

Implementing on Nuclear Security Culture in Indonesia

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Introduction



- Indonesia has 7 nuclear facilities:
 1. TRIGA Mark Reactor (2MW) in Bandung,
 2. Kartini Reactor (250 kW) in Jogjakarta,
 3. Multipurpose Reactor - GA Siwabessy (30 MW) in Serpong,
 4. Research Reactor Fuel Element Production Installation in Serpong,
 5. Experimental Fuel Element Installation in Serpong,
 6. Radio metallurgy Installation in Serpong,
 7. Interim Storage for Spent Fuel in Serpong.

Nuclear Facilities in Indonesia



Experimental
FE Installation,
Serpong

RI-C

RI-E

RR Fuel Fabrication
Plant, Serpong

RI-D

RI-A



RI-G

Install. of
Radio-
metallurgy,
Serpong

RI-F

Spent Fuel Interim
Storage, Serpong

RI-B



Introduction



The existence of nuclear facilities in Indonesia and the use, storage, and transport of nuclear material has encouraged the Indonesia government to adapt the international regulation into its regulation.

National Legislations



- Act No. 10 year 1997 on Nuclear Energy
- Act No. 15 year 2003 on the Establishment of the GR replacing the Act No. 1 year 2002 on Terrorism.
- GR No. 54 year 2012 on the Safety and Security of Nuclear Installations and Materials
- GR No. 2 year 2014 on Licensing of Nuclear Installations and Materials
- BCR No. 1/2009 on the System of Phy. Protection of NIM
- BCR No. 4/2011 on Safeguards system

Draft Act on Nuclear Security (in Process of Ministry and Agency discussion)

Implementation of nuclear security



- One of the efforts to improve nuclear security, In 2014 Indonesia established a *Center for Security Culture and Assessment (CSCA)*.
- CSCA is managed by BATAN

Objectives and functions of CSCA



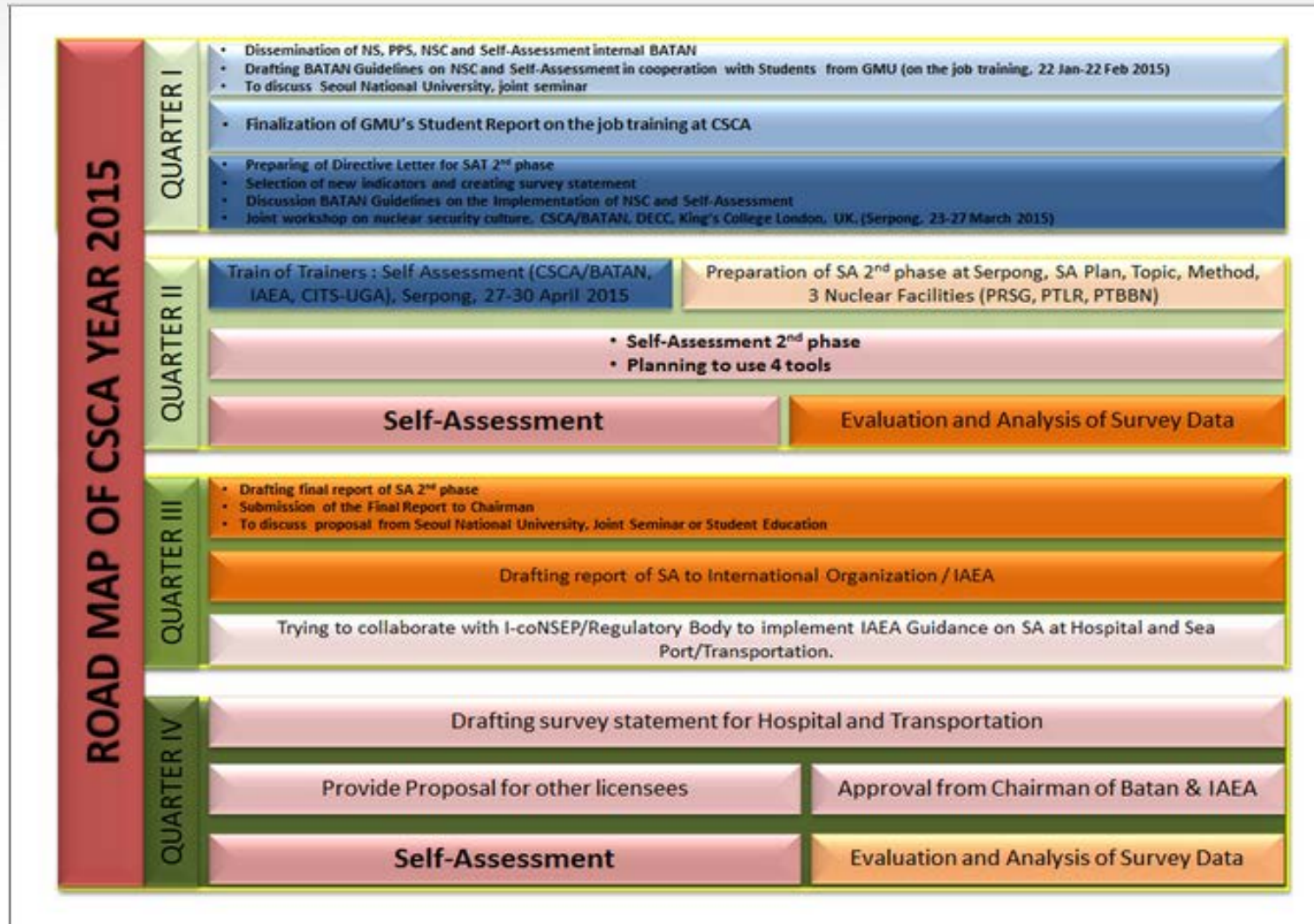
- Conduct dissemination of security culture and its assessment method at nuclear facilities and users of radioactive sources
- Review and comment on the results of the self-assessment of security culture and also provide recommendations.
- Assist the management of assessed facilities to develop follow-up action plans and implementation of good security culture.
- Cooperate with safety culture team to optimize the interface between safety and security.

Objectives and functions of CSCA



- Provide nuclear security awareness training and assessment.
- Assess security culture characteristics and indicators and well as its assessment methods.
- Build networking and collaboration with organizations at the national, district/regional and international levels and develop security culture and assessment
- Conduct an assessment of security through performance testing and vulnerability analysis.

Road Map of CSCA



Self-Assessment program



- In August 12th, 2015 BATAN do stage 2 Nuclear Security Culture Self-Assessment
- The stage 2 survey is using 4 tools: survey, interview, document review and observation
- The respondents were coming from 329 employees
- Stage 2 survey was performed specifically in 3 Working Units (Center) in Serpong Nuclear Area, which are: Multi-purpose Reactor Center, Nuclear Fuel Technology Center and Radioactive Waste Technology Center.

The result



- The survey result will give benefits to the employees, officials and leadership in order to determine the improvement measures in the future, based on the culture indicators that was seen negative by the respondents.
- As the follow up from the stage 1 survey, which has provided many benefits like the improvement of the awareness on security culture.

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