



The ICSCoE Report is a public relations newsletter on ICSCoE's activities.

ICSCoE held the Industrial Cybersecurity Symposium 2021

~Importance of Strengthening Cybersecurity and Cultivating Human Resource

Disseminated the accomplishments of the Core Human Resource Development Program

In May 2021, the Industrial Cyber Security Center of Excellence (ICSCoE) held an online symposium where the graduates and fourth cohort trainees of the Core Human Resource Program disseminated their post-graduation activities and training experiences at the ICSCoE. This symposium attracted approximately 280 participants, including corporate executives and security managers.



Opening remarks by Dr. TOMITA, Chairman of IPA

Must retain manpower familiar with security within a company

Dr. TOMITA, Chairman of Information Technology Promotion Agency, expressed his concerns that the security disparity among companies will affect business performances in the light of the current situation where an entire industry is forced to make full use of IT and run a business properly under the COVID-19 pandemic. He, therefore, mentioned the importance of keeping on attention to security measures and cultivating human resources.

Protecting Japanese industries from ever-evolving cyber threats

Dr. ENDO, Director General of the ICSCoE, gave examples of cyber attacks, which had occurred in Japan and overseas, and mentioned that improving capabilities to cope with cyber attacks against control systems by critical infrastructure providers is becoming an increasingly crucial business challenge. He also indicated the importance of value creation for Japanese industries by establishing secure cyberspace.

We would like to see more use of the ICSCoE

Mr. OKUYA, Director of Cybersecurity Division, Commerce and Information Policy Bureau, Ministry of Economy, Trade and Industry (METI), expressed



Mr. OKUYA expressed his expectations for the ICSCoE

the importance of the leadership of management teams in security measures and increasing needs of reinforcing security measures for the entire supply chains since the threat level of cyber attacks has been significantly escalating in recent years. He also mentioned the significance of participating in the ICSCoE as "an organization where has been implementing high-level of efforts to especially security for control systems in Japan."

Symposium Program

- ▶ **Opening remarks**
Dr. TOMITA Tatsuo, Chairman Information Promotion-Technology Agency (IPA)
- ▶ **Welcome remarks**
Dr. ENDO Nobuhiro, Director General of Industrial Cyber Security Center of Excellence, IPA
- ▶ **Keynote Speech**
Mr. OKUYA Toshikazu, Director of Cybersecurity Division, Commerce and Information Policy Bureau, Ministry of Economy, Trade and Industry (METI)
- ▶ **Panel Discussion**
The ICSCoE Fourth Cohort Trainees
- ▶ **Presentation**
The ICSCoE Graduates
- ▶ **Panel Discussion**
The ICSCoE Graduates
- ▶ **Closing remarks**
Mr. TODAKA Hideshi, Vice Chairman of IPA

The panel discussion addressed by the trainees and graduates of the ICSCoE will be on the next page

Panel Discussion addressed by the ICSCoE Fourth Cohort Trainees

At the end of June 2021 approaching the completion of the program, three trainees of the fourth cohort joined a panel discussion and shared their day-to-day experiences and feelings at the ICSCoE with the audience.



Moderator:
Dr. MITSUNAGA Takuho,
Toyo University

Dr. MITSUNAGA: The ICSCoE provides its trainees with a one-year full-time training program. Could you please tell us what you are feeling during this program?

Mr. YAGI: I think it is good to have many like-minded colleagues around me. We have many opportunities to participate in group discussions, build teams to shape approaches to cyber attacks, and address issues with my colleagues in unity.

Mr. NAKAMURA: I like the environments of building flat relationships among trainees regardless of age differences and the job titles held in the dispatching companies. We can verify



The image of panel discussion

various issues and absorb knowledge from each other.

Ms. TAMADA: I was afraid that I might not be able to keep up with this program because I have a background in the OT field had known nothing about IT before I joined the program. Practically, however, we had a three-month training session to acquire basic knowledge of both IT and OT at the beginning of the program. Therefore, I believe that I was able to improve my skills step-by-step.

Dr. MITSUNAGA: Could you please tell us what is special about the ICSCoE in terms of skills, knowledge, and personal networks you have gained from this program.



Panelist: Mr. YAGI Harunobu,
Central Japan Railway
Company

Mr. YAGI: It is the experience in cyber attacks and defenses conducted in the simulated plants. From this realistic experience, I had a valuable opportunity to imagine what will happen if our companies face cyber attacks: It will be a cold-sweat nightmare. I started thinking about how to respond and what to replenish with my company to tackle horrible situations.

Mr. NAKAMURA: In my case, I appreciate that we have learned

many things extensively besides technologies. For instance, we have plenty of scenes to explain and suggest measures to company executives on actual operations. In our curriculum, we have practical exercises where we promote security measures to the management of companies and receive their feedback, which helps us improve our accountabilities.



Panelist:
Mr. NAKAMURA Toshimasa,
Mitsubishi Electric Corporation

Ms. TAMADA: I think there is no place other than the ICSCoE where people from various industries can gather together and communicate issues. For example, we could build a relationship with the members, who contemplate their companies and security. Eventually, we could discuss security countermeasures spontaneously during lunch break and after class.

Dr. MITSUNAGA: Do you have any “ambitions”, e.g., something you would like to do when returning to your company?

Mr. YAGI: My company focuses on security safety as our ultimate mission. Since I have some colleagues already completing the ICSCoE program, I would like to work together and propel security

measures for my company as an element for ensuring safety.

Mr. NAKAMURA: I believe one biggest challenge the security department has been facing is enhancing its abilities to convince management teams to advance the digitalization of operations and security measures. Therefore, I would like to become a person



Panelist: Ms. TAMADA Hikari,
Nippon Steel Corporation

who can make serious efforts to address these issues.

Ms. TAMADA: I would like to focus on the education for OT security. Also, for the control system facilities I would like to commit to making people feel a sense of urgency that cyber attacks may happen close to them.

Dr. MITSUNAGA: The most remarkable things about the ICSCoE are that we own our facilities, which unable to experience elsewhere, and have the specialized lecturers and curriculum enabling us to utilize those facilities. In addition, we welcome the trainees, who are willing to improve the company, industry, and society to which they belong. I would like to make the ICSCoE a place to foster and connect people and eventually improve our society.

Panel Discussion of the ICSCoE Graduates

Three graduates from the first to third cohorts expressed their thoughts on the activities and efforts after returning to each company.

■ Moderator

Dr. KADOBAYASHI, Nara Institute of Science and Technology

■ Panelists

Mr. SHORIKI Tatsuya (1st cohort graduate), OPTAGE Inc.

Mr. KUMAGAE Takumi (2nd cohort graduate), SOHGO SECURITY SERVICES CO.,LTD. (ALSOK)

Mr. TAKANO Satoru (3rd graduate), TOKYO GAS i NET CORP.

Mr. SHORIKI participated remotely.



Mr. KUMAGAE, Mr. TAKANO and Dr. KADOBAYASHI (from left)

Dr. KADOBAYASHI: What have you been working on since you returned to your company?

Mr. SHORIKI: I have been working on reinforcing security monitoring and rulemaking from the perspective of the operation department while tackling several more ambitious projects, such as analyzing incidents having occurred in the past and reorganizing the CSIRT within my company.

Mr. KUMAGAE: I have been engaging in supporting services for

small and medium-sized enterprises to enhance the security mechanisms of their supply chains by utilizing the knowledge of IT security I absorbed from the ICSCoE program.

Mr. TAKANO: I have been responsible for monitoring the security of the entire group companies to serve as a communication bridging and coordinate role allocation between the onsite operators and system managers in the business affairs department.

Dr. KADOBAYASHI: Could you please tell us your thoughts on the future we should attain while cooperating with the other ICSCoE graduates?

Mr. SHORIKI: I would like to create a future where security will not be portrayed as an obstacle. When a company launches a new initiative, the security department has tendencies to judge “this is too difficult to achieve” or “we cannot allow this” and inhibit it. Thus, I would like to work on incorporating security measures into IT design. In order to support such activities, I would also like to exchange the information at the ICSCoE in order to advance this effort.

Mr. KUMAGAE: In the future, I think both operators and vendors of the critical infrastructures should advance security measures after enabling them to share their security objectives and intentions. I would like to enhance further collaborations between infrastructure operators and vendors among the ICSCoE graduates.

Mr. TAKANO: It is said that there might be an issue with a shortage of security personnel in recent years; thus, we should proceed with security measures more effectively. I would like to utilize Kanae-kai, a community of ICSCoE graduates. For example, if there are common issues to various companies, we can share our expertise through Kanae-kai and provide these companies with more effective security measures quickly without cost.

Dr. KADOBAYASHI: I believe that all graduates have the same spirit even after returned to each company. We are planning to provide them with appropriate follow-ups. I believe it is essential to enlarge the ICSCoE through the industry-government-academia cooperation and persist in formulating human networks and enhance onsite capabilities.

The ICSCoE Graduates Participated in a Webinar on Cybersecurity During and Post COVID-19 Pandemic hosted by Japan Business Federation

Delivered a message to the top management as the ICSCoE graduates



In April 2021, the Japan Business Federation held a webinar for the further promotion of cybersecurity measures. Dr. KADOBAYASHI and three ICSCoE graduates addressed a panel discussion as a moderator and panelist, respectively.

We will introduce the contents extracted from the discussion on "Maximizing the potential of the ICSCoE graduates" as follow.



The conference was held at Keidanren Kaikan.



Mr. TOMURA Shingo
(3rd cohort graduate), Sumitomo Chemical Company, Limited



Mr. HASEGAWA Hiroyuki
(2nd cohort graduate), Chubu Electric Power Grid Co., Inc.



Mr. YONENAGA Katsuyoshi
(1st cohort graduate), JX Nippon Information Technology Co., Ltd.



Dr. KADOBAYASHI Youki,
Nara Institute of Science and Technology

Maximizing the potential of the ICSCoE graduates

Dr. KADOBAYASHI: Could you please tell us your opinion on how companies can utilize the skills the ICSCoE graduates absorbed from the program?

Mr. TOMURA: I believe that the companies can utilize the knowledge and skills of the graduates in promoting DX. In order to advance DX within a company, it is essential for security personnel to incorporate security measures into plans and to cooperate with DX personnel. The graduates of the ICSCoE were well trained in the program curricula; thus, they can show excellent competence in explaining abstruse security terms to the individuals involved in the DX promotion and analyzing security risks with an understanding of businesses.

Mr. HASEGAWA: I believe that we can utilize the abilities of the graduates in the fields where reinforce not only "widening" policies but also "deepening" policies and make these policies realize. Before learning at the ICSCoE, I was responsible for "widening" scopes, such as expanding collaborations with external organizations and creating more training variations. After completing the training, I have currently been working on "deepening" policies. I can use my expertise to facilitate communication on security risks with the management, analyze the risks of engineering policies to reinforce

them, and create training scenarios to help people understand the risks which control systems have been facing.

Mr. YONENAGA: I want the management personnel to utilize the graduates as a tactical strategist for the IT department manager or a communication bridge for the OT department. I think It will be difficult for the management to come up with specific security measures and strategies. Therefore, we must build procedures. First, the management should make the graduates formulate a maneuver. Second, the management understand and approve it. Third, the graduates implement this maneuver onsite. And lastly, the graduates report the outcomes to the management. I believe our security measures will proceed smoothly once we facilitate the efficient information flow inside a company.

Dr. KADOBAYASHI: I believe that the ICSCoE graduates have been playing outstandingly even under the COVID-19 pandemic. I am pretty sure that new topics, including DX, will come out more in the future. However, the graduates will be able to utilize their expertise, knowledge and personal connections developed at the ICSCoE program in practice.