



# Control System Security Center



Control System Security Center is a technology research association to conduct R&D to handle cyber attacks and ensure the security of control systems of critical infrastructures, such as power and gas plants, which support people's lives.



"Control System Security Center (CSSC)," a technology research association, was established in March, 2012 as an authorized corporation approved by the Minister of Economics, Trade and Industry in accordance with the "Act on Research and Development Partnership" with 8 corporations relating to control systems that support people's lives as starting members\*. Its mission is to strengthen security in this field and to authenticate security.

CSSC promotes operations, such as R&D, international standardization, certification, human resource development, promotion and security verification of each system. In order to accomplish these objectives, we operate and improve our Testbed (CSS-Base6) in Tagajo City, Miyagi.

While CSSC is a start-up association, the members have engaged in various activities with high aspirations. We hope to become the center to be proud of, representing Japan to the world, supported by those who are related or interested in this area.

Seiichi Shin,  
President, Control System Security Center

## ■ Outline (As of June 20, 2017)

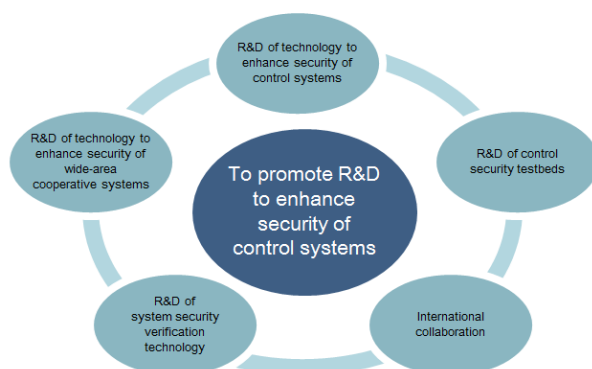
<b>Name</b>	<b>Control System Security Center</b> (Abbreviation) CSSC ※A corporation authorized by the Minister of Economics, Trade and Industry Established March 6, 2012 (The registration date)
<b>Association members</b> (In alphabetical order)	<b>Total 32 corporations</b> The National Institute of Advanced Industrial Science and Technology*, ALAXALA Networks Corporation, Azbil Corporation*, Cisco Systems G.K., Fortinet Japan K.K., Fuji Electric Co., Ltd., Fujitsu Limited, Hitachi, Ltd.*, Hitachi Systems Power Services, Ltd., IHI Corporation, Information Technology Promotion Agency, Japan Audit and Certification Organization for Environment and Quality, Japan Quality Assurance Organization, Macnica, Inc. and Fuji Electronics Co., Ltd., McAfee Co., Ltd., Meidensha Corporation, Mitsubishi Electric Corporation, Mitsubishi Heavy Industries Ltd.*, Mitsubishi Research Institute Inc.*, Mori Building Co., Ltd.*, NEC Corporation, NRI Secure Technologies Ltd., NTT Communications Corporation, OMRON Corporation, Panasonic Corporation, SOHGO SECURITY SERVICES CO.,LTD., The University of Electro-Communications, Tohoku Information Systems Company, Incorporated, Toshiba Corporation*, Tohoku University, Trend Micro Incorporated, Yokogawa Electric Corporation* (*8 starting member corporations)
<b>Supporting members</b>	<b>Total 16 corporations</b> Aiuto, Artiza Networks, Inc., Check Point Software Technologies Ltd., Chiyoda-keiso Co., Ltd., Infosec Corporation, Hirschmann Automation and Control, Interface Corporation, Ixia Communications K.K., Japan Nuclear Security System Co.,Ltd., JAPAN DIREX CORPORATION, KPMG Consulting Co., Ltd., Mitsubishi Space Software Co.,Ltd., NUCLEAR ENGINEERING, Ltd., OTSL Inc., The Japan Gas Association, TOYO Corporation
<b>Special supporting members</b>	<b>Total 14corporations</b> Miyagi Prefecture, Tagajo City, Check Point Software Technologies (Japan) Ltd., Cyber Solutions Inc., Eri, Inc., ICS Co.,Ltd., System Road Co., Ltd., Fukushima Information Processing Center, Techno mind Corporation, Toho C-tech Corporation, Tosaki Communication Industry Ltd., TripodWorks CO.,LTD., Tsuken Electric Ind Co., Ltd., East Japan Accounting Center Co.,Ltd.
<b>Collaborative organizations</b>	Japan Computer Emergency Response Team, The Japan Electrical Manufacturers' Association (JEMA), The Society of Instrument and Control Engineers(SICE), Japan Electronics and Information Technology Industries Association(JEITA), The Association of Japan Instrumentation Industry(AJII), Japan Electric Measuring Instruments Manufacturers' Association(JEMIMA), Manufacturing Science and Technology Center(MSTC), The Federation of Electric Power Companies of Japan(FEPC), Japan Chemical Industry Association(JCIA), Tohoku Economic Federation, Miyagi Information Service Industry Association(MISA), Tagajo-Shicigahama Shokoukai

In order to ensure the security of control systems of critical infrastructures, CSSC conducts various operations thoroughly including R&D, international standardization, certification, human resource development, promotion and security verification of each system in the organization described in Chart 2.

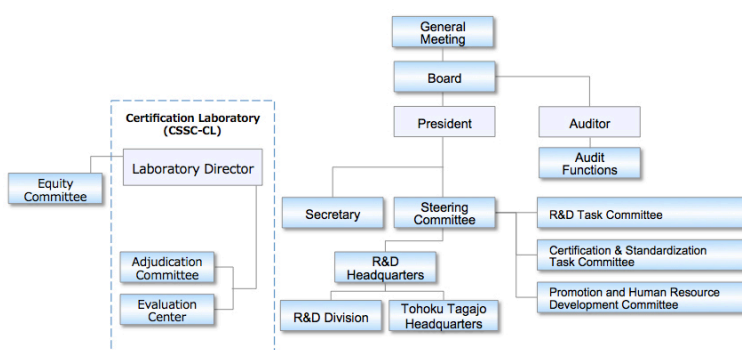
- R&D of technology to enhance security of control systems
- R&D of technology to enhance security of wide-area cooperative systems
- R&D of system security verification technology
- International collaboration
- R&D of control security testbeds

Under the supervision of the Steering Committee, 3 task committees were established in order to promote activities described in Chart 3.

<Chart 1> Objectives



<Chart 2> Organization



<Chart 3> 3 Task Committees and Activities

Task Committee	Activities
R&D and Testbed Task Committee	It sets the direction of R&D regarding control system security as well as the construction of testbeds and promotes R&D and leverages the testbeds.
Certification and Standardization Task Committee	It examines evaluation certification regarding control system security and strategies and policies of standardization. It leverages the testbeds for evaluation certification and standardization.
Promotion and Human Resource Development Task Committee	It sets the direction of awareness and human resource development for control system security as a technical research association. It enhances situational awareness and promotes human resource development, making the use of the testbeds.

## Major business activities and 5-year plans (milestones)

In order to accomplish the CSSC objectives, the following 7 business activities were set up with 5-year plans.

A testbed facility or a hub for R&D and verification, was constructed at Tohoku Tagajo Headquarters in May 2013.

<Chart 4> 7 Business Activities and Milestones (including the testbed construction)

Items		Activities	FY2013	FY2014	FY2015	FY2016	FY2017
1	System security verification	To establish verification methods and execute evaluation of real systems and components	R&D				
2	Eestablishment of structures and technology to enhance security	To establish secure structures and technology for control systems	R&D				
3	Security international standard	To carry out strategic activities towards international standardization and promotions in Japan	Preparation	International standardization operations			
4	International standard compliance certification	To develop certification tools in compliance with international standards and promote the standards	Preparation	Evaluation certification operations			
5	Incident support	To collect and manage incident information and support incident handling	Preparation	Incident handling operations			
6	Human resource development	To hold security skill trainings for control system engineers	Human resource development operations				
7	Promotion	To provide security alert demonstration and guidelines	Promotional operations				
Testbed facility(CSS-Base6)			Operation				