

Table 2.8 - Operational Nuclear Delivery Systems, 2015-2016

Таблица 2.8 – Действующие системы доставки ядерного оружия, 2015-2016

NAME/DESIGNATION НАЗВАНИЕ	AKA ТАКЖЕ ИЗВЕСТНО ПОД ИМЕНЕМ	NUMBER OF SYSTEMS Active+Spare ЧИСЛО СИСТЕМ Действующих+Зapasных	YEAR FIRST DEPLOYED ГОД ВВОДА В ЭКСПЛУАТАЦИЮ	WARHEAD TYPE ТИП БОЕГОЛОВКИ	NUMBER OF WARHEADS x YIELD (kilotons) ЧИСЛО БОЕГоловоК x МОЩНОСТЬ (килотонн)	RANGE (km) ДАЛЬНОСТЬ (км)	TOTAL NUMBER OF WARHEADS Active+Spare ОБЩЕЕ ЧИСЛО БОЕГоловоК ОК Действующих+Зapasных
LAND BALLISTIC MISSILES БАЛЛИСТИЧЕСКИЕ РАКЕТЫ НАЗЕМНОГО БАЗИРОВАНИЯ							
UNITED STATES							
ICBM МЕЖКОНТИНЕНТАЛЬНЫЕ БАЛЛИСТИЧЕСКИЕ РАКЕТЫ							
LGM-30G	Minute man III					13,000	
	MK-12A	200	1979	MIRV, Single	3 x 335		600
	MK-21 SERV	240	2006	Single	1 x 300		240
TOTAL 16(SIPRI) 16(BULL)		440					840
SRBM БАЛЛИСТИЧЕСКИЕ РАКЕТЫ МАЛОГО РАДИУСА ДЕЙТВИЯ							
ATACMS Block I		Some	1991	Single	1 x 560kg payload	165	Some
ATACMS Block IA		Some	1998	Single	1 x 160kg payload	300	Some
ATACMS Block II		Some	2002	Single	1 x 270kg payload	140	Some
TOTAL 08(WIKI)		Some					Some
RUSSIA							
ICBM МЕЖКОНТИНЕНТАЛЬНЫЕ БАЛЛИСТИЧЕСКИЕ РАКЕТЫ							

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SS-18 M6 Satan	RS-20V	46	1992	MIRV	10 x 500-800	11,000-15,000	460
SS-19 M3 Stiletto	RS-18 (UR-100NU TTH)	20	1980	MIRV	6 x 400	10,000	120
SS-25 Sickle	RS-12M (Topol)	90	1985	Single	1 x 800	10,500	90
SS-27 Mod. 1 (mobile)	RS-12M1 (Topol-M)	18	2006	Single	1 x (800)?	10,500	18
SS-27 Mod. 1 (silo)	RS-12M2 (Topol-M)	60	1997	Single	1 x 800	10,500	60
SS-27 Mod. 2 (mobile)	RS-24 (Yars)	63	2010	MIRV	4 x (100)?	10,500	252
SS-27 Mod. 2 (silo)	RS-24 (Yars)	10	2014	MIRV	4 x (100)?	10,500	40
SS-27 Mod. 3 (mobile)	RS-26 (Yars-M)	-	(2016)	MIRV	3 x (100)?		-
SS-27 Mod. ? (rail)	Barguzin	-	(2019)	MIRV	4 x (100)?		-
“heavy” ICBM 2 (silo)	Sarmat	-	(2020)	MIRV	10 x (100)?		-
TOTAL 16(SIPRI) 16(BULL)		307					1,040
SRBM							
БАЛЛИСТИЧЕСКИЕ РАКЕТЫ МАЛОГО РАДИУСА ДЕЙСТВИЯ							
SS-1c Mod 1	Scud-B	Some	1964	Single	1 x 1,000kg	300	Some

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					payload		
SS-1c Mod 2	Scud-B	Some	1964	Single	1 x 950kg payload	240	Some
SS-21 Scarab	Tochka	80	1981	Single	(1 x 10)	120	~80
SS-26 Stone	Iskander	60	2005	Single	(1 x 10)	500	~60
TOTAL 16(SIPRI) 16(BULL) 08(WIKI)		~140					~140
CHINA							
ICBM МЕЖКОНТИНЕНТАЛЬНЫЕ БАЛЛИСТИЧЕСКИЕ РАКЕТЫ							
CSS-4 Mod 2	DF-5A	~10	1981	Single	1 x 4,000-5,000	12,000	~10
CSS-4 Mod 3	DF-5B	~10	2014	MIRV	3 x 200-300	~12,000	~30
CSS-10 Mod 1	DF-31	~8	2006			>7,200	~8
				Single	1 x 200-300		
				MIRV	3 x 50-100		
CSS-10 Mod 2	DF-31A	~25	2007			>11,200	~25
				Single	1 x 200-300		
				MIRV	3-5 x 20-150		
	DF-41	0					
TOTAL 16(SIPRI) 16(BULL)		~53					~73
IRBM БАЛЛИСТИЧЕСКИЕ РАКЕТЫ СРЕДНЕГО РАДИУСА ДЕЙСТВИЯ							
CSS-2	DF-3A	~8	1971	Single	1 x 3,300	3,000	~8

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CSS-3	DF-4	~10	1980	Single	1 x 3,300	5,500	~10
CSS-5	DF-21, DF-21A	~80	1991	Single	1 x 200-300	2,100	~80
TOTAL 16(SIPRI) 16(BULL) 11(WIKI)		~98					~98
SRBM БАЛЛИСТИЧЕСКИЕ РАКЕТЫ МАЛОГО РАДИУСА ДЕЙСТВИЯ							
CSS-6	DF-15/M-9	~100	1994	Single	1 x 50-350	600	Some
CSS-7	DF-11/M-11	32	1999	Single	1 x 0.5	300	Some
CSS-8	DF-7	30	?	Single	1 x 500kg payload	150	?
TOTAL 16(SIPRI) 16(BULL) 04(IISS)		~162					Some
INDIA							
IRBM БАЛЛИСТИЧЕСКИЕ РАКЕТЫ СРЕДНЕГО РАДИУСА ДЕЙСТВИЯ							
Agni II		~8	2011	Single	1 x 12	>2,000	~8
Agni III		~4	(2014)	Single	1 x 12	>3,200	~4
Agni IV		0	(2016)		1 x 12	>3,500	0
Agni V		0	(2017)	Single	1 x 12	>5,200	0
TOTAL 16(SIPRI) 15(BULL) 12(JDW)		~12					~12

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11(WIKI)							
SRBM БАЛЛИСТИЧЕСКИЕ РАКЕТЫ МАЛОГО РАДИУСА ДЕЙСТВИЯ							
Agni I		~20	2007	Single	1 x 12	>700	~20
Prithvi II		~24	2003	Single	1 x 12	250	~24
TOTAL 16(SIPRI) 15(BULL)		~44					~44
PAKISTAN							
IRBM БАЛЛИСТИЧЕСКИЕ РАКЕТЫ СРЕДНЕГО РАДИУСА ДЕЙСТВИЯ							
Ghauri-1	Haft 5	~40	2003	Single	1 x 12	1,250	~40
Shaheen-2	Haft 6	~8	2014	Single	1 x 12	1,500	~8
Shaheen-3	Haft 6	0	(2018)	Single	1 x 12	2,750	0
TOTAL 16(SIPRI) 15(BULL) 15(WIKI)		~48					~48
SRBM БАЛЛИСТИЧЕСКИЕ РАКЕТЫ МАЛОГО РАДИУСА ДЕЙСТВИЯ							
	Haft 1	Some	1989	Single	1 x 500kg payload	70	Some
	Haft 1A	Some	1995	Single	1 x 500kg payload	100	Some
	Haft 1B	Some	2001	Single	1 x 500kg payload	100	Some
Abdali	Haft 2	Some	(2015)	Single	1 x 12	180	Some
Ghaznavi	Haft 3	~16	2004	Single	1 x 12	290-320	~16
Shaheen-1	Haft 4	~16	2003	Single	1 x 12	750	~16
Shaheen-1A	Haft4	0	(2017)	Single	1 x 12	900	0

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Nasr	Haft 9	~6	(2013)	Single	1 x 12	60	~6
TOTAL 16(SIPRI) 15(BULL) 15(WIKI)		~38					~38
ISRAEL							
ICBM МЕЖКОНТИНЕНТАЛЬНЫЕ БАЛЛИСТИЧЕСКИЕ РАКЕТЫ							
Jericho 3		2-5	2008				Some
				Single	1 x 1,000-1,300	11,500	
				MIRV	6 x 100	11,500	
Jericho 2B		Some	1990	Single	1 x 500kg	>7,800	Some
TOTAL 15(SIPRI) 14(BULL) 12(JDW) 11(WIKI) Note [1], [2], [3], [4], [5]		Some					Some
IRBM БАЛЛИСТИЧЕСКИЕ РАКЕТЫ СРЕДНЕГО РАДИУСА ДЕЙСТВИЯ							
Jericho 2		50	1990				50
				Single	1 x 750-1,000kg payload	1,500-1,800	
TOTAL 16(ISS) 16(SIPRI) 14(BULL) 11(WIKI)		50					50

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NORTH KOREA							
IRBM							
БАЛЛИСТИЧЕСКИЕ РАКЕТЫ СРЕДНЕГО РАДИУСА ДЕЙСТВИЯ							
No-Dong-1		<50	1997	Single	1 x 1,000-1,250kg payload	1,250	Some
Rodong-1		Some		Single		1,300	Some
Rodong-2		Some		Single		2,000	Some
Taepodong-1		Some		Single		2,500	Some
Musudan		Some	(>2011)	Single	~1,000kg payload	3,500-4,000	Some
Hwasong-13		Some				>5,500	Some
Taepodong-2		Some				>5,500	Some
TOTAL 16(SIPRI) 15(IISS) 05(BULL) 11(WIKI)		0(6)					Up to 20
SRBM							
БАЛЛИСТИЧЕСКИЕ РАКЕТЫ МАЛОГО РАДИУСА ДЕЙСТВИЯ							
Scud-B		Some	1979-1980	Single	1 x 1,000kg payload	300	Some
Scud-C variant		Some	1989	Single	1 x 700kg payload	500	Some
Scud-D		Some	2006	Single	1 x 500kg payload	700	Some
TOTAL 15(SIPRI) 05(BULL)		Some					Some
SLBM							
БАЛЛИСТИЧЕСКИЕ РАКЕТЫ, БАЗИРУЮЩИЕСЯ НА ПОДВОДНЫХ ЛОДКАХ							

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UNITED STATES							
UGM-133	Trident II D-5	288					
	МК-4		1992	MIRV	4 x 100	12,000	628
	МК-4A		2008	MIRV	4 x 100	>7,400	1,100
	МК-5		1990	MIRV	4 x 475	12,000	384
TOTAL 16(SIPRI) 16(BULL)		288					2,112
UNITED KINGDOM							
UGM-135	Trident II D-5	48	1994	MIRV	1-3 x 100	12,000	215
TOTAL 16(SIPRI) 11(BULL)		48					215
RUSSIA							
SS-N-18 M1 Stingray	RSM-50	32	1978	MIRV	3 x 50	6,500	96
SS-N-23 M1	RSM-54 (Sineva)	96	2007	MIRV	4 x 100	9,000	320
SS-N-32	RSM-56 (Bulava)	48	2014	MIRV	6 x 100	>8,050	288
TOTAL 16(SIPRI) 16(BULL)		176					704

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FRANCE							
M-45		16	1996	MIRV	4-6 x 100	6,000	80
M-51.1		32	2010-2011	MIRV	4-6 x 100	8,000-10,000	160
M-51.2		0	(2016)	MIRV	4-6 x TNO	>6,000	0
M-51.3		0			(6 x 150)	(>6,000)	0
TOTAL 16(SIPRI) 08(BULL)		48					240
CHINA							
CSS-NX-3		?	1986				?
	JL-1			Single	1 x 200-300	>1,700	
	JL-1			Single	1 x 25-50	2,150	
	JL-1A			Single	1 x 25-50	2,500	
CSS-NX-14	JL-2	(48)	(2015)			>7,000	(48)
				Single	1 x 200-300		
				MIRV	3-4 x 90		
TOTAL 16(SIPRI) 16(BULL)		(48)					(48)
INDIA							
	K-4	0	?	Single	1 x 1,000kg payload	~3,000	0
Sagarika / Arihant	K-15	(12)	(2017)	Single	1 x 12	700	(12)
Dhanush	NA	2	2013	Single	1 x 12	400	2
TOTAL 16(SIPRI) 15(BULL)		(14)					(14)
AIRCRAFT							

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UNITED STATES							
STRATEGIC СТРАТЕГИЧЕСКИЕ БОМБАРДИРОВЩИКИ							
B-52H	Stratofortress	76/44	1961	ALCM	5-150	16,000	528
				ACM	5-150		
B-2A	Spirit	20/16	1994	Bombs B61-7, -11, B83-1	ACM 5-150	11,000	256
TOTAL 16(SIPRI) 16(BULL)		96/60					784
SUB-STRATEGIC ПОЛУСТРАТЕГИЧЕСКИЕ БОМБАРДИРОВЩИКИ							
F-15E	Strike Eagle	Some	1988	Bomb B61-3, B61-4, B61-10	5 x 0.3-170	3,840	200
F-16C/D	Fighting Falcon	Some	1987	Bomb B61-3, B61-4, B61-10	2 x 0.3-170	3,200	200
F-16MLU	Fighting Falcon	Some	1985	Bomb B61-3, B61-4, B61-10	2 x 0.3-170	3,200	60
PA-200	Tornado	Some	1983	Bomb B61-3, B61-4, B61-10	2 x 0.3-170	2,400	40
TOTAL 16(SIPRI) 16(BULL) 09(WIKI) 04(IISS)		Some					500
RUSSIA							
STRATEGIC СТРАТЕГИЧЕСКИЕ БОМБАРДИРОВЩИКИ							

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Bear H6	Tu-95 MS6	24/27	1981	ALCM, Bombs	6 x AS-15A ALCMs, bombs	6,500-10,500	162
Bear H16	Tu-95 MS16	25/30	1981	ALCM, Bombs	16 x AS-15A ALCMs, bombs	6,500-10,500	480
Blackjack	Tu-160	11/13	1987	ALCM, SRAM, bombs	12 x AS-15B ALCMs or AS-16 SRAMs, bombs	10,500-13,200	156
TOTAL 16(SIPRI) 16(BULL)		60/70					798
SUB-STRATEGIC ПОЛУСТРАТЕГИЧЕСКИЕ БОМБАРДИРОВЩИКИ							
Land-based bombers Наземные бомбардировщики							
Tu-22M-3	Backfire-C	120	1974	ASM, bombs	3 x ASM, bombs	4,800-7,000	~300
Su-24M/M2	Fencer-D	200	1974	Bombs	2 x bombs	2,100-3,000	~200
Su-34	Fullback	68	2006	Bombs	2 x bombs		~68
TOTAL 16(SIPRI) 16(BULL)		388					~568
Naval bombers, submarines, surface ships Военно-морские бомбардировщики, подводные лодки, надводные корабли							
TOTAL 16(SIPRI) 16(BULL)		Some					~140
FRANCE							

Table 2.8 - Operational Nuclear Delivery Systems, 2015-2016

Таблица 2.8 – Действующие системы доставки ядерного оружия, 2015-2016

NAME/DESIGNATION НАЗВАНИЕ	AKA ТАКЖЕ ИЗВЕСТНО ПОД ИМЕНЕМ	NUMBER OF SYSTEMS Active+Spares ЧИСЛО СИСТЕМ Действующих+Зapasных	YEAR FIRST DEPLOYED ГОД ВВОДА В ЭКСПЛУАТАЦИЮ	WARHEAD TYPE ТИП БОЕГОЛОВКИ	NUMBER OF WARHEADS x YIELD (kilotons) ЧИСЛО БОЕГОЛОВОК x МОЩНОСТЬ (килотонн)	RANGE (km) ДАЛЬНОСТЬ (км)	TOTAL NUMBER OF WARHEADS Active+Spares ОБЩЕЕ ЧИСЛО БОЕГОЛОВОК Действующих+Зapasных
LAND-BASED НАЗЕМНЫЕ БОМБАРДИРОВЩИКИ							
Mirage 2000N		~20	1988	ASMP	1 x 300	2,750	~20
Rafale F3		~20	2010-2011	ASMP	1 x 300	2,000	~20
TOTAL 16(SIPRI) 08(BULL)		~40					~40
CARRIER-BASED БОМБАРДИРОВЩИКИ, БАЗИРУЮЩИЕСЯ НА АВИАНОСЦАХ							
Rafale MK3		~10	2010-2011	ASMP	1 x 300	2,000	~10
TOTAL 16(SIPRI) 08(BULL)		~10					~10
CHINA							
STRATEGIC СТРАТЕГИЧЕСКИЕ БОМБАРДИРОВЩИКИ							
H-6	B-6	~20	1965	Bomb	1 x 3,000kg payload	3,100	~20
Fighters		?	1972-	Bomb	1 x bomb		?
TOTAL 16(SIPRI) 16(BULL)		>~20					>~20
ISRAEL							
SUB-STRATEGIC ПОЛУСТРАТЕГИЧЕСКИЕ БОМБАРДИРОВЩИКИ							
F-4E-2000	Kurnass	Some	1989	Bomb	1 x 8,480kg payload	2,200	Some
F-16A Fighting	Netz/Hawk	88	1980	Bomb	1 x 5,400kg payload	2,500	Some

Table 2.8 - Operational Nuclear Delivery Systems, 2015-2016

Таблица 2.8 – Действующие системы доставки ядерного оружия, 2015-2016

NAME/DESIGNATION НАЗВАНИЕ	AKA ТАКЖЕ ИЗВЕСТНО ПОД ИМЕНЕМ	NUMBER OF SYSTEMS Active+Spare СИСТЕМ Действующих+З апасных	YEAR FIRST DEPLOYED ГОД ВВОДА В ЭКСПЛУАТАЦИЮ	WARHEAD TYPE ТИП БОЕГОЛОВКИ	NUMBER OF WARHEADS x YIELD (kilotons) ЧИСЛО БОЕГОЛОВОК x МОЩНОСТЬ (КИЛОТОНН)	RANGE (km) ДАЛЬНОСТЬ (КМ)	TOTAL NUMBER OF WARHEADS Active+Spare ОБЩЕЕ ЧИСЛО БОЕГОЛОВОК Действующих+Запасных
Falcon							
F-16B Fighting Falcon	Netz/Hawk	16		Bomb	1 x 5,400kg payload	2,500	Some
F-16C Fighting Falcon	Barak / Lightning	75		Bomb	1 x 5,400kg payload	2,500	Some
F-16D Fighting falcon	Barak / Thunderbolt	46		Bomb	1 x 5,400kg payload	2,500	Some
F-16I Fighting Falcon	Sufa / Storm	101		Bomb	1 x 5,400kg payload	2,500	Some
F-15I Strike Eagle	Ra'am / Thunder	25	1997	Bomb	1 x 10,400kg payload	2,500	Some
F-35I Lightning II		(20)+(55)	(2015)-(2030)	Bomb	5,895kg payload	2,200	(Some)
TOTAL 16(SIPRI) 14(BULL) 15(WIKI) 12(JDW)		351+(20) +(55)					Some
INDIA							
SUB-STRATEGIC ПОЛУСТРАТЕГИЧЕСКИЕ БОМБАРДИРОВЩИКИ							
Jaguar IS/IB	Shamsher	~16	1981	Bomb	1 x bomb	1,600	~16
Mirage 2000H	Vajra	~32	1985	Bomb	1 x bomb	1,850	~32
TOTAL 16(SIPRI) 15(BULL)		~48					~48
PAKISTAN							

Table 2.8 - Operational Nuclear Delivery Systems, 2015-2016

Таблица 2.8 – Действующие системы доставки ядерного оружия, 2015-2016

NAME/DESIGNATION НАЗВАНИЕ	AKA ТАКЖЕ ИЗВЕСТНО ПОД ИМЕНЕМ	NUMBER OF SYSTEMS Active+Spare ЧИСЛО СИСТЕМ Действующих+Зapasных	YEAR FIRST DEPLOYED ГОД ВВОДА В ЭКСПЛУАТАЦИЮ	WARHEAD TYPE ТИП БОЕГОЛОВКИ	NUMBER OF WARHEADS x YIELD (kilotons) ЧИСЛО БОЕГОЛОВОК x МОЩНОСТЬ (килотонн)	RANGE (km) ДАЛЬНОСТЬ (км)	TOTAL NUMBER OF WARHEADS Active+Spare ОБЩЕЕ ЧИСЛО БОЕГОЛОВОК Действующих+Зapasных
SUB-STRATEGIC ПОЛУСТРАТЕГИЧЕСКИЕ БОМБАРДИРОВЩИКИ							
F-16A/B	Fighting Falcon	~24	1998	Bomb/Babur LACM	1 x bomb	1,600	~24
Mirage 2000-5		~12	1998	Bomb or Ra'ad ALCM	1 x 4,000kg payload	2,100	~12
TOTAL 16(SIPRI) 15(BULL)		~36					~36
NORTH KOREA							
SUB-STRATEGIC ПОЛУСТРАТЕГИЧЕСКИЕ БОМБАРДИРОВЩИКИ							
H-5	Il-28	80	1950	Bomb	1 x 3,000kg payload	2,100	Some
TOTAL 15(SIPRI) 05(BULL)		80					Some
SLCM КРЫЛАТЫЕ РАКЕТЫ, ЗАПУСКАЕМЫЕ С ПОДВОДНЫХ ЛОДОК							
UNITED STATES							
Tomahawk	TLAM-N	325	1984	Single	1 x 5-150	2,500	(0)
TOTAL 16(SIPRI) 16(BULL)		325					(0)
RUSSIA							
SS-N-9	Siren	Some	1972	Single	1 x 200	110	Some
SS-N-12	Sandbox	Some	1959-1960	Single	1 x 350	550	Some

Table 2.8 - Operational Nuclear Delivery Systems, 2015-2016

Таблица 2.8 – Действующие системы доставки ядерного оружия, 2015-2016

NAME/DESIGNATION НАЗВАНИЕ	AKA ТАКЖЕ ИЗВЕСТНО ПОД ИМЕНЕМ	NUMBER OF SYSTEMS Active+Spare ЧИСЛО СИСТЕМ Действующих+З апасных	YEAR FIRST DEPLOYED ГОД ВВОДА В ЭКСПЛУАТАЦИЮ	WARHEAD TYPE ТИП БОЕГОЛОВКИ	NUMBER OF WARHEADS x YIELD (kilotons) ЧИСЛО БОЕГОЛОВОК x МОЩНОСТЬ (КИЛОТОНН)	RANGE (km) ДАЛЬНОСТЬ (КМ)	TOTAL NUMBER OF WARHEADS Active+Spare ОБЩЕЕ ЧИСЛО БОЕГОЛОВОК Действующих+З апасных
SS-N-19	Shipwreck	Some	1980	Single	1 x 500	550	Some
SS-N-21	Sampson	Some	1984	Single	1 x 200	2,400	Some
SS-N-22	Sunburn	Some	1980	Single	1 x 320kg payload	120	Some
SS-N-30	Kalibr	Some	2012	Single	1 x 450kg payload	2,500	Some
TOTAL 15(WIKI) 15(JDW) 11(SIPRI) 10(BULL)		Some					~280
ISRAEL							
Turbo-Popeye 3		Some	2000	Single	1 x 200kg payload	1,500	Some
TOTAL 15(SIPRI) 14(BULL) 04(IISS)		Some					Some
ALCM КРЫЛАТЫЕ РАКЕТЫ, ЗАПУСКАЕМЫЕ С САМОЛЕТОВ							
UNITED STATES							
AGM-868		1,140	1982/1991	Single	1 x 900-1,400kg payload	2,500	Some
AGM-129		460	1990	Single	1 x 5-200	3,500	Some
TOTAL 11(SIPRI) 08(BULL)		1,600					Some

Table 2.8 - Operational Nuclear Delivery Systems, 2015-2016

Таблица 2.8 – Действующие системы доставки ядерного оружия, 2015-2016

NAME/DESIGNATION НАЗВАНИЕ	AKA ТАКЖЕ ИЗВЕСТНО ПОД ИМЕНЕМ	NUMBER OF SYSTEMS Active+Spare ЧИСЛО СИСТЕМ Действующих+З апасных	YEAR FIRST DEPLOYED ГОД ВВОДА В ЭКСПЛУАТАЦИЮ	WARHEAD TYPE ТИП БОЕГОЛОВКИ	NUMBER OF WARHEADS x YIELD (kilotons) ЧИСЛО БОЕГОЛОВОК x МОЩНОСТЬ (килотонн)	RANGE (km) ДАЛЬНОСТЬ (км)	TOTAL NUMBER OF WARHEADS Active+Spare ОБЩЕЕ ЧИСЛО БОЕГОЛОВОК Действующих+Запасных
RUSSIA							
AS-4	Kh-24 Kitchen	Some	1964	Single	1 x 1,000	310	Some
AS-15A	Kh-55 Kent	Some	1971	Single	1 x 200-250	2,500	Some
AS-15B	Kh-55SM Kent	Some	1986	Single	1 x 200-250	3,000	Some
AS-16	Kh-15 Kickback	Some	1980	Single	1 x 350	150	Some
TOTAL 11(SIPRI) 08(BULL)		Some					Some
FRANCE							
ASMP		Some	1985	Single	1 x 300	250	Some
TOTAL 11(SIPRI) 08(BULL)		Some					Some
CHINA							
DH-10	CJ-10	150-350	2007	Single	1 x ?	>1,500	Some
DH-20?	CJ-20	?	(2014)	?	1 x ?	>1,500	Some
TOTAL 16(SIPRI) 16(BULL)		150-350					Some
PAKISTAN							
Babur	Haft-7	~8	(2014)	Single	1 x 12	700	~8
Ra'ad	Haft-8	0	(>2017)	Single	1 x 12	350	0
TOTAL 16(SIPRI)		~8					~8

Table 2.8 - Operational Nuclear Delivery Systems, 2015-2016

Таблица 2.8 – Действующие системы доставки ядерного оружия, 2015-2016

NAME/DESIGNATION НАЗВАНИЕ	AKA ТАКЖЕ ИЗВЕСТНО ПОД ИМЕНЕМ	NUMBER OF SYSTEMS Active+Spare СИСТЕМ Действующих+З апасных	YEAR FIRST DEPLOYED ГОД ВВОДА В ЭКСПЛУАТАЦИЮ	WARHEAD TYPE ТИП БОЕГОЛОВКИ	NUMBER OF WARHEADS x YIELD (kilotons) ЧИСЛО БОЕГОЛОВОК x МОЩНОСТЬ (килотонн)	RANGE (km) ДАЛЬНОСТЬ (км)	TOTAL NUMBER OF WARHEADS Active+Spare ОБЩЕЕ ЧИСЛО БОЕГОЛОВОК Действующих+З апасных
15(BULL) 15(WIKI)							
GLCM КРЫЛАТЫЕ РАКЕТЫ НАЗЕМНОГО БАЗИРОВАНИЯ							
INDIA							
Nirbhay		?	?	Single	1 x 250-450kg payload	>700	?
15(SIPRI) 15(BULL)							
MISSILE AND AIR DEFENSE SYSTEMS СИСТЕМЫ ПРОТИВОРАКЕТНОЙ И ПРОТИВОВОЗДУШНОЙ ОБОРОНЫ							
RUSSIA							
STRATEGIC DEFENSIVE SYSTEMS СИСТЕМЫ СТРАТЕГИЧЕСКОЙ ОБОРОНЫ							
53T6	SH-08 Gazelle	68	1986	Single	1 x 10	30	~68
S-300 and S-400	SA-10/20 Grumble, and SA-21 Growler	1,000	1980 and 1992	Single	1 x low yield	5-150	~400
SSC-1B Sepal	Redut	30	1973	Single	1 x 350	500	~12
TOTAL 16(SIPRI) 16(BULL)		~1,100					(~480)
UNITED STATES							

Table 2.8 - Operational Nuclear Delivery Systems, 2015-2016

Таблица 2.8 – Действующие системы доставки ядерного оружия, 2015-2016

NAME/DESIGNATION НАЗВАНИЕ	AKA ТАКЖЕ ИЗВЕСТНО ПОД ИМЕНЕМ	NUMBER OF SYSTEMS Active+Spare ЧИСЛО СИСТЕМ Действующих+З апасных	YEAR FIRST DEPLOYED ГОД ВВОДА В ЭКСПЛУАТАЦИЮ	WARHEAD TYPE ТИП БОЕГОЛОВКИ	NUMBER OF WARHEADS x YIELD (kilotons) ЧИСЛО БОЕГОЛОВОК x МОЩНОСТЬ (килотонн)	RANGE (km) ДАЛЬНОСТЬ (км)	TOTAL NUMBER OF WARHEADS Active+Spare ОБЩЕЕ ЧИСЛО БОЕГОЛОВОК Действующих+Запасных
STRATEGIC DEFENSIVE SYSTEMS СИСТЕМЫ СТРАТЕГИЧЕСКОЙ ОБОРОНЫ							
LAND-BASED НАЗЕМНОГО БАЗИРОВАНИЯ							
Fort Greely (Alaska)		26	2004				0
Fort Greely (Alaska)		(14)	(2017)				(0)
Vandenberg (California)		4	2004				0
TOTAL ground-based interceptors		30+(14)					0
SEA-BASED МОРСКОГО БАЗИРОВАНИЯ							
Aegis BMD cruisers		5					0
Aegis BMD destroyers		25					0
TOTAL Aegis BMD ships		30(80-97)					0
15(IISS)							
14(WIKI)							
08(SIPRI)							
SUB-STRATEGIC DEFENSIVE SYSTEMS СИСТЕМЫ ПОЛУСТРАТЕГИЧЕСКОЙ ОБОРОНЫ							
PAC-3 missiles		546					0
TOTAL		546					0
08(SIPRI)							

ACM advanced cruise missile
AKA also known as
ALCM air-launched cruise missile
ASM air-to-surface missile
MIRV multiple independently targetable re-entry vehicles
ICBM intercontinental ballistic missile
IRBM intermediate-range ballistic missile
SRBM short-range ballistic missile
SLBM submarine-launched ballistic missile
SLCM submarine-launched cruise missile
LACM land-attack cruise missile
GBI ground-based interceptors
BMD ballistic missile defense
PAC-3 Patriot advanced capability-3

SOURCES: SIPRI, BULL, WIKI, IISS, JDW

Notes.

- 1) According to an official report which was submitted to the American congress in 2004, it may be that with a payload of 1,000 kg the Jericho 3 gives Israel nuclear strike capabilities within the entire Middle East, Africa, Europe, Asia and almost all parts of North America, as well as within large parts of South America and North Oceania.
- 2) Henry A. Kissinger (16 July 1969), "Israeli Nuclear Program," Memorandum for the President (The White House), Retrieved 2009-07-26
- 3) Proliferation of Weapons of Mass Destruction: Assessing the Risks, U.S. Congress Office of Technology Assessment, August 1993, OTA-ISC-559, Retrieved 2008-12-09
- 4) Missile Survey: Ballistic and Cruise Missiles of Foreign Countries, by Andrew Feikert, Congressional Research Service, Updated March 5, 2004
- 5) Study on a Possible Israeli Strike on Iran's Nuclear Development Facilities, by Abdullah Toukan, Center for Strategic and International Studies, March 14, 2009

Table 2.9 – Operational Nuclear Warheads, 2015-2016, Strategic

Таблица 2.9 – Действующие ядерные боеголовки, 2015-2016, стратегические

RANK	COUNTRY	ICBM МЕЖКОНТИНЕНТАЛ ЬНЫЕ БАЛЛИСТИЧЕСКИЕ РАКЕТЫ	IRBM БАЛЛИСТИЧЕС КИЕ РАКЕТЫ СРЕДНЕГО РАДИУСА ДЕЙСТВИЯ	SLBM БАЛЛИСТИЧЕС КИЕ РАКЕТЫ, ЗАПУСКАЕМЫ Е С ПОДВОДНЫХ ЛОДОК	ALCM/BOMB КРЫЛАТЫЕ РАКЕТЫ ВОЗДУШНО ГО БАЗИРОВА НИЯ / БОМБЫ	TOTAL
1	Russia	1,040		704	798	2,542
2	U.S.	840		2,112	784	3,736
3	France			240	50	290
4	China	73	98	48	20	239
5	U.K.			215		215
6	India		12	14		26
7	Israel	2-5	50			52-55
8	Pakistan		48			48
9	N. Korea		20			20

ALCM air-launched cruise missile
 ICBM intercontinental ballistic missile
 IRBM intermediate-range ballistic missile
 SLBM submarine-launched ballistic missile

SOURCES: SIPRI, BULL, IISS, JDW

Table 2.10 – Operational Nuclear Warheads, 2015-2016, Sub-Strategic

Таблица 2.10 – Действующие ядерные боеголовки, 2015-2016, полустратегические

RANK РАНГ	COUNTRY СТРАНА	SRBM БАЛЛИСТИЧЕСКИЕ РАКЕТЫ МАЛОГО РАДИУСА ДЕЙСТВИЯ	SLCM, NAVY WEAPONS КРЫЛАТЫЕ РАКЕТЫ, ЗАПУСКАЕМЫЕ С ПОДВОДНЫХ ЛОДОК, ВОЕННО- МОРСКОЕ ВООРУЖЕНИЕ	ABM, AIR/COASTAL DEFENSE ПРОТИВОРАКЕТНАЯ ОБОРОНА / БЕРЕГОВАЯ ОБОРОНА	AIRCAFT STRIKE УДАРНЫЕ БОМБАРДИРОВЩИКИ	TOTAL ВСЕГО
1	Russia		280	480	708	1,468
2	U.S.				500	500
3	Pakistan	38	8		36	82
4	India	44			48	92
5	Israel	Some	Some		Some	Some
6	N. Korea				Some	Some
7	China	Some	48		Some	>48
8	France					Some
9	U.K.					Some

SLCM sea-launched cruise missile

SRBM short-range ballistic missile

SOURCES: SIPRI, BULL, IISS, JDW

Table 2.11 – Operational Nuclear Warheads, 2015-2016, Total Strategic and Sub-Strategic

Таблица 2.11 – Действующие ядерные боеголовки, всего стратегические и полустратегические

RANK	COUNTRY СТРАНА	STOCKPILE ЗАПАСЫ			DELIVERABLE ГОТОВЫЕ К УПОТРЕБЛЕНИЮ			
		16(BULL)	16(SIPRI)	See [1], [2], [3]	16(BULL)	16(SIPRI)	15(IISS)	10(JDW)
1	Russia	~7,300	7,290		~4,500	4,100	3,648	
2	U.S.	~6,970	7,000		~4,670	4,236	2,038	
3	Israel		80	Up to 400		80	80	100-300
4	France		300		300	290	280	
5	China	~260	260		~260	260	Up to 250	
6	U.K.	225	215		160	215	120	
7	Pakistan		110-130			110-130	Up to 130	
8	India	~118	100-120		~106	100-120	Up to 120	
9	N. Korea				6-8	20	Up to 20	

Notes:

- 1) “Background Information, 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons,” United Nations, Retrieved 2006-07-02.
- 2) Brower, Kenneth S., “A Propensity for Conflict: Potential Scenarios and Outcomes of War in the Middle East,” Jane’s Intelligence Review, Special Report no. 14 (February 1997), p. 14-15.
- 3) “Nuclear Weapons: Who Has What at a Glance,” Arms Control Association, Retrieved 2007-05-30.
- 4) The Bulletin of the Atomic Scientists puts the Israeli nuclear stockpile at 60-80 but notes that it is believed that Israel has produced nuclear material enough for 115-190 warheads.
- 5) In 1986, Mordechai Vanunu, a former technician at Dimona, revealed to the media some evidence of Israel’s nuclear program. Israeli agents abducted him from Italy and transported him to Israel. An Israeli court then tried him in secret on charges of treason and espionage, and sentences him to 18 years imprisonment. At the time of Vanunu’s arrest, *The Times* reported that Israel had material for approximately 20 hydrogen bombs and 200 fission bombs. If we take this information at face value, by now Israel should have material for considerably more nuclear bombs and that seems to corroborate the opinion of the sources from Notes [1], [2], [3] that Israel now may have up to 400 nuclear weapons.
- 6) Vanunu’s information in October 1986 said that based on a reactor operating at 150 megawatts Israel produces 40 kg of plutonium per year. Israel possesses a 200 kg warhead, containing 6 kg of plutonium (Farr, Warner D. *The Third Temple’s Holy of Holies: Israel’s Nuclear Weapons*, USAF Counterproliferation Center, September 1999, Retrieved 2007-07-03). During 30 years after 1986 until 2016, Israel could have produced $30 \times 40 = 1,200$ kg of plutonium; divided by 6, it gives us 200 warheads; plus 220 warheads, which, according to Vanunu, Israel

- already had in 1986, we receive a possible number of Israel's warheads now at 420.
- 7) The substantial discrepancy over data about Israel (between the Bulletin of the Atomic Scientists and the Stockholm International Peace Research Institute on one side and the International Institute for Strategic Studies, Jane's Defense Weekly, and sources from the notes [1], [2], [3] on the other side) may be explained by the following:
- 7.1) "Israel's nuclear weapons are not believed to be fully operational under normal circumstances" (Bulletin of the Atomic Scientists, article "Nuclear Notebook: Worldwide deployment of nuclear weapons, 2009").
 - 7.2) As Zbigniew Brzezinski stated on Book TV in 2009, Israel had acquired a second-strike capability.
 - 7.3) The opinion of Brzezinski is supported by other less prominent sources stating that Israel's nuclear weapons can now be launched from land, sea and air (Douglas Frantz, Israel Adds Fuel to Nuclear Dispute, Officials confirm that the nation can now launch atomic weapons from land, sea and air, Los Angeles Times, Sunday, October 12, 2003). This gives Israel a second strike option even if much of the country is destroyed (David Eberhart, Samson Option: Israel's Plan to Prevent Mass Destruction Attacks, NewsMax.Com, October 16, 2001).
 - 7.4) The second strike strategy may mean that at any given time some of Israel's nuclear weapons are in storage.

Table 2.12 – States Possessing, Pursuing Or Capable Of Acquiring Weapons Of Mass Destruction, As Well As Those Which Used To Have Or Used To Pursue Them, 2015-2016

Таблица 2.12 – Страны, обладающие или способные к получению оружия массового поражения, а также те, которые имели его или стремились к его получению в прошлом

COUNTRY СТРАНА	NUCLEAR ENERGY ЯДЕРНАЯ ЭНЕРГИЯ	URANIUM ENRICHMENT ОБОГАЩЕНИЕ УРАНА	PLUTONIUM PRODUCTION ПРОИЗВОДСТВО ПЛУТОНИЯ	NUCLEAR WEAPONS ЯДЕРНОЕ ОРУЖИЕ	CHEMICAL WEAPONS ХИМИЧЕСКОЕ ОРУЖИЕ	BIOLOGICAL WEAPONS БИОЛОГИЧЕСКОЕ ОРУЖИЕ	MISSILE TECHNOLOGY РАКЕТНАЯ ТЕХНОЛОГИЯ
Algeria				Used to pursue			
Argentina	Possessing		Possessing	Capable			Pursuing
Armenia	Possessing		Possessing				
Australia				Capable	Capable	Capable	Capable
Belarus				Capable			
Belgium	Possessing		Possessing				
Brazil	Possessing	Pursuing	Possessing	Capable			Possessing
Bulgaria	Possessing		Possessing			Capable	
Burma					Pursuing		
Canada	Possessing		Possessing				
Chile					Capable		
China	Possessing	Possessing	Possessing	Possessing	Possessing	Possessing	Possessing
Cuba						Capable	
Czechia	Possessing		Possessing				
Ethiopia					Used to pursue		
Egypt					Possessing	Possessing	Pursuing
Finland	Possessing		Possessing				
France	Possessing	Possessing	Possessing	Possessing	Possessing	Capable	Possessing
German	Possessing	Possessing	Possessing	Capable	Capable	Capable	Capable

Table 2.12 – States Possessing, Pursuing Or Capable Of Acquiring Weapons Of Mass Destruction, As Well As Those Which Used To Have Or Used To Pursue Them, 2015-2016

Таблица 2.12 – Страны, обладающие или способные к получению оружия массового поражения, а также те, которые имели его или стремились к его получению в прошлом

COUNTRY СТРАНА	NUCLEAR ENERGY ЯДЕРНАЯ ЭНЕРГИЯ	URANIUM ENRICHMENT ОБОГАЩЕНИЕ УРАНА	PLUTONIUM PRODUCTION ПРОИЗВОДСТВО ПЛУТОНИЯ	NUCLEAR WEAPONS ЯДЕРНОЕ ОРУЖИЕ	CHEMICAL WEAPONS ХИМИЧЕСКОЕ ОРУЖИЕ	BIOLOGICAL WEAPONS БИОЛОГИЧЕСКОЕ ОРУЖИЕ	MISSILE TECHNOLOGY РАКЕТНАЯ ТЕХНОЛОГИЯ
Hungary	Possessing		Possessing				
India	Possessing	Possessing	Possessing	Possessing	Possessing	Possessing	Possessing
Indonesia					Pursuing		
Iran	Possessing	Possessing	Pursuing	Used to pursue	Possessing	Possessing	Pursuing
Iraq			Used to have	Used to pursue	Used to have	Used to have	Used to pursue
Israel			Possessing	Possessing	Possessing	Possessing	Possessing
Italy			Possessing				
Japan	Possessing	Possessing	Possessing	Capable	Capable	Capable	Possessing
Kazakhstan			Possessing	Capable			
Laos					Used to pursue	Used to pursue	
Libya				Used to pursue	Used to have	Used to have	
Lithuania	Possessing		Possessing				
Mexico	Possessing		Possessing				
Netherlands	Possessing	Possessing	Possessing				
North Korea	Possessing		Possessing	Possessing	Possessing	Possessing	Possessing
Pakistan	Possessing	Possessing	Possessing	Possessing	Possessing	Possessing	Possessing

Table 2.12 – States Possessing, Pursuing Or Capable Of Acquiring Weapons Of Mass Destruction, As Well As Those Which Used To Have Or Used To Pursue Them, 2015-2016

Таблица 2.12 – Страны, обладающие или способные к получению оружия массового поражения, а также те, которые имели его или стремились к его получению в прошлом

COUNTRY СТРАНА	NUCLEAR ENERGY ЯДЕРНАЯ ЭНЕРГИЯ	URANIUM ENRICHMENT ОБОГАЩЕНИЕ УРАНА	PLUTONIUM PRODUCTION ПРОИЗВОДСТВО ПЛУТОНИЯ	NUCLEAR WEAPONS ЯДЕРНОЕ ОРУЖИЕ	CHEMICAL WEAPONS ХИМИЧЕСКОЕ ОРУЖИЕ	BIOLOGICAL WEAPONS БИОЛОГИЧЕСКОЕ ОРУЖИЕ	MISSILE TECHNOLOGY РАКЕТНАЯ ТЕХНОЛОГИЯ
Romania	Possessing		Possessing				
Russia	Possessing	Possessing	Possessing	Possessing	Capable	Possessing	Possessing
Saudi Arabia				Pursuing	Pursuing	Pursuing	Pursuing
Serbia				Pursuing	Capable		
Slovakia	Possessing		Possessing				
Slovenia	Possessing		Possessing				
South Africa	Possessing		Possessing	Capable	Capable	Capable	Capable
South Korea	Possessing		Possessing		Capable	Capable	Possessing
Spain	Possessing		Possessing				
Sudan					Used to pursue		
Sweden	Possessing		Possessing				
Switzerland	Possessing		Possessing				
Syria					Pursuing	Pursuing	Pursuing
Taiwan	Possessing		Possessing		Possessing	Possessing	Possessing
Thailand					Pursuing		
Ukraine	Possessing		Possessing	Capable			
Vietnam					Pursuing	Pursuing	
United Kingdom	Possessing	Possessing	Possessing	Possessing	Capable	Capable	Possessing

Table 2.12 – States Possessing, Pursuing Or Capable Of Acquiring Weapons Of Mass Destruction, As Well As Those Which Used To Have Or Used To Pursue Them, 2015-2016

Таблица 2.12 – Страны, обладающие или способные к получению оружия массового поражения, а также те, которые имели его или стремились к его получению в прошлом

COUNTRY СТРАНА	NUCLEAR ENERGY ЯДЕРНАЯ ЭНЕРГИЯ	URANIUM ENRICHMENT ОБОГАЩЕНИЕ УРАНА	PLUTONIUM PRODUCTION ПРОИЗВОДСТВО ПЛУТОНИЯ	NUCLEAR WEAPONS ЯДЕРНОЕ ОРУЖИЕ	CHEMICAL WEAPONS ХИМИЧЕСКОЕ ОРУЖИЕ	BIOLOGICAL WEAPONS БИОЛОГИЧЕСКОЕ ОРУЖИЕ	MISSILE TECHNOLOGY РАКЕТНАЯ ТЕХНОЛОГИЯ
m							
United States	Possessing	Possessing	Possessing	Possessing	Possessing	Possessing	Possessing

SOURCES: BULL, SIPRI, EST, E, CIA, WIKI

Table 2.13 Global Stocks Of Highly Enriched Uranium (HEU), 2015**Таблица 2.13 Мировые запасы высокообогащенного урана, 2015**

COUNTRY СТРАНА	STOCKPILE (TONNES) ЗАПАСЫ (ТОНН)
Argentina	0.001-0.01
Australia	0.001-0.01
Belarus	0.1-1
Belgium	0.1-1
Canada	1-10
China	18 ± 4
France	30 ± 6
Germany	0.1-1
Ghana	~0.001
India	3.2 ± 1.1
Indonesia	~0.001
Iran	0.001-0.01
Israel	0.3
Italy	0.1-1
Jamaica	~0.001
Japan	1-10
Kazakhstan	1-10
Netherlands	0.1-1
Nigeria	~0.001
North Korea	0.01-0.1
Norway	0.001-0.01
Pakistan	3.1 ± 0.4
Poland	0.1-1
Russia	679 ± 120
South Africa	0.1-1
Switzerland	0.001-0.01
Syria	~0.001
United Kingdom	21.2
United States	584
Uzbekistan	0.01-0.1
TOTAL	~1355

Notes.

- 1) Most of highly-enriched material is 90-93% enriched uranium-235, which is typically considered as weapon-grade. Important exceptions are noted. Blending down (i.e. reducing the concentration of U-235) of excess Russian and U.S. weapon-grade HEU up to the end of 2014 has been taken into account.
- 2) The revised estimate for China is based on new information suggesting that China's Heping gaseous diffusion plant operated from 1970 to 1987 to produce HEU, and not as previously assumed from 1975 to 1987.
- 3) France declared 4.6 tonnes of civilian HEU to the International Atomic Energy Agency (IAEA) as of the end of 2014; it is assumed here to be weapon-grade, 93% HEU, even though some of the material is in irradiated form. The uncertainty in the estimate applies only to the military stockpile of 26 tonnes and does not apply to the declared stock of 4.6 tonnes.
- 4) It is believed that India is producing HEU (enriched to 30-45%) for use as naval reactor fuel. The estimate is for HEU enriched to 30%.
- 5) Israel may have acquired 300 kg of weapon-grade HEU from the USA in or before 1965.
- 6) For Russia the material in discharged naval cores is not included in the current stock since the enrichment of

uranium in these cores is believed to be less than 20 percent U-235.

- 7) The United Kingdom declared a stockpile of 21.9 tonnes of HEU as of March 31, 2012, the average enrichment of which was not given. The United Kingdom declared a stock of 1.4 tonnes of civilian HEU to the IAEA as of the end of 2013.
- 8) The amount of the United States HEU is given in actual tonnes, not 93% enriched equivalent. In 2016, the United States has declared that, as of September 30, 2013 its HEU inventory was 585.6 tonnes, of which 499.4 tonnes was declared to be for “national security or non-national security programs including nuclear weapons, naval propulsion, nuclear energy, and science”. The remaining 86.2 tonnes was composed of 41.6 tonnes “available for potential down-blend to low enriched uranium or, if not possible, disposal as low-level waste”, and 44.6 tonnes in spent reactor fuel. Of 41.6 tonnes, a further 1.6 tonnes was downblended or shipped as of the end of December 2014.
- 9) The 2014 IAEA Annual Report lists 192.7 significant quantities of HEU under comprehensive safeguards in non-nuclear weapon states as of the end of 2014. In order to reflect the uncertainty in the enrichment levels of this material, mostly in research reactor fuel, a total of 15 tonnes of HEU is assumed. About 10 tonnes of this is in Kazakhstan and has been irradiated; it was initially slightly higher than 20%-enriched fuel. It is possible this material is no longer HEU.

SOURCES: SIPRI, BULL, CIA, WIKI

Table 2.14 Global Stocks Of Separated Plutonium, 2015**Таблица 2.14 Мировые запасы обогащенного плутония, 2015**

COUNTRY СТРАНА	MILITARY STOCKS (TONNES) ВОЕННЫЕ ЗАПАСЫ (ТОНН)	CIVILIAN STOCKS (TONNES) ГРАЖДАНСКИЕ ЗАПАСЫ (ТОНН)
Argentina (2015)	-	17.6
Armenia (2015)	-	2.1
Belgium (2015)	-	40.9
Brazil (2015)	-	5.9
Bulgaria (2015)	-	8.8
Canada (2015)	-	213
China	1.8 ± 0.8	32.5
Czechia (2015)	-	16.8
Finland (2015)	-	17.6
France	6 ± 1.0	354.4
Germany	-	115.1
Hungary (2015)	-	10.8
India	0.59 ± 0.2	34.8
Israel	0.86 ± 0.13	-
Italy (2015)	-	<0.4
Japan	-	171.8
Kazakhstan (2015)	-	3.0
Lithuania (2015)	-	12.3
Mexico (2015)	-	5.2
Netherlands (2015)	-	1.4-1.7
North Korea	0.03	-
Pakistan	0.19 ± 0.02	2.17
Romania (2015)	-	10.4
Russia	128 ± 8	199.2
Slovakia (2015)	-	14.3
South Africa (2015)	-	9.46
South Korea (2015)	-	97.9
Spain (2015)	-	44.4
Sweden (2015)	-	54.4
Switzerland (2015)	-	18.0
Taiwan (2015)	-	32.4
Ukraine (2015)	-	50.6
United Kingdom	3.2	156.3
United States	87.6	629
TOTALS	~230	~2,388

Notes.

- 1) Some countries own civilian plutonium that is stored overseas, mostly in France and the United Kingdom, but do not submit IAEA declaration, including Australia, Belgium and the Netherlands.
- 2) The amount for Germany may be an overestimate since Germany apparently reports plutonium as being in unirradiated mixed oxide (MOX) fuel even if the fuel has started being irradiated in a reactor.
- 3) As part of the 2005 Indian-U.S. Civil Nuclear Cooperation Initiative, India has included in the military sector much of the plutonium separated from its spent power-reactor fuel. While it is labelled civilian here since it is intended for breeder reactor fuel, this plutonium was not placed under safeguards in the 'India-specific' safeguards agreement signed by the Indian government and the IAEA on February 2, 2009. New estimates

of the efficiency of India's reprocessing plants are much lower than previously assumed. The estimate is for the end of 2014.

- 4) Israel is believed to still be operating the Dimona plutonium production reactor but may be using it primarily for tritium production (tritium is an important component in nuclear weapons; it is used to enhance the efficiency and yield of fission bombs and the fission stages of hydrogen bombs in a process known as "boosting" as well as in external neutron initiators for such weapons). The estimate is for the end of 2014.
- 5) North Korea reportedly declared plutonium production of 31 kg in June 2008; carried out nuclear tests in 2006 and 2009; and resumed production in 2009, adding 8-10 kg.
- 6) As of the end of 2014, Pakistan was operating 4 plutonium production reactors at its Khushab site, but since one of these began operating sometime in 2013 and the other possibly in 2014 it is assumed their spent fuel had not been reprocessed by the end of 2014.
- 7) Russia does not include its plutonium declared as excess in its IAEA statement. The military stockpile includes 6 tonnes of weapon-grade plutonium that is not part of the material declared excess nor declared as civilian and was produced between 1994 and 2010.
- 8) The United Kingdom declared 103.3 tonnes of civilian plutonium (not including 23 tonnes of foreign-owned plutonium in the United Kingdom) as of the end of 2014. This includes 4.4 tonnes of military plutonium declared excess and placed under Euroatom safeguards and designated for IAEA safeguarding.
- 9) In 2012, the USA declared a government-owned plutonium inventory of 95.4 tonnes as of the 30 Sep. 2009. In its 2014 IAEA statement, the USA declared 49 tonnes of unirradiated plutonium (both separated and in MOX) as excess for military purposes as of the end of 2014, with additional 4.5 tonnes sent for disposal as waste. Not included in the 87.6 tonnes listed in the table are 7.7 tonnes of plutonium remaining in spent fuel that has been declared as excess to national security needs.
- 10) Data for other states is estimated by subtracting plutonium declared as 'held elsewhere' from plutonium declared as 'belongs to others' in IAEA statements.

SOURCES: SIPRI, BULL, CIA, WIKI