



CABA'S CONNECTED HOME COUNCIL

Connected Home Council (CHC) Meeting Minutes
Hosted by Qualcomm, La Jolla, CA
Friday, October 12, 2012
9 AM – 11:15 AM PT
DRAFT MINUTES

Meeting Participants:

Gianluca Arcari, CSA Group
Ron Bernstein, Lonmark International
Kris Bowring, Best Buy Co., Inc.*
Jonathan Cluts, Microsoft Corporation
Derek Cowburn, LumenCache Inc.
Tim Enwall, Mobiplug Networks Inc.
Ken Fairbanks, The Duchossois Group/AMX/Chamberlain Group
David Foote, Hitachi Communications
John Hall, CABA
Steve Harvey, Strategy Analytics
Fabrice Hoerner, Qualcomm Incorporated
Grant Kroeger, Qualcomm Incorporated
Dennis Kyle, Tendril Networks Inc.
Andre Lalande, Lutron Electronics Co.
Michael Lehman, Zanthus Corp.
David Leon, ShowStoppers
Anthony Lui, CSA Group
Robert Lutz, Systech Corporation
Michael Marks, Zonoff, Inc.
Takefumi Matsumoto, Buffalo Inc.
Maurice Okawaki, Frost & Sullivan
Roxy Podlogar, Tendril Networks Inc.
Carol Priefert, Consumers Energy
Barry Rogers, SecurTek Monitoring Solutions
Ram Sastry, Samsung Telecommunications America
Sam Sciacca, SCS Consulting LLC* (IEEE)
Gareth Selfe, Logitech
Francis Sideco, IHS Research
Bent Sorenson, Z-Wave Alliance*
Brian Stephenson, TE Connectivity*
Mark Trayer, Samsung Telecommunications America
Ken Wacks, Ken Wacks Associates
Jeremy Wong, Qualcomm Incorporated
Carole Wiedmeyer, Zanthus Corp.
Ron Zimmer, CABA

(* Connected by teleconference)

1. Welcome and Introductions – Ron Zimmer, CABA President & CEO

Ron Zimmer, CABA President & CEO, chaired the meeting on behalf of CHC Chair, Scott Burnett of IBM, who was not able to attend due to illness. Ron welcomed new CHC members and attendees to the meeting and announced that the meeting would move quickly and according to the agenda. Ron invited all attendees to attend the Miramar Air Show, as VIP guests of Qualcomm, immediately following the meeting. John Hall circulated an attendance sign-in sheet, to expedite the meeting schedule. The CHC meeting minutes

of August 17, 2012 were discussed and motioned to pass – the motion was accepted by Andre Lalande and seconded by Ken Fairbanks.

Ron thanked Grant Kroeger and Fabrice Hoerner and the team at Qualcomm for their excellent hospitality in hosting both the CHC meeting and the CABA Digital Home Forum. Ron mentioned that the meeting minutes of August 17, 2012 and all presentations from the current CHC meeting could be viewed and downloaded on the CABA website at: <http://www.caba.org/connected-home-council>. Ron called upon the Council for any new CHC business, and reminded attendees that new business or initiatives in which the CHC may consider, or become involved, could be passed along to the CHC Executive or the CABA Board members.

2. Smart Grid Working Group Sub-Committee Update – Working Group Chair, Brian Stephenson, TE Connectivity

Sub-Committee Chair, Brian Stephenson, updated the Council on recent meeting proceedings of the Smart Grid Working Group. The Working Group was formed to better understand the feasibility and timing of large-scale deployment of Smart Grids, and who the primary beneficiaries may be. Therefore, discussion often encompasses the benefits and constraints for end-use consumers, moving through the value chain - from smart home OEMs, to the capacity and distribution capabilities of utilities and energy producers. All discussions add to the growing body of knowledge concerning market potential, monetization, and the creation of functional economic models to provide widespread rollout - with effective incentives throughout the value chain. Brian provided an update of recent Working Group activities including the examination of utility incentive programs, a related CEA working group also examining residential Smart Grid developments, and upcoming field trials of new standards in grid implementation to take place next year. The Smart Grid Working Group was also pleased that their recommendation for the “impact of Smart Grid on Connected Homes” research project was just completed.

It was also announced that all CABA CHC members were invited to join the Smart Grid Working Group to attend the **IBM Smarter Home** demonstration on energy management, by Jochen Burkhardt, IT Architect, IBM Software Group, IBM. Jochen, who is based in Germany, will be providing a web-based guided tour of the IBM Smarter Home – detailing the operation of latest energy management systems, on **Thursday, November 8, 2012 at 11 AM – 12:30 PM ET**. An announcement to all CHC members will be sent by CABA, and attendees are asked to register with Tony Disipio (Disipio@CABA.org) to get the LiveMeeting details and call-in codes.

To become a member of the CHC Smart Grid Working Group and to join the next meeting, please contact Brian Stephenson (brian.stephenson@te.com), Tony Disipio (Disipio@CABA.org) or John Hall (Hall@CABA.org) for more information. Working Group teleconference meetings are normally held every second Thursday of the month from 2 PM – 3 PM ET.

3. IEEE-SA Standards-Related Activities for Smart Grid – Sam Sciacca, President, SCS Consulting LLC, representing the IEEE Standards Association

Sam Sciacca gave an overview of the IEEE Standards Association and the full standards life cycle activities with regards to smart grid. This included an overview of the incubation activities, standards development activities, and post standards activities that are helping to shape the smart grid market. Smart Grid represents the new business frontier, as an estimated \$13 billion will be spent on modernizing power grids worldwide, by 2030. Standards such as IEEE 802.11 will be critical to the growth of Smart Grid as an open wireless solution in the communications network security and management layers. The IEEE will leverage its strength in Smart Grid development, as the world’s largest professional association in advancing technology – with over 7,000 active members, 900 active standards and 500 standards under development. The IEEE is an open organization in terms of membership, participation and governance – with no restrictions.

Sam detailed IEEE Smart Grid Standards Initiatives in terms of the standards activity life cycle, detailing pre-standards activities such as incubation and bringing new technologies from research into standards development. Standards development activities happen on an individual

and entity basis, using e-tools that have currently updated 100+ foundational standards for Smart Grid. Standards implementation (involving ICAP, registration authority and patent pools) is part of the IEEE professional services, enabling market acceptance, certification and implementation. For more detailed information regarding IEEE pre-standards activities, standards development and implementation, the complete presentation can be found at:

<http://docs.caba.org/documents/minutes/IEEE-SA-Standards-Related-Activities-For-Smart-Grid.pdf>.

4. Z-Wave Alliance Update – Bent Sorenson, Director of Sales, Sigma Designs, representing the Z-Wave Alliance

The Z-Wave Alliance was formed in 2005 as a consortium of leading global companies dedicated to delivering affordable, interoperable, easy-to-use, wireless home control products and applications to consumers. A long-standing member of CABA, today the Alliance is 160+ members strong with products and applications which span smart energy, aging independently, entertainment control, hospitality, security and remote home management, lighting, window and shade control, smart appliances and more. Z-Wave is growing faster than any other RF technology of its type in the residential space and is used in products and applications that benefit from its secure communications, low power battery operation, mesh network coverage and reliability and best-in-class cost and overall performance.

Bent Sorenson, of Sigma Designs, provided an update of Z-Wave Alliance activities, highlighting the following milestones and accomplishments for 2012: Z-Wave was ratified by the ITU-T as the international standard, G.9959, and the Alliance announced its 700th interoperable product at CEDIA 2012. As well, the Interoperability Lab in NJ provides a variety of testing and supporting services to Z-Wave Alliance Members, and finally, Z-Wave Home control technology was deployed in the majority of US Alarm panels - including those of 2GIG, Vivint/Blackstone, Honeywell, ADT, and Alarm.com. The complete detailed Z-Wave presentation can be found at: <http://docs.caba.org/documents/minutes/wzave-chc-presentation.pdf>.

5. CABA CHC White Papers Sub-Committee – John Hall, CABA Research Director

CABA Research Director, John Hall, discussed the formation of “CHC White Papers Sub-Committee”. The purpose of the Sub-Committee is to provide the CHC membership with detailed information regarding “hot button” issues in the Connected Home market for the development of new “CHC White Papers” – which would be both timely and relevant to members and their organizations.

The complete presentation can be found at: <http://www.caba.org/connected-home-council>, “Connected Home Council White Papers Initiatives”. The following is a brief summary of the presentation:

- At the CHC meeting of August 17, 2012 the following was discussed:
 - The CHC White Papers Sub-Committee become a permanent Sub-Committee of the Council – with volunteer contributor “Subject Matter Experts” (SMEs), an individual white paper working group structure, and a Chairperson to guide the process and report back to the CHC at subsequent meetings.
 - The Council should approve the CHC White Papers Terms of Reference to govern the process, the collection, production and dissemination of white papers, and the roles of contributors and vendors. The complete Terms of Reference can be found at: <http://docs.caba.org/documents/CHC-White-Papers-Sub-Committee-Terms-of-Reference.pdf>.
 - The CHC should conduct the “White Papers Survey” with the membership twice per year (spring and fall), to refresh ideas and get feedback for new areas of interest for white papers development. **Subsequently, it was decided that CHC members be able to submit new ideas for white papers at any time, and in addition to, the bi-annual survey.**

- The first CHC White Paper to be undertaken would be, “Connected Home Energy Management through Cloud Technology”.

The CHC membership ratified the discussion of the August 17 meeting, and accepted the permanency of the Sub-Committee, approved the White Papers Terms of Reference and agreed that the White Papers Survey should be conducted on a bi-annual basis to refresh topics for white paper production. As well, the Council agreed that the proposed volunteer contributor “Subject Matter Experts” (SMEs), and individual white paper working group structure be adopted. It was further agreed that all CHC members be able to submit potential white paper topics to the Sub-Committee at any time throughout the year.

We are very pleased to announce that Ken Fairbanks, Senior Director, Business Development, The Duchossois Group, will be the Chair of the CHC White Papers Sub-Committee. As well, several member research consultancies expressed interest in working with the Sub-Committee to develop individual white papers. John Hall of CABA will be working closely with Ken Fairbanks in the coming weeks to convene the first Sub-Committee meeting. All members of the CHC will be invited to attend the initial meeting, to further develop white paper topics and establish individual working groups and timelines. If you would like to take part in the White Papers Sub-Committee as a Working Group SME or vendor/developer, or if you have a suggestion for White Paper development – please contact John Hall at 613.686.1814 ext. 227, or at Hall@CABA.org.

6. CHC Landmark Research Update – John Hall, CABA Research Director

6.1 “Impact of Smart Grid on Connected Homes” - 2012 Landmark Research

Study research vendor, Frost & Sullivan completed the study and delivered the presentation/ webinar and MS Word report files to CABA. All reports and presentations have now been distributed the twenty-five (25) member sponsors, of which sixteen (16) were on the project Steering Committee. Qualcomm hosted the final project webinar, on **Wednesday, October 10** – to which over twenty (20) study sponsors attended in-person or remotely, via webex.

As the final presentation has been delivered, the study sponsors have agreed that the research will be under embargo until **February 10, 2013** – and then be made available to the industry for purchase in the CABA eStore. For more information regarding purchase of the report, post-embargo, please contact CABA Business Development Manager, George Grimes at Grimes@CABA.org or at 613.686.1814 ext. 226.

All CABA members have been notified that the study MS Word report Executive Summary and Webinar Presentation Executive Summary has been placed in the CABA Members Research library, for viewing and download. If you require your pass codes to access the study Executive Summary Package in the library, please contact Tony Disipio at Disipio@CABA.org and he will forward them to you.

As this Connected Home 2012 Landmark research project comes to a close, this project was a success, in that it provided study sponsors with timely and relevant insights to the development and deployment of residential Smart Grid – with regard to the value chain, business models, consumer perceptions, barriers and opportunity areas, segments, characteristics and key trends in the market. We would like to thank all of our sponsoring organizations and Frost & Sullivan for their participation, contributions and extraordinary efforts in producing this Landmark Research study.

6.2 Selection of 2013 CHC Landmark Research Project

CABA members and delegates discussed the current CABA research strategy to identify gaps and opportunities at the Digital Home Forum on October 11, 2012, for ideation and selection of the CHC Connected Homes collaborative Landmark Research project for 2013. All participants were in agreement that the collaborative approach to this major research project was beneficial to participants, as it brought new and varied perspectives and a rich context to the study. The

research ideation session was very well received and generated more than ten (10) new and relevant prospective topics for the Connected Homes Landmark Research for 2013.

After members and delegates were polled, a majority selected “**Monetization Modelling of Connected Homes**” as the favored area for investigation for the CHC Landmark Research project for 2013. A recap of the rationale, process and final research selection is summarized in a presentation at: <http://www.caba.org/connected-home-council>, “Connected Home Landmark Research Selection 2013 – John Hall, CABA”.

The “Monetization Modelling of Connected Homes 2013” Landmark Research project will soon be under development – with research prospectus development and an introductory study webinar. As we would welcome your input and participation in the initial development of this project, to ensure your interests are incorporated in the study, please contact CABA Research Director, John Hall at Hall@CABA.org. Furthermore, we would be very pleased to discuss any research project ideas you may want CABA to develop and undertake.

7. ShowStoppers Overview – David Leon, Partner, ShowStoppers

ShowStoppers is the leading global producer of press and business events spanning the US, Europe and Asia. Dave Leon is Partner and Sales Director of ShowStoppers, a CABA partner and member. Each ShowStoppers event organizes product introductions, sneak previews and demonstrations for selected journalists, bloggers, industry and financial analysts, venture capitalists and business executives. Industry leaders, innovators and startups exhibit at ShowStoppers events around the world to help generate news coverage and product reviews, make new connections, promote brands, and open new markets. Dave detailed special programs in which CHC members could participate in at ShowStoppers events, such as exhibiting at the Connected Home Pavilion inside ShowStoppers at CES 2013, Las Vegas, NV.

As a number of CABA members have exhibited at ShowStoppers press events, Dave proposed having an area inside the ShowStoppers press event at CES dedicated to bringing media awareness to CABA member companies who are integrating consumer electronics, data and voice communications, broadband, home networking, residential gateways, home office automation, integrated lighting, multi-room AV systems, life/safety and energy management/control, etc. into the connected home. For special rates and the full ShowStoppers presentation, please go to: <http://www.caba.org/connected-home-council>, “ShowStoppers Presentation”.

8. Microgrid Platform, SmartGrid Benefits - Derek Cowburn, Founder, LumenCache Inc.

The Council was pleased to welcome Derek Cowburn, Founder, LumenCache Inc. to deliver a presentation on Microgrid Platform, SmartGrid Benefits. LumenCache was most recently named a 2012 CEDIA Manufacturers Excellence Awards finalist, in the Sustainable Lifestyles Product Innovation Awards category.

LEDs have changed the power requirements for residential and commercial lighting and lighting systems have joined other native DC electronic devices and some motorized devices now changing to DC, to maximize efficiency. As these devices use DC internally, it is logical to distribute DC power in a controlled microgrid - using AC to satisfy the long distance and high current required to reach the microgrid from the Utility. Local DC storage (batteries) do not require further conversion, as SmartGrid demand control over the utility consumption does not need to affect occupants, due to the battery buffer. Finally, renewable sources can directly charge the battery storage and send any excess to the utility. With this, new microgrid platforms will change the infrastructure wiring of buildings and bring benefits to system owners, designers, and utilities.

Derek went onto detail how LEDs have changed the power requirements for residential and commercial lighting, in that increased output can be achieved with ever decreasing wattage. Advances like the DC LED Driver Cube now provide reduced size and higher power efficiency

over the AC driver. It raises the question as to why high power AC is still used to run throughout buildings to low power devices that use only a fraction of the power they formerly used. As incandescent LEDs are DC electronics devices and not raw power consumers, they can be used to greater efficiency than AC to run more appliances and systems. For example, AC drivers can now be built into DC lighting systems. With advances in LED technology, the ability to run high power AC through distributed Microgrids allows high power AC to be sent from Utility to local Microgrids where power and data can be distributed to the field devices. Variations in these devices can be addressed by making the distribution highly modular (per device) and help keep costs down. An ideal distribution medium is Cat5 wire; capable of multiple and simultaneous power options and also data. As well, DC Microgrids can support energy storage in several forms ranging from simple batteries to other efficient buffering storage.

Derek then detailed a system overview with renewable and AC sources, the effects Microgrids could have on enhancing power and data flow, and how simple automation rules can be applied to change the behavior of the system to deliver more aggressive energy saving behavior. LumenCache technology can be central to these developments and provide simpler and lower cost installation, provide an open platform that is highly modular, and simplify adaptation of legacy systems. The complete LumenCache presentation can be viewed and downloaded at: <http://www.caba.org/connected-home-council>, "LumenCache Presentation".

9. Other Business, Closing Comments and Meeting Adjournment – Ron Zimmer, CABA President & CEO

CBA President & CEO, Ron Zimmer, asked meeting attendees for any outstanding business, and reminded everyone that all meeting proceedings, minutes and presentations could be found on the CABA website at: <http://www.caba.org/connected-home-council>. All featured presenters and meeting attendees were thanked for their contributions. A special thanks was given to Qualcomm for hosting the CHC breakfast meeting. Ron announced that the next CHC meeting would be held by teleconference in January 2013. The meeting was adjourned at 11:15 AM PT.

10. Invitation to Miramar Air Show Ron Zimmer, CABA President & CEO

All CHC meeting attendees were invited to attend the Miramar Air Show for the afternoon, as VIP Guests of Qualcomm. Ron thanked Qualcomm for their excellent hospitality and directed all attendees to board the tour buses and pick up their gift in front of the meeting facility at the Estancia Hotel.

Other news items:

1. Information on CABA Councils, Terms of Reference and CHC meeting minutes are posted at: <http://www.caba.org/councils/index.html>.
2. For any CABA CHC member or non-member that wishes to participate in any of the CHC Advisory Boards, Task Forces or Working Groups, please contact Ken Gallinger, CABA Marketing Director, (Gallinger@CABA.org) or the CABA office.
3. CHC meetings are open to all CABA members.
4. If you wish to access the CABA Research Library, please e-mail Tony Disipio: Disipio@CABA.org and he will forward your new passwords.

CABA's Connected Home Council (CHC) Meeting Sponsorship Opportunities:

If you are interested in hosting the CABA Digital Home Forum or sponsoring a CHC meeting or reception, please contact:

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