Conference on Disarmament

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Arabic, Chinese, English, French and Russian only

Australia

Working paper

Corrigendum

Fissile material¹ types potentially relevant to FMCT verification²

Subsitute table to read

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¹ Aims to cover all of the main proposed fissile material definitions.

	Risk to FMCT	Value added to FMCT by verification of non-diversion	Verification challenge	Main facilities to be verified
LEU in bulk forms such as UF6, UO2	Risk for undeclared enrichment	"light" verification would be of value	methodologies available	enrichment, conversion and fuel fabrication facilities
LEU in non-bulk forms	Low risk for undeclared enrichment	low	methodologies available	fuel fabrication facilities and nuclear reactors
unseparated Pu, U-233 in irradiated fuel	Risk for undeclared reprocessing	"light" verification would be of value for fast breeder blanket fuel, otherwise low value	methodologies available ³ but for dry storage are challenging	nuclear reactors and off-site stores
separated plutonium, HEU and U-233 in bulk forms	Moderate to high risk for use in weapons	high	methodologies available,	enrichment and reprocessing facilities, some fuel fabrication facilities
			new managed access approaches may be needed for some facilities ³	
HEU, U-233 and plutonium in unirradiated fuels	Moderate risk for use in weapons	moderate	methodologies available ³	some conversion and fuel fabrication facilities, some nuclear reactor sites
separated Np, Am	Low to moderate risk for use in weapons	moderate	available methodologies may be adapted	reprocessing plants
small quantities of fissile material used for isotope production or in research	Low risk for use in weapons	low	methodologies available	isotope production facilities,
				R&D laboratories,
				locations outside facilities
fabricated unirradiated LEU naval fuel	Low risk for undeclared enrichment	low	necessary methodologies not yet developed, significant managed access issues need to be addressed	Small in number
HEU for naval fuel in bulk forms	Moderate to high risk for use in weapons	moderate-high	available methodologies may be adapted, but significant managed access issues need to be addressed	small in number

³ Measurement techniques for U-233 need to be developed.

	Risk to FMCT	Value added to FMCT by verification of non-diversion	Verification challenge	Main facilities to be verified
fabricated unirradiated HEU naval fuel	Moderate risk for use in weapons	moderate	necessary methodologies not yet developed, significant managed access issues need to be addressed	small in number
'excess' fissile material in weapons forms	High risk for use in weapons	high	necessary methodologies not yet developed, significant managed access issues need to be addressed, proliferation- sensitive information must be protected	small in number