

Research Initiatives Task Team

Progress Report

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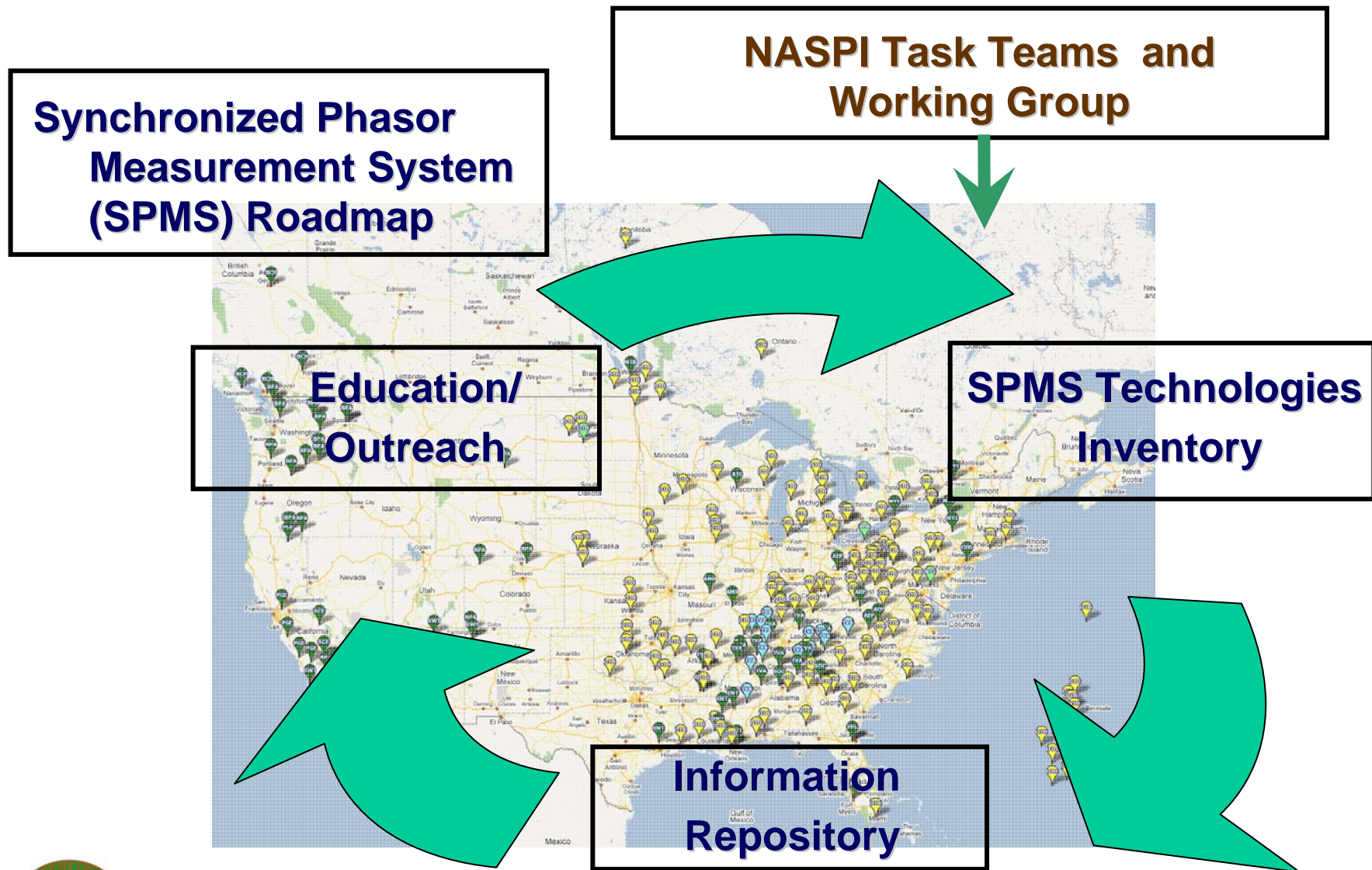
Scope – Research Initiatives Task Team

Scope of the Research Initiatives Task Team

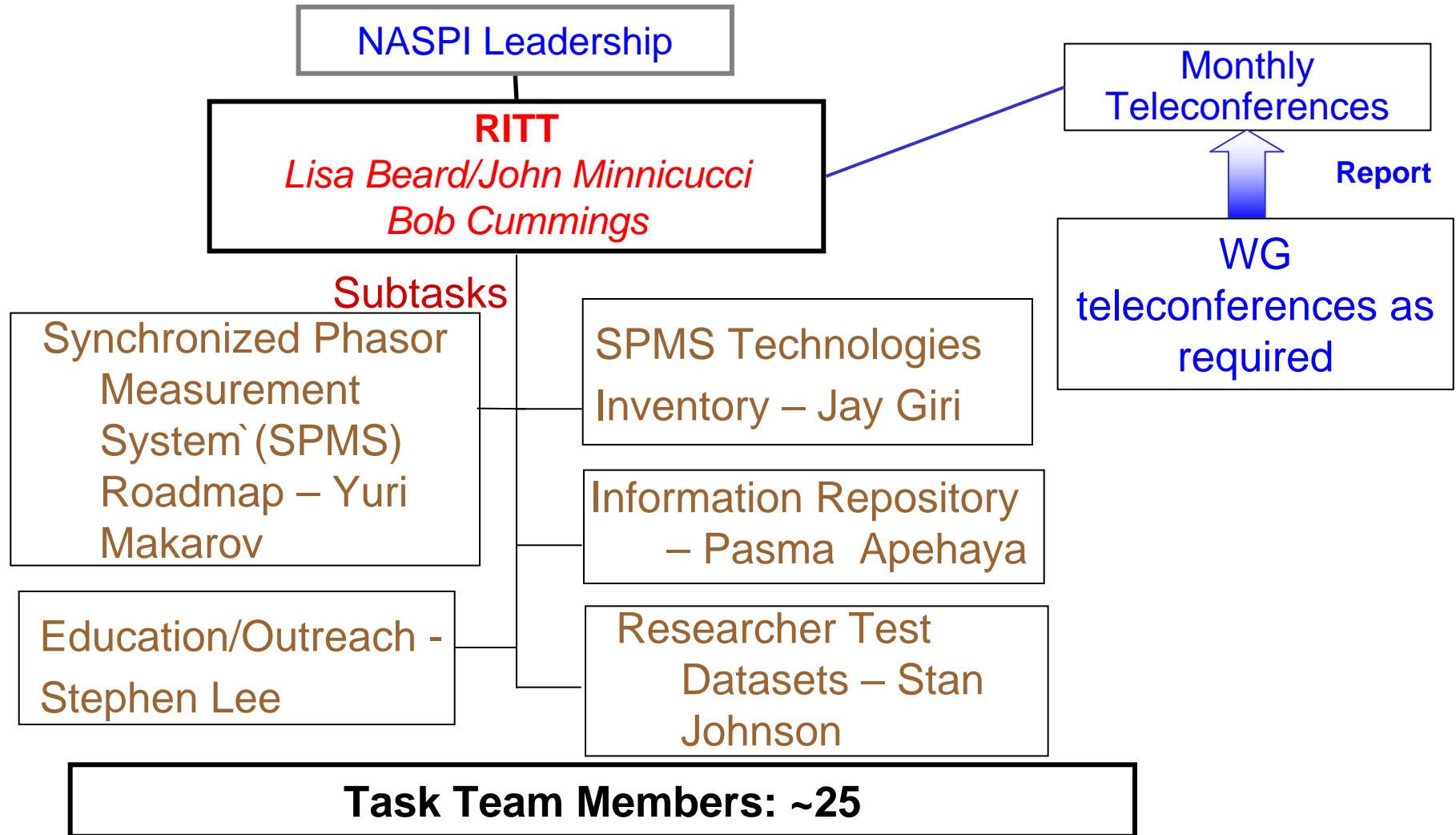
- Facilitate and promote the advancement of wide area synchronized measurements and control applications and technologies.
- Create an environment in which the NASPI community can collaborate on research development and deployment activities.
- Work with other task teams to identify research needs, communicate advancements and promote opportunities and efforts in priority areas.



Overview of RITT Activities



RITT Organization and Present Activities



<http://www.naspi.org/resources/ritt/rittresources.stm>
<http://www.eippshare.org/ritt/default.aspx>



Key 2007 Goals

- Develop a high-level research roadmap for Synchronized Phasor Measurement System (SMPS) technologies
- Begin a comprehensive inventory of related SM activities underway
- Develop plans for information repository and a website or other means to communicate advancements to help distribute papers, presentations, and other important research materials
- Develop a disclosure agreement to allow the release of historical PMU test cases to research community



Current Activities:

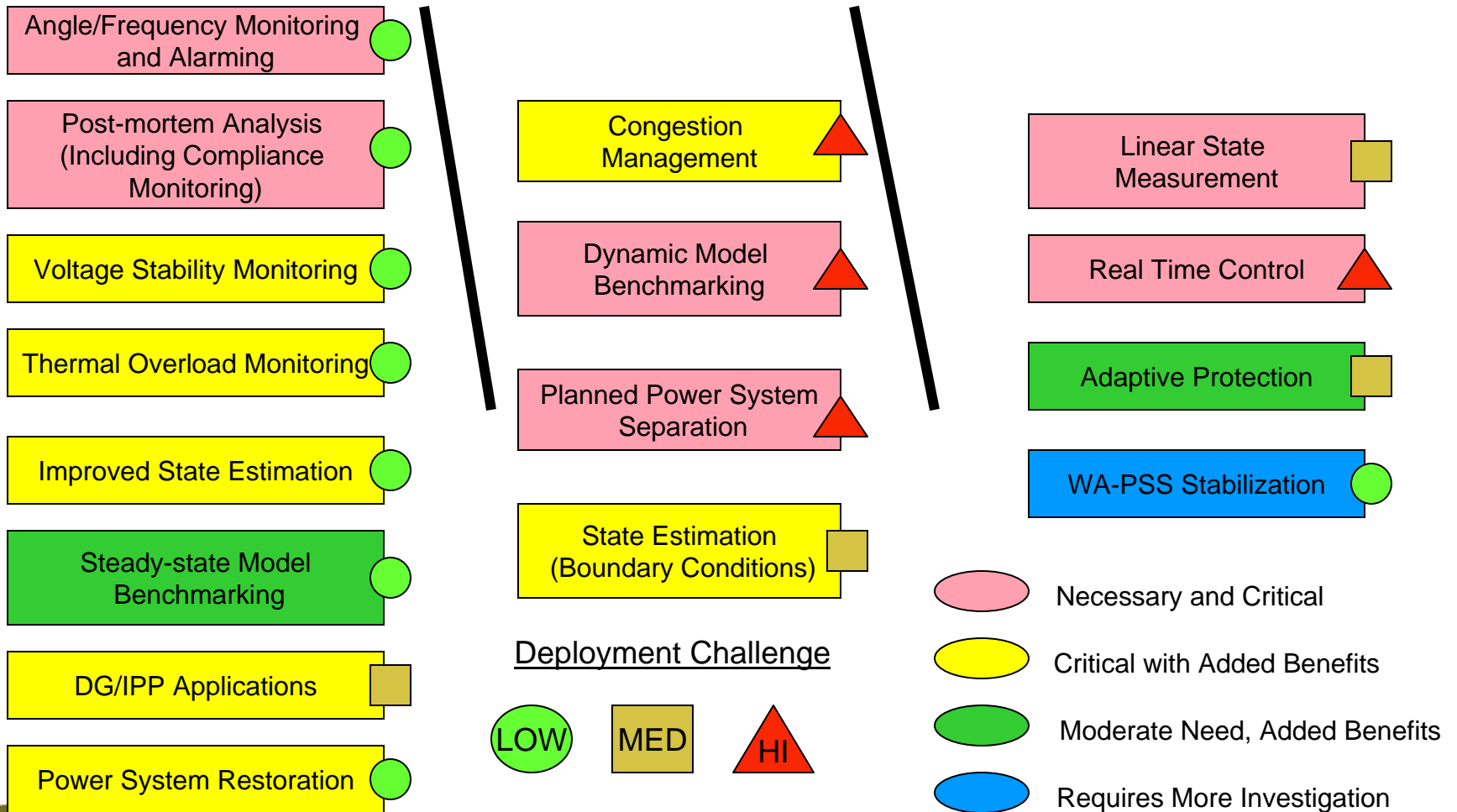
Synchronized Phasor Measurement System (SPMS) Roadmap

- **Goal:** Synchronized Phasor Measurement System (SPMS) Roadmap
- **Contents:**
 - High Level NASPI Roadmap for synchronized phasor measurement system (SPMS) technologies
- **Team:** Yuri Makarov delivered a first draft for RITT review
- **Status:** Currently in review by RITT. Additional areas of research for Roadmap may include alarm processing management, distributed generation, and data architecture.



DRAFT High Level Roadmap

Capability Evolution Indicating Time to Achievement, Priority of Industry Need, and Severity of Deployment Challenge



Current Activities:

SPMS Technologies Inventory

- **Goal: Develop** comprehensive listing of completed, on-going, and planned research projects related to SPMS technologies
- **Contents:**
 - Design survey template and tools for collecting appropriate information
 - Draft cover letter for the mailing or email survey request
 - Identify survey participants
 - Conduct survey (possibly locate on NASPI website)
 - Analyze results/refine as needed
- **Users:**
 - Manufacturers: phasor product design and certification
 - Utility Engineers: phasor product selection and phasor applications
 - Researchers: identify areas of common interests and needs
 - Others: NASPI TTs and WG
- **Current Status:**
 - Work has begun on survey instrument
 - Identification of survey participants has begun
 - Preliminary results have been provided by PSERC, EPRI, VT, and Montana Tech
- **Team:** Bob Cummings, Jay Giri, Mani Venkatasubramanian and Stephen Lee



Current Activities:

Information Repository

Goal: Develop an information repository, a website and/or other means for communicating advancements, papers, presentations and other important documents

- **Contents:**
 - Queriable database
 - Website or other for access and communication
 - Other
- **Users:**
 - Manufacturers: phasor design and applications
 - Utility Engineers: phasor applications
 - Researchers: Identify areas of common interests and needs
 - Others: NASPI TTs and WG
- **Current Status:**
 - Task has not begun, RITT is seeking volunteer(s) to help lead in this effort
- **Team:** TBD



Current Activities:

Education/Outreach

Goal: Develop Education and Outreach Program which may include setting up a series of technical forums in order to discuss specific areas of research in more detail.

- **Contents:**
 - Education and Outreach Plan
 - Technical conferences, seminars, forums
 - Other - TBD
- **Users:**
 - Manufacturers: phasor design and applications
 - Utility Engineers: phasor applications
 - Researchers: Identify areas of common interests and needs
 - Others: NASPI TTs and WG
- **Current Status:**
 - Task has not begun
- **Team:** Stephen Lee has volunteered to lead this effort



Other Activities:

Researcher Test Data Cases

Goal: Provide test data sets to provide phasor measurement data to non-utility research community. Intent is to obtain a one-time disclosure agreement for release of PMU data by utilities so that this data can be shared with legitimate researchers

- Define datasets requirements associated with specific applications (historic, real-time, pseudo).
- Work with DMTT to determine data management and repository
- Work with BMTT to determine administration of data sets
- Other – TBD
- **Users:**
 - Researchers: Identify areas of common interests and needs
- **Current Status:**
 - Disclosure Agreement drafted and sent to EI utilities to review
 - BPA test data sets available (3 minute snapshots)
 - Work with Work with Operations ITT and Planning ITT to help identify data needs
- **Team:** Bob Cummings, John Minnicucci, Ken Martin, Ritchie Carroll Notes: The RITT is seeking a volunteer(s) to help lead in this effort.



Future Activities

- **Key 2008 Goals:**
 - Begin a comprehensive inventory of related SM activities underway
 - Develop information repository and a website or other means to communicate advancements to help distribute papers, presentations, and other important research materials
 - Begin Education/Outreach activities
 - Working with DMTT and BMTT provide historical PMU test cases to research community
- **Other Potential Technical Activities:**
 - Facilitate and promote the high priority research projects/areas. Work with other task teams to identify research needs, communicate advancements and promote opportunities and efforts in priority areas.
 - Facilitate collaborative research development and deployment activities



Future Activities: Administrative Items

- Promote active participation by Task Team Members in WG activities
- Linkage and coordination with other Task Teams



Questions?

