

**National Workshop on** 



# "Cyber Security for Critical Infrastructure" (CSCI)

27-28, September, 2019

# Jointly Organized by

Society for Electronic Transactions and Security (SETS) (Under the O/o Principal Scientific Adviser to the Government of India) MGR Knowledge City, CIT Campus, Taramani, Chennai – 600 113 Website: www.setsindia.in

## Centre For Development Of Advanced Computing

(C-DAC)

(A Scientific Society under the Ministry of Electronics and information Technology) Knowledge Park, No. 1, Old Madras Road Byappanahalli, Bengaluru – 560038 Website: www.cdac.in

## **About the Workshop**

The potential fallout of a network breach at a critical infrastructure facility or location could be catastrophic, with effects that could be felt across a number of critical segments. Cyber-attacks on Industrial Control Systems (ICS) in the context of National level Critical Infrastructure (CI) are increasing in scale and complexity. In the process control industry environments, integration of networks from enterprise level to plant level have brought in unique value propositions. Challenge of handling hard-real time needs of plant level networks with adequate cyber security protection need to be addressed. Convergence of IOT systems in ICS-CI systems has raised the impact of cyber-attacks multi-fold. Data related security and privacy of critical infra is becoming vital. AI plays a key role as part of critical infrastructure security approach It will require that security is put above everything, embedded everywhere and integrated throughout the operations of every critical infrastructure provider – across its people, processes and technology. The workshop will cover some of the key requirements, challenges and opportunities from cyber security perspective of Industrial control systems (CPS)

## **Topics to be covered**

- Threat concerns/ landscape in CI
- Differences in securing IT and CI-ICS systems
- Defence in depth methodologies
- DNS Security
- IT-OT/ CPS security framework
- Lightweight Cryptography
- SCADA Security/ IoT/ IIoT Security
- CI & CPS Security

## **Advisory Committee**

Dr P K Saxena, O/o PSA to GOI Dr SAV Satya Murthy, VMRF, Chennai Dr PV Ananda Mohan, C-DAC, Bangalore Shri PK Agarwal, POSOCO, New Delhi Prof Sandeep Shukla, IIT-Kanpur Shri R Pitchaiah, Technology Adviser, SETS

- Domain specific case studies
- Impact of Quantum Computing/ Communications in CI Security
- AI/ML/DL and its role in Cyber security of ICS-CI
- CI Security Standards & Best Practices
- Indigenous solutions
- Device visibility/ security

Shri G Narendra Nath, NSCS, New Delhi Shri S S Sarma, ICERT New Delhi Dr S D Sudarshan, ABB, Bangalore Shri Bindhumadhava, C-DAC, Bangalore Dr N Sarat Chandra Babu, SETS, Chennai

#### SPEAKERS: Eminent speakers from Academia, R&D, Industry and User Organizations

# **About SETS**

**Society for Electronic Transactions and Security (SETS)** was set-up as a premier Research Institution to work in the area of Information Security under the Office of Principal Scientific Advisor to Government of India. It has established an "Advanced Facility in Information Security and Cryptology (AFISC)" working in the research areas of Information Security as Knowledge Centre focussing on Cryptology, Hardware Security and Network Security to meet the specific long-term and short-term cyber security needs of the Nation. It has established a state of the art Side Channel Analysis (SCA) Lab for hardware security; AI-CS Project management group to work on futuristic needs of AI for cybersecurity and also a Walk-in Cyber Security Education & Research (WiCSER) lab to demonstrate indigenously developed solutions to the end users. It has developed competencies in the area of Quantum Key Distribution (QKD) and Post Quantum Cryptography.

# About C-DAC

The Centre for Development of Advanced Computing (C-DAC) is an autonomous Scientific Society under the Ministry of Communications & Information Technology, Government of India. established in 1988, as India's national initiative for design, development and delivery of high performance computing (Supercomputer) systems and solutions based on parallel processing technology, C-DAC has over the years diversified its activities, transferring the expertise it acquired and technologies it developed in the high-end computing to develop and deploy advanced Information Technology (IT) based solutions in the key sectors of economy. C-DAC, Bangalore has Setup the first SCADA Security testbed in our country. The testbed caters to research in the development of CI security solutions, SCADA Security, RTU security and Network security solutions. CDAC Open Process Solution (COPS) Defender, SCADA Protocol Anomaly Detector (SPADe), Guard your Network, Application aware firewall, Cloud security, IOT security are few key solutions developed here.

#### **Technical Coordinators**

Ms A Suganya Head - Hardware Security Research Team SETS, Chennai Tel: 044-66632517 e-mail:asuganya@setsindia.net Mr Senthil Kumar Associate Director, RTS&IoT Group C-DAC, Bangalore

Tel: 080-25093400 Ext:3440 e-mail: senthil@cdac.in

#### **Registration:**

• Rs. 3000/- Professionals from Industry
• Rs. 2500/- Government Personnel and Academic Staff
• Rs. 1500/- Research Scholars/Students
(It includes workshop Kit, Working Lunch, Tea and Snacks)
Payment process as given in the registration form.
Programme:
Registration : 9.00 a.m.
Inauguration : 9.30 a.m.
Session : 10.00 a.m.

#### Venue: Auditorium, SETS, Chennai

Registration fee along with application should be sent to the **Dr. P. Nageswara Rao** Workshop Manager Society for Electronic Transactions and Security (SETS) MGR Knowledge City, CIT Campus, Taramani, Chennai – 600 113 Phone: 044 – 66632506 Fax: 044–66632501 Mobile: 9884143131 e-mail: workshop@setsindia.net



Computer Society of India Chennai Chapter In Association with



IEEE Computer Society Madras Chapter



ACM Chennai Professional Chapter



Information Security Education and Awareness