

Quad Charts

PAP 01 through 17

September 1, 2010

Program Management Office

Status of PAP01: Role of IP in the Smart Grid

Updated August 31, 2010.

A#	Current Activities and Accomplishments
A5	Develop action plans for the following subject areas: architecture, security, IPv6
A6	OpenSG to document Gaps identified

I#	Issues, Concerns & Help Needed
I1	Need to develop guidelines on the use of IPv6
I2	Need to develop an architecture document for IP networks

S	D#	Deliverables
✓	D1	Requirements for different Smart Grid applications
✓	D2	Identify Core set of IP protocols
🟡	D3	IP network architecture
🟡	D4	IPv6 profile for Smart Grid
🟡	D5	IP network security
🟡	D6	Standards gap analysis

S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
✓	TPMO1	PAP Initiation	2009-09	2009-09	SGIP	
✓	TPMO2	PAP Charter Developed	2009-10	2009-10	SGIP	
✓	TPMO3	Form Initial Team	2009-11	2009-11	SGIP	
✓	TPMO4	Develop List of Deliverables and Tasks with Assignments	2009-11	2009-11	SGIP	
✓	TPMO5	SSO Identified	2009-11	2009-11	Open SG-net IETF	D1, D6 D2, D3, D5
🟡	TPMO8	Standards Handback to PAPWG from SSO	2010-12			
🟡	TPMO9	SSO Results submitted to GB by PAP after completing analysis	2010-12			
🟡	TPM10	PAP Complete	2010-12			

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
✓	T1	Develop a set of requirements for different Smart Grid applications	Dec-2009	Dec-2009	Open SG-net	D1
✓	T2	Identify a core Protocol Suite for IP-based Smart Grid	Dec 2009	Dec 2009	IETF	D2
🟡	T3	Develop application specific protocol	Jul 2010		Open SG-net	D1

	requirements				
	T4 Meet at OpenSG on July 22 to develop action plan	Jul 2010	Jul 2010	PAP	
	T5 Describe achieving security with IP suite of protocols	Dec 2010		PAP	D5
	T6 Develop IPv6 profile	Dec 2010		NIST & others	D4
	T7 Develop IP architecture	Nov 2010		PAP	D3
	T8 Perform gap analysis	Aug 2010		OpenSG /IETF	D6

Status	Schedule	Deliverables	Resources
January 2010			
February 2010			
March 2010			
April 2010			
May 2010			
June 2010			
July 2010			
August 2010			

Status of PAP02: Wireless Communications for the Smart Grid (6.1.5)

Updated May 27, 2010.

A# Current Activities and Accomplishments		S D# Deliverable	
A4	Initial set requirements for AMI and Distribution Automation completed with Open SG-Net	✓	D1 Application Communication Requirements Matrix Template
A5	Initial Guidelines Document Outline Developed and Chapters in Development	✓	D2 Application communication matrix
		✓	D3 Wireless Capability Matrix Template
		✓	D4 Wireless capability matrix
		🟡	D5 Standards development guidelines

I# Issues, Concerns & Help Needed		S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
I1	Call for input to Task 1 to compile additional application communication requirements with specific quantitative data needed for further evaluating wireless communication technologies	✓	TPMO1	PAP Initiation	2009-08	2009-08	SGIP	All
		✓	TPMO2	PAP Charter Developed	2009-11	2009-11	SGIP	All
I2	Call for input to Task 6 to contribute tools and methods and conduct the evaluation of wireless technologies based on the application requirements	✓	TPMO3	Form Initial Team	2009-11	2009-11	SGIP	All
		✓	TPMO4	Develop List of Deliverables and Tasks with Assignments	2010-01	2010-01	SGIP	All
		✓	TPMO5	NIST Technical Wireless Evaluation Model	2009-12	2009-12	NIST	D5
		✓	TPMO6	Development of Requirements By Open SG-Net	2010-05	2010-05	Open SG	D1,D2
		✓	TPMO7	SSO Wireless Capabilities Matrix	2010-01	2010-08	SSOs	D3,D4
		🟡	TPMO8	Draft SG Wireless Guidelines Development Phase I	2010-07		Assigned	D5
		🟡	TPMO9	SSO Results submitted to GB by PAP after completing analysis	2010-09			D5
			TPM10	PAP Complete				

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
✓	T1	NIST Technical Wireless Evaluation Model Development	Dec 2009	Dec 2009	NIST Technical	D5

✓	T2 SSO Requirements Development by Open SG Net	May 2010	May 2010	Open SG Net	D1,D2
✓	T3 SSO Wireless Capabilities Matrix	Jan 2010	Aug 2010	IEEE 802, 3GPP,3GPP2, ATIS, TIA	D3,D4
●	T4 Draft Smart Grid Wireless Guidelines Report	July 2010		PAP 2 and SSO Contributors	D5
●	T5 NIST Reviews and Publishes Wireless Guidelines Report (NISTIR)	Sept 2010		NIST Technical	D5
●	T6 PAP 2 Analyses Report and Submits to SGIP GB	Sept-2010		PAP 2 SSOs and Contributors	D5

Status	Schedule	Deliverables	Resources
January 2010	●	●	●
February 2010	●	●	●
March 2010	●	●	●
April 2010	●	●	●
May 2010	●	●	●
June 2010	●	●	●
July 2010	●	●	●

Status of PAP03: Develop Common Specification for Price and Product Definition

Updated August 31, 2010.

A#	Current Activities and Accomplishments	S	D#	Deliverable					
A16	The EMIX TC is addressing SGIP guidance and working on their next draft (first revision posted July 12, see D4)	<input checked="" type="checkbox"/>	D1	High level scoping document					
		<input checked="" type="checkbox"/>	D2	Price use cases and requirements					
		<input checked="" type="checkbox"/>	D3	Information model and summary of product characteristics of interest to energy consumers					
		<input checked="" type="checkbox"/>	D4	Draft price and product definition specification to others					
		<input checked="" type="checkbox"/>	D5	Requirements Evaluation and Artifacts					
		<input type="checkbox"/>	D6	Deliverables Evaluation and Artifacts					
I#	Issues, Concerns & Help Needed	S	T#	PMO PAP Milestones	Due	Actual	Resp	D#	
I1	Need focused coordination with DER & PEV PAPs and to include specific tasks in PAP09 and PAP11	<input checked="" type="checkbox"/>	TPMO1	PAP Initiation	2009-07	2009-07	PAP03WG	TWiki	
I6	Need to setup team(s) to review deliverables once received back from SSOs.	<input checked="" type="checkbox"/>	TPMO2	PAP Charter Developed	2009-08	2009-08	PAP03WG	TWiki	
I7	Need to see updated artifacts (post comment period) from OASIS (October-ish) and ZigBee (November-ish) for PAP03WG Review	<input checked="" type="checkbox"/>	TPMO3	Form Initial Team	2009-08	2009-08	PAP03WG	TWiki	
		<input checked="" type="checkbox"/>	TPMO4	Develop List of Deliverables and Tasks with Assignments	2009-08	2009-08	PAP03WG	TWiki	
		<input checked="" type="checkbox"/>	TPMO5	SSO Identified	2009-07	2009-07	PAP03WG	TWiki	
		<input checked="" type="checkbox"/>	TPMO6	Development of Requirements By PAPWG	2010-07	2010-07	PAP03WG	D5	
		<input checked="" type="checkbox"/>	TPMO7	Requirements Handoff to SSO	2010-07	2010-07	PAP03WG	D5	
		<input type="checkbox"/>	TPMO8	Standards Handback to PAPWG from SSO	2010-12		OASIS, ZigBee		
		<input type="checkbox"/>	TPMO9	SSO Results submitted to GB by PAPWG after completing analysis	2011-01		PAP05WG	D6	
		<input type="checkbox"/>	TPM10	PAP Complete	2011-04		SGIPGB	N/A	
		S	T#	PAP Work Tasks		Due	Actual	Resp	D#
		<input checked="" type="checkbox"/>	T1	Develop high level scoping document		2009-11	2009-11	NAESB	D1
<input checked="" type="checkbox"/>	T2	Develop price and product definition use cases & requirements		2009-11	2010-04	NAESB	D2		
<input checked="" type="checkbox"/>	T3	Meet and present status on		2009-	2009-	PAP03WG	D1		

		deliverables at Grid-Interop	11	11		
✓	T4	Plan to import and use material from PAP04	2009-12	2009-12	NAESB	D2
✓	T5	Plan to import and use material from PAP04	2009-12	2009-12	OASIS	D3
✓	T6	Plan to import and use material from PAP04	2009-12	2010-05	ZigBee	D3
✓	T7	Data model draft publicly visible	2010-02	2010-02	OASIS	D3
✓	T8	Data model draft publicly visible	2010-02	2010-04	ZigBee	D3
✓	T9	Draft price and product definition specification to others	2010-04	2010-05	OASIS	D4
✓	T10	Draft price and product definition specification to others	2010-04	2010-04	ZigBee	D4
✓	T11	Requirements evaluation; define scope/schedule/deliverables	2010-06	2010-06	PAP03WG	D5
TBD	T12	Deliverables evaluation; define scope/schedule/deliverables	TBD	TBD	PAP03WG	D6

Status	Schedule	Deliverables	Resources
January 2010			
February 2010			
March 2010			
April 2010			
May 2010			
June 2010			
July 2010			
August 2010			

Status of PAP04: Develop Common Scheduling Mechanism for Energy Transactions

Updated August 30, 2010.

A#	Current Activities and Accomplishments	S	D#	Deliverable
A14	xCal submitted to IETF to finish Standards Track process July 2010	✓	D1	Update pre-existing IETF standards for extensibility
A17	The WS-Calendar TC is addressing SGIP guidance and working on their next draft.	✓	D2	Standard XML Serialization for Bi-directional Translation
A18	PAP04 Requirements delivered in July 2010 to WS-Calendar	✓	D3	Use cases and requirements to test the standard
A19	WS-Calendar planning Formal Public Review in September/October 2010	✓	D4	Associated semantics for schedule performance related to WS-Calendar standard
A20	Consumption of PAP04 work in NAESB Energy Usage Public Review Draft, August 2010	✓	D5	Create essential WS APIs for Calendars and Schedules
		🟡	D6	Align APIs and semantics across SDOs

I#	Issues, Concerns & Help Needed	S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
I2	Other PAPs need to clarify their consumption of PAP04 output and coordinate as necessary.	✓	TPMO1	PAP Initiation	2009-07	2009-07	SGIP	
I5	ZigBee has not clearly addressed PAP04 in its work to date (See PAP03 tables)	✓	TPMO2	PAP Charter Developed	2009-08	2009-08	SGIP	
I6	Need to integrate PAP07 requirements in Public Review Draft	✓	TPMO3	Form Initial Team	2009-08	2009-08	SGIP	
		✓	TPMO4	Develop List of Deliverables and Tasks with Assignments	2009-08	2009-08	SGIP	
		✓	TPMO5	SSO Identified	2009-07	2009-07	SGIP	
		✓	TPMO6	Development of Requirements By PAPWG	2009-12	2009-12	NAESB	D3
		✓	TPMO7	Requirements Handoff to SSO	2009-12	2009-12	NAESB	D3
		🟡	TPMO8	Standards Handback to PAPWG from SSO	2010-4Q		OASIS	
		🟡	TPMO9	SSO Results submitted to GB by PAP after completing analysis	2010-4Q		SGIP	
		🟡	TPM10	PAP Complete	2011-02		SGIP	

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
✓	T1	Update IETF iCalendar format to allow extensibility	2010-01	2009-09	CalConnect	D1
✓	T2	Standard XML serialization of extensible iCalendar out	2010-01	2009-11	CalConnect	D2

		for public review				
	T3	Standard APIs for Calendar-to-Calendar communications for inclusion in WS-Calendar	2010-08		CalConnect	D4
	T4	Submit output of T2 to IETF for approval as Standards Track RFC	2010-05	2010-05	CalConnect	D1
	T5	Develop Smart Grid use cases and requirements for for use in WS-Calendar	2009-10	2010-04	NAESB	D3
	T6	Create Committee to develop service-oriented schedule profiles based on IETF xCalendar and APIs (WS-Calendar)	2010-01	2010-01	OASIS	D5
	T7	WS-Calendar work out for public review	2010-04	2010-05	OASIS	D5
	T8	Submission of WS-Calendar public review draft to IEC Power Management CIM	2010-05	2010-05	OASIS	D6
	T9	Development of Requirements by PAPWG [See NOTE]	2010-07	2010-07	PAP04WG	D3
	T10	Standards Handback to PAPWG from SSO	2010-4Q		OASIS	D6

NOTE: Original [D3](#) completed; T9 addresses high level requirements from the NIST Framework and Roadmap.

Status	Schedule	Deliverables	Resources
January 2010			
February 2010			
March 2010			
April 2010			
May 2010			
June 2010			
July 2010			
August 2010			

Status of PAP05

Updated August 31, 2010.

A#	Current Activities and Accomplishments	S	D#	Deliverables
A4	AEIC AMTI group preparing a gap report alongside the guidelines for delivery to PAP05WG and other groups (first draft on 08/06)	✓	D1	Utility requirements mapping
		✓	D2	Expression of AEIC v2.0 Guidelines in terms of additional device class(es)
A7	Requirements circulated for approval per PMO Consensus Process	✓	D3	Revision of AEIC v1.0 Guidelines
		✓	D4	Data type profiles for specific Use Case(s)
A8	Formed Voting Group on 8/16/2010 to approve requirements, prepared for AEIC deliverable evaluation	✓	D5	White Paper/Presentation on ANSI metering protocol standards
A9	AEIC AMTI group delivered guidelines document for public review on 8/18/2010	✓	D6	New capabilities as developed during PAP05 work
		✓	D7	Publicly available training materials
A10	Voting Group approved requirements 8/19/2010; comments to be resolved.	✓	D8	Design Document
		🟡	D9	Analysis
		🟡	D10	Use Cases and Requirements
		🟡	D11	Gap Report

I#	Issues, Concerns & Help Needed	S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
I2	Team will need broader participation for review of AEIC deliverable	✓	TPMO1	PAP Initiation	2009-08	2009-08	PAP05WG	TWiki
I3	The delivery of the final AEIC document in August instead of 5/31 negatively impacted the schedule.	✓	TPMO2	PAP Charter Developed	2009-08	2009-08	PAP05WG	TWiki
I4	There may still be resource constraints until the PAP has been completed.	✓	TPMO3	Form Initial Team	2009-08	2009-08	PAP05WG	TWiki
		✓	TPMO4	Develop List of Deliverables and Tasks with Assignments	2009-08	2009-08	PAP05WG	TWiki
		✓	TPMO5	SSO Identified	2009-08	2009-08	PAP05WG	TWiki
		✓	TPMO6	Development of Requirements By PAPWG	2009-08	2009-08	PAP05WG	TWiki
		✓	TPMO7	Requirements Handoff to SSO	2009-08	2009-08	PAP05WG	TWiki
		✓	TPMO8	Standards Handback to PAPWG from SSO	2010-08	2010-08	AEIC	1,2,6,8
		🟡	TPMO9	SSO Results submitted to GB by PAPWG after completing analysis	2010-09		PAP05WG	9
		🟡	TPM10	PAP Complete	2010-10		SGIPGB	N/A
S	T#	PAP Work Tasks	Due	Actual	Resp	D#		
✓	T1	Map utility requirements	05/31/2010	08/18/2010	AEIC AMTI	D1		

		expressed via AEIC Guidelines v2.0 to Device Classes				
✓	T2	Express AEIC Guidelines v2.0 in terms of one or more additional Device Classes	05/31/2010	08/18/2010	AEIC AMTI	D2
✓	T3	Complete revision of AEIC Guidelines v2.0	12/2009	12/11/2009	AEIC AMTI	D3
✓	T4	Minimize the variations in data types transported from and to End Devices (real-time communication and enterprise data representations).	01/31/2010	03/22/2010	AEIC AMTI	D4
✓	T5	Socialize the existence of additional Tables within ANSI C12.21-2006 and C12.22-2008 via WP/PPT report.	05/31/2010	05/25/2010	Team Members	D5
✓	T6	Provide definitions and recommendaions for Function Control Limiting Table values and general configuration.	05/31/2010	08/18/2010	AEIC AMTI	D6
✓	T7	Develop education package around ANSI C12.18-2006, C12.19-2008, C12.21-2006 and C12.22-2008.	04/15/2010	05/17/2010	Team Members	D7
✓	T8	Minimize variation and maximize interoperability of Application	06/15/2010	08/18/2010	AEIC AMTI	D8

		Services and behaviors within ANSI C12.18-2006, ANSI C12.19-2008, ANSI C12.21-2006 and ANSI C12.22-2008.			
	T9	PAP05WG to analyze D3;	09/20/2010	PAP05WG	D9
	T10	Report on Framework-based Use Cases and Requirements.	09/20/2010	Team Members	D10
	T11	Create and deliver Gap Report.	09/30/2010	AEIC AMTI	D11

Status	Schedule	Deliverables	Resources
January 2010			
February 2010			
March 2010			
April 2010			
May 2010			
June 2010			
July 2010			
August 2010			

Status of PAP06

Updated August 31, 2010.

A# Current Activities and Accomplishments		S	D#	Deliverables		
A1	Sub-group has begun discussion of Use Cases and Requirements		D1	Key Use Cases		
A5	Requirements circulated per PMO Consensus Process for approval		D2	Requirements		
A6	Formed Voting Group on 8/16/2010 to ballot requirements, prepared for future deliverable evaluations		D3.1	Mapping between ANSI C12.19-2008 and IEC 61850		
A7	Voting Group approved requirements on 8/19/2010; will resolve comments		D3.2	Mapping between ANSI C12.19-2008 and MultiSpeak v4		
			D3.3	Mapping between ANSI C12.19-2008 and IEC 61968-9		
			D4	Integration and harmonization roadmap		

I#	Issues, Concerns & Help Needed	S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
I1	Need to explore explicit recruitment of new resources, including explicit experts for the different standards		TPMO1	PAP Initiation	2009-08	2009-08	PAP06WG	TWiki
I2	Need to coordinate with PAP05WG , including explicit coordination requirements (review of PAP05WG Deliverable 3)		TPMO2	PAP Charter Developed	2010-01	2010-01	PAP06WG	TWiki
I3	Schedule slippage of PAP05 tasks impacting PAP06 tasks (same resources involved)		TPMO3	Form Initial Team	2009-08	2009-08	PAP06WG	TWiki
I4	PAP6WG would function more efficiently if equally competent but separate resources from PAP05WG could be found		TPMO4	Develop List of Deliverables and Tasks with Assignments	2010-01	2010-01	PAP06WG	TWiki
			TPMO5	SSO Identified	2010-04	2010-04	PAP06WG	TWiki
			TPMO6	Development of Requirements By PAPWG	2010-06		P6WG1	TWiki
			TPMO7	Requirements Handoff to SSO	2010-06		PAP06WG	
			TPMO8	Standards Handback to PAPWG from SSO	2010-09			
			TPMO9	SSO Results submitted to GB by PAPWG after completing analysis	2010-10		PAP06WG	
			TPM10	PAP Complete	2011-01		SGIPGB	

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
	T1	Identify key use cases (should occur before	2010-06		P6WG1	D1

	mappings are performed)				
 T2	Requirements development	2010-06		P6WG1	D2
 T3.1	Define mapping between ANSI C12.19-2008 and IEC 61850 (relevant part) for the key use cases	2010-09		P6WG3 .1	D3.1
 T3.2	Define mapping between ANSI C12.19-2008 and MultiSpeak v4 for the key use cases.	2010-09		P6WG3 .2	D3.2
 T3.3	Define mapping between ANSI C12.19-2008 and IEC 61968-9 (minimally) for the key use cases	2010-09		P6WG3 .3	D3.3
 T4	Create roadmap to integrate and harmonize challenges with MultiSpeak , IEC and COSEM standards	2010-09		P6WG4	D4

Status	Schedule	Deliverables	Resources
March 2010			
April 2010			
May 2010			
June 2010			
July 2010			
August 2010			

Status of PAP07: Energy Storage Interconnection Guidelines

Updated August 25, 2010

A		Current Activities and Accomplishments		S	D#	Deliverable			
A1	IEC 61850 information models were developed for some of the key Use Cases, and will be submitted to the IEC TC57 WG17.	✓	D1	Task 0 Activities: Development of Scoping Study Document (MS Word version)					
A2	The first meeting of the IEEE 1547.8 was held in August. The balloting for IEEE 1547.6 is completed.	✓	D2	Task 1a Use Cases: List of ES-DER Use Cases (organized by type) (MS Word version)					
A3	Mapping of 61850 DER models to SEP had a very successful first meeting, with the SEP people achieving a better understanding of 61850 structures, and the 61850 people understanding SEP better. Funded efforts will most likely finalize this work.	✓	D3	Task 4 Use Cases Descriptions for Key ES-DER Use Cases (MS Word version) - 1st draft complete					
		✓	D4	Completing IEEE 1547.4 & .6 per IEEE rules See IEEE 1547 Web Page					
		✓	D5	Initiated PAR for IEEE 1547.8 per IEEE rules See IEEE 1547 Web Page					
I	Issues, Concerns & Help Needed		S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
1	See Task 4f: Need support to develop the IEC Fast Track database format requirements so that the IEC central office can implement the database input, output, and user interface as most appropriate and effective for vendors and utilities.		✓	TPMO1	PAP Initiation	2009-08	2009-08	SGIP	
		✓	TPMO2	PAP Charter Developed		2009-08	2009-08	SGIP	
		✓	TPMO3	Form Initial Team		2009-08	2009-08	SGIP	
		✓	TPMO4	Develop List of Deliverables and Tasks with Assignments		2009-08	2009-08	SGIP	
		✓	TPMO5	SSO Identified		2009-08	2009-08	PAP 7	
		✓	TPMO6	Development of Requirements By PAPWG		2010-04	2010-04	PAP 7	
		✓	TPMO7	Requirements Handoff to SSO		2010-06	2010-06	PAP 7	D3 & D5
			TPMO8	Standards Handback to PAPWG from SSO		2011-06		IEEE and IEC	
			TPMO9	SSO Results submitted to GB by PAP after completing analysis		2011-08		PAP 7	
			TPM10	PAP Complete		2011-11		SGIP	
S	T#	PAP Work Tasks	Due	Actual	Resp	D#			
✓	T0	Scoping Document Draft v1	Nov-2009	Nov 2009	PAP 7	D1			
✓	T1	Collect Use Cases	Mid-	Mid-Feb list of	PAP 7	D2			

	with Brief Narratives	Feb-2010	Use Cases was completed	members	
✓ T2	Complete IEEE 1547.4 (Draft Guide for Design, Operation, and Integration of Distributed Resource Island Systems with Electric Power System) & .6 (Draft Recommended Practice For Interconnecting Distributed Resources With Electric Power Systems Distribution Secondary Networks)	Aug-2010	1547.4 is currently in ballot, as per IEEE 1547 balloting schedule, and due for final release by July/August 2010. 1547.6 is in pre-ballot and is expected to be released by December 2010	IEEE 1547	D4
✓ T3	Initiate IEEE 1547.8 to address interconnection issues of storage (title not known yet)	Feb-2010	IEEE PAR approved in March, with first meeting scheduled for August 2010	IEEE 1547	D5
✓ T4	Prioritize and develop details for key ES-DER Use Cases	Mar-2010	April 5 2010	NIST & PAP 7	D3
✓ T4a	Provide key ES-DER Use Cases to PAPs 3, 4, and 9, and discuss whether the ES-DER schedules and pricing signal requirements are covered adequately	April 2010	April 2010: Use Cases were provided	PAP 7, PAPs 3, 4, 9	D3
✓ T4b	Provide key ES-DER Use Cases to PAP 10 and discuss whether ES-DER issues are	April 2010	April 2010: Use Cases were provided - PAP 10 has deferred ES-DER	PAP 7, PAP 10	D3

		adequately covered under Energy Usage		considerations		
✓	T4c	Provide key ES-DER Use Cases to PAP 11 and discuss if additional PEV Use Cases need to be added to ES-DER Use Cases	June 2010	May 25: Use Cases were provided to PAP 11, discussions are taking place	PAP 7, PAP 11	D3
✓	T4d	Provide key ES-DER Use Cases to PAP 16 and discuss if any addition actions need to be taken by PAP 16 for handling Wind plus ES-DER	April 2010	April 2010: Use Cases were provided - no specific issues found at this time - the IEC TC57 WG17 may pick up later	PAP 7, PAP 16	D3
✓	T4e	Develop Information Exchange requirements for key ES-DER Use Cases	June 2010	June 2010	PAP 7	D3
✓	T4f	Hand off Information Exchange requirements for key ES-DER Use Cases to IEC TC57 WGs 14 & 17	June 2010	June 2010: Object modeling requirements handed off to IEC TC57 WG17	PAP 7	D3
✓	T5	SDOs to start development of safety codes and test methods to ensure safe and reliable implementation of Task 3 - specifically UL 1741	Aug 2010	August 2010: UL has officially initiated the process to revise UL 1741	UL,	D5
🟡	T6a	Review and approve P1547.8 results as meeting PAP 7 requirements	June 2011		PAP 7	
🟡	T6b	Review and	Dec		PAP 7	

		approve IEC 61850 results as meeting PAP 7 requirements	2011		
	T6c	Review and approve UL 1741 results as meeting PAP 7 requirements	June 2011		PAP 7

Status	Schedule	Deliverables	Resources
June 2010			
July 2010			
Aug 2010			

Status of PAP08: CIM/61850 for Distribution Grid Management

Updated August 30, 2010

A	Current Activities and Accomplishments
A7	MultiSpeak (R) Version 4.1 delivered
A8	CIMTool specification delivered
A9	Next steps identified for task T9
A10	First pass of the messages identified in the Use Case is completed. The sequence diagram is being rewritten to simplify the model.

S	D#	Deliverable
✓	D1	UML Model of MultiSpeak
🟡	D2	UML Tools for CIM (deliverable is internal to IEC TC57 WG14)
✓	D3	Interoperability Test of CIM Wires Model (completed Nov 2009 - refer to IEC)
✓	D4	Distribution Grid ManagementSG UC nm3.doc: Updated version of the DGM Use cases ADA DOMA/FLIR/ VVWO Use Cases with requirements for Distribution Grid Management
✓	D5	ADA Functions - Sequence Diagrams.pdf: ADA_Functions_-_Sequence_Diagrams.pdf Use Cases with appropriate details for IEC TC57 WGs (61850 and CIM)
🟡	D6	IEC 61968, Parts 3 & 5, CIM updated standards to meet the PAP 8 Use Case application-to-application requirements
🟡	D7	IEC 61850-7-4xx standards to meet the PAP 8 Use Case interactions with field equipment

I	Issues, Concerns & Help Needed
I3	IEC TC57 WG14 needs additional experts and additional time from existing experts to update the CIM (IEC 61968 Parts 3 & 5, as well as other parts) to meet the requirements described in the PAP 8 Use Cases (See Help Wanted Page)

S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
✓	TPMO1	PAP Initiation	2009-09	2009-09	SGIP	
✓	TPMO2	PAP Charter Developed	2009-10	2009-10	SGIP	
✓	TPMO3	Form Initial Team	2009-11	2009-11	SGIP	
✓	TPMO4	Develop List of Deliverables and Tasks with Assignments	2010-06	2010-06	SGIP	
✓	TPMO5	SSO Identified	2009-11	2009-11	SGIP	
🟡	TPMO6	Development of Requirements By PAPWG	2010-09		SGIP	
🟡	TPMO7	Requirements Handoff to SSO	2010-09		SGIP	
🟡	TPMO8	Standards Handback to PAPWG from SSO	2011-07		IEC	
🟡	TPMO9	SSO Results submitted to GB by PAP after completing analysis	2011-08		SGIP	
🟡	TPM10	PAP Complete	2011-11		SGIP	

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
✓	T1	UML model for MultiSpeak	Jun-2010	Jun-2010	NRECA	D1
✓	T2	Team for UML tools for CIM	Jun-2010	Jun-2010	IEC TC57 WG14	D2
✓	T3	Team for interoperability testing	Nov-2009	Nov-2009	IEC TC57 WG14	D3
✓	T4	Web conference CIM Modeling team	Nov-2009	Nov-2009	IEC TC57 WG14	D4
✓	T5	Create SG use case team	Nov-2009	Nov-2009	Mini-T&D team	D5
✓	T6	Use Case master list	Jan-2010	Jan-2010	Mini-T&D team	D5
✓	T7	Key Use Cases prioritized and refined	Feb-2010	Feb-2010	UCI	D5
✓	T8	Review Use Cases and complete Sequence Diagrams of those Use Cases	Apr-2010	Apr-2010	NIST, PAP 8	D6
●	T9	Provide completed Use Cases to the IEC TC57 WGs 14 & 17	Sept-2010		NIST, PAP 8	D6, D7
●	T10	Track progress on developing CIM and 61850 models from the Use Cases	Dec-2011?		IEC TC57 WG14 & 17	
●	T11	Modify UML tool for use with Multispeak	Oct-2010		EPRI	D2

Status	Schedule	Deliverables	Resources
April 2010	●	●	●
May 2010	●	●	●
June 2010	●	●	●
July 2010	●	●	●
August-2010	●	●	●

Status of PAP09: Standard DR and DER Signals

Updated August 30, 2010.

A#	Current Activities and Accomplishments	S	D#	Deliverable
A11	The Working Group held a face-to-face review of OASIS Energy Interoperation jointly with UCAlug on July 20; guidance has been delivered to the OASIS TC		D1	Standard Vocabulary for DR and DER
			D2	Direct Load Management Communication
			D3	Collaborative Load Management Communication
			D4	Grid safety Signals
A12	Members of the ISO/RTO Council have joined the OASIS Technical Committee and have contributed additional requirements July 2010		D5	DER support (deferred)
			D6	Other signals and/or an extensibility mechanism
A13	Leadership meetings are taking place among the UCAlug OpenADR Task Force and OASIS Energy Interoperation TC			
A14	Southern California Edison has joined the OASIS Energy Interoperation TC			
A15	The OASIS Energy Interoperation TC has planned Formal Public Review autumn 2010			

I#	Issues, Concerns & Help Needed	S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
I2	Note: PAP-15 calls for a standard DR interface		TPMO1	PAP Initiation	2009-07	2009-07	SGIP	
I3	Completion is dependent upon completion of EMIX (PAP03)		TPMO2	PAP Charter Developed	2009-08	2009-08	SGIP	
I4	Completion is dependent upon completion of WS-Calendar (PAP04)		TPMO3	Form Initial Team	2009-08	2009-08	SGIP	
I5	Need to integrate PAP07 Requirements		TPMO4	Develop List of Deliverables and Tasks with Assignments	2009-08	2009-08	SGIP	
			TPMO5	SSO Identified	2009-07	2009-07		
			TPMO6	Development of Requirements By PAPWG (see NOTE)	2009-12	2009-12		
			TPMO7	Requirements Handoff to SSO	2009-12	2010-04		
			TPMO8	Standards Handback to PAPWG from SSO	2010-12			
			TPMO9	SSO Results submitted to GB by PAP after completing analysis	2011-01			
			TPM10	PAP Complete	2011-04			
		S	T#	PAP Work Tasks	Due	Actual	Resp	D#
			T1	Collect, Analyze, and Consolidate Use Cases and deliver requirements (inc DER)	2009-10	2010-04	NAESB	D1
			T2	Direct Load Management:	2010-10	2010-04	Zigbee	D2

		(Residential Applications) Message Semantics Work DR, DER	04			
✓	T3	Collaborative Load Management: (C+I Applications) Message Semantics, DR, DER	2010-04	2010-04	OASIS	D3,D6
*	T4	Coordinate and merge Direct and Collaborative Load Management development tracks.	2010-04	deferred	NAESB	D1
🟢	T5	Submit collaborative load management task outputs to IEC TC57 when completed	no date		OASIS	D3
🟢	T6	Submit direct load management outputs to IEC TC57 when completed	no date		Zigbee	D2
✓	T7	Downstream user requirements/engagement	2009-10	2009-09	LonMark BACnet	D3
✓	T8	Downstream user requirements/engagement	2009-10	2009-10	Zigbee	D2
✓	T9	Additional message requirements for Distribution (none required)	2009-10	2009-10	MultiSpeak	D1
*	T10	Resale and process for safety and interconnection (deferred)	2009-10	deferred	NAESB	D5,D4
✓	T11	Vocabulary for DR, DER actor names	2009-09		NAESB	D1
✓	T12	Development of Requirements by PAPWG [See NOTE]	2010-07		PAP09WG	D1
🟢	T13	Standards Handback to PAPWG from SSO	2010-4Q		OASIS	D6

NOTES: Original [D1](#) completed 2009-12 and delivered 2010-04; T12 addresses high level requirements from the NIST Framework and Roadmap. T4 Was deferred by the WG; T10 was examined and no work was determined to be needed at this time. T5 and T6 will be completed when the other work is completed.

Status	Schedule	Deliverables	Resources
January 2010	🟡	🟢	🟢
February 2010	🟡	🟡	🟢
March 2010	🟡	🟡	🟢

April 2010			
May 2010			
June 2010			
July 2010			
August 2010			

Status of PAP10: Standard Energy Usage Information:

Updated August 30, 2010.

A#		Current Activities and Accomplishments	S	D#	Deliverable
A1		NAESB Draft received 400 comments during informal review by 16 commentors	✓	D1	Use cases and requirements for standard energy usage information exchange
A2		NAESB formal draft to be released for comment on August 31 for 30 day review	✓	D2	Short term plans for near-term customer access to usage data based upon todays installed meters
			🟡	D3	NAESB PAP10 Energy Usage Information Standard: An Information model to satisfy present and future needs for exchange of energy usage information
			🟡	D4	Implement a plan to expedite harmonized standards development and adoption: OASIS, IEC61970/61968, IEC61850, ANSI C12.19/22, PAP 17/ASHRAE SPC201, and ZigBee Smart Energy Profile (SEP) 2.0.

I#	Issues, Concerns & Help Needed	S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
I1	A small set of issues were identified in the information model that will make CIM re-integration challenging. Will try to resolve during formal review period	✓	TPMO1	PAP Initiation	2009-07	2009-07	SGIP	
I2	Need to address deliverable 4 -- migration of the NAESB standard to implementing SDOs	✓	TPMO2	PAP Charter Developed	2009-07	2009-08	SGIP	
		✓	TPMO3	Form Initial Team	2009-07	2009-08	SGIP	
		✓	TPMO4	Develop List of Deliverables and Tasks with Assignments	2009-07	2009-08	SGIP	
		✓	TPMO5	SSO Identified	2010-06	2010-06	PAP10WG	
		✓	TPMO6	Development of Requirements By PAPWG	2010-06	2010-06	PAP10WG	D1
		✓	TPMO7	Requirements Handoff to SSO	2010-06	2010-06	PAP10WG	
			TPMO8	Standards Handback to PAPWG from SSO	2010-12		SSO	
			TPMO9	SSO Results submitted to GB by PAP after completing analysis			PAP10WG	
			TPM10	PAP Complete			PAP10WG	

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
✓	T1	Reach out to ANSI C12, IEC, ZigBee, and OASIS for formal involvement.	2009-08	2010-01	UCAIug	D1

	Plan additional engagement				
✓	T2 Create preliminary Requirements and Use Cases for early deployment	2009-10	2009-11	UCAIug	D2
✓	T3 Reach out to additional stakeholders especially commercial, industrial, and residential	2010-01	2010-01	EIS Alliance	D1
✓	T4 Gather requirements and use cases for intra-premise scenarios that require inter-domain data exchange	2010-01	2010-01	EIS Alliance	D1
✓	T5 Survey current practice. Gather existing usage communications between energy suppliers and consumers, including providers of intermediary services	2010-07	2010-07	NAESB	D1
✓	T6 Consolidate use cases and requirements into a Basic Energy Usage Information straw model to contribute to NAESB standards process	2010-06	2010-06	PAP10 individuals	D1
✓	T7 Produce first delivery information model for today's meters and infrastructure (from utility information systems)	2010-02	2010-04	UCAIug	D2
●	T8 Expedite harmonized standards development and adoption within the associated standards bodies	2011-01		NAESB	D4
●	T9 Produce Energy Usage information model specification	2010-12		NAESB	D3

Status	Schedule	Deliverables	Resources
April 2010	●	●	●
May 2010	●	●	●
June 2010	●	●	●
July 2010	●	●	●



Status of PAP11: Interoperability Standards to Support Plug-in Electric Vehicles (6.2.4)*

SAE J1772-TM PEV Connector Standard Released: Electric Vehicle and Plug in Hybrid Electric Vehicle Conductive Charge Coupler, 2010-01-15

http://standards.sae.org/j1772_201001/

SAE J2836-1 PEV Use Cases Standard Released: Use Cases for Communication Between Plug-in Vehicles and the Utility Grid, 2010-04-08

http://standards.sae.org/j2836/1_201004/

SAE J2847-1 PEV Communications Requirements Released: Communication between Plug-in Vehicles and the Utility Grid, 2010-06-16

http://standards.sae.org/j2847/1_201006/

Updated August 29, 2010.

A#	Current Activities and Accomplishments	S	D#	Deliverable
A1	Assembled and organized PEV Use Cases from stakeholder inputs. Reformatted in SGIP prescribed template	✓	D1	PEV Use Cases
		✓	D2	Memo SAE and Smart Energy
		✓	D3	Map 61968 and 61850
A2	Joint Collaboration Agreement Between SAE and Smart Energy Profile Face-to-Face meeting July 13-14, 2010.	✓	D4	Define all SDO related activities
		✓	D5	Use Cases in SGIP format
A3	Provided extensive input to Smart Energy Profile 2.0 SRS 0.9 requirements for PEV messages and information exchange sets.	✓	D6	Organize Regulatory Advisors Task Force
		✓	D7	Drafting high level information model, evolve robust object models
A4	Joint Collaboration with IEC TC57, WG 14, 17, 19, TC69 (PEV) July 2010	✓	D8	SAE Evaluation of PLCs for PEVs
		✓	D9	Complete list of PEV Requirements
A5	PEV Information Model developed in CIM as extension defined by SEP 2.0 SRS 0.9, Harmonization between IEC 61968 (CIM) and IEC 61850 as proposed by EPRI study	✓	D10	Need to overcome collaborative difficulties with IEC
		⊙	D11	Develop requirements for Level 3 and DC connector
A6	Set up Regulatory Affairs Task Force in July 2010 with 6 initial states participating			
A7	Face-to-Face meeting in July 2010 in conjunction with OpenSG User group meetings. Next meeting scheduled in October 2010.			
A8	Collaborating with additional SDOs – IEEE, NEC, NFPA, U.L. on fire, safety, building standards			
A9	Face-to-Face meetings with EPRI Infrastructure Working Council. Met jointly in June 9-10, 2010, next meeting September 1-2, 2010 in Detroit, MI.			
A10	SAE J1772-TM PEV Connector Standard Released:			



	Electric Vehicle and Plug in Hybrid Electric Vehicle Conductive Charge Coupler, 2010-01-15
A11	SAE J2836-1 PEV Use Cases Standard Released: Use Cases for Communication Between Plug-in Vehicles and the Utility Grid, 2010-04-08
A12	SAE J2847-1 PEV Communications Requirements Released: Communication between Plug-in Vehicles and the Utility Grid, 2010-06-16

I#	Issues, Concerns & Help Needed
I1	IEC organization / SGIP alignment
I2	Coordinate with PAP 15 – PLC communication. Provide requirements.
I3	Coordinate with PAP07 – Energy Storage. Provide requirements

S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
✓	TPMO1	PAP Initiation	2009-09	2009-09	PAPWG	
✓	TPMO2	PAP Charter Developed	2009-09	2009-09	PAPWG	
✓	TPMO3	Form Initial Team	2009-09	2009-09	PAPWG	
✓	TPMO4	Develop List of Deliverables and Tasks with Assignments	2009-10	2009-10	PAPWG	
✓	TPMO5	SSO Identified	2009-10	2009-10	PAPWG	
✓	TPMO6	Development of Requirements By PAPWG	2010-08	2010-08	PAPWG	
✓	TPMO7	Requirements Handoff to SSO	2010-08	2010-08	PAPWG	
✓	TPMO8	Standards Handback to PAPWG from SSO	2010-08	2010-08	SSO	
🕒	TPMO9	SSO Results submitted to GB by PAP after completing analysis	2011-06		PAPWG	
🕒	TPM10	PAP Complete	2011-09		SGIPGB	

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
✓	T1	Assemble PEV related use cases	2009-12	2009-12	Arindam Maitre EPRI	D1
✓	T1A	Use Cases in SGIP format	2010-01	2009-12	Nathan Tenney PNL	D5
✓	T1B	Complete PEV Data Communication Requirements for delivery to SSOs	2010-08	2010-08	Jerry Melcher, EnerNex	D9
✓	T2	Drafting high level information model, evolve robust object models	2010-02	2010-02	ZigBee SEP (Greg Robinson - Extensibel Solutions /	D7



					Robby Simpson, GE)	
✓	T3	Need to overcome collaborative difficulties among SDOs	2009-08	2009-09	SAE (Jose Salazar, SCE)	D2
✓	T3A	Need to overcome collaborative difficulties with IEC	2010-06	2010-06	Eric Simmon, NIST	D10
✓	T4	Produce 61968 and 61850 documents for IEC meeting	2010-04	2010-04	TC57 WG 14,17,19 (Greg Robinson)	D3
✓	T5	Reviewing regulations with regulators	2010-05	2010-05	NEMA (Ben Biroshak) CPUC (Adam Langton)	D6
✓	T6	Review related standards for barrier to PEV adoption	2010-04	2010-05	SAE (Efrain Ornelas)	D4
✓	T7	SAE Evaluation of PLC for PEVs	2010-07	2010-07	SAE (Rich Scholer, FORD)	D8
●	T8	Develop requirements for Level 3 and DC connector	2010-08		NIST (Eric Simmon)	D11

Status	Schedule	Deliverables	Resources
Jul 2010	●	●	●
Aug 2010	●	●	●

Status of PAP12: Mapping IEEE 1815 (DNP3) to IEC 61850 Objects

Updated September 1, 2010.

A#	Current Activities and Accomplishments	S	D#	Deliverable
A1	NIST has released an RFP to fund key work tasks for PAP12 (and PAP-13). Proposal period has closed. A response is expected from NIST in the next few weeks.	✓	D1	Use Case Diagrams and Data Flow Diagrams
		✓	D2	Scope Description
		✓	D3	Use Case Descriptions
A2	Draft outline for the new IEC Technical Report (IEC 61850-80-2) is now completed.	✓	D4	IEEE Std 1815 (DNP3)
		🟡	D5	IEC 61850-80-2 New Work Item Proposal
A3	New work item planned for IEEE WG C12 meeting at the PSRC (Sept 13-16) to update IEEE 1815 to address the addition of security and editorial items.	🟢	D6	IEC 61850-80-2 Mapping Specification
		🟢	D7	DNP3 Application Note - IEC 61850 Integration
A4	Mapping group is meeting continually to continue to work on approach and details for the mapping. Recent discussions are addressing a detailed mapping spread sheet and the expected architecture and behavior of the gateways.	🟢	D8	Changes to IEC 61580 Specifications
		🟢	D9	Changes to DNP3 Specifications
		🟢	D10	Example DNP XML and SCL files
A5	Investigating ways to accelerate the standard IEC process for technical specifications			
A6	Continuing to review and add to the draft outline for the new (DNP Technical Committee sponsored) guideline for mapping DNP3 with IEC 61850.			
A7	Coordination with PAP-7 - we are currently developing a guide on "how you use DNP for communications with inverters" to address current industry needs. Mapping document will address known requirements for inverter communications using IEC 61850 which will lead to the use of 61850-7-420.			

I#	Issues, Concerns & Help Needed	S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
I1	NIST expects to award a contract in the next few weeks to help to move the work along.	✓	TPMO1	PAP Initiation	2009-09	2009-09	SGIP	
		✓	TPMO2	PAP Charter Developed	2009-11	2009-11	SGIP	
		✓	TPMO3	Form Initial Team	2009-11	2009-11	SGIP	
		✓	TPMO4	Develop List of Deliverables and Tasks with Assignments	2009-12	2009-12	SGIP	
		✓	TPMO5	SSO Identified	2009-11	2009-11	SGIP	
		✓	TPMO6	Development of Requirements By PAPWG	2010-04	2010-04	SGIP	
		✓	TPMO7	Requirements Handoff to SSO	2010-05	2010-05	SGIP	

	TPM08	Standards Handback to PAPWG from SSO	2011-06		SDO	D4, D6, D7
	TPM09	SSO Results submitted to GB by PAP after completing analysis	2011-07		SGIP	
	TPM10	PAP Complete	2011-08		SGIP	
S	T#	PAP Work Tasks	Due	Actual	Resp	D#
✓	T1	Create a proposed outline for a new scoping document.	Jan-2010	Jan-2010	Ron Farquharson	D2
✓	T2	Create data flow diagrams	Mar-2010	Mar-2010	Grant Gilchrist	D1
✓	T3	Create drafts of the use case description based on the topology diagrams	Apr-2010	Apr-2010	Grant Gilchrist	D3
✓	T4	Support IEEE PES Substations WG-C12 with IEEE P1815 - new IEEE standard for DNP	May-2010	May-2010	Ron Farquharson, Lee Smith, Parker McCauley	D6
✓	T5	Define what key data types are required for SCADA	May-2010	May-2010	Rick Murphy	D7
✓	T6	Modify existing architecture diagrams to add DNP to field devices, electronic security perimeter	Apr-2010	Apr-2010	Rick Murphy	D1
🌐	T7	Locate example mappings	September-2010		Bruce Muschlitz	D10

		(existing products) for DNP3 to IEC61850			
	T8	Finalize outline for the IEC 61850-80-2 Technical Report (Mapping DNP with 61850)	September-2010	Grant Gilchrist / Christoph Brunner	D6
	T9	Finalize outline for the (DNP Technical Committee sponsored) guideline for mapping DNP3 with IEC 61850.	September-2010	Rick Murphy	D7
	T10	Develop the New Work Item Proposal for the IEC 61850-80-2 technical specification.	September-2010	Christoph Brunner	D5

Status	Schedule	Deliverables	Resources
January 2010			
February 2010			
March 2010			
April 2010			
May 2010			
June 2010			
July 2010			
August 2010			

Status of PAP13: Harmonization of IEEE C37.118 with IEC 61850 and Precision Time Synchronization

Updated September 1, 2010.

A#	Current Activities and Accomplishments	S	D#	Deliverable
A1	NIST has released an RFP to fund key work tasks for PAP13 (and PAP-12). Proposal period has closed. A response is expected from NIST in the next few weeks.	✓	D1	Harmonization use cases and requirements
		✓	D2	C37.118 Enhancement (gaps) List
		🟡	D3	IEC 61850-90-5 Mapping document
A2	Currently reviewing the full draft of the IEC 61850-90-5 document which has been released to the PAP-13 group for comments by mid September. Next major review will occur at the WG-10 meeting in Moscow in October.	✓	D4	1588 Time Sync Demo
		🟡	D5	1588 Power Profile is IEEE PC37.238
		🟡	D6	Amendments to IEC 61850 documents
		🟡	D7	Amendments to IEEE C37.118 document(s)
A3	Work is progressing well on updates to C37.118.1 (the measurement portion) by PSRC WG H11 and C37.118.2 (the communications portion) by WG H19.	🟡	D8	Guideline for Harmonizing C37.118-2005 with IEC 61850
A4	IEEE PSRC H7/C7 - IEEE PC37.238 (Power Profile for IEEE 1588) is now Draft 5.1 and is in a pre-ballot review. Lots of good work is happening with this effort. Expecting a sponsor ballot in Sept 2010. No parallel balloting will occur with the IEC but the draft will be submitted to the IEC for comments.			
A5	Reviewing the C37.118 Gap List (Enhancement) list to decide which enhancements to implement on an updated C37.118 communications standard vs which to implement with IEC 61850-90-5 (new Technical Report for Phasor Data Communications)			

I#	Issues, Concerns & Help Needed	S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
I1	NIST expects to award a contract in the next few weeks to help to move the work along.	✓	TPMO1	PAP Initiation	2009-09	2009-09	SGIP	
		✓	TPMO2	PAP Charter Developed	2009-11	2009-11	SGIP	
		✓	TPMO3	Form Initial Team	2009-11	2009-11	SGIP	
		✓	TPMO4	Develop List of Deliverables and Tasks with Assignments	2009-12	2009-12	SGIP	
		✓	TPMO5	SSO Identified	2009-11	2009-11	SGIP	
		✓	TPMO6	Development of Requirements By PAPWG	2010-06	2010-06	SGIP	
			TPMO7	Requirements Handoff to SSO	2010-09		SGIP	
			TPMO8	Standards Handback to PAPWG from SSO	2011-04		SSO	D3, D5 -

						D8
	TPM09	SSO Results submitted to GB by PAP after completing analysis	2011-05		SGIP	
	TPM10	PAP Complete	2011-06		SGIP	
S	T#	PAP Work Tasks	Due	Actual	Resp	D#
✓	T1	Requirements document for Synchrophasors	Sep-2009	Oct-2009	Mark Adamiak	D1
✓	T2	Create outline for IEC mapping document (IEC 61850-90-5)	June-2010	June-2010	HTF3 - Joint IEEE/IEC	D3
✓	T3	Create the draft IEC mapping document (90-5)	Sep-2010	July-2010	IEC WG10	D3
🟡	T4	IEEE PSRC H7 - Power Profile for IEEE 1588 - sponsor ballot	Sept-2010		IEEE H7/C7	D5
✓	T5	Interop demo 1588	Jan-2010	Jan 2010	IEEE H7/C7	D4
🟡	T6	Validate time synchronization requirements	Sep-2010		NIST	D5
🟡	T7	Differences in time stamps C37.118 / IEC 61850	Sep-2010		IEEE H7 / TC57/WG10	D3
🟡	T8	Amendments to IEC 61850	Jan-2011		TC57/WG10	D6
🟡	T9	NIST Testbed for 1588 - Requirements	Sep-2010		NIST	D5
✓	T10	Create a list of enhancements and gaps for C37.118-2005	May-2010	May-2010	Mark Adamiak	D2, D7
🟡	T11	Outline for the Guideline for Harmonizing C37.118-2005 with IEC 61850	Sep-2010		Ron Farquharson	D8

Status	Schedule	Deliverables	Resources
January 2010	🟡	🔴	🔴
February 2010	🟡	🟡	🔴
March 2010	🟡	🟡	🔴
April 2010	🟡	🟡	🔴

May 2010			
June 2010			
July 2010			
August 2010			

Status of PAP14: Transmission and Distribution Power Systems Model Mapping (11.2.1)

Updated Aug 26, 2010.

A# Current Activities and Accomplishments		S D# Deliverable	
A3	Received IEEE permission to share C37.239 in PAP 14 through email, sent	✓ D1	Report on the impact of C37.239 on CIM and IEC 61850
A4	Use Cases for Advanced Distribution Expanding to details at greater depth/beadth	✓ D2	A master list of use cases (task 6)
A6	Reviewing prior work to set priorities for most valuable use cases to advance modeling	🔴 D3	New and refined use cases (task 7)
A8	Identifying Modeling Objects and Other Application Communication Standards (IKB)	🟡 D4	Updates of models (task 7)

I# Issues, Concerns & Help Needed		S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
I1	Work requires specialized expertise from participants within the key SDOs IEEE PSRC and IEC TC 57	✓	TPMO1	PAP Initiation	2009-09	2009-09	SGIP	
I3	Need focussed work on the next generation T&D operations Architecture Perspective	✓	TPMO2	PAP Charter Developed	2009-09	2009-09	SGIP	
I4	Need expert help in developing identified use cases in sufficient detail to contribute to standards development	✓	TPMO3	Form Initial Team	2009-09	2010-03	SGIP	
I5	Need to apply expert help in harmonization, integration and unification of key standards	✓	TPMO4	Develop List of Deliverables and Tasks with Assignments	2010-03	2010-06	SGIP	
		✓	TPMO5	SSO Identified	2010-01	2010-01	WG19	
			TPMO6	Development of Requirements By PAPWG	2010-08			
			TPMO7	Requirements Handoff to SSO	2010-09			
			TPMO8	Standards Handback to PAPWG from SSO	2010-11			
			TPMO9	SSO Results submitted to GB by PAP after completing analysis				
			TPM10	PAP Complete				

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
✓	T1	Investigating impact of IEEE PC37.239	Dec-2009	May 2010	Hughes	D1
✓	T2	In the process of creating team to identify Use Cases	April-2010	May 2010	Hughes	D2
✓	T3	Creating initial use case team – T&D DEWG	Sep-2009	March-2010	Hughes	D2
🔴	T4	Creating use case master list, set priorities	Dec-2009	July-2010	WG 19	D2

	T5 Refining use cases	Jun-2010		WG 19	D3
	T6 Reviewing and assigning use cases – WG19 Smart Grid TF to review and assign to other TF's	May-2010			D3
	T7 Develop contributions to communication objects and system models	Dec-2010			D4

Status	Schedule	Deliverables	Resources
January 2010			
February 2010			
March 2010			
April 2010			
May 2010			
June 2010			
July 2010			

Status of PAP15: Harmonize Power Line Carrier Standards for Appliance Communications in the Home

Updated August 18, 2010.

A#	Current Activities and Accomplishments	S	D#	Deliverable
A1	Coexistence subgroup meetings occur every two weeks: every 2nd and 4th Tuesday of the month, 11am-12:30pm ET	✓	D1	Final Task 1 Deliverable and supporting documents
		✓	D2	Final Task 2 Deliverable
		✓	D3	Intermediate reports available NB coexistence mechanism
A2	Agreed on action plan composed of Tasks 1, 2, and 3	✓	D4	Harmonized BB Coexistence standards, P1901, G.9972, standards available from IEEE, ITU-T
A3	Created two PLC focus groups, one on low frequency narrowband and one on high frequency broadband technologies	✓	D5	Announcement of joint IEEE ITU-T work on NB standard.doc
A4	Received the following documentation <ul style="list-style-type: none"> • ISP coexistence specifications contained in IEEE P1901 Draft (D2.01) • G.cx coexistence specifications (Recommendation ITU-T G.9972, version consented in Oct. 2009) - see attachment at end of page • Report from EPRI on appliance connector (document refers to an in-line connector, interfacing the homeowner's communications with the appliance) - see attachment at end of page • List of the Functional Technical Requirements developed for the coexistence/interoperability cluster by the IEEE 1901 Working group. • Home Appliance Requirements (AHAM whitepaper) - see attachment at end of page • Open Han requirements - see attachment at end of page 		D6	NB PLC standard
A5	Task 1 and 2 completed - deliverable posted. <ul style="list-style-type: none"> • BB task group produced a comparison of two BB PLC coexistence standards, G.hn and P1901 ISP. • NB task group produced a NB PLC coexistence mechanism. 			
A5	Harmonization of G.hn and P1901 ISP completed. G.hn approved as G.9972 and P1901			



ISP became part of P1901.

I#	Issues, Concerns & Help Needed
11	<p>Ongoing discussions on whether:</p> <ul style="list-style-type: none"> - Only SDO-based technologies or also proprietary ones should have access to the implementation of coexistence mechanisms, - SDO-based technologies should have priority over proprietary or industry alliance backed ones in accessing channel resources <p>A possible resolution is to adopt the same rationale adopted in IEEE 1901 and ITU-T G.hn: limit access to ISP resources only to specific SDO-based technologies: IEEE 1901 Access and In-Home, and ITU-T G.hn</p>
12	<p>Ongoing discussions on whether coexistence should include installed base of PLC technologies and how</p> <p>Partial alleviation of this problem can be achieved using the techniques described in ITU-T Contribution 09GS-078 (ITU-T Contribution 09GS-078 for PAP15.pdf)</p>
13	<p>It appears that even if PAP15 members vote for one SDO to develop a NB PLC coexistence standard, the other SDO may continue to develop its own coexistence standard, thus necessitate future PAP15 harmonization efforts. The voting was suspended, awaiting for SDOs to work out a collaborative project to develop one common coexistence standard.</p>

S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
✓	TPMO1	PAP Initiation	2009-10	2009-10	SGIP	All
✓	TPMO2	PAP Charter Developed	2009-11	2009-11	SGIP	All
✓	TPMO3	Form Initial Team	2010-01	1020-01	SGIP	All
✓	TPMO4	Develop List of Deliverable and Tasks with Assignments	2010-01	2010-01	SGIP	All
✓	TPMO5	Work with SDOs to harmonize BB PLC Coexistence standards	2010-06	2010-06	IEEE,ITU-T	All
🟡	TPMO6	Select SDO for NB PLC coexistence standard	2010-07	XXXX-XX	SGIP	
🟢	TPMO7	Development of Requirements for NB PLC By PAPWG	2010-10		SGIP	
🟢	TPMO8	Requirements for NB PLC Handoff to SDO	2010-10		SGIP	
🟢	TPMO9	Standards Handback to PAPWG from SDO	2011-??	IEEE,ITU-T		
🟢	TPM10	SSO Results submitted to GB by PAP after completing analysis				
🟢	TPM11	PAP Complete				

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
✓	T1	Create a list of existing PLC technologies and revise them according to home appliances requirements	March 23rd, 2010	March 23rd, 2010	Subgroup on coexistence	D1-Final deliverable posted
✓	T2	Create a list of existing coexistence mechanisms and revise them according to home	March 23rd, 2010	April 13th, 2010	Subgroup on coexistence	D2-Final deliverable posted

		appliances requirements				
<input checked="" type="checkbox"/>	T3	Harmonize coexistence standards if multiple candidates are found	IEEE and ITU finalize the alignment of the BB-PLC coexistence specs	June 2010	BB Task Force of Subgroup on coexistence	D4-Work completed, BB coexistence standards approved by ITU-t and IEEE in June 2010.
<input checked="" type="checkbox"/>	T4	Develop Narrow Band (NB) Coexistence mechanism	April 2010	April 27, 2010	NB Task Force of Subgroup on coexistence	D3-Report delivered,
	T5	Select an SDO to develop NB Coexistence standard	June 2010	August 10, 2010	Subgroup on coexistence	Voting postponed, July 27, await joint SDO proposal, D5-IEEE, ITU-T joint announcement delivered.
	T6	IEEE and ITU-T to jointly develop a NB PLC standard	TBD			D6-standard specification

Status	Schedule	Deliverables	Resources
January 2010			
February 2010			
March 2010		<input checked="" type="checkbox"/>	
April 2010		<input checked="" type="checkbox"/>	
May 2010			
June 2010		<input checked="" type="checkbox"/>	
July 2010			
August 2010			

Status of PAP16: Wind Plant Communications

Updated August 31, 2010.

A# Current Activities and Accomplishments		S	D#	Deliverable			
A1	Requirements mapped to E61400-25	✓	D1	Requirements related to wind power plant communications from use cases			
A2	Gaps identified, identifying recommendations	●	D2	Requirements mapping and gaps existing between 61400-25 standard and Task 1 use cases			
A3	Hosting Cross-PAP session at Fall SGIP Meeting	●	D3	Best practices on the application of 61400-25 in the US			
		●	D4	Specific recommendations to the IEC TC 88 working group			

I#	Issues, Concerns & Help Needed	S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
		✓	TPMO1	PAP Initiation	2010-01	2010-01	SGIP	
		✓	TPMO2	PAP Charter Developed	2010-02	2010-02	SGIP	
		✓	TPMO3	Form Initial Team	2010-03	2010-03	SGIP	
		✓	TPMO4	Develop List of Deliverables and Tasks with Assignments	2010-04	2010-04	SGIP	D1
		✓	TPMO5	SSO Identified	2010-02	2010-08-05	PAP16wg	D1
		●	TPMO6	Development of Requirements By PAP 16 WG	2010-09		PAP16wg	D2,D3
		●	TPMO7	Requirements Handoff to SSO	2010-10		PAP16wg	D4
		●	TPMO8	Standards Handback to PAPWG from SSO	2011-07		SSO	
		●	TPMO9	SSO Results submitted to GB by PAP after completing analysis	2011-08		PAP16wg	
		●	TPM10	PAP Complete	2011-11		PAP16wg	

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
✓	T1	Develop requirements related to wind power plant communications from use cases	June-2010	June-2010	UWIG et al	D1
✓	T2A	Map the requirements of task 1 into 61400-25.	July-2010	August 2010	PAP 16/61400-25 User Group	D2
●	T2B	Identify Gaps and deveop recommendatios.	September 2010		PAP 16	D2
●	T3	Develop a best practices list for the application of 61400-25. Identify opportunities to harmonize the CIM and 61400-25	September-2010		UWIG/All	D3
●	T4	Provide specific recommendations to IEC TC 88 through USTAG for 61400-25 and follow-up	November-2010		All/UWIG/61400-25 User Group	D4
●	T5	Coordinate with PAP 7 in extending ES-DER standards to transmission level	September -2010		PAP 16 / PAP 7	D4

Status	Schedule	Deliverables	Resources
July2010	●	●	●
August 2010	●	●	●

Status of PAP17: Facility Smart Grid Information Standard

Updated August 31, 2010.

A#		Current Activities and Accomplishments	S	D#	Deliverable
A1		SGIPGB Establishes PAP17		D1	Use cases and requirements
A2		ASHRAE has finalized their committee 8/9/2010 ASHRAE Information		D2	Information Models
A3		ASHRAE SPC held first meeting 8/30-3/31, created seven sub groups to tackle important issues ASHRAE Information		D3	Draft Standard
				D4	Published Standard

I#	Issues, Concerns & Help Needed
I1	TBD

S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
✓	TPMO1	PAP Initiation	2010-07	2010-07	SGIP	
✓	TPMO2	PAP Charter Developed	2010-07	2010-07	SGIP	
	TPMO3	Form Initial Team	2009-08		SGIP	
✓	TPMO4	Develop List of Deliverables and Tasks with Assignments	2010-07	2010-07	SGIP	
✓	TPMO5	SSO Identified	2010-07	2010-07	PAP17WG	
	TPMO6	Development of Requirements By PAPWG			PAP17WG	D1
	TPMO7	Requirements Handoff to SSO			PAP17WG	
	TPMO8	Standards Handback to PAPWG from SSO			SSO	
	TPMO9	SSO Results submitted to GB by PAP after completing analysis			PAP17WG	
	TPM10	PAP Complete			PAP17WG	

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
✓	T1	Form ASHRAE Standard Project Committee (SPC) to execute the tasks from this PAP	2010-07	2010-07	ASHRAE	D1
	T2	Assemble data requirements from existing use cases referenced above	2010-09		ASHRAE	D2
	T3	Initiate public review of	2011-		ASHRAE	D1

	draft Facility Smart Grid Information Standard	01			
T4	Publication of final Facility Smart Grid Information Standard	2011-04		EIS Alliance	D1

Status	Schedule	Deliverables	Resources
August 2010			

