

Testing Process: Conformance and Interoperability

Mladen Kezunovic

Department of Electrical and Computer Engineering

Texas A&M University

kezunov@ece.tamu.edu

Outline

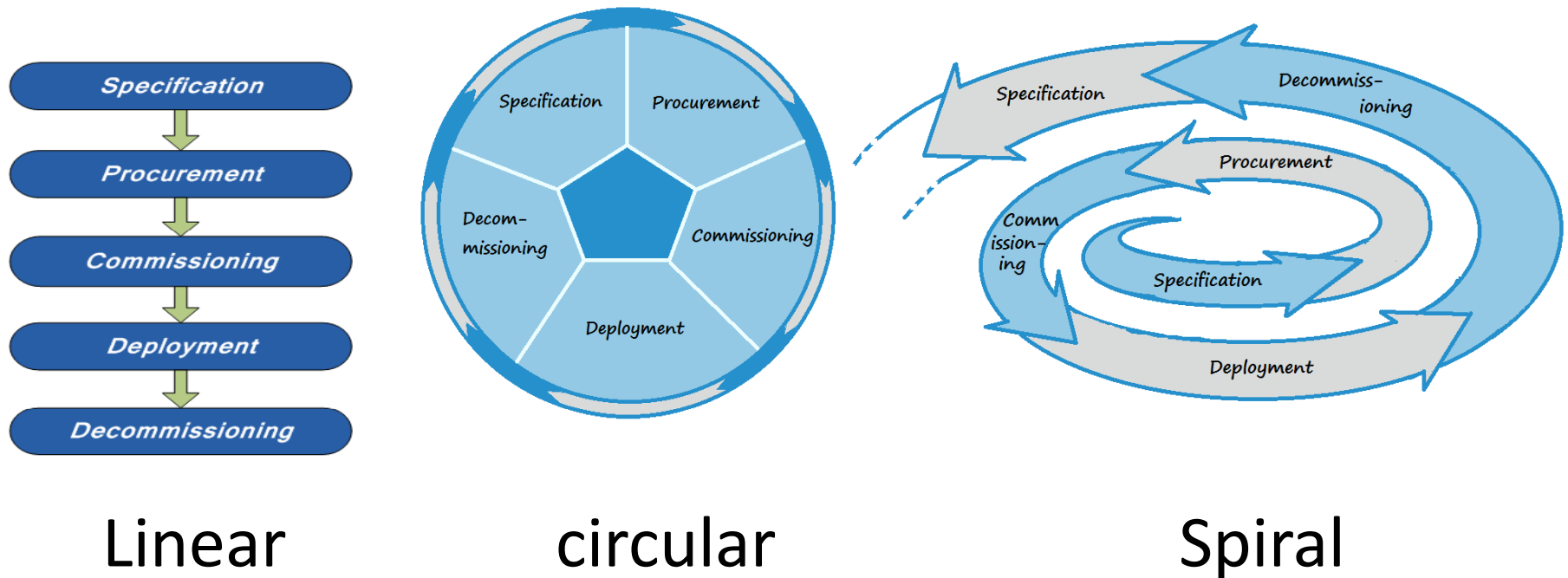
- **What** are we facing?
- **Why** to take closer look now?
- **How** to deal with it?
- **When** to start preparations?

What are we facing?

- Large scale system deployment never done (by some) before?
- Focused standardizations efforts (NIST SGIP-TCC)
- Huge expectations (internal and external)

What are we facing?

Design life-cycle



Why to take closer look now?

Focused standardizations efforts (NIST SGIP):

- NIST SGIP-TCC IPRM release
- Roll out is expected in Dec 2010
- implementation is expected in 2011

Why to take closer look now?

Interoperability Process Reference Manual

Interoperability Testing and Certification Authority (ITCA) is the organization whose function is to promote and facilitate the introduction of interoperable products based on a standard in to the market place. **The formation and maintenance of this organization**, ad hoc or formal, **is key** to increasing the velocity of the adoptions of interoperable standards in the market place.

Why to take closer look now?

Interoperability Process Reference Manual

Introduces the key high-level **testing and certification processes necessary to achieve interoperability** in a consistent manner over time, and suggest means to coordinate with the other key organizations (SSO's, Test labs, Certification Bodies, etc) involved in the processes of launching an interoperable set of products.

Why to take closer look now?

Interoperability Process Reference Manual

The SGIP SGTCC believes that the full implementation of ISO 17025 and ISO 65 will significantly increase the availability of Out-of-the-box interoperable products in the market place. However, **there is a trade off between cost of testing** and confidence in the results of the Interoperability testing programs

Why to take closer look now?

Interoperability Process Reference Manual

Product and System Integrators
Standards Setting Organizations (SSO's) -
developing interoperability standards

**SSO's Interoperability Testing and
Certification Authority**

Testing Laboratories

Certification Bodies

Why to take closer look now?

Interoperability Process Reference Manual

Business plan

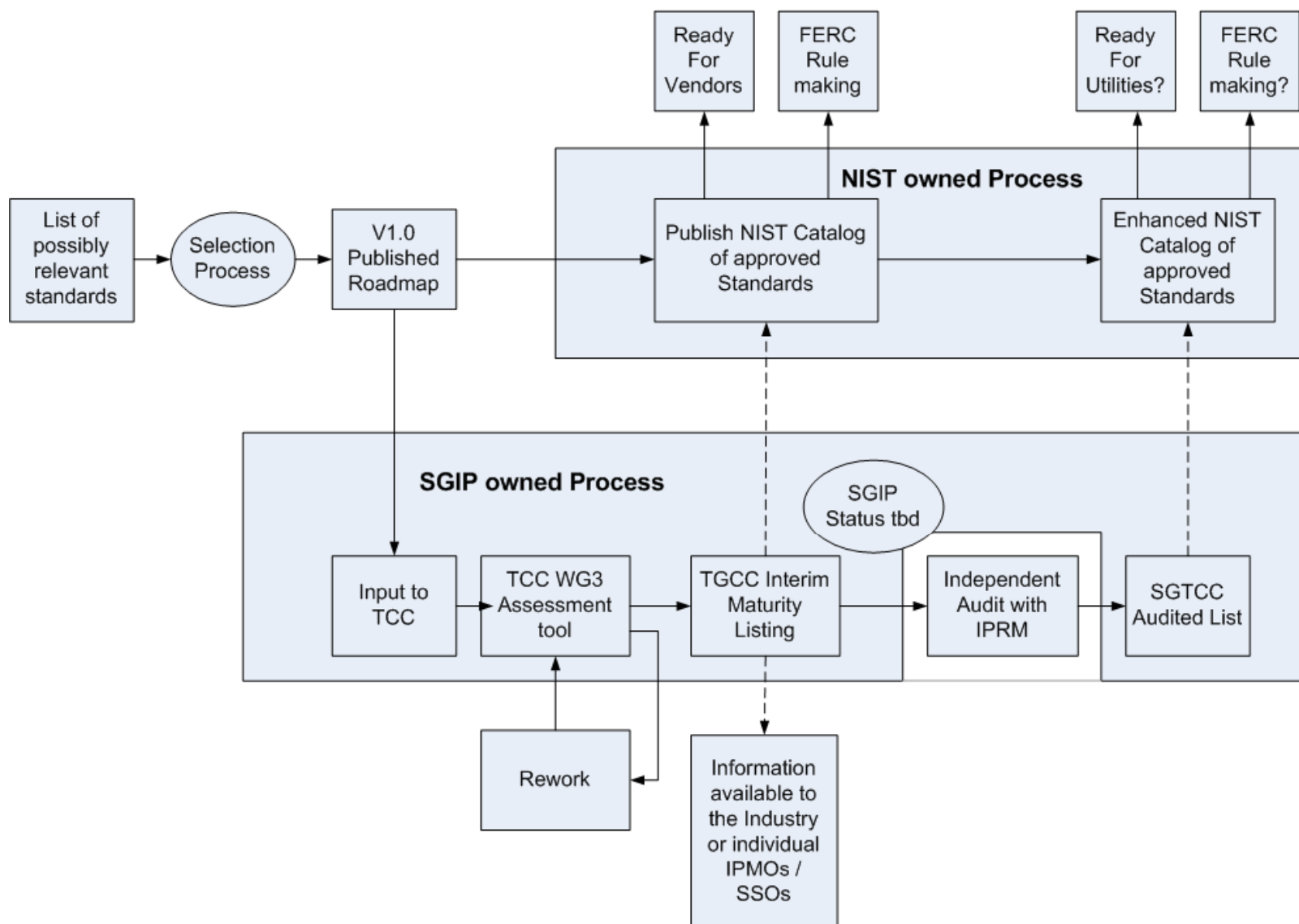
Clear governance structure and IPR policy

Testing lab(s)

Certification body/bodies

Security certificate authority

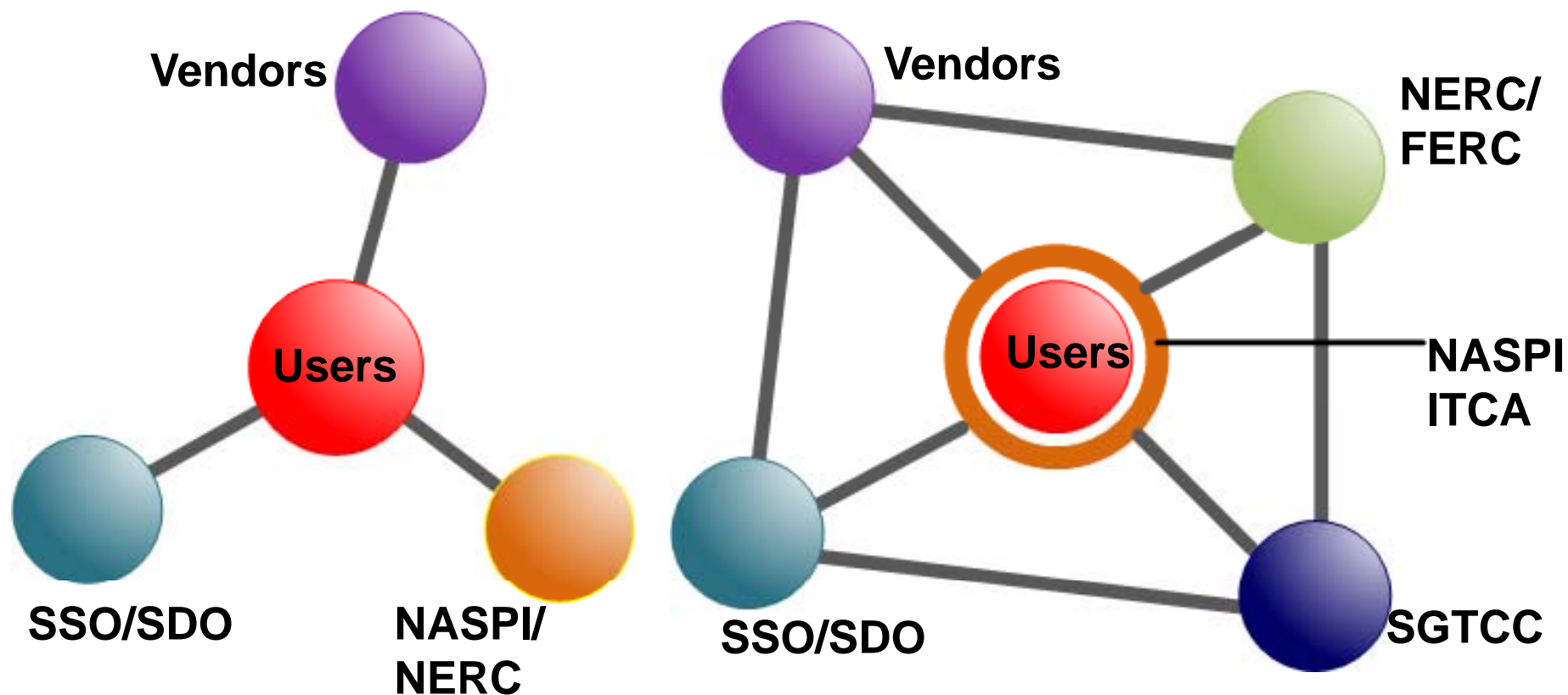
Technical Lead(s)



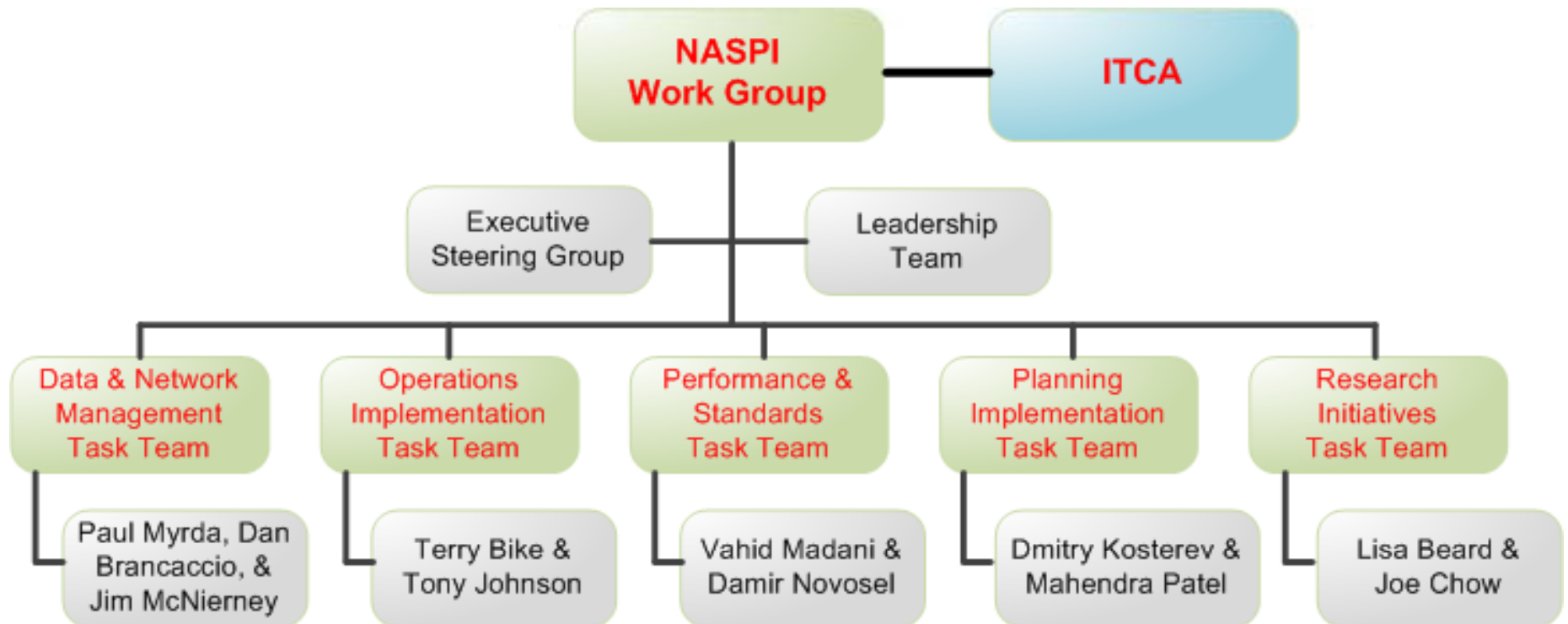
How to deal with it?

- Form an ITCA
- Define process
- Identify labs
- Certify labs
- Lay out Interoperability and conformance testing process

How to deal with it?



How to deal with it?



When to start preparations?

IPRM Rollout plan

- Oct: 1-30: Internal SGTCC IPRM Final Review
- Oct: Pilot IPRM/ IOP Assessment with Two Standards
- Oct 31: Presentation/Released to SGIP Members
- Nov: Several Standards tested against IPR
- Nov: Webinars to Members on IPRM
- Dec: SGIP accepts IPRM... Roll out to SG

Thank you!
Questions?

Mladen Kezunovic
Tel: (979) 845-7509
E-mail: kezunov@ece.tamu.edu

