
Conference on Disarmament

1 July 2015

Original: English

Canada

Working paper

Considering verification implications of fissile material definitions and of fissile material categories for future treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices

GE.15-10965 (E)



* 1 5 1 0 9 6 5 *

Please recycle 



Verification implications for different definitions of fissile material for which their production is banned for proscribed purposes

<i>Definition of Fissile Material</i>	<i>What specific obligations would be covered?1</i>	<i>Relevant verification tools</i>	<i>Challenges to effective verification2</i>	<i>Potential verification risks/gaps to providing credible assurance on compliance</i>	<i>Observations</i>
90% or more of U-235 or U-233 Pu containing more than 95% of Pu-239					
Pu less than 80% Pu-238, 20% or more U-235 and/or U-233 (Un-irradiated Direct Use Material)					
Pu-239, U-233, U enriched in U-235 and U-233 (Special Fissionable Material)					
a specific isotopic composition, to be determined during negotiations based on the scope and verification requirements of the treaty					
Other Materials Covered (e.g Neptunium, Americium)					

¹ This could include, inter alia, specific production activities and production facilities, that would be included in the scope of a production ban according to different fissile material definitions.

² This could include, inter alia, considerations related to national security and sensitive information, cost and resource questions, and technical capabilities.

Verification implications of fissile material categories that could be included as part of the scope of a future Treaty

<i>Functional Categories of Material</i>	<i>What specific obligations would be covered?³</i>	<i>Relevant Verification Tools</i>	<i>Challenges to effective verification</i>	<i>Potential verification risks/gaps to providing credible assurance on compliance</i>	<i>Observations</i>
Future Production of Fissile Material for Civilian Use					
Future Production of Fissile Material for Non-Proscribed Military Purposes					
Existing Stockpiles of Fissile Material for Civilian Use					
Existing Stockpiles of Fissile Material for Non-Proscribed Military Purposes					
Existing Stockpile Excess to Nuclear Weapon Requirements					
Existing Stockpiles Produced for Nuclear Weapons					

³ This could include, inter alia, obligations related to non-diversion, transfer, declarations and transparency, or material accountancy and control.