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# REDUCTION OF PERSONNEL AND HEAVY WEAPON-SYSTEMS IN EUROPE BETWEEN 1990 AND 2010

## Abstract

Since the end of World War Two in 1945 until 1990 the European security environment has been shaped by the powerful military alliances North Atlantic Treaty Organization (NATO)<sup>i</sup> and Warsaw Pact (WAPA)<sup>ii</sup>. While Eastern-Europe (Poland, former German Democratic Republic, former Czechoslovakia, Hungary, Romania, Bulgaria) was controlled by Soviet Union, the most of West- and Shout-Europe (Great Britain, Norway, Denmark, Netherlands, Belgium, Island, Luxemburg, France, Germany, Italy, Spain, Portugal, Greece) was under a loose control by the most powerful NATO member-states USA, Great Britain and France. Besides the military alliances a handful neutral and non-aligned countries (Sweden, Finland, Austria, Switzerland, Albania, Yugoslavia and Ireland) played in the strategic game of both superpowers only a secondary role. One of the most important strategy in the so-called "Cold War" period was "the arms race" which led to be always read for fight to over-manned and over-equipped armed forces.

Keywords: security, NATO, Cold War ~ biztonság, NATO, Hidegháború

# THE WAY TO DISARMAMENT

In 1990 the Warsaw-pact member-state "German Democratic Republic" collapsed overnight and the Berlin Wall was demolished afterwards. Like a house of cards, the domino effect brought other former member-states of WAPA to collapse and in 1991 the Warsaw Pact treaty was cancelled. As a result the former member-states of WAPA changed their political and economic system and became member-states of NATO in 1999 respectively 2004 and member-states of European Union" in 2004 respectively 2007.

After the collapse of the bipolar<sup>vi</sup> world, in a period of nearly 20 years the former member-states of WAPA restructured their armed forces fundamentally. Nearly all the countries changed their recruitment system from conscription to a volunteer system and reduced thereby also their arsenal of weapon systems.

Figure 1<sup>vii</sup> shows the reduction of personnel and heavy weapons systems in Europe (without former Soviet Union) between 1990 and 2010 in detail. The brief summary looks as follows:

40.7 %
75.5 %
59.5 %
45.8 %
54.1 %
61.1 %
24.9 %
59.2 %
34.4 %
18.4 %
5.1 %

Figure  $2^{viii}$  shows the reduction of personnel and heavy weapons systems in the successor states of former Soviet Union and of US Forces in Europe between 1990 and 2010 in detail. The brief summary looks as follows:

Successor states of former Sovie	US Forces Europe		
Personnel	67.6 %	Personnel	73.9 %
Reserves	50 %	Battletank	96 %
Battletank	54.9 %	Armoured infantry fighting vehicle	86 %
Armoured infantry fighting vehicle	20.3 %	Armoured personnel carrier	80 %
Armoured personnel carrier	69.3 %	Artillery-towed and SP	92 %
Artillery-towed	51.1 %	Fighter Aircraft	h
Artillery-SP	-	Transport aircraft	71 %
Fighter Aircraft	35.3 %	Helicopter	
Transport aircraft	30 %		No figures
Helicopter	41 %		available
Large fighting ships	72 %		

As both figures show within a period of 20 years most of the countries in Europe reduced their personnel and reserve personnel as well as their heavy weapon systems. Therefore on the market for armament goods in Europe exists an over supply of second hand armament goods.

Meanwhile, there exists a long list of examples which kind of used weapons found a new owner. The Austrian Armed forces which had always manage the forces with little money

bought used Leopard 2 battle tanks from the Netherlands, Hercules transport aircraft and self propelled artillery systems M 109 from Great Britain, Jaguar tank destroyer from Germany (meanwhile withdrawn from service) and nearly as good as new Typhoon fighter aircraft<sup>ix</sup>. The purchase of used weapon systems leads always to many problems, for example upgrading and the purchase of spare parts could become extremely expensive during the whole life cycle of operation. But, in lack of money for armed forces, the purchase of used weapons is the only possibility for many states to equip their armed forces with nearly modern technology.

Used weapons which had served its time had to be scrapped by specialists. Because of large accumulated amount of old worn out weapons this business became an important branch of industry in Europe. Valuable raw materials can thereby be recycled and used for the production of new civilian and military goods.

The reduction of personnel and heavy weapon systems went hand in hand with reduction of defence expenditure on most of European countries. See in detail the figure 3<sup>x</sup> which shows the reduction of defence expenditure between 1990 and 2010 of selected European countries. In sum all the European countries spent less than 33.5 billion US\$ in 2010 than in 1990. As the listing shows, the greatest reduction in absolute figures happened in reunited Germany (30 percent), Swiss (42.8 percent) and in most of the former member-states of Warsaw Pact respectively their successor states, i.e. in Hungary (50 percent), Romania (50 percent) and in the successor-states of former Czechoslovakia (63 percent). A larger increase of defence expenditure only happened in Finland (33 percent), Portugal (33 percent), Poland (25 percent), Greece (25 percent), Turkey (23 percent) and Norway (18.6 percent). A moderate increase in defence expenditure happened in Great Britain (8.6 percent), Denmark (2.2 percent), Spain (6.6 percent) and Italy (5 percent). The reduction of defence expenditure influenced economic activity in different ways. On the one hand side it has due to decreasing demand on armament goods an influence on the national defence industry and on the other hand side saving money for armed forces can reduce the budget deficit if the reduction of defence expenditure were real savings and weren't reallocated to other public expenditure, i.e. education, social security or health.

## THE CONSEQUENCES OF DISARMAMENT IN EUROPE

Europe as a continent nowadays indulges in reminiscences and the continent has no imagination how mighty the whole Europe could be in the world. When we look at the economic figures, Europe is a powerful continent with a prospering economy as a strong base. But in comparison with the military machine of USA Europe is a weak continent. European countries operate no large aircraft carriers and no long range military transport aircraft. Both are important requirements to be a real world wide acting superpower. As history has shown, an overall powerful continent needs not only a strong economy but also a strong military machine. Remember the times when Great Britain rules the waves and the mighty Royal Navy won nearly all sea-battles during their glorious times at the heydays of the British Empire. Or remember the glorious days of France as a superpower which controlled most of West-Africa.

The First World War sounded the bell for decline of the continent Europe as a superpower. After the World War One the USA became stronger and stronger and during the heydays of the Second World War, USA with the advantage to be a power which has the monopoly of nuclear weapons became the most important superpower. Shortly after the war Soviet Union joint USA as second power which was able to produce nuclear weapons.

To loose further importance, after the Second World War the most powerful Western-European countries founded the European Communities (EC)<sup>xi</sup>, nowadays the European Union (EU). Within the European Union the Common Security and Defence Policy (CSDP)<sup>xii</sup> is one important task of policy. Until now the CSDP stayed a stepchild of EU policy. Too

strong is NATO in Europe and there is obviously no need for duplication of military installations like organization structure. Within NATO the European member-states behave like free-riders and spend a smaller amount of money for their defence as USA and Peoples Republic of China (see figure 3: Defence expenditure). The result is a lack of strategic air and sea transportation systems, for example aircraft carriers and military long range transport aircrafts. The current situation of ESDP gives the impression that the Europeans rely heavily on the capabilities of USA and get therefore in a dangerous strategic offside position.

An important outcome to be a real strategic power is the possibility to send troops in missions with different intensity around the world and to control all the important sea-lanes. Though the European countries showed in the past that it is possible to lead missions abroad without extensive help by USA, for example in Chad before the door of Europe, it is not easy for European organize, lead and supply missions abroad far away from Europe. Therefore European contingents are only part of US-leaded Missions, for example in Afghanistan.

The current situation leads not only to great influence on the strategic position of Europe in the World but has also influence on the European armament Industry. A lack on demand of armament goods leads to a steadily decline of leading European armament enterprises. In the final end the firms earn less profit and had to reduce their organization which leads in short-time works or firing employees.

# THE WAY OUT OF THE DILEMMA

As shown above, CSDP, compared with other fields of politics, lives a life of nicheness. Therefore it is necessary to start a process to raise awareness of importance of strong forces in a security environment which becomes more and more instable. If Europe will play an important role in world politics in the future, all the European Countries shall follow the way of the USA to adhere to a policy to maintain strong well equipped forces which could deployed in every corner of the world immediately in the best possible condition.

Land		1990	2010	Reduction	
				In absolut figures	In percent
Austria	Personnel	44.000	27.300	16.700	37.9
(neutral)	Reserves	242.000	65.000	177.000	73.1
	Battletank	159	114	45	28.3
	Armoured infantry fighting vehicle	-	112	-	-
	Armoured personnel carrier	460	352	108	23.4
	Artillery-towed	136	105	31	22.7
	Artillery-SP	54	189	-	-
	Fighter Aircraft	54	37	17	31.4
	Transport aircraft	2	3	-	-
	Helicopter	64	67	-	-
Hungary	Personnel	86.500	29.450	57.050	65.9
(Former WAPA)	Reserves	210.000	44.000	166.000	79
(NATO since 1999)	Battletank	1.482	30	1.453	98
	Armoured infantry fighting vehicle	502	164	338	67.3
	Armoured personnel carrier	1.261	164	1.097	86.9
	Artillery-towed	591	16	575	97.2
	Artillery-SP	171	152	19	11.1
	Fighter Aircraft	111	39	72	64.8
	Transport aircraft	16	5	11	68.7
	Helicopter	122	29	93	76.2

Land		1990	2010	Reduction	
				In absolut	In.
D-1-i	P1	05.450	38.450	figures	percent
Belgium (NATO since 1949)	Personnel Reserves	85.450 234.000	2.040	47.000 231.960	55 99.1
(1ATO \$100,E1949)	Battletank Y	334	40	294	88
	Armoured infantry fighting validle	514	24	490	95
	Armoured personnel carrier	1.421	232	1.189	83.6
	Artillery-towed	21	24	-	-
	Artillery-SP	207	-	207	100
	Fighter Aircraft	144	60	84	58.3
	Transport aircraft Helicopter	22 60	20 33	2 27	9 45
	Large Fighting Ships	4	2	2	50
Bulgaria	Personnel	107.000	34.975	72.025	67.3
(Former WAPA)	Reserves	472.500	302.500	170.000	35.9
(NATO since 2004)	Battletank	2.149	362	1.782	82.9
	Armoured infantry fighting vehicle	243	185	58	23.8
	Armoured personnel carrier	1.998	1.290	708	35.4
	Artillery-towed Artillery-SP	716 761	152 329	564 432	78.7 56.7
	Fighter Aircraft	266	62	204	76.6
	Transport aircraft	22	17	5	22.7
	Helicopter	84	47	37	44
	Large Fighting Ships	7	4	3	42.8
Czechoslovakia	Personnel	154.000	33.001	121.000	78.5
(Former WAPA)	Reserves	495.000	11.445	483.555	97.6
(Czech Republic	Battletank	3.200	420	2.780	86.8
NATO since 1999,	Armoured infantry fighting vehicle	1.560	805	755	48.3
Slovakia NATO since 2004)	Armoured personnel carrier Artillery-towed	1.900 1.849	210 51	1.690 1.798	88.9 97.2
(2010: Add-up	Artillery-SP	518	298	220	42.4
figures for successor-	Fighter Aircraft	297	70	227	76.4
states Czech	Transport aircraft	30	18	12	40
Republic and	Helicopter	181	104	77	42.5
Slovakia)					
Denmark	Personnel	29.000	26.585	2.415	8.3
(NATO since 1949)	Reserves Bettletenie	72.700 499	53.507 65	19.193 434	26.4 86.9
	Battletank Armoured infantry fighting vehicle	499	29	434	80.9
	Armoured personnel carrier	595	372	223	37.4
	Artillery-towed	317	-	317	-
	Artillery-SP	76	24	52	68.4
	Fighter Aircraft	79	48	31	39.2
	Transport aircraft	6	7	-	
	Helicopter	42 3	34 2	8 1	19.4 33.3
Einland.	Large Fighting Ships Personnel	31.800	22.550	9.250	29
(neutral)	Reserves	700.000	350.000	350.000	50
***************************************	Battletank	120	100	20	16.6
	Armoured infantry fighting vehicle	72	180	-	-
	Armoured personnel carrier	460	920	-	-
	Artillery-towed	630	354	276	43.8
	Artillery-SP Fighter Aircraft	90	90 64	26	28.8
	Transport aircraft	3	10	20	20.0
	Helicopter	7	24	-	-
	Large Fighting Ships	2	8	-	-

France (NATO since 1949)         Personnel Reserves         453.100 419.0000 419.0000 419.000 419.000 419.000 419.000 419.0000 419.000 419.000 419.000 419.000 419.00	22.1 98.3 52.7 13.2
France (NATO since 1949)         Personnel Reserves         453.100 419.000 419.000 419.000 419.000 419.000 419.000 419.000 419.000 7.030 712 5         100.379 411.970 9         2           1949)         Battletank         1.349 7.030 7.030 712 5         5	22.1 98.3 52.7
(NATO since Reserves 419.000 352.721 411.970 9 1949) Battletank 1.349 7.030 712 5	98.3 52.7
1949) Battletank 1.349 7.030 712 5	52.7
, I I I I I I I I I I I I I I I I I I I	
Armoured 817 637 108 1	13.2
infantry fighting 3.700 709	٠
	75.4
	75.7
	70.5
	51.7
	30.7
	35.2
Transport 33	
aircraft	
Helicopter	
Large Fighting	
Ships	
	17.3
	33.8
	30
	37.1
	76.7
	94.8
	15.1
1	52.5
	51.9
	52.5
Fighter Aircraft 14 96	١
Transport 490	
aircraft 15	
Helicopter	
Large Fighting	
Ships	11.4
	12.6
`	70.6
	39.1
	24.2
7 0 0	51.8
	51.4
	50
	35.2
	33.8
	17.9

Land		1990	2010	Reduction	
				In absolut	Įņ.
				figures	percent
Greece	Personnel	158.500	156.600	1.990	1.2
(NATO since 1952)	Reserves	406.000	237.500	168.500	41.5
	Battletank	1.879	1.688	191	10.1
	Armoured infantry fighting vehicle	96 2.000	377 2.105	105	52.5
	Armoured personnel carrier Artillery-towed	875	412	463	52.9
	Artillery-SP	299	348	-	-
	Fighter Aircraft	375	242	133	35.4
	Transport aircraft	97	39	58	59.7
	Helicopter	180	195	-	-
	Large Fighting Ships	18	17	1	5.5
Italy	Personnel	361.400	293.302	68.098	18.8
(NATO since 1949)	Reserves	584.000	41.867	542.133	92.8
	Battletank	1.220	320	900	73.7
	Asmoured infantry fighting vehicle		254	-	-
	Annoured personnel carrier Artillery-towed	3.879 967	2.367 164	1.512 803	38.9 83
	Artillery-towed Artillery-SP	283	164	119	42
	Fighter Aircraft	449	207	242	53.8
	Transport aircraft	63	91	-	-
	Helicopter	535	126	409	76.1
	Large Fighting Ships	34	26	8	23.5
Netherlands	Personnel	101.400	46.882	54.518	53.7
(NATO since 1949)	Reserves	152.400	3.339	149.061	97.3
	Battletank	913	60	853	93.4
	Armoured infantry fighting vehicle	984	224 70	760 2.162	77.2 96.8
	Armoured personnel carrier Artillery-towed	2.232 165	/0	165	100
	Artillery-IOWed	298	169	129	43.2
	Fighter Aircraft	181	87	94	51.9
	Transport aircraft	16	10	6	37.5
	Helicopter	112	106	6	5.3
	Large Fighting Ships	15	6	9	60
Norway.	Personnel	32.700	24.025	8.675	26.5
(NATO since 1949)	Reserves	285.000	45.000	240.000	84.2
	Battletank	211	72	13	65.8
	Armoured infantry fighting vehicle	53	104	-	-
	Armoured personnel carrier Artillery-towed	150 274	390	274	100
	Artillery-towed Artillery-SP	126	90	36	28.5
	Fighter Aircraft	85	57	28	32.9
	Transport aircraft	12	4	8	66.6
	Helicopter	33	44	-	-
	Large Fighting Ships	5	3	2	40
Poland.	Personnel	305.000	69.670	245.330	80
(Former WAPA)	Reserves	507.000	371.000	136.000	26.8
(NATO since 1999)	Battletank	2.850 1.391	946 1.508	1.904	66.8
	Armoured infantry fighting vehicle Armoured personnel carrier	928	239	689	74.2
	Armoured personner carrier Artillery-towed	883	239	883	100
	Artillery-SP	599	608	-	-
	Fighter Aircraft	506	122	384	75.8
	Transport aircraft	25	39	-	-
	Helicopter	208	104	104	50
	Large Fighting Ships	6	8	-	-

Personnel	Land		1990	2010	Redu	ction
Personnel					In absolut	Įņ.
Reserves   190,000   210,900   -   -   -					figures	percent
Battletank		Personnel	61.800		17.460	28.2
Armoured infantry fighting vehicle   Armoured personnel certier   Armour	(NATO since 1949)		190.000		-	-
Armoured personnel carrier Artillery-towed Art		~~~~~~~~	146	225	-	-
Artillery-towed Artillery-SP   6			-	-	-	-
Artillery-SP					_	
Fighter Aircraft   83   19   64   77.1     Transport aircraft   Helicopter   45   35   10   22.2     Large Fighting Ships   10   12       Large Fighting Ships   10   12       Country WAPA) (NATO since 2004)     (NATO since 2004)   Armoured personnel carrier   2.575   2.99   2.76   89.6     Armoured personnel carrier   2.575   1.089   1.486   57.7     Artillery-towed   Artillery-SP   32   24       Large Fighting Ships   2.00   2.75   3.08     Artillery-Sp   32   24       Large Fighting Ships   2.00   2.00   2.00     Artillery-Sp   32   24       Large Fighting Ships   2.00   2.00   2.00     Artillery-Sp   32   24       Large Fighting Ships   2.00   2.00   2.00     Artillery-towed   2.00   2.00   2.00     Artillery-towed   2.00   2.00   2.00     Artillery-towed   2.00   2.00   2.00   2.00   2.00     Artillery-Sp   3.00   2.00   2.00   2.00   2.00     Artillery-Sp   3.00   2.00   3.00   3.00   3.00   3.00     Artillery-towed   2.00   3.00   3.00   3.00   3.00   3.00     Artillery-Sp   3.00   3.00   3.00   3.00   3.00   3.00   3.00     Artillery-Sp   3.00   3.00   3.00   3.00   3.00   3.00   3.00     Artillery-Sp   3.00   3.00   3.00   3.00   3.00   3.00   3.00     Artillery-Sp   3.00				1	7	4.9
Transport aircraft   Helicopter   Large Fighting Ships   10   12     -		-	_	ı	-	-
Helicopter   Large Fighting Ships   10   12   1		_			04	77.1
Commania					10	22.2
Reserves   Statistics   Reserves   Statistics   Reserves   Statistics   Reserves   Res		-			10	22.2
Reserves   Sattletank   Reserves   Battletank   Reserves   Battletank   Reserves   Battletank   Reserves   Battletank   Reserves   Battletank   Reserves	Romania				127 300	63.3
Rattletank   Armoured infantry fighting vehicle   156   26   130   83.3   1.486   57.7   1.089   1.193   1.089   1.193   1.089   1.193   1.089   1.193   1.089   1.193   1.089						
Armoured infantry fighting vehicle Armoured personnel carrier Artillery-towed Artillery-SP Artillery-Towed Artillery-SP Artillery-Towed Artillery-SP Artillery-Towed Artillery-SP Artillery-Towed Artillery-SP Artill						
Armoured personnel carrier   2.575   1.089   1.486   57.7	(4.522.5.40000.2554)					
Artillery-towed Artillery-SP			2.575	1.089		
Artillery-SP   32					I	
Transport aircraft   126   12   14   53.8   Helicopter   120   64   56   46.5   46.5			32	24	-	-
Helicopter   120		Fighter Aircraft	465	49	416	89.4
Large Fighting Ships		Transport aircraft	26	12		53.8
Personnel (NATO since 1982)   Personnel (Reserves		-	120	64	56	46.6
Reserves   Battletank   Armoured infantry fighting vehicle   Armoured personnel carrier   1.742   1.465   277   15.9   Artillery-towed   Artillery-SP   156   130   26   16.6   59   Artillery-SP   156   130   26   16.6   130   107   13   10.8					_	
Battletank   Armoured infantry fighting vehicle   -	-					
Armoured infantry fighting vehicle	(NATO since 1982)					
Armoured personnel carrier			838		340	40.5
Artillery-towed Artillery-SP Artillery-SP Artillery-SP I 156 I 130 I 26 I 16.6 Fighter Aircraft I 120 I 107 I 13 I 10.8 Helicopter I Large Fighting Ships I 20 I 13 I 7 I 35  Sweden Personnel Reserves Battletank Armoured infantry fighting vehicle Artillery-towed Artillery-SP I 30 I 40 I 54.6 Artillery-SP I 50 I 600 I 600 I 687 I 600 I 687 I 7 I 7 I 68 I 88 I 82.7 I 7 I 7 I 85 I 80					-	-
Artillery-SP						
Fighter Aircraft   247   179   68   27.5						
Transport aircraft		-		ı	I	
Helicopter   269						
Large Fighting Ships   20						
Personnel		-			7	
Reserves   709.000   200.000   509.000   71.7	Sweden				49.950	
Battletank   785   280   505   64.     Armoured infantry fighting vehicle   - 336       Armoured personnel carrier   600   687       Artillery-towed   990   49   541   54.6     Artillery-SP   30   24   6   20     Fighter Aircraft   470   165   305   64.8     Transport aircraft   30   16   24   80     Helicopter   92   47   45   48.9     Large Eighting Ships   31   5   26   83.8      Swiss   Personnel   21.500   22.058       Reserves   625.000   174.041   450.959   72     Battletank   870   351   519   59.6     Armoured infantry fighting vehicle   625   154   471   75.3     Armoured personnel carrier   725   945   -     Artillery-towed   900   -   900   100     Artillery-SP   473   348   135   28.5     Fighter Aircraft   289   87   202   69.8     Transport aircraft   18   20   -   -	******	Reserves				
Armoured infantry fighting vehicle	***************************************	Battletank	785			
Artillery-towed			-		-	-
Artillery-SP   30   24   6   20		Armoured personnel carrier	600	687	-	-
Fighter Aircraft		-	1		541	
Transport aircraft		-	1		_	
Helicopter   92   47   45   48.9			1	1	I	
Large Fighting Ships   31   5   26   83.8					I	
Personnel   21.500   22.058   -   -			1		I	
Reserves   625.000   174.041   450.959   72   870   351   519   59.6					26	83.8
Battletank   870   351   519   59.6     Armoured infantry fighting vehicle   625   154   471   75.3     Armoured personnel carrier   725   945   -     Artillery-towed   900   -   900   100     Artillery-SP   473   348   135   28.5     Fighter Aircraft   289   87   202   69.8     Transport aircraft   18   20   -   -			1		450.050	-
Armoured infantry fighting vehicle Armoured personnel carrier  Artillery-towed  Artillery-SP  Fighter Aircraft Transport aircraft  Armoured infantry fighting vehicle  625  945  945  945  900  900  473  348  135  28.5  87  202  69.8  Transport aircraft 18  20  -	(neutral)		1	1		
Armoured personnel carrier 725 945			1	1		
Artillery-towed     900     -     900     100       Artillery-SP     473     348     135     28.5       Fighter Aircraft     289     87     202     69.8       Transport aircraft     18     20     -     -			1	ı	4/1	13.3
Artillery-SP 473 348 135 28.5 Fighter Aircraft 289 87 202 69.8 Transport aircraft 18 20				940	000	100
Fighter Aircraft         289         87         202         69.8           Transport aircraft         18         20         -         -				349		
Transport aircraft 18 20		-	ı	ı	I	
			1		202	-
***************************************		_	1		51	47.6
		***************************************				

	1990 2010		Redu	ction
			In absolut	In
			figures	percent
Personnel	579.200	510.600	68.600	11.8
Reserves	1,1 Mio.	378.700	721.300	65.5
Battletank	3.783	4.503	-	-
Armoured infantry fighting vehicle		650	-	-
Armoured personnel carrier	3.560	3.643	-	-
Artillery-towed	1.724	685	939	54,4
Artillery-SP	528	868	-	-
Fighter Aircraft	530	426	104	19.6
Transport aircraft	88	77	11	12.5
Helicopter	330	340	-	-
Large Fighting Ships	20	23	-	-
Parsonnal	188 000	74 241	112 650	60.4
- *				88.9
				53
			902	33
			-	-
			1 508	82.6
•			-1070	50
	_			77.5
		-		56.8
-				21.6
		_	-	50
Large Fighting Ships	+			30
	Reserves Battletank Armoured infantry fighting vehicle Armoured personnel carrier Artillery-towed Artillery-SP Fighter Aircraft Transport aircraft Helicopter	Personnel Reserves Battletank Armoured infantry fighting vehicle Armoured personnel carrier Artillery-towed Artillery-SP Fighter Aircraft Transport aircraft Helicopter Large Fighting Ships  Personnel Reserves Battletank Armoured infantry fighting vehicle Armoured personnel carrier Artillery-SP Fighter Aircraft Helicopter 188.000 Personnel Reserves Battletank Armoured infantry fighting vehicle Armoured personnel carrier Artillery-towed Artillery-towed Artillery-SP Fighter Aircraft Transport aircraft Helicopter 185	Personnel         579.200         510.600           Reserves         1,1 Mio.         378.700           Battletank         3.783         4.503           Armoured infantry fighting vehicle         -         650           Armoured personnel carrier         3.560         3.643           Artillery-towed         1.724         685           Artillery-SP         528         868           Fighter Aircraft         530         426           Transport aircraft         88         77           Helicopter         330         340           Large Fighting Ships         20         23           Personnel         188.000         74.341           Reserves         510.000         56.316           Battletank         1.850         868           Armoured infantry fighting vehicle         490         727           Armoured personnel carrier         500         700           Artillery-towed         1.934         336           Artillery-SP         120         160           Fighter Aircraft         489         110           Transport aircraft         44         19           Helicopter         185         145	Personnel         579.200         510.600         68.600           Reserves         1,1 Mio.         378.700         721.300           Battletank         3.783         4.503         -           Armoured infantry fighting vehicle         -         650         -           Armoured personnel carrier         3.560         3.643         -           Artillery-towed         1.724         685         939           Artillery-SP         528         868         -           Fighter Aircraft         530         426         104           Transport aircraft         88         77         11           Helicopter         330         340         -           Large Fighting Ships         20         23         -           Personnel         188.000         74.341         113.659           Reserves         510.000         56.316         453.684           Battletank         1.850         868         982           Armoured infantry fighting vehicle         490         727         -           Artillery-towed         1.934         336         1.598           Artillery-SP         120         160         60           Fighter Aircraft<

Sum total			Sum total of	reduction
	1990	2010	In absolute figures	In percent
Personnel	4.097.550	2.426.316	1.671.234	40.7
Reserves	11.460.700	3.206.818	8.657.882	75.5
Battletank	32.646	13.210	19.436	59.5
Amoured infantry fighting vehicle	11.606	6.284	5.322	45.8
Armoured personnel carrier	44.858	17.430	27.428	54.1
Artillery-towed	15.196	3.510	11.686	61.1
Artillery-SP	6.662	4.997	1.665	24.9
Fighter Aircraft	6.924	2.820	4.104	59.2
Transport aircraft	1.294	848	446	34.4
Helicopter	3.642	2.971	671	18.4
Large Fighting Ships	291	276	15	5.1

1. figure. Reduction of personnel and selected weapon systems in Europe (without former Soviet Union) between 1990 and 2010  $^{\rm xiii}$ 

Scource: Institute for Strategic Studies-The Military Balance – 1990/1991 and 2010 and Janes Group

Land			***		Reduction	
	1990		2010			In
						percent
Soviet Union	Personnel	3.4 Mio.	Personnel	1.1 Mio.	2.3 Mio.	67.6
(In column	Reserves	5.2 Mio.	Reserves	2.6 Mio.	2.6 Mio.	50
2010 add up	Battletank	54.400	Battletank	29.875	25.525	54.9
figures of	Armoured infantry fighting	28.000	Armoured infantry fighting	22.296	5.704	20.3
successor states	vehicle		vehicle	15.348	34.652	69.3
of former	Armoured personnel carrier	50.000	Armoured personnel carrier	15.982	17.018	51.1
Soviet Union)	Artillery-towed	33.000	Artillery-towed	10.814	-	-
	Artillery-SP	9.000	Artillery-SP	2.805	1.535	35.3
	Fighter Aircraft	4.340	Fighter Aircraft	434	186	30
	Transport aircraft	620	Transport aircraft	2.713	1.887	41
	Helicopter	4.600	Helicopter	61	157	72
	Large fighting ships	218	Large fighting ships			
US-Forces	Personnel	303.100	Personnel	79.000	224.100	73,9
Europe	Battletank	5.000	Battletank	200 to 300	as much as 4.8	00 96
	Armoured infantry fighting	2.200	Armoured infantry fighting	300 to 400	as much as 1.9	00 86
	vehicle		vehicle		as much as 4.0	00 80
	Armoured personnel carrier	3.500 bis 5.000	Armoured personnel carrier	1.000 to 1.500	as much as 2.2	50 92
	Artillery-towed and SP	2.420	Artillery-towed and SP	200 to 300	Though there a	ire no
	Fighter Aircraft	657	Fighter Aircraft	NA	figures availab	le, the
	Transport aircraft	26	Transport aircraft	NA	figures of redu	ction
	Helicopter	293	Helicopter	NA	could be simila	r to the
	Large fighting ships	13	Large fighting ships	NA	reduction of he	avy
					weapon systen	ns

2. figure. Reduction of personnel and selected weapon systems in successor states of former Soviet Union and US-Forces in Europe between 1990 and 2010 Source: Institute for Strategic Studies-The Military Balance 1990/1991 and 2010, Homepage of US Forces Europe.

Country	1990	2010	Change in	Change in percent
			absolute figure	
Austria	3.5	3.4	- 0.1	- 2,8
Hungary	3.2	1.6	- 1.6	- 50
Albania	0.268	0.2	- 0.068	- 22
Belgium	8.3	5.7	- 2.6	- 31
Bulgaria	3.6	1	- 2.6	- 72
Czechoslovakia	10.8	3.9	- 6.9	- 63
Denmark	4.7	4.8	+ 0.1	+ 2,2
Finland	2.7	3.6	+ 0.9	+ 33
France	70	66	- 4	- 5,7
Germany	71	49	- 22	- 30
Great Britain	58	63	+ 5	+ 8.6
Greece	7	8.8	+ 1.8	+ 5
Ireland	1	1.3	+0.3	+ 30
Italy	36	38	+ 2	+ 5
Netherlands	13.5	12	- 1.5	- 11
Norway	5.9	7.0	+ 1.1	+ 18.6
Poland	7.4	9.3	+ 1.9	+ 25.6
Portugal	3.9	5.2	- 1.3	+ 33
Romania	4.6	2.3	- 2.3	- 50
Spain	15	16	+ 1	+ 6.6
Sweden	8.4	6.7	- 1.6	- 19
Swiss	8.4	4.8	- 3.6	- 42.8
Turkey	13	17	+ 3	+ 23
Yugoslavia	4.4	3.4	- 1	- 22
Soviet Union	290	80	- 210	- 70
USA	527	720	+ 193	+ 36

**<sup>3.</sup> figure.** Defence Expenditure of selected countries in Billion US\$ (constant 2011) Source: Institute for Strategic Studies-The Military Balance 1990/91 and 2010, SIPRI-database

Remarks: Figures 2010 for Czechoslovakia, Yugoslavia and Soviet Union add-up figures of successor states

## References

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<sup>&</sup>lt;sup>1</sup> The North Atlantic Treaty Organization (NATO; *Organisation du traité de l'Atlantique Nord* (*OTAN*)), also called the (North) Atlantic Alliance was founded in April 1949 by Great Britain, France, Netherlands, Belgium, Luxembourg, United States, Canada, Portugal, Italy, Norway, Denmark and Iceland. Meanwhile, after some Steps of enlargement NATO includes 28 member states. 12 founders and Greece, Turkey, Germany, Spain, Czech Republic, Hungary, Poland, Bulgaria, Estonia, Latvia, Lithuania, Romania, Slovenia, Slovakia, Albania and Croatia. Within NATO exists the "Partnership for Peace- Program (PfP)". Further 22 states are member of PfP: Armenia, Azerbaijan, Russia, Ukraina, Belarus, Georgia, Kazakhstan, Moldava, Tajikistan, Turkmenistan, Usbekistan, Bosnia and Hercegovina, Republic of Macedonia, Montenegro, Serbia, Austria, Ireland, Sweden, Finland, Malta, Switzerland. Cyprus and Kosovo are aspiring members. There exists also a co-operation with other states in the NATO-program for global partners. In this co-operation are included Republic of Korea, Japan, Australia, New Zealand, Mongolia, Pakistan, Afghanistan, Iraq and Colombia. Another interesting program is the Mediterranean Dialogue which includes Algeria, Egypt, Israel, Marocco, Jordan, Mauritania and Tunisia.

ii The Treaty of Friendship, Co-operation, and Mutual Assistance, more commonly referred to as the Warsaw Pact was founded in May 1955 by Bulgaria, Czechoslovakia, East Germany (withdrew in September 1990, before German Unification), Hungary, Poland (withdrew on January 1, 1990), Romania, Albania (formally withdrew in 1968) and Soviet Union. On 25 February 1991, the Warsaw Pact was declared disbanded at a meeting of defense and foreign ministers from Pact countries meeting in Hungary. On 1 July 1991, the Warsaw Treaty Organization of Friendship, Cooperation, and Mutual Assistance formally ended.

iii The so-called period of "Cold War" dated from 1947 to 1991 and was a state of political and military confrontation between powers in the Western Bloc, dominated by the USA and NATO, and powers in the Eastern Bloc, dominated by the Soviet Union along with the Warsaw Pact.

<sup>&</sup>lt;sup>iv</sup> The phrase "arms race" means a competition between two or more parties to have the best armed forces. Each party competes to produce larger numbers of weapons, greater armies, or superior military technology. The arms race leads to a technological escalation.

The European Union (EU) is an economic and political union of 28 member states. The members are: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden United Kingdom. One important field of politics in the EU is the Common Foreign and Security Policy (CFSP). The CFSP sees the NATO responsible for the territorial defence of Europe and "peace-making". However, since 1999, the European Union is also responsible for implementing missions, such as "peace-keeping" and policing of treaties, etc..

vi Bipolarity is a distribution of power in which two states have the majority of economic, military, and cultural influence internationally or regionally. For example, in the Cold War, most Western and capitalist states would fall under the influence of the USA, while most Communist states would fall under the influence of the Soviet Union.

"The Military Balance", 1990-1991 Brassey's UK, Limited, 1990 and "The Military Balance" 2010 and 2011, Routledge 2010 and 2011.

viii The data for figure 2 were taken from "The Military Balance", 1990-1991 Brassey's UK, Limited, 1990 and "The Military Balance" 2010 and 2011, Routledge 2010 and 2011.

ixThe data for figure 3 were mostly taken from the "Stockholm International Peace Research Institute (SIPRI) military expenditure database" gives consistent time series on the military spending of 172 countries since 1988, allowing comparison of countries' military spending: in local currency, at current prices; in US dollars, at constant prices and exchange rates; and as a share of GDP. Some data were taken from Institute for Strategic Studies-The Military Balance 1990/91 and 2010.

vii The data for figure 1 were taken from "The Military Balance" which is The International Institute for Strategic Studies' (IISS) annual assessment of the military capabilities and defence economics of 171 countries worldwide. It is an essential resource for those involved in security policy-making, analysis and research.

x See http://en.wikipedia.org/wiki/Leopard 2#Operators (Retrieved 30 August 2013), http://www.airpower.at/flugzeuge/herkules/index.html (Retrieved 30 August 2013), http://de.wikipedia.org/wiki/Jaguar\_(Jagdpanzer) (Retrieved 30 August 2013) http://ciar.org/ttk/mbt/armor/armor-magazine/armor-mag.1998.ma/2austria98.pdf (Retrieved 30 August 2013) http://en.wikipedia.org/wiki/Eurofighter\_Typhoon#Operators (Retrieved 30 August 2013)

xi The European Communities (sometimes referred to as the European Community or EC) were three international organisations that were governed by the same set of institutions. These were the European Coal and Steel Community (ECSC), the European Economic Community (EEC) and the European Atomic Energy Community (EAEC or Euratom).

xii The Common Security and Defence Policy (CSDP), formerly known as the European Security and Defence Policy (ESDP), is a major element of the Common Foreign and Security Policy of the European Union (EU) and is the domain of EU policy covering defence and military aspects, as well as civilian crisis management. The ESDP was the successor of the European Security and Defence Identity under NATO, but differs in that it falls under the jurisdiction of the European Union itself, including countries with no ties to NATO.

xiii Since 2010 further reduction of personnel and weapon-systems have happened. For example Austria reduced artillery SP (from 189 to approx.50) and armoured personnel carrier (from 353 to 0) and batteltanks from 114 to approx. 6 and Hungary reduced all the artillery SP weapons to 0 and fighter aircraft to 14.