1. BACKGROUND

The Continental Automated Buildings Association (CABA) is an industry association dedicated to the advancement of intelligent home and intelligent building technologies. CABA is an international association, with over 300 major private and public technology organizations committed to research and development within the intelligent building and connected home sectors. Association members’ are involved in the design, manufacture, installation and retailing of products for home and building automation. CABA is a leader in initiating and developing cross-industry collaborative research, under the CABA Research Program.

CABA has two (2) councils, the Connected Home Council (CHC) focusing on residential homes and the Intelligent & Integrated Buildings Council (IIBC) focusing on larger commercial buildings. Each council produces one (1) large (US$150,000) collaborative Landmark Research project per year which is fully funded by CABA member sponsors. Each Landmark Research project is directed by a steering committee made up of project sponsors. The steering committee provides feedback and input throughout the course of the research to help define the scope, direction, and methodology. CABA and the project steering committee commission a research firm to conduct the research while CABA provides project management.

The intelligent and integrated buildings market is a fast evolving industry segment that is being influenced by a number of emerging industry trends and pressing “hot button” issues. CABA’s Intelligent & Integrated Buildings Council (IIBC) participated in several research ideation sessions to generate topics and select the next IIBC Landmark Research Project for 2015. Several excellent ideas were generated, the top two (2) topics were voted on by the IIBC, and “Intelligent Buildings and Cybersecurity” was selected as the Landmark Research Project for 2015.

In the past all that was required was physical security to protect our buildings and businesses, but today much more is needed. The consideration of cybersecurity has recently come into the mainstream for intelligent and integrated buildings; this has been highlighted through the recent cyber-attacks on Dropbox, iCloud, Target, Sony and others. The causes of these threats ranged from sophisticated software tools to simply leaving the back door open exposing risks. There is no
panacea to solving cybersecurity concerns because threats are constantly evolving, this is why CABA members and the IIBC have selected cybersecurity as the main issue that needs to be addressed in 2015.

The responsibility of managing and protecting our data cannot be solely left in the hands of security and IT professionals; everyone has to play a role in protecting buildings and business from cyber threats. This research will include: an evaluation of the state of cybersecurity in intelligent buildings, a stakeholder analyses via in-depth interviews and directed surveys, a value proposition evaluation for cybersecurity solutions, an assessment of the future market direction and specific recommendations.

2. PURPOSE OF THE RESEARCH

The purpose of this research is to examine various aspects of cybersecurity as they relate to intelligent and integrated buildings.

Topics that might be covered in this research include, but are not limited to, the following:

State of Cybersecurity in Intelligent Buildings
- Trends and evolutions of cybersecurity threats and solutions.
- An outline of the convergence of building systems and devices.
- Issues related to security in wired versus wireless building systems.
- The balance of security and functionality.
- Current security industry standards.
- The key players and emerging players in the industry.

Stakeholder Analysis
- Characterization of cybersecurity in intelligent buildings.
- The responsibility of cybersecurity by manufacturers, service providers, end-users, and organizations as a whole.
- Evaluations of cybersecurity risks and solutions for the end-user, owner, and operator.
- Evaluation of cybersecurity risks and solutions for service providers and technology manufacturers.
- Perceived security risk versus actual security risks.
- Role of convergence of systems.
- Best practices for preventing and dealing with cybersecurity attacks.
Value-Proposition

- Level of security risk (high, medium, low) and specific strategies to mitigate security risks at each level.
- Risks and rewards of effectively dealing with cybersecurity issues for various stakeholder groups.
- Business analysis and value proposition for each stakeholder group.
- Examine the value of cybersecurity prevention.

Future Direction and Recommendations

- Inhibitors to industry growth.
- Risk-benefit analysis for various cybersecurity solutions.
- Evolutions of industry standards.
- Barriers towards adoptions of cybersecurity solutions.
- Industry awareness of cybersecurity issues.
- Role of corporate culture.

Disclaimer: The topics mentioned above are meant to be a general outline of this research project. The final research may not address all the topics outlined above, and additional topics may be added. The scope of the final research will be narrowed down further in the RFP submission process, and later by the Steering Committee.

3. RESEARCH VENDOR QUALIFICATIONS

Overarching criteria will be determined by the Steering Committee and the CABA, via competitive bid criteria and process. At a minimum, the research firm will have a history of working and conducting research relating to connected homes and/or intelligent buildings.

4. STRATEGIC VALUE OF THE STUDY

The outcomes of this collaborative research project should provide the Steering Committee members a clear understanding of the opportunities, risks and solutions of cybersecurity in relation to intelligent buildings. This study will assist organizations to make sound security related business decisions using reliable third party qualitative and quantitative data.

5. PROJECT SCOPE

The scope of the project will be narrowed down in the RFP submission process and then narrowed even further by the Steering Committee once the project is awarded. This prospectus is meant to provide a general overview of the final research project.
6. STUDY APPROACH and RESEARCH METHODOLOGY

This Landmark Research will leverage several different methodologies to maximize the value of and validate the deliverables.

Review and Analyze Existing Applicable CABA and/or Non-CABA Industry Research:

The research will leverage past CABA research and/or other relevant industry research, as well as CABA membership thought leaders to create a base from which the Steering Committee and research firm can begin to develop concept hypotheses for testing.

Methodologies to be considered for opportunity identification and vetting:

Qualitative Research (In-depth Interviews) and Quantitative Research (Industry Questionnaires) will be used.

7. PROJECT DELIVERABLES

The deliverables for this project should consist of the following:

- Introductory webinar to help promote the project to existing members and potential sponsors.
- Kick-off webinar to the Steering Committee to outline the research purpose, scope, objectives, approach, and timelines.
- Bi-weekly Steering Committee meetings (via webinar) to communicate; progress, preliminary findings, approvals of research methodologies, and next steps. Depending on the stage of the study, email updates may at times replace webinar meetings.
- Refined definitions and supporting illustrations of the final concept hypothesis opportunities.
- Opportunity roadmap that ranks, validates, and maps the concept hypothesis opportunities.
- “Print Ready” electronic color Microsoft Word report including executive summary, detailed findings, conclusions, and recommendations. This same information needs to be presented in a Microsoft PowerPoint presentation (full report and executive summary).
Each sponsor will also receive an electronic and hard copy version of the full report and executive summary, as well as an electronic version of the full report presentation and executive summary presentation.

The vendor will identify and flag all the key insights from the final report using CABA's Marketing Insights Management System (MIMS) software.

Upon completion of the research, there will be a final webinar (1.5 - 2 hour) outlining the complete research findings to all the sponsors.

Sponsor webinars (1 hour) will be given to each Steering Committee organization. These webinars will provide an overview of the research findings that are relevant to each Steering Committee organization.

8. PROPOSED TIMELINE

Timeline details will be finalized during the initial planning session by a selected research firm, CABA and the Steering Committee. This timeline is tentatively based on the scope of the project as defined in this document. Depending on the breadth of agreed specification, estimated project duration is eighteen (18) weeks, from prospectus development to final report delivery. Steering Committee members will be asked to provide valued input to project development. The selected research firm, in conjunction with the CABA, will prepare detailed timelines, project milestones, responsibilities, and action/delivery dates; as agreed to by the Steering Committee. Bi-weekly webinars with the Steering Committee will serve to keep sponsors abreast of progress, developments, and key findings.
The following outline may be adjusted, pending confirmation of tasks and timing:

| IIBC Landmark Research 2015: Intelligent Buildings and Cybersecurity – DRAFT/ESTIMATED |
|---------------------------------------------------------------|-----------------------------|
| **Activity**                                                | **Anticipated Date**       |
| Research set-up and kick-off meeting                        | June 1, 2015               |
| Secondary research                                         | TBD                        |
| Primary research                                           | TBD                        |
| Analysis and reviews                                       | TBD                        |
| Draft report delivery                                      | TBD                        |
| Final report delivery                                      | TBD                        |
| Key insights identification using CABA's Marketing Insights Management System (MIMS) software | TBD                        |
| Final webinar (1.5 – 2 hours) with all the sponsors to highlight the findings of the research. | TBD                        |
| Sponsor webinars (1 hour each), one (1) webinar for each organization on the Steering Committee. | October, 2015             |

9. SPONSORSHIP OPPORTUNITIES

**Diamond Sponsor ($5K):**

- Name and logo will be placed on the front page of the research report, slide deck, media releases, and marketing material.
- Opportunity to participate in the final webinar with all the sponsors which will highlight the findings of the research in detail.
- Final report, executive summary and presentations.

**Emerald Sponsor ($10K):**

- All benefits of the Diamond Sponsor.
- Will be on the Steering Committee and allowed to: define the research scope and methodology, provide feedback and input regarding the direction of the study, and participate in Steering Committee webinars.
- Will have a special one (1) hour webinar specifically for your organization. Anyone from your organization can attend and receive a detailed overview of the research findings that relate to your organization.
Ruby Sponsor ($15K):

- All benefits of the Emerald Sponsor.
- Will receive a case study within the research to highlight the work your organization has been doing in the area. Case studies are typically supplied by the sponsor, but in some instances the research firm has developed a case study on the sponsor behalf. This case study will be included with the executive summary, which will be distributed to all CABA members.

Note: All funds are in US dollars.

10. PREVIOUS CABA RESEARCH

CABA has undertaken a number of Landmark and Multi-Client Boutique research projects. To better understand the intelligent building research that CABA has completed, please review these executive summaries:

- **Intelligent Buildings and Big Data 2015:**
  http://docs.caba.org/MarketingEmailer/IBBD%20exec%20summary.htm

- **Life Cycle Costing of Intelligent Buildings 2013:**
  http://www.CABA.org/LCCIB (Full Report and PowerPoint Presentation)

- **Intelligent Buildings and the Bid Specification Process 2013:**

- **Smart Grid Impact on Intelligent Buildings 2011:**

- **Market Size in North America 2010:**

- **Bright Green Buildings: Convergence of Green and Intelligent Buildings 2008:**
  http://www.caba.org/brightgreen (Full Report and PowerPoint Presentation)

11. CONTACT INFORMATION:

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