INTERNET SECURITY ALLIANCE
Combining Technology, Public Policy, and Economics to Create a Sustainable System of Cybersecurity
A decade ago, there were two philosophies for how government and industry ought to address the growing cybersecurity problem.

The Bush administration adopted a laissez-faire approach by arguing that natural market economics would lead to adequate security. The Obama philosophy was a Sarbanes-Oxley style regulatory model of government mandates and strict penalties for non-compliance.

In 2008, ISA proposed in our first Cyber Security Social Contract publication a third way: Government and industry should partner to identify standards and practices worthy of being promoted for voluntary adoption. That framework should be cost effective and supported by market incentives.

The ISA model has now become the bipartisan consensus approach to cybersecurity.

ISA successfully integrates thought leadership with economics and public policy to help create a sustainable system of cybersecurity.

• The House Republican Cybersecurity Task Force adopted ISA policy.

• The Presidential Commission on Enhancing National Cybersecurity adopted all of ISA’s recommendations.

• The ISA Social Contract became the first and most often cited source in President Obama’s “Cyber Space Policy Review.”

• President Obama’s Executive Order 13636 adopted the ISA model.

• Congress passed significant cybersecurity policy legislation in 2015, using liability incentives instead of mandates to promote cybersecurity information sharing.

• ISA led the US Chamber of Commerce, TechAmerica, BSA and the Center for Democracy and Technology in a coalition that embraced the ISA model in a pan-association white paper.


Above: Kiersten Todt, Executive Director of the Commission on Enhancing National Cybersecurity, speaks during the ISA 15th Anniversary Conference.

IMPACT ON POLICY

ISA was the only trade organization asked to brief the 2016 Republican National Committee in Cleveland on cybersecurity, along with House Homeland Security Committee Chairman Mike McCaul and former House Intelligence Committee Chairman Mike Rogers.

As part of the briefing, policymakers received advance copies of “The Cybersecurity Social Contract: Implementing a Market-Based Model for Cybersecurity.”

Left: former House Intelligence Committee Chair Mike Rogers. Middle: ISA President Larry Clinton discusses the Cybersecurity Social Contract. Right: House Homeland Security Chairman Mike McCaul.

Below: House Armed Services Chair Mac Thornberry meeting with the ISA board. Rep. Thornberry chaired the House Republican Cybersecurity Task Force. ISA was the first organization asked to testify before the task force, which adopted all of ISA’s major recommendations on building cybersecurity through market incentives rather than government mandates. Congress enacted legislation on cyber information sharing following the ISA model in 2015.

www.isalliance.org
In 2014, ISA and the National Association of Corporate Directors (NACD) published the first “Cyber-Risk Handbook.” This publication has been independently assessed by PricewaterhouseCoopers and shown to dramatically improve enterprise cybersecurity. We issued a significantly updated version in 2017.

Working together, NACD and ISA have produced a unique and successful program that addresses cybersecurity as a board level issue – not simply an IT operational issue.

In April 2018, ISA and NACD will host a Global Summit on Cybersecurity for corporate boards in Geneva. The goal of this event is to create a coherent approach to cybersecurity based on the Handbook’s principles but adapted to unique environments outside the United States. Starting in 2017, the ISA will hold events in the United Kingdom and Germany to prepare local versions of the handbook.

The “Cyber-Risk Oversight Handbook” is the only private sector publication that has been endorsed by the Department of Homeland Security and the Department of Justice. It has also been endorsed by a wide variety of private sector organizations such as the Chamber of Commerce and the International Auditors Association.

ISA and NACD jointly produce an annual summit meeting on cybersecurity exclusively for corporate boards, where the ISA board members expand on the principles in the Handbook.

Above: The “Cyber-Risk Oversight Handbook,” prepared by ISA President Larry Clinton and published by the National Association of Corporate Directors, is available for free download at www.isalliance.org/cyber-risk-handbook.


ISA board members speak during a panel of the 2016 NACD/ISA Cyber Summit in Chicago, Ill. From right to left: Jeff Brown (Raytheon); Gary McAlum (USAA); Dustin Wilcox (Centene).
“Guidelines from the NACD advise that Boards should view cyber-risks from an enterprise-wide standpoint and understand the potential legal impacts.

Boards appear to be listening to this advice. This year we saw a double-digit uptick in Board participation in most aspects of information security. Deepening Board involvement has improved cybersecurity practices in numerous ways. As more Boards participate in cybersecurity budget discussions, we saw a 24% boost in security spending. Other notable outcomes cited by survey respondents include identification of key risks, fostering an organizational culture of security and better alignment of cybersecurity with overall risk management and business goals.”

-PricewaterhouseCoopers Global State of Information Security Survey 2016
ISA published in 2016 an updated and extended edition of the Cybersecurity Social Contract. The book’s recommendations for the next administration and Congress weren’t written by consultants or academics. They came from experts whose day job is fighting cyber threats at the highest levels.

Members of the ISA board (principally CISOs from 12 industry sectors) each wrote a chapter detailing the unique cybersecurity issues their sector faces, the barriers they must work through to manage these issues and specific policy recommendations.

The publication also covers a range of cross-cutting issues such as educating corporate boards of directors, needed reforms to the cybersecurity auditing process, how insurance could best be used to transfer risk, how the federal government should be restructured for the digital age, resolving tensions between privacy and security and improving public-private partnerships.

The Cybersecurity Social Contract: Implementing a Market-Based Model for Cybersecurity is an attempt to provide a coherent and systemic framework for collaborative action. Advanced technology needs to be integrated with practical economics and thoughtful public policy to create a sustainable system of cybersecurity.

We are already seeing these recommendations being enacted, which is not surprising given the widespread independent endorsements the new publication has received.
PRAISE FOR ISA’S CYBERSECURITY SOCIAL CONTRACT

“This well-researched and documented book is the most comprehensive work to date in addressing these issues. I strongly recommend the administration and the Congress adopt the recommendations of this work.”

- Admiral Mike McConnell (Retired), former Director of National Intelligence; former Director, National Security Agency

“The Cybersecurity Social Contract provides a thoughtful roadmap of recommendations that places risk management principles at the core of the next administration’s cybersecurity agenda.”

- Melissa Hathaway, President, Hathaway Global Strategies, former Director of the Joint Interagency Cyber Task Force

“What an accomplishment. The Internet Security Alliance continues to prove its thought leadership by laying out a practical framework that integrates technology, government policy and business economics.”

- Air Force General Charlie Croom (Retired), Senior Vice President and Director, Strategic Account Executives, Leidos

“The Cybersecurity Social Contract blends for the first time real world economics and politics of cybersecurity. This volume offers the incoming administration the best hope for making serious progress.”

- Pradeep Khosla, Chancellor, University of California-San Diego; former Dean, College of Engineering, Carnegie Mellon University

“The Cybersecurity Social Contract presents a comprehensive overview of why we have failed to get our arms around these issues—including privacy—and what the next administration needs to do to avoid catastrophe.”

- Art Coviello, Jr., Executive Chairman (Retired), RSA
The Internet Security Alliance has a long history of advocating for market-driven cybersecurity policy before Congress.
Since 2001, ISA has been asked to provide congressional testimony twenty times. The expertise and diversity of perspective provided by ISA and its member companies is critically needed to create an effective and sustainable cybersecurity policy.
MESSAGE OUT
THE ADMINISTRATION

ISA has met with nearly every homeland security secretary.
Above: Tom Ridge. Below left: Janet Napolitano. Below right, Michael Chertoff

Top row: Secretary Tom Ridge delivered a keynote speech at the kick-off dinner for the ISA, when it was formed in 2001 as a subsidiary of the Electronic Industry Alliance. Above left: Secretary Janet Napolitano was a keynote speaker at ISA’s 2009 cybersecurity conference, held at the White House. Above right: ISA President Larry Clinton and former Secretary Michael Chertoff were the two keynote speakers at the World Institute for Nuclear Security in Vienna, Austria, in 2013.

Above: Then-Homeland Security Under Secretary for the National Protection and Programs Directorate Suzanne Spaulding speaks with ISA President Larry Clinton during an ISA board meeting. At right, ISA board member Tim McKnight (now Thomson Reuters) and Phyllis Schneck, then homeland security deputy under secretary for cybersecurity and communications.
The ISA Board meets twice each year in Washington, D.C., meetings that include a Salon Dinner. The dinners are chances for our members to dine with leaders in the D.C. cybersecurity scene – members of Congress, executive branch officials, and reporters.

First row: Sen. Dianne Feinstein (D-Calif.) shares a light moment with ISA board members, including Tracie Grella (AIG) at extreme right. Second row: ISA board member Jeff Brown (Raytheon), former Homeland Security Secretary Michael Chertoff, and ISA board member Tim McKnight (Thomson Reuters). Third row left: ISA board members Larry Trittshuh (Synchrony Financial), Catherine Ide (CAQ) and ISA President Larry Clinton. Third row right: ISA board member Nasrin Rezai (GE) and former Assistant Attorney General for National Security John Carlin. Bottom row: White House Cybersecurity Coordinator Howard Schmidt and ISA board member Air Force Lt. Gen. (retired) Charlie Croom (Lockheed Martin).
We use the dinners as an opportunity to give out the McCurdy Award, an award named after our founder, former Rep. David McCurdy, and given only to exceptional innovators in cybersecurity policy.

McCurdy Award recipients (clockwise): White House Cybersecurity Coordinator Michael Daniel; Representatives Mike Rogers (R-Mich.) and Dutch Ruppersberger (D-Md.); Senators Richard Burr (R-N.C.) and Dianne Feinstein (D-Calif.); Melissa Hathaway. Not pictured: Representative Mac Thornberry (R-Texas)
When ISA Speaks,

ISA is one of the premier advocates for framing cybersecurity as an enterprise risk management problem and for incentivizing the private sector for better cybersecurity.

ISA has long been a go-to source of expert testimony and commentary on all things cybersecurity for news organizations across all media formats.

ISA regularly facilitates the participation of its sponsors in its creative and innovative programs.
THE MEDIA LISTENS

OUTLETS THAT HAVE RELIED ON THE ISA FOR EXPERTISE:

ISA SPONSORS ON CAMERA

Then ISA Chairman Tim McKnight at the Washington Post Live Forum. At the time, McKnight was chief information security officer at Northrop Grumman. McKnight remains on the ISA board as a representative from Thomson Reuters. He has also acted for Fidelity and GE on the board.

Left: Then ISA Board Chairman Ken Silva (Verisign) participating in an ISA Capitol Hill briefing carried live on C-SPAN. Right: Then ISA Board Members David Peyton (National Association of Manufacturers) participates in the same briefing. The National Association of Manufacturers remains on the ISA board.
When we began in 2001, the ISA was the only organization in Washington, D.C., dedicated to advocating for a market-run model of cybersecurity.

Flash forward 15 years, and we still occupy a unique position in the nation’s capital – but we have numerous friends, many who joined us to discuss and celebrate during a day-long conference 15 years of advocacy for a market-based model of sustainable cybersecurity.
Another area where ISA provides thought leadership leading to practical changes and improvements in cybersecurity is cyber audits and assessments.

Most organizations are more concerned with the auditor than the cyber attacker. Getting cybersecurity assessments to be more effective and useful is an urgent need.

The ISA board became the first entity to be used by the American Institute of CPAs (AICPA) as a “focus group” for the reformed models the audit community is working on to improve the cyber assessment process.

ISA is working with the audit community and bringing in other interests including the US Chamber of Commerce to define a process more in tune with the forward-looking risk management process needed to address cyber threats and distinguish the process from the more backward looking financial audit model.
Cybersecurity is a problem that knows no national boundaries.

ISA has been on the forefront of international outreach in an effort to raise awareness and harmonize approaches in multiple locations across the globe. We collaborate with the German Federal Office for Information Security and have participated in State Department-sponsored cybersecurity evangelism trips to India and Mexico.

ISA President Larry Clinton has briefed the Organization of American States in Argentina and keynoted a conference of the World Institute for Nuclear Security in Vienna, Austria.

ISA President Larry Clinton was asked to brief the NATO Cyber Security Center for Excellence in Tallin, Estonia on the effects of increased regulation in cybersecurity and offered a comparative analysis of European cybersecurity programs as compared to the more effective Asian programs.

ISA President Larry Clinton speaks before the Cyber Society of India.

Arne Schönbohm (left), president of the German Federal Office for Security and Information Technology (BSI) during an ISA-hosted dinner. At right is Northrop Grumman Chief Information Security Officer Michael Papay.

Above: State Department Coordinator for Cyber Issues Christopher Painter speaks during an ISA board meeting. Left: ISA President Larry Clinton spoke to a meeting of the World Economic Forum in Berlin about the NIST Cybersecurity Framework.
2001 – The Internet Security Alliance is founded in collaboration with Carnegie Mellon University as a unique, multi-sector international trade association that combines the thought leadership of a think tank with advocacy and the programs of a professional association.

2003 – ISA creates its first set of best practices guides to combat insider threats, long before insiders were a well-appreciated risk.

2005 – ISA chairs the congressionally appointed Cross Sector Cyber Security Working Group Committee, which focuses on the use of market incentives, rather than regulation, the way to improve private sector cybersecurity.

2008 – ISA publishes its watershed “Cyber Security Social Contract,” a set of policy recommendations for the incoming Obama administration and the new Congress. The document formulates the ISA’s belief that market incentives, not centralized government regulations, is the key to spur on private sector investment into cybersecurity.

In conjunction with the American National Standards Institute, ISA publishes “The Financial Impact of Cyber Risk: 50 Questions every CFO Should Ask,” one of the earliest documents to frame cybersecurity with a risk-management lens for a business audience. The document guides chief financial officers through targeted questions to ask key corporate departments, such as legal, compliance, external communications and business operations.

2009 – ISA’s “Cyber Security Social Contract” is the first and most frequently cited source in the administration’s 60-day Cyberspace Policy Review. The executive summary of this National Security Council staff-authored official report begins and ends by citing the “Social Contract.” And, like the “Social Contract,” it urges the government to look into the development of market incentives as a means to advance cybersecurity.

2010 – ISA publishes the “Social Contract 2.0,” which follows up on the 2008 document by providing an outline to implementing the president’s market incentive recommendations.

2011 – The House Republican Cybersecurity Task Force adopts the core ISA policy position that Congress should create a “menu of market incentives tied to the voluntary adoption of cyber security measures,” language taken verbatim from ISA’s “Social Contract” and “Social Contract 2.0” as well as from ISA congressional testimonies.

A coalition of five industry and civil liberties groups led by the ISA, including the U.S. Chamber of Commerce, TechAmerica, the Business Software Alliance (BSA), and Center for Democracy and Technology (CDT), all adopt a set of recommendations similar to the Cybersecurity Social Contract.

ISA holds a 10th Anniversary conference and Homeland Security Secretary Janet Napolitano keynotes.
2012 – The Senate rejects the Collins-Lieberman cybersecurity bill, which would have modeled cybersecurity on Sarbanes-Oxley. ISA worked diligently in the halls of Congress to educate members on the dangers posed by this approach.

2013 – As directed by Executive Order 13636, the National Institute of Standards and Technology published a draft outline of the Cybersecurity Framework. The very first source cited in the draft report is the ISA’s 2008 publication “Financial Management of Cyber Risk.” Fidelity Investments announces it will use the same publication as core material for their fall conference for chief information security officers and CEOs. This year, the ISA board also authors “The Advanced Persistent Threat: Practical Controls that Small and Medium-Sized Business Leaders Should Consider Implementing,” a real-world guide for improving cybersecurity.

2014 – The NIST Cybersecurity Framework version 1.0 is published, with the ISA at the forefront of shaping its final form. This year we also collaborate with the National Association of Corporate Directors to produce the first “Cyber-Risk Oversight Handbook,” which receives endorsement from the Department of Homeland Security.

2015 – Congress passes and the president signs the Cyber Security Act of 2015, which adopts the ISA recommendation of extending liability protection to companies seeking to share cyber threat information.

2016 – ISA publishes “The Cybersecurity Social Contract: Implementing a Market-Based Model for Cybersecurity” as a policy guide for the incoming administration and Congress. Written by our members, the book is circulated at the Republican National Convention in Cleveland, where ISA is the only trade association to participate in cybersecurity briefings. We hold a well-attended conference timed to our 15th anniversary featuring speakers from the administration and Capitol Hill to launch the book and the policy suggestions contained in it.

The President’s Commission on Enhancing National Cybersecurity adopts all 12 of ISA’s major recommendations from the book.

PricewaterhouseCoopers’s annual Global Information Security Survey cites the ISA-NACD “Cyber-Risk Handbook” by name for having a substantial impact on how corporate boards address cybersecurity.

Each year ISA polls its sponsor companies asking how well, on a scale of 1-5, they feel ISA is fulfilling the organization’s goals. Below are the most recent responses for these questions (1 = not meeting the goal/value; 5 = maximum goal/value).

ISA meets goals of providing thought leadership

ISA meets goal to advocate for productive and effective public policies leading to a sustainably secure cyber system

ISA meets goal of stimulating awareness and adoption of good security practices

ISA provides value proposition to its members

ISA is supported entirely by member company annual dues. Sponsorships, which include a seat of the board and premium service, are $70,000. Contact Larry Clinton at lclinton@isalliance.org or at (703) 907-7090 for more information.

ISA values independent recognition, since it validates the thought leadership, advocacy and dedication of its members.

We’ve been honored with:

• National Association of Corporate Directors (NACD) Directorship 100 – 2016

• SC Magazine – 2016 Editor’s Choice Award for Leadership and Excellence in Cybersecurity

• NACD Directorship 100 – 2015

• Online Trust Alliance – Excellence in Online Trust 2010
WHAT OUR SPONSORS SAY ABOUT THE ISA

“We all get recruited by other companies, if I decide on joining another, I tell them we have to be involved in government policy and as a current member of the ISA board, being a member of ISA is an unconditional prerequisite to my joining.”

– Bob Zandoli, Chief Information Security Officer, Bunge, formerly board member from AIG

“I don’t know what else ISA could do to promote better cybersecurity.”

– Jeff Brown, Chief Information Security Officer, Raytheon

“ISA turns out a ton of work and is constantly raising the bar. For example, the work with the NACD, which has taken off and is growing to worldwide influence.”

– Tim McKnight, Chief Information Security Officer, Thomson Reuters, and formerly board member from Northrop Grumman, Fidelity and GE

“ISA’s thought leadership is a great value to us. On public policy it is very influential and we think it’s important for us to be working with them. It’s fantastic, really critical.”

– Janet Bishop-Levesque, Chief Information Security Officer, RSA

“I don’t know what else we could ask from ISA, they are very productive. The ISA flag is well known and its brand is strong.”

– Gary McAlum, Chief Security Officer, Senior Vice President of Enterprise Security, USAA

“We have to be involved in government policy and as a current member of the ISA board, being a member of ISA is an unconditional prerequisite to my joining.”

– Richard Spearman, Group Corporate Security Director, Vodafone

“The Cyber-Risk Handbook prepared by the ISA for the NACD is one of the most frequently used cyber publications for the education of U.S. board members. The ISA agenda of developing a sustainable approach to enterprise cybersecurity is aligned with our guidance to corporations.”

– Andrew Cotton, Partner, EY

“ISA turns out a ton of work and is constantly raising the bar. For example, the work with the NACD, which has taken off and is growing to worldwide influence.”

– Brian Raymond, Director of Technology Policy, National Association of Manufacturers

“Thought leadership is ISA’s sweet spot. I couldn’t rate them any higher, it’s fantastic.”

– JR Williamson, Corporate Chief Information Officer, Northrop Grumman

“ISA hits it out of the park. It’s very beneficial for us to work with ISA.”

– Gary McAlum, Chief Security Officer, Senior Vice President of Enterprise Security, USAA
ISA BOARD OF DIRECTORS

Jeff Brown
ISA Board Chairman
Raytheon
Chief Information Security Officer

Gary McAulm
ISA Board Vice Chairman
USAA
Chief Security Officer, Senior Vice President of Enterprise Security

JR Williamson
ISA Board Second Vice Chairman
Northrop Grumman
Corporate Chief Information Officer

Tim Knight
Thomson Reuters
Executive Vice President and Chief Information Security Officer

Tracie Grella
AIG
Global Head of Professional Liability Financial Lines

Larry Trittshuh
Synchrony Financial
Threat and Vulnerability Leader Information Technology

Bob Zandoli
Boeing
Chief Information Security Officer

Jim Connelly
Lockheed Martin
Vice President and Chief Information Security Officer

Tim McNulty
Carnegie Mellon University
Associate Vice President for Government Relations

Richard Spearman
Vodafone
Group Corporate Security Director

Janet Bishop-Levesque
RSA
Chief Information Security Officer

Catherine Ide
Center for Audit Quality
Senior Director of Professional Practice

Daniel Crisp
BNY Mellon
Chief Information Risk Officer and Head of Technology Compliance

Ed Hammersla
Utilidata
CEO

Nasrin Rezaei
GE
Chief Information Security Officer

Steve Hull
Leidos
Chief Information Officer

Anthony Maggio
Centene
Director of Information Security

Andrew Cotton
EY
Partner

Joe Buonomo
Direct Computer Resources
President and CEO

David Estlick
Starbucks
Chief Information Security Officer

Brian Raymond
National Association of Manufacturers
Director of Technology Policy

Larry Clinton
Internet Security Alliance
President and CEO