



LESSONS LEARNT FROM THE TRANSFORMATION PROCESS IN THE DEFENCE INDUSTRY

Paulina ZAMELEK, PhD

Paulina.Zamelek@wat.edu.pl

Warsaw, 13.03.2024

FUNCTIONS OF THE DEFENCE INDUSTRY

- ✓ **defence functions** - meeting the current and prospective needs of the armed forces for the supply, modernization, repair and servicing of military equipment and combat assets, as well as the development of scientific and research facilities



- ✓ **economic functions** - structural changes in the labour market and the formation of economic and defence capabilities
- ✓ **political functions** - a tool of the state's strategy in building its own geopolitical position in the region or the world

DEVELOPMENT PHASES OF THE DEFENCE INDUSTRY

...XIX century...

...XX century...

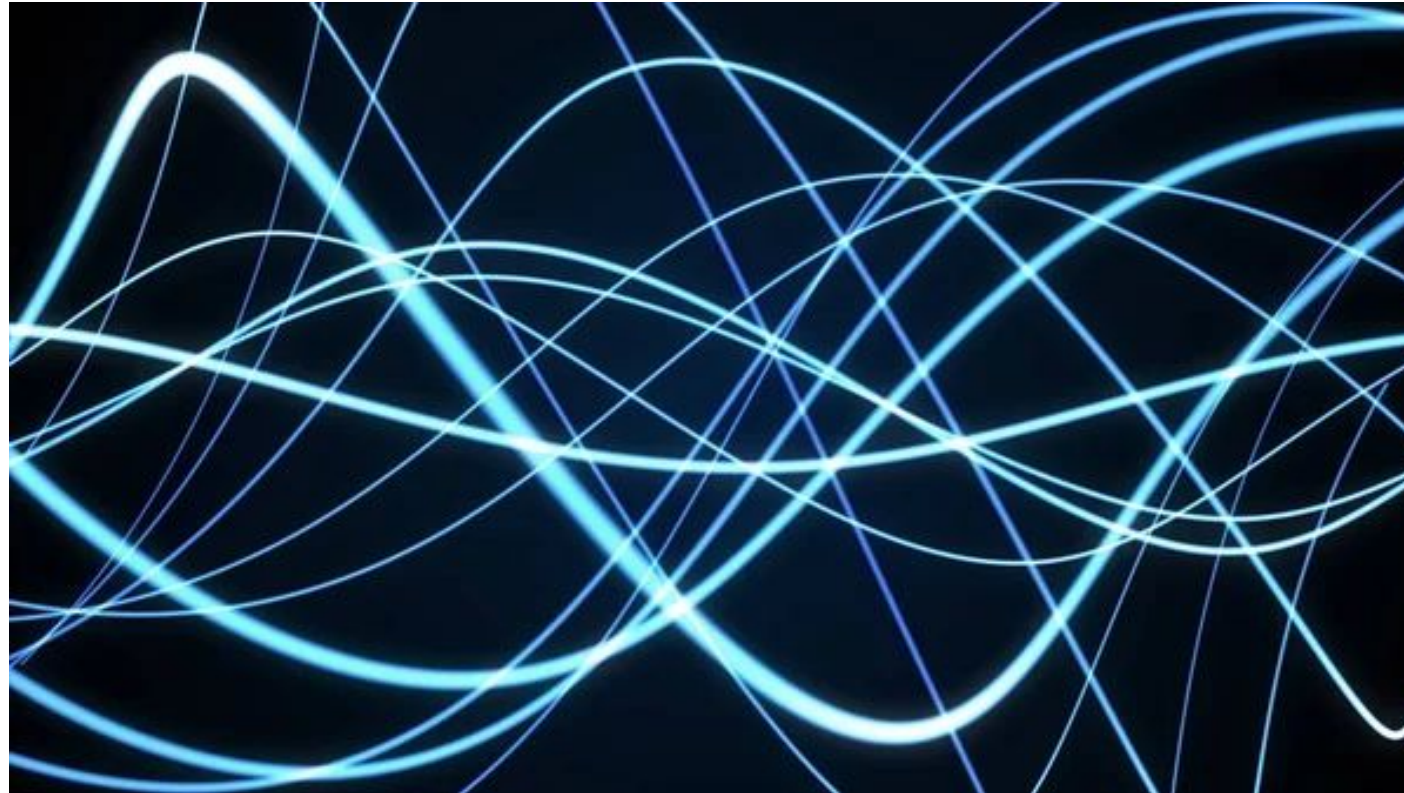
...WWI...

...WWII...

...Cold War ... local conflicts...

...Eastern Bloc Collapse...

...Russian War...



REASONS FOR TRANSFORMATION PROCESSES

DISARMAMENT

MERGERS AND ACQUISITIONS

CONSOLIDATION

EMPLOYMENT
DOWNSIZING

RECONSTRUCTION

PRIVATIZATION



THE SEARCH FOR NEW
EXPORT MARKETS

MARKET EXITS

NATIONALIZATION

INTERNATIONAL COOPERATION

NEW FORMS OF
INDUSTRIAL ORGANISATION

- ✓ peace dividend
- ✓ international neoliberal theory
- ✓ processes of capital concentration and consolidation of enterprises
- ✓ trade and economic wars

GLOBALIZATION

PREMISES FOR THE TRANSFORMATION OF THE DEFENCE INDUSTRY IN THE USA

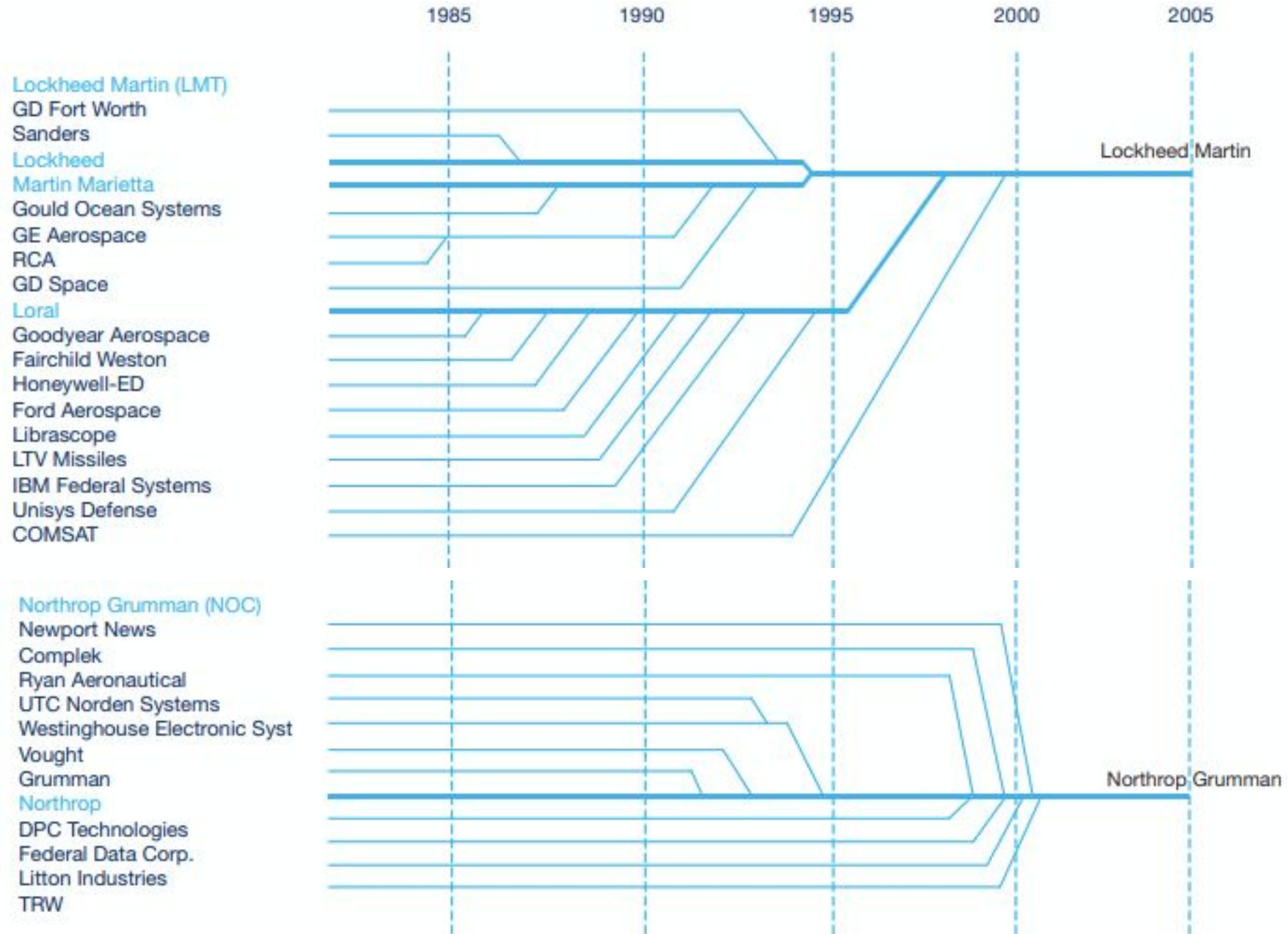
- ✓ "last supper" /1993/
- ✓ avalanche of layoffs
- ✓ acquisitions and spectacular mergers between 1993-1998
- ✓ the most consolidated industries: aviation, electronics, missiles, naval systems and armament of land forces
- ✓ process dynamics: $50 > 5$
- ✓ anti-concentration regulations in the USA and the EU /1998-2006/
- ✓ DoD industrial policy
- ✓ The „Not Invented Here” rule



Industry strategies:

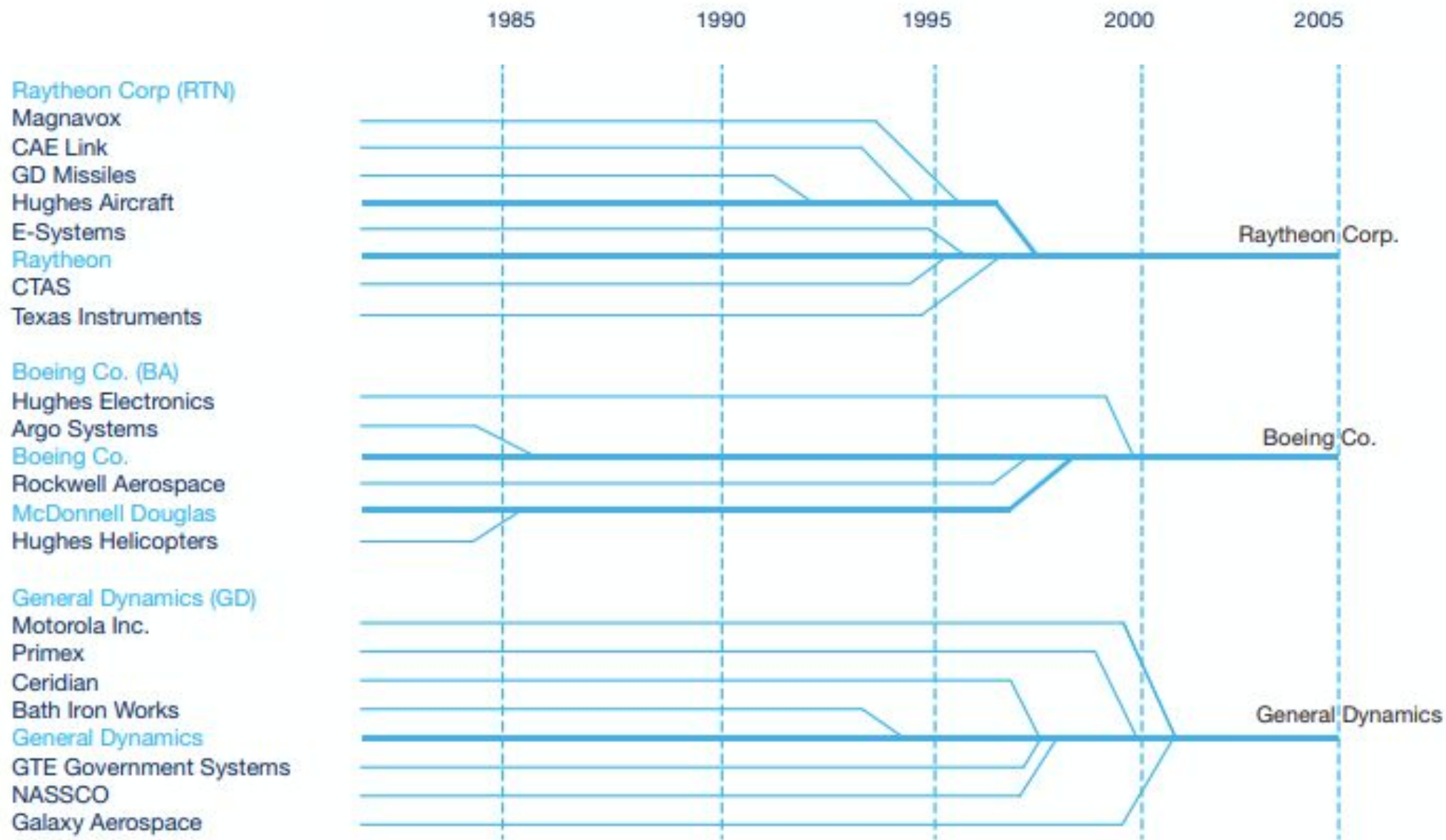
- horizontal and vertical diversification
- acquisitions of entities from related industries
- acquisitions of foreign entities

CONSOLIDATION OF THE US DEFENCE INDUSTRY - EXAMPLES



Source: *The Defence Industry in the 21st Century*, Pricewaterhouse Coopers 2005, https://www.pwc.pl/en/publikacje/defence_industry_ads.pdf

CONSOLIDATION OF THE US DEFENCE INDUSTRY - EXAMPLES



Source: *The Defence Industry in the 21st Century*, Pricewaterhouse Coopers 2005, https://www.pwc.pl/en/publikacje/defence_industry_ads.pdf

PREMISES FOR THE TRANSFORMATION OF EUROPEAN DEFENCE INDUSTRIES

Basic security interest:

- aspirations regarding the self-sufficiency policy of the defence sector
- protection of the national defence industry
- security of supply

- ✓ Model of hermetic, fragmented national defence
- ✓ Overcapacity, duplication in terms military equipment
- ✓ National responsibility for consolidating the supply
- ✓ "Buy European"?



DEFENCE SECTOR CONSOLIDATION LEVELS

SCOPE OF CONSOLIDATION

CONSOLIDATION ON A GLOBAL LEVEL

CONSOLIDATION AT THE TRANSATLANTIC LEVEL

CONSOLIDATION AT EUROPEAN LEVEL

CONSOLIDATION AT THE NATIONAL LEVEL

DEFENCE SECTOR CONSOLIDATION MODELS

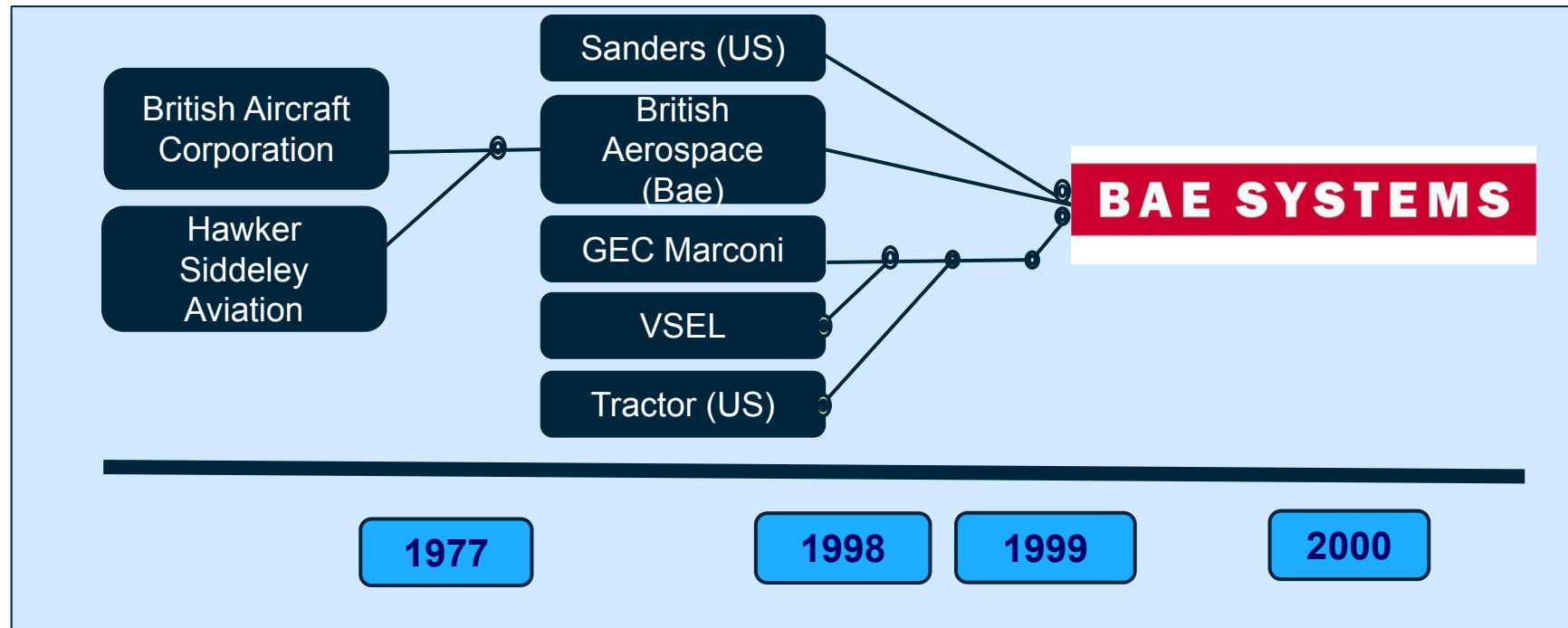
CONSOLIDATION AT THE NATIONAL LEVEL



- ❖ processes implemented since the 1950s-1970s
- ❖ mainly: Great Britain, France, Germany, Sweden, Italy, Spain
- ❖ national leaders of the defence sector as integrators of weapons systems bringing together numerous small and medium-sized enterprises in their supply chains

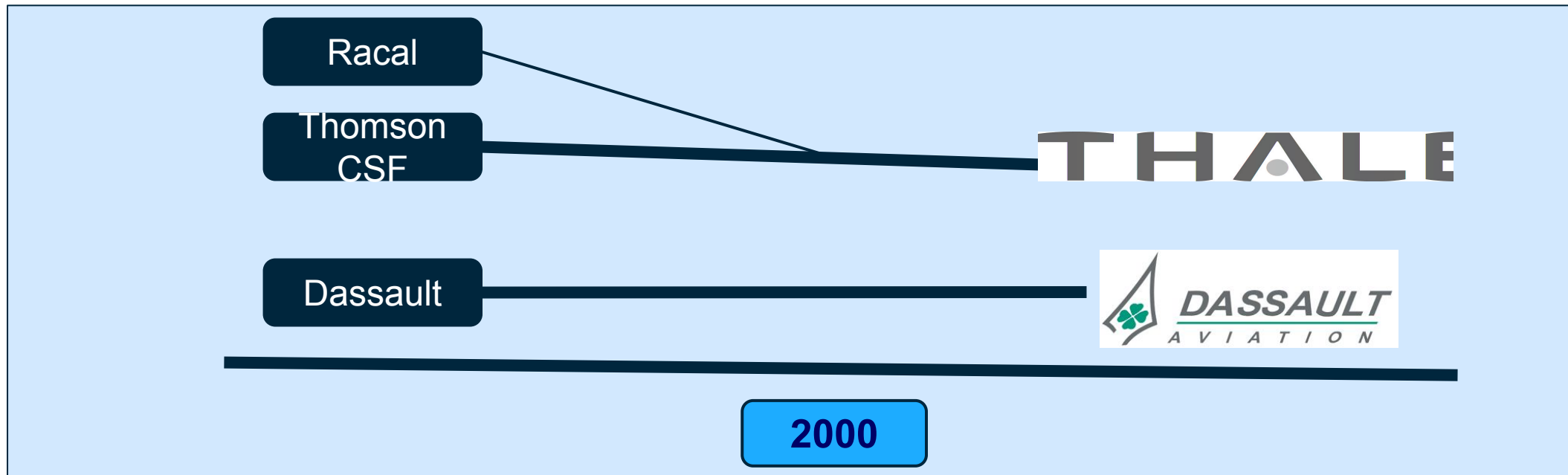
DEFENCE SECTOR CONSOLIDATION MODELS – GREAT BRITAIN

- ❖ first consolidation processes from the 1950s to the 1970s
 - ✓ aviation and rocket industry (BAC + HSA)
 - ✓ shipbuilding industry (British shipbuilders)
- ❖ combination to create a leading company in the industry /strong branching of the company/
- ❖ Great Britain's defence industry as an example of successful national consolidation

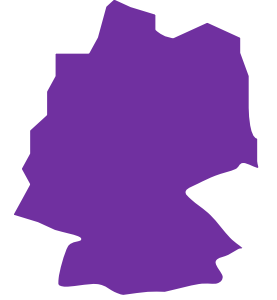


DEFENCE SECTOR CONSOLIDATION MODELS - FRANCE

- ❖ centralized management model
- ❖ the state as a strong and active regulator of the arms market
- ❖ close ties between the arms industry and the state (DGA)
- ❖ creating leaders in particular industries:
 - land (GIAT Nexter) 
 - electronic (Thomson CSF Thales)
 - naval (...DCNS) 



DEFENCE SECTOR CONSOLIDATION MODELS - GERMANY



- ❖ a consolidation trend has been gaining strength since the 1960s
 - ❖ stimulation of the merger process by the government in Bonn
- in individual industries:
- aviation (Deutsche Aerospace, DASA)
 - land (Rheinmetall DeTec AG, Kraus-Maffei Wegman GmbH&Co. KG)
 - shipbuilding (ThyssenKrupp)



DEFENCE SECTOR CONSOLIDATION MODELS

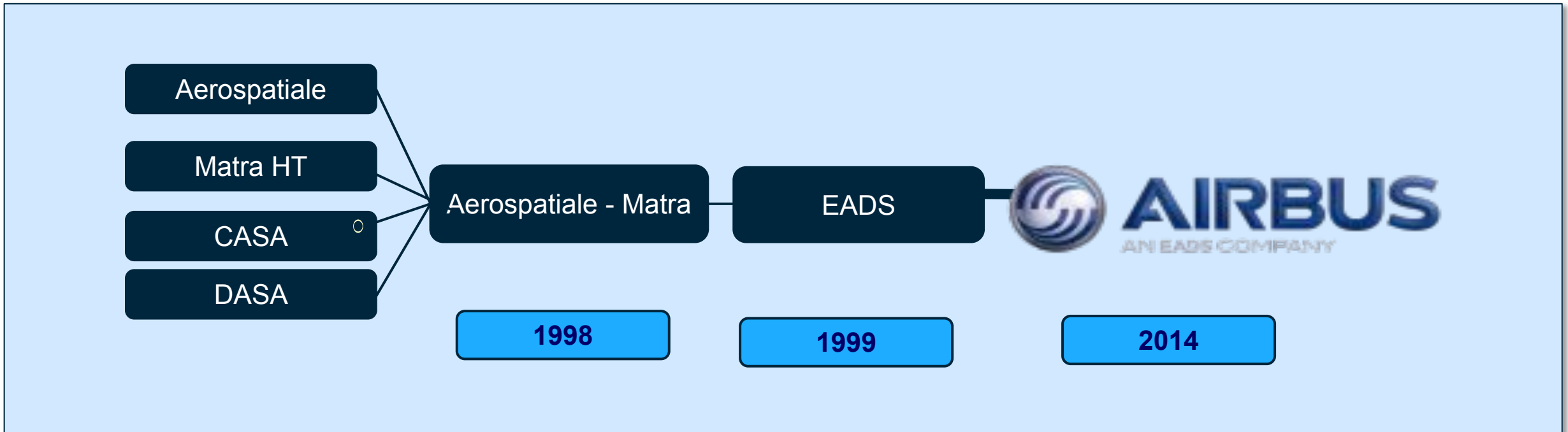
CONSOLIDATION AT EUROPEAN LEVEL

- ❖ acquiring significant resources in business entities from other European countries or by becoming part of a larger European corporation
- ❖ consolidation saturation in the USA vs. dissatisfaction in Europe
- ❖ political dimension: differing policies and priorities of countries making connections difficult
- ❖ forms of internationalization of enterprises:
 - international company
 - multinational enterprise
 - transnational enterprise



DEFENCE SECTOR CONSOLIDATION MODELS

AIRBUS – aviation and space industry



- ❖ Trans-European entity – refers to companies whose ownership status and control structures are located in more than one European country.
- ❖ Airbus is based in 3 European countries: France, Germany and Spain.

DEFENCE SECTOR CONSOLIDATION MODELS

CONSOLIDATION AT THE TRANSATLANTIC LEVEL

For some companies a consolidation at European level went parallel with their transatlantic consolidation. Especially, when a European company gained a significant presence on the US market - and vice versa – or became a part of a greater US company.

- market diversification
- financial diversification
- new technologies acquisition

.... necessity to strengthen NATO argument



DEFENCE SECTOR CONSOLIDATION MODELS

GLOBALIZATION - a new socio-economic order, which is to function according to the principle of maximum mobility and universal freedom of movement of production factors.

CONSOLIDATION ON A
GLOBAL LEVEL

THALE



BAE SYSTEMS

building a global presence
by European defence sector companies,
or their efforts to become part of existing
global corporations



SIPRI TOP-100 ARMS-PRODUCING AND MILITARY SERVICES COMPANIES

<i>Top 2015</i>	<i>Top 2014</i>	<i>Top 2012</i>	<i>Top 2010</i>	<i>Company's name (country where the registered office is located)</i>	<i>Armaments sales 2015 (bln USD)</i>
1	1	1	1	Lockheed Martin (US)	36,4
2	2	2	3	Boeing (US)	27,9
3	3	3	2	BAE Systems (UK)	25,5
4	4	4	6	Raytheon (US)	21,7
5	5	6	4	Northrop Grumman (US)	20,0
6	6	5	5	General Dynamics (US)	19,2
7	7	7	7	Airbus [EADS] (NL)	12,8
8	8	8	10	United Technologies (US)	9,5
9	9	9	8	Finmeccanica (IT)	9,3
10	10	10	9	L-3 Communications (US)	8,7
11	12	11	11	Thales (FR)	8,1
12	13	13	-	Huntington Ingalls Industries (US)	6,7
13	11	14	20	Almaz-Antey (RU)	6,6
14	17	15	14	Safran (FR)	5,0
15	29	48	43	Harris Corp. (US)	4,9
16	16	17	17	Rolls-Royce (UK)	4,7
17	14	18	21	United Aircraft Corp. (RU)	4,6
18	19	-	-	Bechtel Corp. (US)	4,6
19	15	46	51	United Shipbuilding Corp. (RU)	4,5
20	23	26	-	Booz Allen Hamilton (US)	3,9

SIPRI TOP-25 ARMS-PRODUCING AND MILITARY SERVICES COMPANIES, 2019

<i>Top 2019</i>	<i>Top 2018</i>	<i>Company's name (country where the registered office is located)</i>	<i>Armaments sales 2019 (bln USD)</i>	<i>% of military sales</i>
1	1	Lockheed Martin (US)	53,2	89
2	2	Boeing (US)	33,5	44
3	3	Northrop Grumman (US)	29,2	86
4	4	Raytheon (US)	25,3	87
5	6	General Dynamics (US)	24,5	62
6	5	AVIC (CN)	22,4	34
7	7	BAE Systems (UK)	22,2	95
8	9	CETC (CN)	15,1	46
9	8	NORINCO (CN)	14,5	22
10	-	L-3 Harris Technologies (US)	13,9	77
11	14	United Technologies Corp. (US)	13,1	17
12	11	Leonardo (IT)	11,1	72
13	10	Airbus (Trans-European)	11,0	14
14	13	Thales (FR)	9,5	46
15	12	Almaz-Antey (RU)	9,4	98
16	16	Huntington Ingalls Industries (US)	7,7	87
17	38	Dassault Aviation Group (FR)	5,7	70
18	18	Honeywell International (US)	5,3	15
19	19	Leidos (US)	5,3	48
20	22	Booz Allen Hamilton (US)	5,1	69
21	28	General Electric (US)	4,8	5
22	-	EDGE (AE)	4,7	95
23	23	Rolls-Royce (UK)	4,7	24
24	25	CSGC (CN)	4,6	16
25	21	United Shipbuilding Corp. (RU)	4,5	83

INTERNATIONAL PRESENCE OF THE TOP-20 ARMS-PRODUCING AND MILITARY SERVICES COMPANIES, 2022






Rank		Company ^b	Country ^c	Arms revenue		Change in arms revenue 2021-22	Total revenue 2022	Arms revenue as a % of total revenue, 2022
2022 ^a	2021			2022	2021 ^d			
1	1	Lockheed Martin Corp.	United States	59390	65199	-8.9%	65984	90%
2	2	Raytheon Technologies ^e	United States	39570	45220	-12%	67074	59%
3	4	Northrop Grumman Corp.	United States	32300	32286	0%	36602	88%
4	3	Boeing	United States	29300	36111	-19%	66608	44%
5	5	General Dynamics Corp.	United States	28320	29995	-5.6%	39407	72%
6	6	BAE Systems	United Kingdom	26900	26887	0%	27712	97%
7	7	NORINCO	China	22060	21133	4.4%	82537	27%
8	8	AVIC ^f	China	20620	19702	4.7%	82499	25%
9	9	CASC	China	19560	18713	4.5%	44458	44%
10	10	Rostec ^g	Russia	16810	18659	-9.9%	30295	55%
11	11	CETC	China	15080	14686	2.7%	55837	27%
12	13	L3Harris Technologies	United States	12630	14436	-13%	17062	74%
13	12	Leonardo	Italy	12470	13414	-7%	15025	83%
14	16	Airbus	Trans-European ^h	12090	10340	17%	61805	20%
15	14	CASIC ^f	China	11770	12609	-6.7%	37364	32%
16	15	CSSC	China	10440	10650	-2%	51443	20%
17	17	Thales	France	9420	9194	2.5%	18479	51%
18	18	HII	United States	8750	9260	-5.5%	10676	82%
19	19	Leidos	United States	8240	8677	-5%	14287	58%
20	25	Amentum ^f	United States	6560	5424	21%	8750	75%

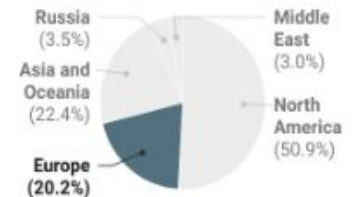
Source: [The SIPRI Top 100 Arms-producing and Military Services Companies, 2022](#)

SIPRI TOP-100 ARMS-PRODUCING AND MILITARY SERVICES COMPANIES



EUROPE'S PRESENCE IN THE TOP ARMS-PRODUCING AND MILITARY SERVICES COMPANIES, 2022

Country ^a	No. of companies	Arms revenue		Change in arms revenue 2021-22	Share of total Top 100 arms revenue
		2022	2021		
 United Kingdom	7	41820	40765	2.6%	7.0%
 France	5	26010	27055	-3.9%	4.4%
 Germany	4	9090	8990	1.1%	1.5%
Trans-European ^b	3	19670	17954	9.6%	3.3%
 Italy	2	15290	16190	-5.6%	2.6%
 Sweden	1	3700	3720	-0.5%	0.6%
 Norway	1	1230	1095	12.3%	0.2%
 Spain	1	990	1045	-5.3%	0.2%
 Poland	1	1600	1409	13.5%	0.3%
 Ukraine	1	1260	1400	-10.0%	0.2%
Total	26	120660	119624	0.9%	20.2%



Source: [The SIPRI Top 100 Arms-producing and Military Services Companies, 2022](#)

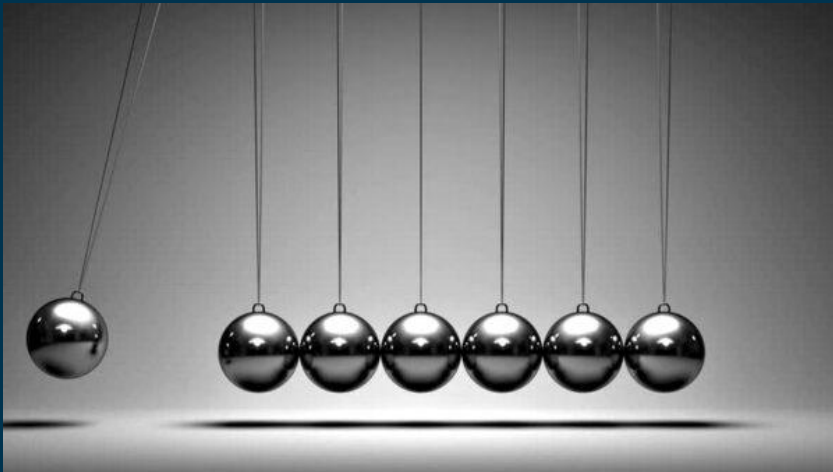
LESSONS LEARNT FROM THE CONSOLIDATION PROCESSES

- 1. Defence industry is hugely impacted by PEST(EL) aspects, and changes accordingly.**
- 2. BRICS power in defence sector is on a rise.**
- 3. Signals sent to the defence industry by governments / international institutions cause actions eventually.**
- 4. The long consolidation processes of the world's major corporations lasted from a few years to several decades and included companies in various geographical areas and ownership status – a trend for building European private defence industry.**
- 5. Concentration of assets in defence industry together with internationalization process has been significant in most countries.**
- 6. Effects of consolidation on third countries - marginalization?**
- 7. Further deepening of consolidation trends in Europe? - Impact of European institutions vs. today, it is mostly companies, not governments, that are pushing for consolidation.**





LESSONS LEARNT FROM THE TRANSFORMATION PROCESS IN THE DEFENCE INDUSTRY



dr Paulina ZAMELEK
Paulina.Zamelek@wat.edu.pl

Warsaw, 13.03.2024