ICT Virtual Organization of ASEAN Institutes and NICT ASEAN IVO Forum 2016 Call for Presentations

Submission and Registration Form

Please enter the relevant information in the fields below, giving an appropriate explanation when necessary. You may add supplemental pages and supporting data. If necessary, you may be asked to provide additional documents.

I. Title—Title of presentation:

The National Framework of Information Security Governance on National Cyber Physical Systems

II. Author(s)—Full name (First name family name):

- 1. Ahmad Budi Setiawan, MTI, ISMS-LA
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III. Organization(s):

The Research and Human Resource Development Agency, Ministry of Communication and Information Technology (MCIT), Indonesia

IV. Topic selection:

Cyber-Security and its applications

- Secure IoT

IV. Abstract:

Development of Internet technology and it use in all aspects of life from day to day progress is rapidly. Internet is no longer just linking between humans but connecting between any connected objects. Then this movement has known as the Internet of Things (IoT). In addition, IoT also known by the term Cyber Physical Systems (CPS), which is an intelligent system that includes physical components interacting network engineering and computing. In mid-2014, NIST established the Working Group on CPS (CPS PWG) to bring together various experts CPS in open public forum to help define and shape key characteristics of CPS, so for better management of the development and implementation within across multiple application domains, including intelligent manufacturing, transportation, energy, and health. CPS is a major supporter of the industrial revolution the fourth generation.

CPS are smart systems that include engineered interacting networks of physical and

computational components. CPS and related systems, including the Internet of Things (IoT) and the Industrial Internet, are widely recognized as having great potential to enable innovative applications and impact multiple economic sectors in the worldwide economy. Systems that are interconnected and integrated to provide new functionality to improve the quality of life and allow increased technology advances.

Developments of CPS turn out accompanied by the development of the attacks and the risks to it. This phenomenon has become a trigger for many to secure the system. The leakage of security breach or CPS can provide information on the impact on system performance and financial losses. In addition, security issues can result in the leaking of information that can be misused by unauthorized parties. Information security problems are generally solved by partial and limited. Therefore, rapid development of Internet technology and the growing role of these technologies on the economy, also have an impact on the security and sovereignty. CPS is one form of development of Internet technology. Thus it takes a comprehensive and integrated governance on CPS security. CPS security governance framework is a foundation and guidelines for the implementation of a security management system on CPS.

This research aim to propose the holistic and integrated CPS security framework in Indonesia, so it is necessary for the successful achievement of the objectives of the CPS system. This research project is a preliminary research and will be associated with the research related to the implementation of the sacurity management system CPS in each sector of the economy. Results of this study is a recommendation plan of the CPS information security framework in Indonesia.

V. Speaker information:

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VI. Support for speaker—circle or underline any that you wish to request:

Round trip fare at discount economy class

Accommodation