WG Meeting**

Vendor Paper Submission: **December 31 2020**

NASPI Report: **Fall 2021 NASPI WG Meeting**

**A2 Archive and Network (A&N) Application Guidance:**

Review new and existing industry archiving and network concepts for best fit for application development.

Coordinate with CRSTT, DisTT and EATT to research prominent applications and prospective network and archive requirements.

Develop outline of A&N Application Guidance methodology

*Example: ML for Asset Failure tracking - best fit to cloud-based offline analytics structure; Real-time operator visualization - best fit to local PDC based architecture.*

**(No current activities for Category B projects)**

**Industry Outreach**

The DMNTT will continue to coordinate with other NASPI task teams and industry bodies to advance the deployment and use of this new technology and help gain understanding of network and archiving issues and new strategies.

The DNMTT will seek collaboration and learning efforts with other industry organizations such as:

Coordination:

IEEE Working Group on Dynamic System Measurement

IEEE PES Subcommittee on Big Data and Analytics for Power System

IEEE Task Force on Synchrophasor Applications in Power System Operation and Control