
Our Mission - Establish products and services developed by private sector stakeholders to enhance human safety and protect asset value by offering market-driven options and front-end insurance incentives to promote cyber protections in smart technologies across multiple sectors.

Our Vision – As global non-profit entity, Building Cyber Security (BCS) will collaborate with the insurance industry to incentivize investments in operational technologies, processes, training, and recovery plans to reduce cyber risk to business brand, operations, and personnel.

The Problem – Integrated Operational Technologies (OT) in smart buildings, machines, and industries for a more efficient and convenient world offer new vectors of risk to asset value and performance are not being complemented by a commensurate cyber safety/security framework to mitigate risk to lives, property, or resources. The general public does not have programs or consumer choice in the market to counter the risks presented by the exploitation of smart technologies to threaten homes, cars, work areas, or essential services.

The Threat - Bad cyber-enabled actors (criminals, terrorists, disgruntled employees, etc) are increasingly attracted to buildings and infrastructure for ransom payouts and other destructive activities due to the combination of high asset value, compelling threats to human safety, and relatively low cybersecurity protections. Governments do not have the flexibility to quickly respond to this threat to the built environment. As a result, asset owners, operators, occupiers investors, and insurers have increased portfolio liability and risk leading to volatility in insurer offers for cyber, property, and casualty policies.

The Costs - According to the World Economic Forum, cyber-attacks are cited as No. 2 in the top 10 global business risks. Gartner predicts that the financial impact of CPS attacks resulting in fatal casualties will reach over \$50 billion by 2023. Cybersecurity Ventures expects global cybercrime costs to grow by 15 percent per year over the next five years, reaching \$10.5 trillion annually by 2025. This represents the greatest transfer of economic wealth in history.

The Liability - Gartner predicts 75% of CEO's will be personally liable for cyber-physical security incidents by 2024. Cybersecurity claims have skyrocketed in 2021, particularly from ransomware attacks targeting high value assets with low cyber security postures. "Failing to properly maintain reasonable cyber security measures, procedures, and practices appropriate to the nature and scope of business operations" has become the primary claim in a growing number of class action lawsuits.

A Global Solution – BCS understands that smart technologies must incorporate cyber security and safety engineering to minimize the potential of an unsafe condition. BCS is translating existing global OT cybersecurity standards into a dynamic, actionable framework and certification program that will reward investors who adopt robust and persistent cyber protections. A tiered (platinum, gold, silver, bronze) certification process rewarding the selection of technologies, their design and integration, and life cycle management will allow stakeholders to determine the level of safety commensurate with their business risk. Executives will be able to receive consistent feedback on the status and effectiveness of cyber protections throughout the enterprise. Investments in certifications will be returned through reduced insurance rates, less business disruption, and increased employee/customer/client/ consumer confidence.

Progress - Since 2020, BCS has added 300 companies globally representing super-techs, cyber/technical services, insurers, control system manufacturers, system integrators, trade associations, and companies in six industry vertical councils (real estate/facilities, healthcare, automation/robotics, transportation, consumer devices, and infrastructure) to guide implementation and marketing of the BCS framework, certification, and training programs to meet specific industry cyber protection needs.

- Members and affiliates include Facility Owners & Operators, Critical Infrastructure operators, Control Systems Manufacturers, Original Equipment Manufacturers, Equipment Installers, Standards Organizations, Audit Agencies, Technology System Integrators, Smart Device Manufacturers, Engineering Companies, Insurance Companies, Cyber Services Companies, Microelectronic developers.

BCS is in the process of an internal stakeholder and insurer review of the first framework and certification for real estate and facilities to be released publicly in October, 2021.

- The proprietary BCS Framework enables a certification process for designs, specifications, and control system installation procedures to incentivize the replacement of legacy controls, require product registration, and reward consistent security oversight.
- Subsequent frameworks will be tailored to specific industry verticals in BCS and updated to respond to evolving OT threats. Intellectual property protections are being secured for each framework.

BCS has partnered with national associations, and is in discussion with Federal Agencies, to incorporate the framework into public infrastructure projects and federal building design solicitations.

A wide range of institutional and private owners, large occupiers and property management companies represented by over 100 Commercial Real Estate entities, along with real estate associations, is leading adoption of the framework. BCS will start testing the framework for buildings in November, 2021

BCS has partnered with the International Society of Automation (ISA), Center for Internet Security (CIS), and the National Electrical Manufacturer's Association (NEMA) for framework development and certification processes. BCS has alliance agreement in place with REALCOMM, and the Telecom Industry Association in collaboration with Underwriter's Labs. BCS is also negotiating a collaboration agreement with BOMA and will be presenting to the Urban Land Institute in October, 2021

The world's largest insurance broker, AON, A founding member, is facilitating the review by real estate underwriters to assess the value and impact to cyber, property, and casualty policies resulting from framework certifications.

BCS is sustained through memberships dues and donations. A national marketing and [promotional plan](#) is underway to build membership. Higher tier contributors are leading BCS Boards and councils. BCS will be sustained through licensing fees for certifications and training programs.

As headlines confirm, the cyber threat is growing more sophisticated every day. The private sector ecosystem in BCS is taking bold action now to incentivize proactive cybersecurity protections for physical safety in an increasingly smart world – **building cyber security**.