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The International Safeguards Working Group on Open Source and Geospatial Information: Overview, Activities, and Future Plans

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ABSTRACT

The open source and geospatial information (OSGI) working group is a community of experts, practitioners, and interested parties from within the Institute of Nuclear Materials Management's (INMM) International Safeguards Technical Division (ISD) focusing on open source and geospatial information collection and analysis in support of safeguards verification activities. The working group was formed in 2012 and has seen its membership, interest, and engagement grow alongside the unprecedented availability of open source and geospatial data and the associated software and hardware needed to process it. Most recently, the working group published a special issue of INMM's peer-reviewed Journal of Nuclear Materials Management, highlighting nine technical manuscripts from multi-disciplinary teams across the globe and an introduction from the International Atomic Energy Agency on the evolution of open source and geospatial analytics for safeguards. In this paper, we will describe the working group's background and mission, review its historical activities, and preview upcoming events and plans for future engagement.
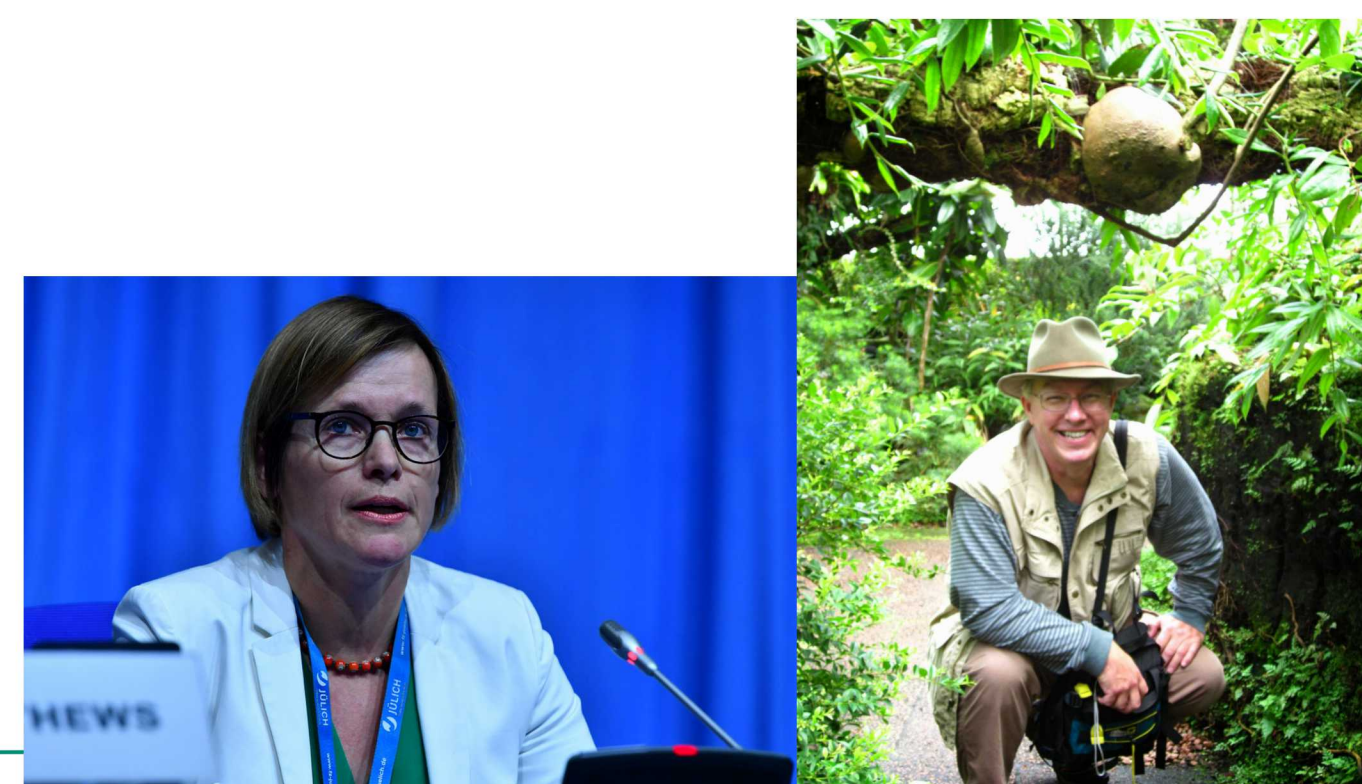
MISSION

The working group aims to provide a dedicated forum for the open and free exchange of ideas and concepts in the domain of open source and geospatial information. The group's mission is to promote the use of open-source and geospatial information for addressing some of the most difficult international safeguards and nonproliferation challenges of the day, and to examine the issues, challenges and opportunities of leveraging these expanding information sources and technologies within a safeguards and nonproliferation perspective. This working group shares experiences, expertise, and expectations regarding the emerging open source and geospatial information technologies for safeguards and nonproliferation.
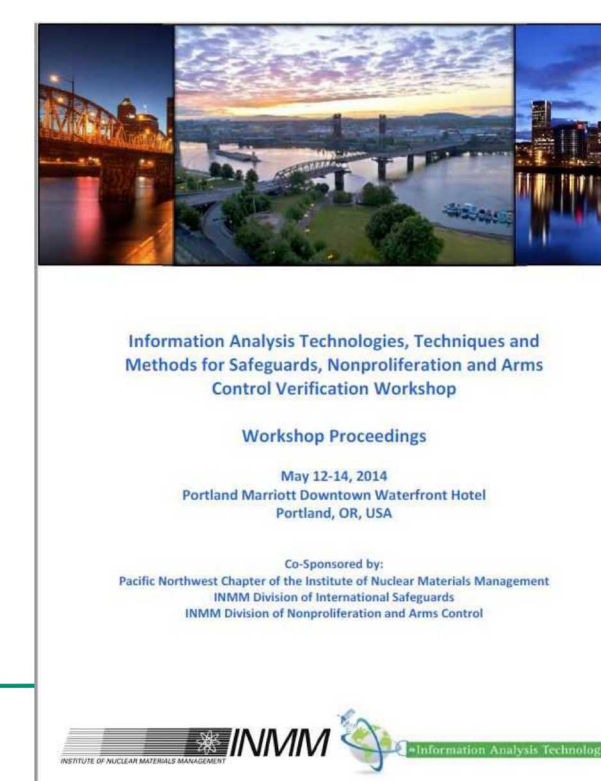

2012: OSGI WG founded, by co-chairs: Irmgard Niemeyer and Karl Horak
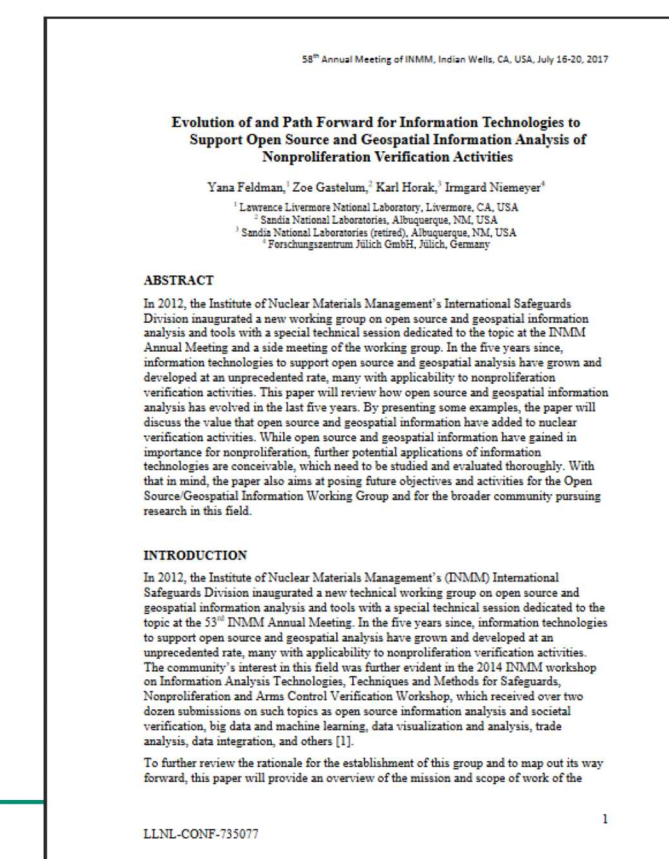Image credit (left): IAEA 2018

2014: INMM Workshop on Information Analysis for Safeguards, Nonproliferation and Arms Control, held in Portland, OR, USA

2016: New OSGI WG co-chairs appointed: Zoe Gastelum and Yana Feldman

2018: WG coordinates a special issue of the Journal of Nuclear Materials Management

2017: WG presents strategic planning paper at INMM Annual Meeting

2016: Outreach lecture on open source information analysis for safeguards to INMM Mercyhurst student chapter

October 2019: Planning collaborative working group sessions at the Joint INMM/ESARDA Meeting in Tokyo, Japan

April 2020: Plans for significant technical contributions to the INMM Emerging Digital Technologies Workshop in Livermore, CA, USA

Beyond: Our future is bright! Education and training opportunities for WG members at the INMM Annual Meeting and throughout the year; additional technical forums and workshops, and more!