Development of psychosocial model for detecting the insider threat in trustworthiness programme

Insider adversaries are one of the most potential threats to nuclear facility which is difficult to identify and mitigate. One of the security preventive measures against insider threats is established trustworthiness assessment of the employees. National Nuclear Energy Agency (BATAN) of Indonesia has trustworthiness programme such as supervisor review, medical appraisal, management decision and trust official review. Currently, expert’s opinion play an important role to analyze those information for detecting the malicious insider threats. This method is time consumable and too subjective. Therefore, it is necessary to have a tool to accomplish those analysis. This study proposes the psychosocial model for detecting the insider threat. Lists of trustworthiness dimensions and indicators have been investigated and scored based on its contribution to trustworthiness degrees. Then, the operational definition of each dimensions and indicators have to be defined for obtaining the same perception of the manner. Finally, the information from the responders have been collected by using sets of psychometric scale questionnaire. The questionnaire results of psychosocial model are expected can predict the malicious behavior of responders