

EWG 07 2011A

Addressing Challenges of AMI Deployment in APEC

2011/5/1 ~ 2011/4/31

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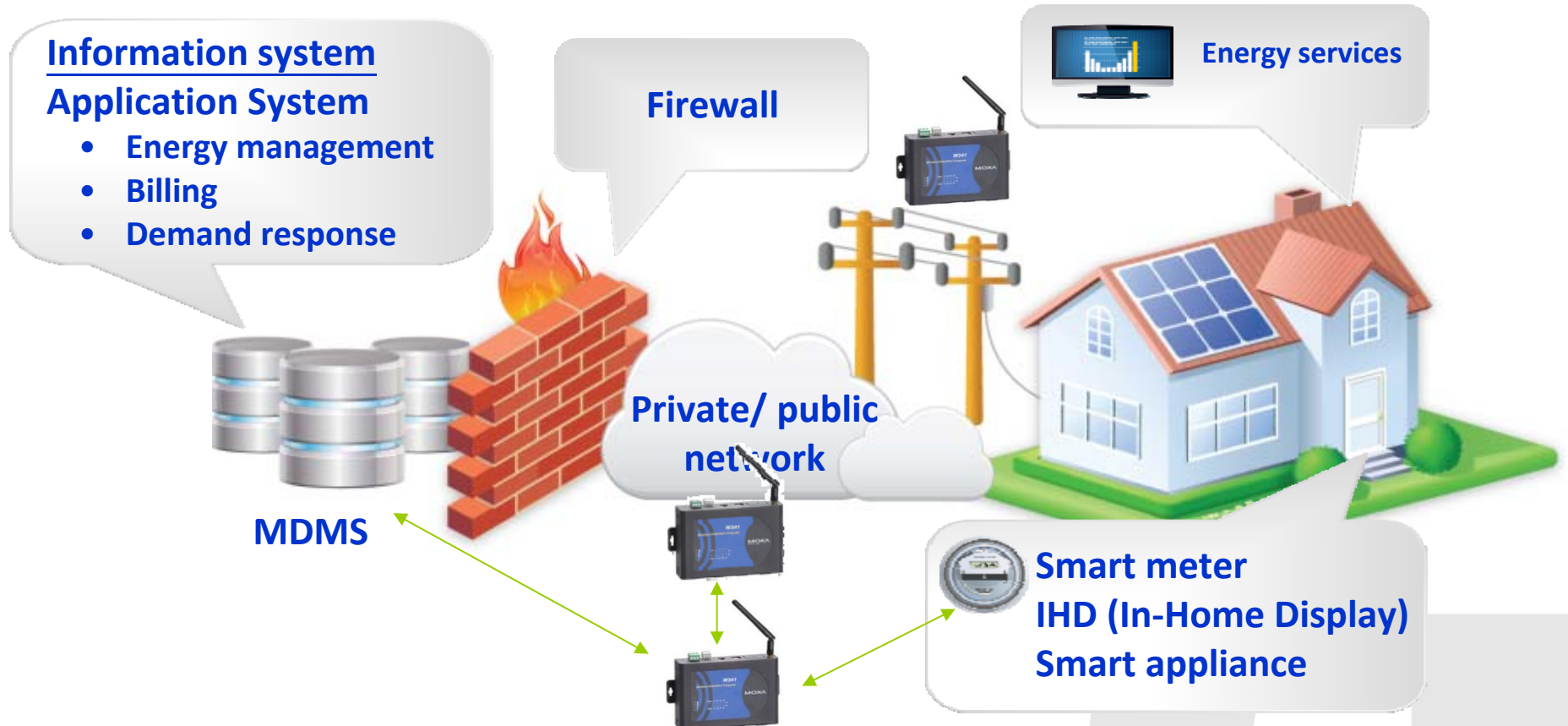
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What is AMI?

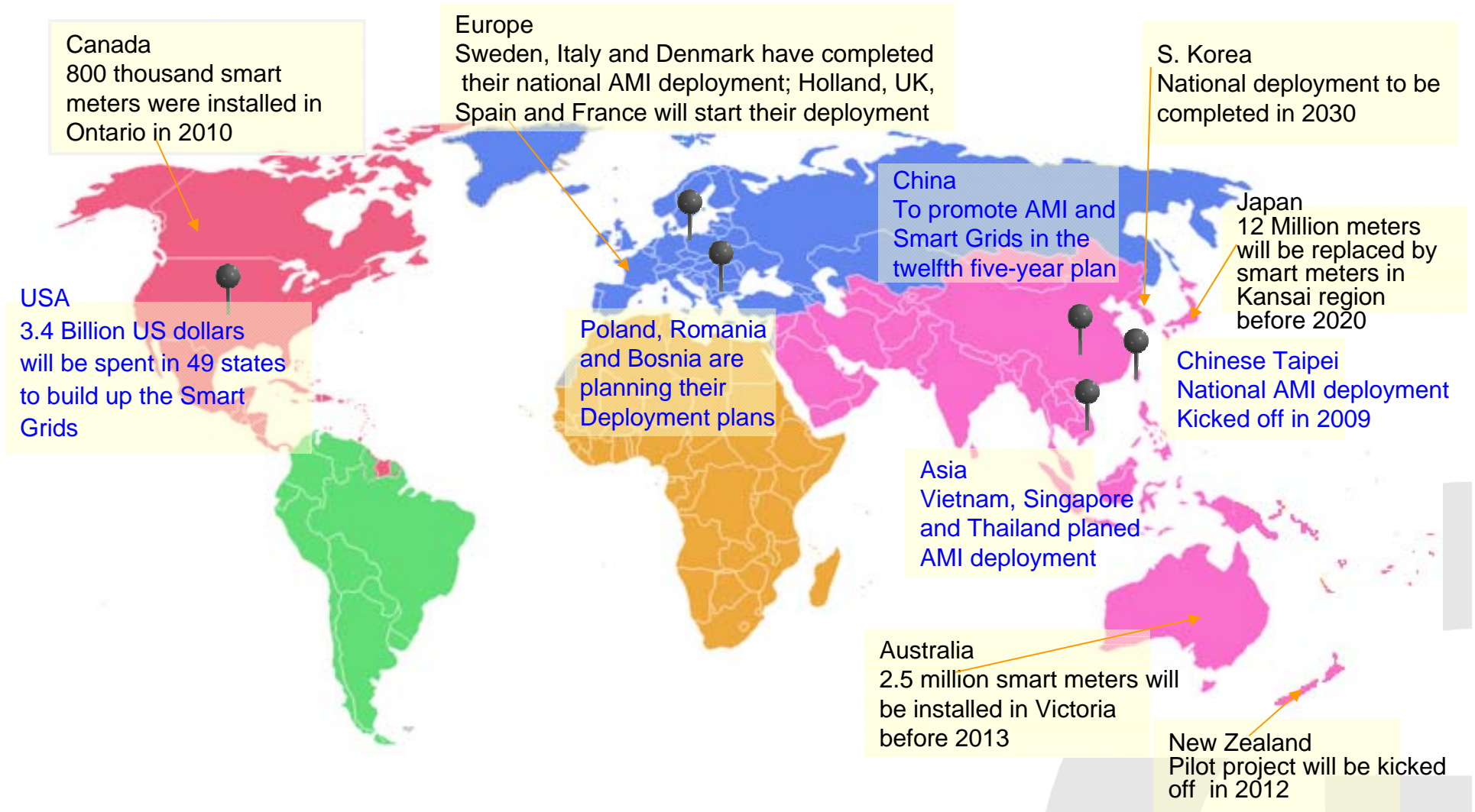
AMI system consists of the smart meter, concentrator, communication system and the MDMS

AMI (Advanced Metering Infrastructure) is built for interaction between energy suppliers and users. The bi-directional data transmission is essential for AMI. It is also the cut-in point of smart grid.





AMI Deployment Worldwide



Project Objects

- **Investigate and confer the development strategies and current status of AMI in APEC economies.**
- **Identify effective AMI polices and best practices.**
- **Offer guidelines to economies and industry for AMI deployment.**
- **Provide recommendations for power network upgrading and Smart Grid integration.**
- **Increase the awareness and effectiveness of AMI.**

Approaches

- A survey to collect the AMI deployment worldwide
- An international workshop to increase the awareness of AMI
- A questionnaire to interview the key persons involved in AMI deployment around APEC economies

Job items	M1 (May/20 11)	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12 (April/20 12)
Survey			* 1		* 2		* 3		* 4			
workshop			* 5	* 6								
interview					* 7		* 8		* 9			
Final report												* 10

now



Check Points

Number of check points	Work item	Current status
1	Survey AMI deployment in Australia	Done
2	Survey AMI deployment in Europe	progressing
3	Survey AMI deployment in US	
4	Survey AMI deployment in Asia	
5	Invite speakers and arrange workshop	done
6	Workshop hosting	24-25/8
7	Questionnaire design and revise	progressing
8	Questionnaire delivery to APEC members	
9	Data collection and analysis	
10	Final report	

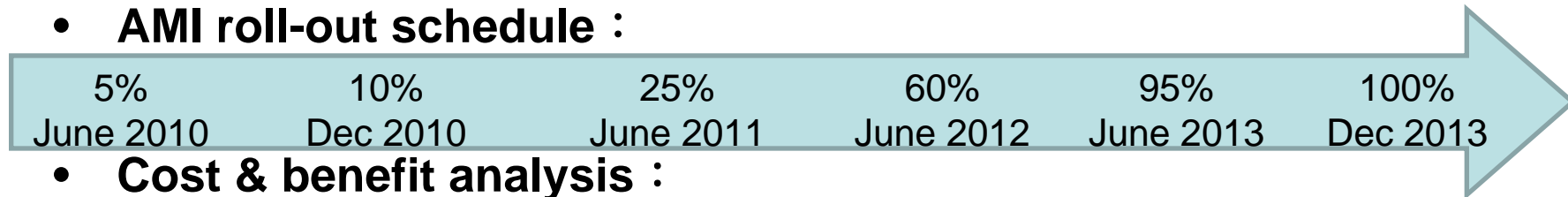
Current Status

- **Australia Data survey**
 - each state has its own deployment plan
 - Minimum AMI Functionality Specification and Minimum AMI Service Levels Specification
- **Workshop**
 - 23rd & 24th August, 2011
 - Taipei International Convention Center (ITCC)
- **Questionnaire**
 - Identify the framework, such as environment, policy, and economic

Victoria—Leading the way in Australia

- **Scope : 2.5 million households and small business with smart meters.**

- **AMI roll-out schedule :**



- **Cost & benefit analysis :**

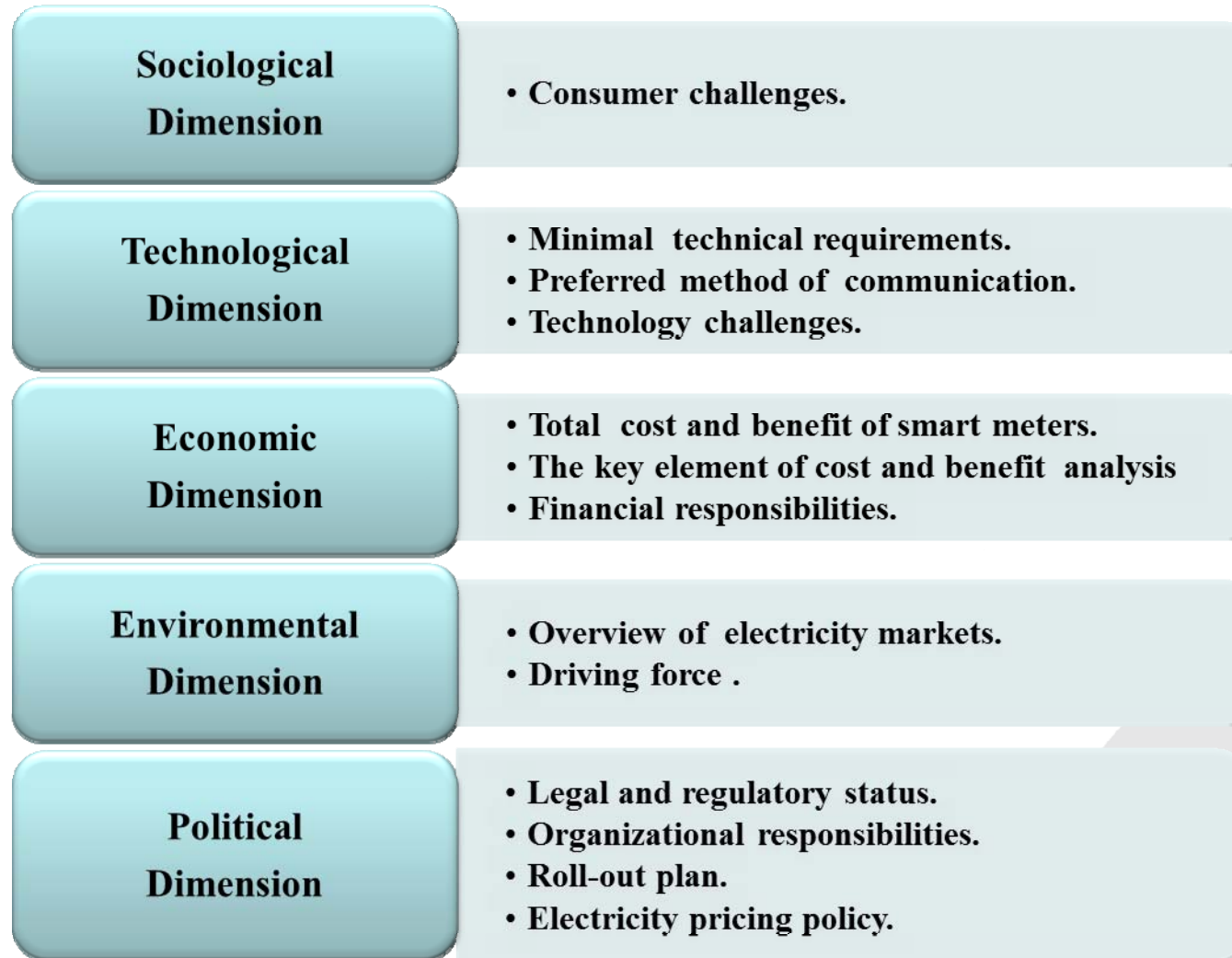
- Cost : 1.6B AUD over 20 year.
- Greater efficiencies should save some 2.5B AUD~5B AUD over 20years.
- AER (Australian Energy Regulator)makes draft determination on Victorian smart meter costs and charges.(2011/07)

	2011	2012	2013	2014	2015
SP AusNet	93.83	101.02	108.75	117.08	126.04
United Energy Distribution	92.12	99.57	107.62	116.33	125.73
Jemena Electricity Networks	136.7	155.84	159.86	162.34	164.88
Citipower	91.38	93.38	95.26	37.17	99.13
Powercor	95.01	92.72	93.91	95.12	96.34

Source : AER(2000/07)



AMI Questionnaire



Further Work

- **Survey and compare the AMI deployment requirements from different cases worldwide**
- **Summarize the conclusions of the invited speakers to the workshop**
- **Finish the questionnaire and revision**
- **Identify the appropriate candidates among APEC economies as the potential sample for questionnaire**



Appendix

Methods

- **Investigate AMI deployment worldwide**
- **Identify the real value and benefits of AMI**
- **Exchange ideas and learn experiences from experts**
- **Understand the concerns while deploying AMI**
- **Offer guidelines for planning AMI**