

IEEE-SA Smart Grid

10 June 2011



IEEE-SA Smart Grid Status

■ Pre-standards activities

- To create IEEE Smart Grid Visions for Communication, Power, IT, Control Systems, and Vehicular Technologies. These should be a long term visions of what the smart grid in each technology space will look like 20 to 30 years out. SG Vision Projects should be chartered with creation of forward looking use cases, applications scenarios for SG, and corresponding enabling technologies for SG of the future snapshots of years 2015, 2020, 2030, and beyond that will characterize the SG paradigm and should be the world's beacon for SG paradigm and relevant to it technologies. These are targeted to produce publishable products (long term vision, reference architecture model(s), and a technology roadmap)
- 4 research group are being explored (wireless vehicle charging, high voltage solid state transformers, vehicles that don't crash, Nano and molecular communications).

■ Standards Acceleration

IEEE SG Project list <http://smartgrid.ieee.org/standards/ieee-proposed-standards-related-to-smart-grid>

- 6 out 11 standards targeted for completion in 2011 are approved and 2 more on the June Revcom agenda
- 13 drafts currently available for sale (2 more then projected for 2011)

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Post-standards activities

- MOUs being explored for testing on synchrophasors, software for metering, and communications networking devices for power systems.

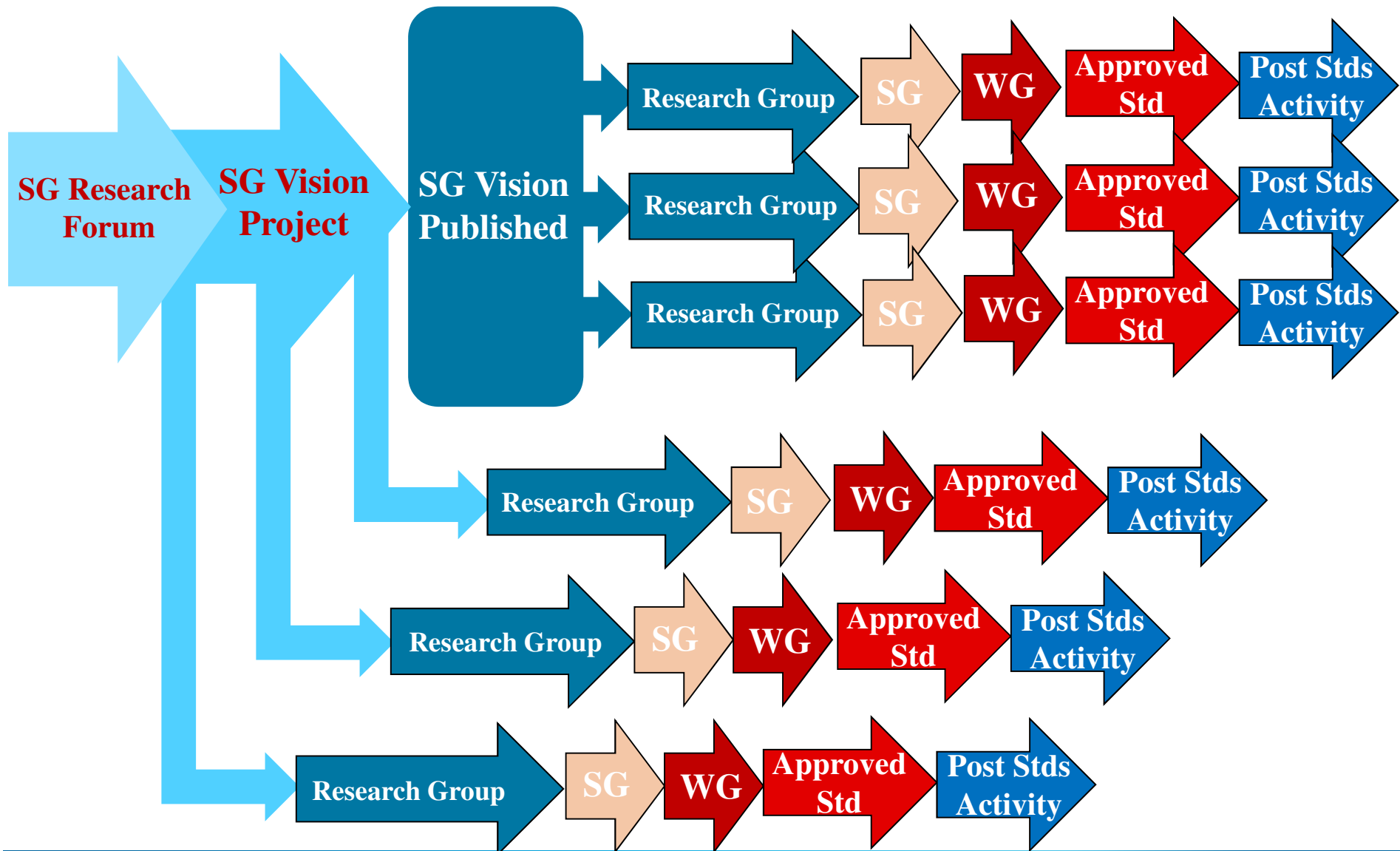
International marketing and PR efforts

- IEEE-SA news being picked up in hundreds of news channels.
- **Form strategic partnerships; build collaboration and cooperation**
 - MOUs signed with SAE
 - Collaborating P1901.2, P2030.1, 1547 series
 - IEC
 - PAS 63547 (1547) being balloted
 - Joint work IEEE PC37.118.1 and CP37.118.2

IEEE and IEEE-SA

- IEEE smart grid web portal – Provide SA related content
 - Standards is second in most active hits
 - Standards linked to the interactive smart grid conceptual model
- IEEE Smart Grid LinkedIn – Posting standards related news information
- IEEE Smart Grid Steering Committee meeting – Participate on bi-weekly teleconference
- IEEE SG Newsletter - Contribute articles to each monthly release
- TA technology life cycle and the SA standards life cycle harmonization – SA working with TA to build a unified message
- IEEE Conferences – Provide speakers and standards related information where appropriate
- IEEE Public Visibility – Participate by providing information relating to standards

Summary of the Approach



IEEE Involvement in Priority Action Plans (PAP)

Smart Grid Interoperability Panel

Priority Action Plan	IEEE Involvement
2 – Wireless Communications for the Smart Grid	IEEE 802
5 – Standard Meter Data Profiles	IEEE SCC31
6 – Common Semantic Model for Meter Data Tables	IEEE SCC31
7 – Electric Storage Interconnection	IEEE 1547 / IEEE 1679 / IEEE 2030.2 / IEEE 2030.3
12 – Mapping IEEE 1815 to IEC 61850 Objects	IEEE 1815
13 – Harmonization of IEEE C37.118 with IEC 61850 and Precision Time Synchronization	IEEE C37.118
14 – Transmission and Distribution Power Systems Model Mapping	IEEE C37.237 / IEEE C37.329
15 – Harmonize Power Line Carrier Standards for Appliance Communications in the Home	IEEE 1901