LA-UR-12-22917

Approved for public release; distribution is unlimited.

Title: Towards a tactical nuclear weapons treaty? Is There a Role of IAEA

Tools of Safeguards?

Author(s): Saunders, Emily C.

> Rowberry, Ariana N. Fearey, Bryan L.

Intended for: INMM Annual Meeting, 2012-07-15/2012-07-20 (Orlando, Florida, United

States)



Disclaimer:

Disclaimer:

Los Alamos National Laboratory, an affirmative action/equal opportunity employer,is operated by the Los Alamos National Security, LLC for the National NuclearSecurity Administration of the U.S. Department of Energy under contract DE-AC52-06NA25396. By approving this article, the publisher recognizes that the U.S. Government retains nonexclusive, royalty-free license to publish or reproduce the published form of this contribution, or to allow others to do so, for U.S. Government purposes. Los Alamos National Laboratory requests that the publisher identify this article as work performed under the auspices of the U.S. Departmentof Energy. Los Alamos National Laboratory strongly supports academic freedom and a researcher's right to publish; as an institution, however, the Laboratory does not endorse the viewpoint of a publication or guarantee its technical correctness.

Towards a tactical nuclear weapons treaty?

Is There a Role of IAEA Tools of Safeguards?

Emily Cura Saunders[1], Ariana N. Rowberry[2], Bryan L. Fearey[3]

Abstract:

In recent years, there is growing interest in formal negotiations on non-strategic or tactical nuclear weapons. With the negotiations of New START, there has been much speculation that a tactical nuclear weapons treaty should be included in the follow on to New START. This paper examines the current policy environment related to tactical weapons and some of the issues surrounding the definition of tactical nuclear weapons. We then map out the steps that would need to be taken in order to begin discussions on a tactical nuclear weapons treaty. These steps will review the potential role of the IAEA in verification of a tactical nuclear weapons treaty. Specifically, does IAEA involvement in various arms control treaties serve as a useful roadmap on how to overcome some of the issues pertaining to a tactical nuclear weapons treaty?

[2] Department of Political Science, University of North Carolina, Chapel Hill, NC, 27514

[1] School of Politics and Economics, Claremont Graduate University, Claremont, CA 91711

[3] MS-A148, National Security Office, Los Alamos National Laboratory, Los Alamos, NM 87544

Towards a tactical nuclear weapons treaty? Is There a Role of IAEA Tools of Safeguards?

Emily Cura Saunders, CGU Ariana Rowberry, UNC Bryan L. Fearey, LANL

Prepared for the 53rd Annual Meeting-INMM

Outline

- Introduction
- Obstacle One: Defining TNWs
- Obstacle Two: Negotiations
- Obstacle Three: Technical Issues
- The role of the IAEA
- Conclusion





Introduction

- History
 - INF
 - PNIs
- US Domestic Politics
 - New START Senate Ratification
- NATO Politics
 - Strategic Concept
 - DDPR





Obstacle One: Defining TNWs

- How do we discriminate between TNWs and Strategic Nuclear Weapons?
 - Range
 - Yield
 - Delivery Vehicle



Obstacle Two: Negotiations

- Complexity of negotiating arms control treaties would not be lost on a TNW treaty
 - Asymmetry
 - Limits to US bargaining leverage
 - RF limited conventional forces
 - Compromises?





Obstacle Three: Technical Issues

- Issues of employing an effective inspection and verification regime
 - Counting warheads
 - Centralized storage units
 - Overall limit
 - Transparency





IAEA Role

- Is there a role of IAEA involvement in bilateral arms control?
 - Statue
 - Historical precedent
 - Benefits
 - Drawbacks





Conclusion

- Arriving at an acceptable definition of TNWs will require serious discussion between the Russian Federation and the United States.
- Furthermore, creating a verification regime represents a series of substantive challenges, in particular the potential exposure of sensitive information that could be damaging to each states national security.



Conclusion (Cont)

 As also suggested earlier, an alternative approach and one that may allow for the United States and Russia to side step some of the aforementioned issues would be to set a total ceiling on *all* nuclear weapons, deployed, non-deployed, strategic, and non-strategic.











