Submission relating to the inquiry into Government support for Australian defence industry exports.

This submission will relate to the following areas:

- Identification of the barriers and impediments to the growth of Australia's defence exports
- How Government can better engage and assist the Australian defence industry to export its products
- Assessment of the export support given to the defence industry by governments of comparable nations.

The defence market

The global market for defence products and services is directly proportional to the global distribution of military expenditure as shown in Table 1 below.

USA 640,221 China, P. R. 188,460 Russia/USSR 87,836 Saudi Arabia 66,996 France 61,228 UK 57,891 Germany 48,790 Japan 48,604 India 47,398 Korea, South 33,937 Italy 32,657 Brazil 31,456 Australia 23,963 Turkey 19,085 Canada 18,460 Israel 16,032 Colombia 13,003 Spain 12,765 Taiwan 10,530 Algeria 10,402 Netherlands 10,328 Singapore 9,759 Poland 9,257 Oman 9,246 Iraq 7,840 Mexico 7,838 Pakistan 7,641 Norway 7,235	Country	US\$ million
Russia/USSR 87,836 Saudi Arabia 66,996 France 61,228 UK 57,891 Germany 48,790 Japan 48,604 India 47,398 Korea, South 33,937 Italy 32,657 Brazil 31,456 Australia 23,963 Turkey 19,085 Canada 18,460 Israel 16,032 Colombia 13,003 Spain 12,765 Taiwan 10,530 Algeria 10,402 Netherlands 10,328 Singapore 9,759 Poland 9,257 Oman 9,246 Iraq 7,896 Indonesia 7,840 Mexico 7,838 Pakistan 7,641 Norway 7,235	USA	640,221
Saudi Arabia 66,996 France 61,228 UK 57,891 Germany 48,790 Japan 48,604 India 47,398 Korea, South 33,937 Italy 32,657 Brazil 31,456 Australia 23,963 Turkey 19,085 Canada 18,460 Israel 16,032 Colombia 13,003 Spain 12,765 Taiwan 10,530 Algeria 10,402 Netherlands 10,328 Singapore 9,759 Poland 9,257 Oman 9,246 Iraq 7,896 Indonesia 7,840 Mexico 7,838 Pakistan 7,641 Norway 7,235	China, P. R.	188,460
France 61,228 UK 57,891 Germany 48,790 Japan 48,604 India 47,398 Korea, South 33,937 Italy 32,657 Brazil 31,456 Australia 23,963 Turkey 19,085 Canada 18,460 Israel 16,032 Colombia 13,003 Spain 12,765 Taiwan 10,530 Algeria 10,402 Netherlands 10,328 Singapore 9,759 Poland 9,257 Oman 9,246 Iraq 7,840 Mexico 7,838 Pakistan 7,641 Norway 7,235	Russia/USSR	87,836
UK 57,891 Germany 48,790 Japan 48,604 India 47,398 Korea, South 33,937 Italy 32,657 Brazil 31,456 Australia 23,963 Turkey 19,085 Canada 18,460 Israel 16,032 Colombia 13,003 Spain 12,765 Taiwan 10,530 Algeria 10,402 Netherlands 10,328 Singapore 9,759 Poland 9,257 Oman 9,246 Iraq 7,896 Indonesia 7,840 Mexico 7,838 Pakistan 7,641 Norway 7,235	Saudi Arabia	66,996
Germany 48,790 Japan 48,604 India 47,398 Korea, South 33,937 Italy 32,657 Brazil 31,456 Australia 23,963 Turkey 19,085 Canada 18,460 Israel 16,032 Colombia 13,003 Spain 12,765 Taiwan 10,530 Algeria 10,402 Netherlands 10,328 Singapore 9,759 Poland 9,257 Oman 9,246 Iraq 7,840 Mexico 7,838 Pakistan 7,641 Norway 7,235	France	61,228
Japan 48,604 India 47,398 Korea, South 33,937 Italy 32,657 Brazil 31,456 Australia 23,963 Turkey 19,085 Canada 18,460 Israel 16,032 Colombia 13,003 Spain 12,765 Taiwan 10,530 Algeria 10,402 Netherlands 10,328 Singapore 9,759 Poland 9,257 Oman 9,246 Iraq 7,840 Mexico 7,838 Pakistan 7,641 Norway 7,235	UK	57,891
India 47,398 Korea, South 33,937 Italy 32,657 Brazil 31,456 Australia 23,963 Turkey 19,085 Canada 18,460 Israel 16,032 Colombia 13,003 Spain 12,765 Taiwan 10,530 Algeria 10,402 Netherlands 10,328 Singapore 9,759 Poland 9,257 Oman 9,246 Iraq 7,840 Mexico 7,838 Pakistan 7,641 Norway 7,235	Germany	48,790
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Turkey 19,085 Canada 18,460 Israel 16,032 Colombia 13,003 Spain 12,765 Taiwan 10,530 Algeria 10,402 Netherlands 10,328 Singapore 9,759 Poland 9,257 Oman 9,246 Iraq 7,896 Indonesia 7,840 Mexico 7,838 Pakistan 7,641 Norway 7,235	Brazil	31,456
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Pakistan 7,641 Norway 7,235		•
Norway 7,235		•
•		•
Sweden 6 510		
3wedeii 0,319	Sweden	6,519

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Angola	6,095
Greece	5,939
Thailand	5,874
Kuwait	5,815
Chile	5,435
Ukraine	5,338
Venezuela	5,313
Belgium	5,264
Switzerland	5,053
Malaysia	4,842
Portugal	4,784
Denmark	4,553
Argentina	4,511
Egypt	4,255
South Africa	4,108
Morocco	4,064
Philippines	3,472
Azerbaijan	3,440
Viet Nam	3,387
Finland	3,262
Austria	3,230
Peru	2,865
Ecuador	2,803
Kazakhstan	2,799
Romania	2,521
Nigeria	2,411
Myanmar	2,211
Czech Rep.	2,149
Lebanon	1,936
New Zealand	1,833
Sri Lanka	1,823
Bangladesh	1,818
Yemen	1,416
Afghanistan	1,293
Bahrain	1,236
Hungary	1,210
Ireland	1,197
Jordan	1,196
Uruguay	1,042
Slovak Rep.	994
Belarus	965
Croatia	957
Tunisia	948
Serbia	921
Kenya	861
Bulgaria	838

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Slovenia	545
Estonia	479
Paraguay	477
Uganda	465
Cyprus	455
Bolivia	445
Georgia	443
Congo, Dem. Rep.	428
Armenia	427
Brunei	412
Namibia	396
Cameroon	393
Tanzania	380
Zambia	377
Ethiopia	375
Dominican Rep.	371
Zimbabwe	356
Lithuania	355
Ghana	306
Luxembourg	305
Latvia	299
Botswana	298
El Salvador	266
Guatemala	259
Nepal	258
Gabon	254
Cambodia	243
Senegal	237
Kyrgyzstan	234
Honduras	230
Bosnia-Herzegovina	203
Albania	167
Burkina Faso	163
Mali	154
Mauritania	149
Macedonia, FYR	127
Jamaica	122
Swaziland	112
Papua New Guinea	87
Benin	86
Nicaragua	85
Rwanda	82
Montenegro	70
Burundi	61
Malta	60
Madagascar	55

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Fiji	54
Malawi	51
Lesotho	48
Guyana	33
Sierra Leone	30
Timor Leste	29
Moldova	24
Mauritius	24
Belize	17
Liberia	14
Seychelles	13
Cape Verde	9
Total	1,704,448

Table 1. Military Expenditures 2013 in US\$

(Stockholm International Peace Research Institute (SIPRI) Military Expenditure Database).

From Table 1 it is clear that defence exports are concentrated to a few countries, both in terms of volume and in terms of sophistication.

It is also clear that the US is the dominant buyer of defence equipment. Of the total military expenditure of US\$ 1.7 trillion in 2013, around US\$26 billion was imported defence equipment distributed across types as follows:

Defence Equipment type	US\$ million
Aircraft	10,411
Air defence systems	1,423
Armoured vehicles	2,486
Artillery	395
ASW weapons	
Engines	1,212
Missiles	3,723
Other	131
Sensors	1,399
Ships	4,389
Total	25,570

Table 2. Military Equipment sale in 2013 US\$

(Stockholm International Peace Research Institute (SIPRI) Arms Transfers Database)

Given that sales relate to systems, it is critical that Australian defence companies are linked into the global supply chains of the relevant systems integrators. According to SIPRI, Australia exported defence equipment to the value of US\$ 63 million during 2013 placing it as the 23rd largest exporter (Table 3) with exports going to the US (\$30 million), Indonesia (\$18 million), India (\$8 million) and Singapore (\$6 million).

Country	Export in US\$ million
Russia	8,283
United States	6,153
China	1,837
France	1,489
United Kingdom	1,394
Germany (FRG)	972
Italy	807
Israel	773
Spain	605
Ukraine	589
Sweden	505
Belarus	338
South Korea (ROK)	307
Netherlands	302
Switzerland	205
Canada	199
Poland	131
Romania	108
Finland	94
Turkey	82
South Africa	76
Norway	64
Australia	63
Belgium	52
UAE	43
Brazil	36
Iran	12
India	10
Denmark	9
Serbia	9
Czech Republic	7
Unknown country	7
Bulgaria	6
Austria	1
Ireland	1
Jordan	1
Singapore	1
Total	25570

Table 3: Military Equipment sale by exporter in 2013 US\$
(Stockholm International Peace Research Institute (SIPRI) Arms Transfers Database)

The above data leads to the conclusion that the US market represents the greatest opportunity for Australian producers.

Selling defence equipment

In order to export to key countries, or in order to be a key supplier in a system integrator supply chain, a local presence in the recipient and/or system integrator home market is critical. 98% of US defence procurement is from domestic producers for the following five reasons (which are reasons used by all OECD countries except Australia):

- 1. 'National eyes only' security issues
- 2. Control of technology upgrades
- 3. Maintenance of a national industry base
- 4. The robustness of war ramp-up and sustainment
- 5. Perceived lack of national jobs.

When the US buys from non-domestic producers it is for the following four reasons:

- 6. An urgent need by national forces
- 7. The area is not prioritized nationally
- 8. National development vs. foreign COTS (Commercial Off The Shelf)
- 9. More competition is needed.

A typical example of a successful defence company entering and growing on the overseas market can be illustrated by the Norwegian firm Kongsberg.

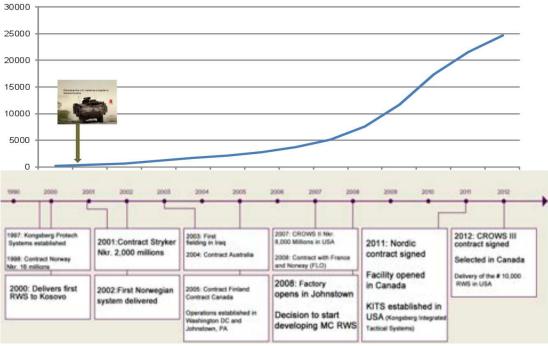


Figure 1. Kongsberg Protech Systems US Journey (company presentation)

As can be seen, success for Kongsberg began when they entered the global supply chain of General Dynamics, then pursued the US defence market by establishing a local presence in the US.

A list of the key system integrators can be found at http://www.sipri.org/research/armaments/production/Top100. These are the companies whose supply chains are of interest.

The key barriers to overcome when entering the US defence market are:

- Adapting to another (US) culture
- Being available across the US time zones
- Understanding and complying with complex laws and regulations
 - FAR, ITAR, SSA (DSS), Buy American Act
- Understanding US acquisition processes
- Recognising that each service behaves almost as a separate defence force; Army, Navy, Air Force, Marines, SOCOM
- · Facing and overcoming the 'no foreign supplies' attitude
- Constantly being 'behind, and on the scene' in DC.
 - The importance of Congress and the Pentagon
- Australians have to accept and adapt to 'this is how we do it in the US'.

To succeed, Australian defence firms will need both in-country and at-home support. In-country support should be at the level provided by countries with a similar global export volume. For example, Norway is a country with a population of just 5 million people and has many similarities to Australia including economic structure and being a key customer for Lockheed Martin's Joint Strike Fighter. As can be seen in Table 4, Australia has exported US\$156 million in defence equipment to the US since 2010. Over the same time period, Norway has achieved twice that amount at US \$325 million.

Arms Exports to the US 2010-13			In US\$	million	
	2010	2011	2012	2013	Total
Germany (FRG)	161	186	216	192	755
United Kingdom	211	177	236	57	681
Canada	178	188	161	71	598
France	68	69	97	96	328
Norway	142	75	107		325
Switzerland	91	77	77	77	322
Italy	80	80	80	16	256
Australia		96	30	30	156
Poland	8	8		121	138
South Africa	117	5			122
Spain	34	34	34	17	120
Netherlands			46	46	92
Israel	9	15	25	35	84
Total	1,113	1,014	1,215	759	4,100

Table 4. Arms Transfers (Trend Indicator Values) to the US by exporter 2010-2013 (Stockholm International Peace Research Institute (SIPRI) Arms Transfers Database)

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The Norwegian government provides active support of defence sales to the US and Canada through 15-20 diplomats. These include:

- Innovation Norway
 - Counsellor for Defence Industry Cooperation
- Office of the Defence Attaché
 - Defence Attaché & Assistant Attaché
 - Air Attaché & Assistant Attaché
 - Naval Attaché
 - Army Attaché
 - Support staff
- Ministry of Defence
 - Counsellor for Defence
- Royal Norwegian Embassy
 - His Excellency the Ambassador
 - Various heads of departments

This representation is needed, together with Australian industry's normal cooperative activities with US industry and the potential customer, to manage the 25 or so 'Domestic Preference Restrictions Affecting Purchases by, or on behalf of, the Department of Defence'.

These restrictions take the form of:

- 1. General laws, regulations and guiding principles:
 - a) Federal Acquisition Regulation (FAR)
 - b) Department of Defense FAR Supplement (DFARS)
- 2. Within these regulations, major restrictions can be found in:
 - a) Buy American Act (BAA) FAR 25.1 and DFARS 225.1
 - b) Balance of Payments Program (DFARS 225.75)
 - c) The Berry Amendment (statutory requirement 10USC 2533a)
 - d) Special Metals Restrictions (10USC 2533b and DFARS 225.7003)
- 3. Other restrictions:
 - a) Market restrictions such as 'no foreign content'
 - b) Security classification of programs
 - c) Requirements to produce on U.S. soil
 - d) The Small Business Act
 - e) Data Distribution Code
 - f) ITAR (International Traffic in Arms Regulations)
 - i) Registration of Brokers (ITAR part 129)
 - ii) New and additional amendments
 - g) Proxy Board and Special Security Agreement (SSA)

The key objective for in-US support by the government of Australian defence industry firms wanting to or already operating in the US, should focus on:

- Ensuring Australian/American Defence-Homeland Security industry has a fair competitive environment in the US market
- 2. Developing a critical mass representation on behalf of the Australian/American defence industry in the US market
- 3. Establishing a Congressional Caucus representing Australian defence industry interests
- 4. Influencing Congressional, Executive, and Department of Defence policy development
- 5. Ensuring that U.S. Government officials are informed about the unique capabilities of Australian defence industry firms in the Defence and Homeland Security market sectors

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6. Providing educational services and support on doing business in the US for our Australian defence industry firms.

No matter which defence market is targeted, a similar support structure must be implemented.

Support at home

The support the Australian Government should aim to achieve for defence and defence-related firms is:

- 1. Enhancing the export readiness of firms
- 2. Educating them about the identified defence markets e.g. US
- 3. Facilitating their entry into global supply chains.
 - This is most easily done by having a local content requirement when procuring foreign
 defence equipment for the Australian Defence Forces. Australia is presently the only OECD
 country and the only major defence equipment procuring country without such a policy.
 - This policy is the natural integration between industry and innovation policy on the one hand and defence policy on the other.
 - From my own experiences relating to the potential suppliers in e.g. the LAND 400 project, I
 can categorically state that they all are prepared to deliver on any localisation requirement
 and they have all done it in their other export orders, but since Australia does not require
 this, they will not offer it.
 - In addition, as can be seen from the work by Gunnar Eliasson¹, the return on investment from developing defence equipment using a domestic system integrator provides a return of between 2.3-6 times the development costs and generates a long term improvement of the domestic industry structure and domestic industry competitiveness.
 - Finally, the development of a capable local defence industry with on-going export reduces the operational risk and cost-of-ownership for the Australian Defence Forces' equipment.

¹ Eliasson, G. (2010). Advanced public procurement as industrial policy: The Aircraft Industry as a Technical University (Vol. 34). Springer.