

Buildings Technology Research and Development Subcommittee
September 25, 2007

Location: DOE Forrestal Building 6A-110
Time: 1:30-3:30

Attendees¹

Shyam Sunder
Jerry Dion
Kevin Hurst
Paul Domich
Dru Crawley
Donna McIntire
John R Weber
Mike Ritter
Ken Sandler
Cyndi Vallina
Douglas Fouth
Alan Heckt
Hunter Fanney
Diane Stewart
Mark Halverson
Rob Sandoli
Alan Schroeder
Juan D. Lopez
Bob Thompson
Mila Kennett
Calvin Kam
Kevin Kampschroer
Charles Matta
Dana Bres
Ed Pinero
Steve Bushby
Bobbie Lippiatt
Lloyd H. Siegel
Camille Villanova

Agency/Office

DOC/NIST
DOE/EE-Buildings
EOP/OSTP
DOC/NIST
DOE/EE-Buildings
DOS/OBO
Architect of the Capitol
USDA Forest Service
EPA/Green Buildings
EOP/OMB
NSF
EPA
NIST
HHS
PNL
DOS
DOE/EE-Buildings
EOP/CEQ/OFEE
EPA (via teleconference)
FEMA
GSA/Office of Chief Architect
GSA/Applied Science
GSA/Office of Chief Architect
HUD/PD&R
EOP/CEQ/OFEE
DOC/NIST
DOC/NIST
DVA/CFM
DOL/OSHA

Next Meetings

November 15, 2007 1:30-3:30, GSA Training Room, L'Enfant Plaza
December 20, 2007 1:30-3:30, GSA Conf Room A, L'Enfant Plaza

¹ Members present listed in black type – members not attending identified in light gray

Introductions: Subcommittee Co-chair Jerry Dion (DOE) opened the meeting of the Buildings Technology Research and Development (BTRD) Subcommittee welcoming the agency representatives and thanking them for their participation.

Overview of Subcommittee Charter and Scope – Kevin Hurst (OSTP) discussed the status of the draft Subcommittee charter and queried members on any additional comments or amendments. Following a discussion on indoor environmental factors, the “Purpose” section (second bullet) will include “to benefit human health and productivity”. Following a final review by agencies previously providing comments, Hurst will initiate the formal signing of the charter.

ACTION ITEM: Paul Domich will make the changes to the Subcommittee Charter and forward it to members for final approval.

International Activities: Hurst raised the issue of international cooperation and opened a discussion on possible international cooperation roles that the Subcommittee may wish to assume. Following a brief synopsis of individual agency international activities, several possible international roles were proposed for the subcommittee. Domich will schedule a teleconference that includes BTRD Chairs, OSTP, and Greg Manuel from DOS to discuss these possible future international activities.

ACTION ITEM: Paul Domich will make the arrangements for the teleconference on international cooperation related to building technology and energy efficiency.

Section 913 Report - Dion presented a brief overview of the planned Section 913 Report documenting the federal strategy for improving energy technology systems and materials and the energy efficient automated operation of buildings and building systems. Dion highlighted that the proposed scope of the Section 913 Report goes beyond that mandated by Congress in EPACT 2005 and includes other important areas technologies including high performance, sustainable/green, water conservation technologies. The specific requirements to the Section 913 Report will be satisfied by the proposed subcommittee report.

Subcommittee recommendations on the draft outline include:

- Justification of need for an interagency R&D plan for building energy technologies through references to traceable national documents (e.g., November 2006 PCAST report titled “The Energy Imperative”, National Academy studies, etc.).²
- Delineation of desired outcomes (e.g., target reductions, performance) from the technologies used to achieve those outcomes. The outline will be

² The report as a whole should answer questions such as: What is the problem and why is it hard? How is it solved today and by whom? Why can we succeed now? What are the new technical ideas? What is the research plan? What is the impact if successful and who would care? Why should the federal government do this?

modified to include a preamble section either to the entire report or to specific sections that describes these desired outcomes.

- Discussion of the energy issues surrounding the entire life cycle of buildings – design, construct, commission, operate and maintain, dispose.
- Modifying the general structure of the Section 913 report to incorporate a major section covering elements common for both commercial and residential buildings followed by a second major section that discusses technologies and issues specific to each.
- Address water conservation as an element for both residential and commercial buildings as opposed to having distinct sections standing alone.

The overall content of the outline was deemed adequate with the exception of water conservation. DOE, NIST, EPA, USDA and DOS agreed to work together to update the outline based on subcommittee feedback and on adding content to the water conservation elements. Topics related to residential buildings are of interest to EPA, USDA, and HUD.

The 913 Report will be 25-30 pages in length, a rough draft is expected in February 2008, and a refined first draft is expected in April 2008. A final report for agency review and sign-off will be available by August 2008.

The general format of the report was also discussed. A sample guide for the report will be circulated to subcommittee members for their reference.³

ACTION ITEM: The outline will be modified as suggested and circulated to DOE, NIST, EPA, USDA and DOS for additional development of the water conservation elements for both the residential and commercial buildings sections. Once completed, the outline will be circulated to all subcommittee members.

ACTION ITEM: Paul Domich will circulate the National Plan for Critical Infrastructure R&D as a sample report document. See footnote #3.

Nomination of Agency Working Group: Each representative described the preferred roles for their agency in developing the Section 913 Report. DOE described their lead role and the contributions from DOE National Laboratory staff. NIST will provide both writing and editorial resources in addition to content related to standards, performance metrics, and measurement technologies. EPA will contribute both to the development of green technologies (coordinating with the EPA Green Technologies Working Group) and in policy development. HHS, Architect of the Capital, OFEE will provide review roles. HUD will be encouraged

³ Sample report include the President's American Competitiveness Initiative, February 2006 (<http://www.whitehouse.gov/stateoftheunion/2006/aci/aci06-booklet.pdf>) and the NSTC Subcommittee on Disaster Reduction's Grand Challenges for Disaster Reduction, October 2005 (<http://www.ostp.gov/nstc/html/SDR%20Grand%20Challenges%20for%20Disaster%20Reduction.pdf>)

to assist in the development of residential elements to the subcommittee report. USDA will contribute broadly across sections that include use of wood products.

ACTION ITEM: The revised outline will be annotated by section identifying the contributing agencies and will be circulated to the members for their review. HUD participation on the residential sections will be encouraged.

Subcommittee Meeting Schedules and Execution Plan: The BTRD Subcommittee is scheduled to convene meetings every quarter. The Workgroup will meet monthly. Subcommittee members are welcome to attend the Workgroup meetings. The schedule dates for upcoming meetings include October 18, November 15, and December 20 from 1:30 pm to 3:30 pm. The rough draft should be available by February 2008, a complete first draft report by April, with a final report available by August 2008.

ACTION ITEM: Paul Domich will contact Steve Hagan (GSA) regarding meeting room in the regional GSA office at L'Enfant Plaza. Dru Crawley will reserve a back-up room for the October 18th workgroup meeting.

ACTION ITEM:

Closure: Shyam Sunder and Jerry Dion thanked the agency representatives.