



Contribution ID: 66

Type: **Wedge Participant**

## Virtual Reality - ISCN's Effective Capacity Building Tool

*Monday, 5 November 2018 17:10 (5 minutes)*

Capacity building is an important area to be continually reinforced in order to maintain the successful operation of an entity or organization. The depletion of capable human resources due to retirement, health and other unavoidable conditions should be addressed. The valuable knowledge and experience could be shared in a certain way with ease of comprehension and information retention. Virtual reality (VR) is one of those tools that can be used in response to the urgent need of capturing the knowledge and experience from relevant resources. In 2016, the Integrated Support Center for Nuclear Nonproliferation and Nuclear Security (ISCN) of the Japan Atomic Energy Agency (JAEA) invested to equip its Center of Excellence with knowledge transfer technology through virtual reality. The ISCN has developed a VR system that provides a three-dimensional computer generated training environment which can be explored and interacted with by a person or individual. Through this VR system, that person becomes part of this virtual world or is immersed within this environment; while being there, the person is able to manipulate objects or perform a series of actions. This paper describes how virtual reality is being used by the ISCN as an effective capacity building tool. It will also describe the approach of how the knowledge and experience for a specific subject matter are conveyed through the use of virtual reality. The effectiveness of the tool had been introduced and used in several occasions during the training course for the State System of Accounting for and Control of Nuclear Material (SSAC), with the benefit from zero exposure to radiation and in a virtually suitable environment for the participants, while learning the safeguards concept and its associated nuclear material verification measures.

### Which "Key Question" does your Abstract address?

SGI3.7

### Which alternative "Key Question" does your Abstract address? (if any)

SGI3.8

### Topics

SGI3

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**Session Classification:** [TEC] Recent Examples of Innovation in Safeguards

**Track Classification:** Leveraging technological advancements for safeguards applications (TEC)