The Cascade Continues: International Transfers of Surplus Weapons as a Consequence of Defence Reform in Europe

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I. Introduction

Do weapons ever die? In times of ‘defence austerity’ in Europe, where increasing numbers of major conventional arms are considered as excess to requirements by governments across the continent, the answer appears to be negative. In this context, the ‘cascade’ of surplus Cold war-designed weapons deserves increased consideration. Considerable attention was initially paid to the issue of disposing of surplus arms and military equipment in North America and Europe after the end of the Cold war1, as both NATO and former Warsaw Pact states were faced with huge stockpiles of conventional arms to which they added as they downsized their armed forces. While surplus small arms and light weapons (SALW) and ammunition have continued to attract the attention of governments

and scholars\(^2\), less vigilance has been devoted to the issue of surplus major conventional weapons.

SALW are often considered as the most lethal of weapons, killing most civilians in today’s conflicts.\(^3\) However, major conventional weapons trade also give rise to concerns, as exported weapons can be used in human rights violations or in build-ups to regional conflicts breakouts.\(^4\) Surplus conventional weapons raise similar issues as newly exported weapons. But, the focus on surplus weapons transfers also highlights a specific feature. While they may be deemed surplus to requirement in the eyes of the armed forces of one state due to changes in the strategic or geopolitical context of that particular state, they may suit the requirements of the armed forces of another state. The life-cycle of many major conventional weapon platforms is now longer than initially envisioned thanks to developments with regards to overhaul, refurbishment and modernisation.

The cases discussed in this paper underline the fact that considerable quantities of surplus are generated following the involvement of European countries in conflict. The very large quantities of weapons originally designed and produced for Cold War conflict between NATO and the Soviet Union and its Warsaw Pact allies in the European theatre are deemed surplus to requirements today (such as tanks),\(^5\) but continue to be in demand in some parts of Europe and much further afield. Looking ahead, European participants in International Security Assistance Force (ISAF) in Afghanistan are considering options for disposing of major conventional arms and military equipment that will be surplus to


requirements after the 2014 drawdown, with the possibility of donations to the Afghan armed forces and other security forces in the region being considered by various ISAF participating states. This paper will show that Cold War era equipment continues to be present in international arms transfers and further that a considerable part of the international arms trade consists of transfers of surplus major conventional weapons today. Therefore, the ‘cascade of arms’ continues, with large numbers of surplus combat aircraft, armoured vehicles and ships in particular passing to second and third owners.

**Defining surplus weapons**

‘Surplus weapons’ are created by a high level military-political decision that particular quantities and types or models of equipment are deemed surplus or excess to requirements. In most cases, arms and military equipment are declared surplus after they have been in service with the armed forces. This paper will only discuss surplus weapons that have been used and therefore became second-hand after export and includes major conventional weapons that have been refurbished before export. According to data compiled by the Stockholm International Peace Research Institute (SIPRI), refurbished weapons account for 31 per cent of overall surplus transfers between 2008 and 2012.

Several sets of circumstances have been identified when arms and military equipment are deemed excess or surplus to requirements: Changes in strategic doctrine; downsizing of the armed forces; replacement of existing holdings with new equipment; a sharp drop in military spending; obligations under international disarmament treaties; and an end to a particular armed conflict.

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7 There are exceptions to the general rule that surplus weapons are second-hand. For example, Sweden declared that it would only require around 100 of the 204 Jas-39 Gripen combat aircraft it had ordered, and therefore agreed to lease 14 new Jas-39 Gripen to the Czech Republic.


These sets of circumstances are not mutually exclusive. Changes in strategic doctrines, as in the 1990s, may lead to downsizing and/or purchasing of new equipment. A drop in military spending, prompted by new geopolitical environment or by a difficult economic situation, can be connected to downsizing as well. However, two issues that are prompting the focusing of attention on surplus exports in the European context today are the impact on procurement plans of ‘European defence austerity’ and the creation of surplus due to the post-conflict drawdowns in Afghanistan and Iraq. Thus, while the transfer of surplus arms has been a consistent feature of European arms exports since the fall of the USSR, there are particular reasons for focused attention today.

**Disposing of surplus weapons**

Once military equipment is designated as surplus, governments have several options open for them on how to dispose of surplus arms and military equipment: export; stockpile; destruction; conversion; or demilitarisation.

The stockpiling of surplus equipment can be expensive if governments are interested in ensuring safe storage of the surplus weapons. It is cheaper to let equipment stand and decay. This represents a policy of ‘deliberate obsolescence’, and by not storing the weapon safely it can become practically obsolete and can also be subject to theft. However, irrespective of whether the surplus equipment is maintained or the subject of ‘deliberate obsolescence’, stockpiled surplus can still be exported or dealt with through other options. Destruction effectively puts surplus arms and military equipment beyond military use. Conversion can be for civilian purposes or can involve the conversion of surplus equipment for other military roles (see below with regard to surplus tanks being converted to armoured engineer vehicles), which can be continued use with the armed forces of the state that deems the equipment

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surplus to requirements or exported. Demilitarisation also permits the sale of former military equipment to museums or civilian collectors.

Of all these choices, export to another armed force is generally regarded as the most cost-effective way for a government to dispose of its surplus conventional arms and military equipment. There have been efforts by states in North America and Western Europe to encourage the destruction of surplus SALW, in particular stockpiles in Central and Eastern Europe. However, the results of these efforts have been mixed. Further, there have not been similar efforts to push for the destruction option to be utilised more prominently for major conventional weapons.

**Exports of surplus weapons, where Europe is a world leader**

SIPRI data on international transfers of major conventional weapons shows that surplus retains a solid share of international transfers of major conventional weapons today. SIPRI Trend Indicator Values (TIV) indicate that surplus equipment accounts for 9 per cent of the arms trade between 2008 and 2012 – it accounted for 16 per cent between 1991 and 1995.\(^\text{12}\) The SIPRI TIV can be used to measure the volume of international arms transfers in lieu of financial values. It is of course an imperfect system, but does help to show that transfers of surplus major conventional weapons continue to represent significant contributions to war-fighting capabilities in different parts of the world. During 2008-2012, surplus (second-hand and refurbished) major conventional weapons accounted for 34 per cent of exports from Africa, 11 per cent from Europe, 12 per cent from the Middle East, 19 per cent from the Americas and 3 per cent from Asia. Table 1 shows that Europe represented 71 per cent of total surplus exports in the 5-year period, whereas it accounted for 59 per cent of global arms exports at the same time.\(^\text{13}\)

\(^{12}\) All references to transfers of surplus arms and military equipment in this paper refer to second-hand and refurbished weapons, as defined by the SIPRI arms transfers programme, ‘Appendix 7A. The suppliers and recipients of major conventional weapons, 2005-2009’, SIPRI Yearbook 2010: Armaments, Disarmament and International Security (Oxford: Oxford University Press, 2010), pp. 306-10.

\(^{13}\) All volumes of international transfers and shares of exports and imports are taken from the SIPRI arms transfers database, <http://www.sipri.org/research/armaments/transfers/databases/armstransfers>.
Table 1: Exports of surplus major conventional weapons by region, 2008-2012

<table>
<thead>
<tr>
<th>Region</th>
<th>Surplus as a share of regional exports</th>
<th>Share of the region in total world surplus exports</th>
<th>Share of the region in all world exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>34 per cent</td>
<td>2 per cent</td>
<td>0.5 per cent</td>
</tr>
<tr>
<td>Americas</td>
<td>6 per cent</td>
<td>19 per cent</td>
<td>32 per cent</td>
</tr>
<tr>
<td>Asia and Oceania</td>
<td>4 per cent</td>
<td>3 per cent</td>
<td>6 per cent</td>
</tr>
<tr>
<td>Europe</td>
<td>11 per cent</td>
<td>71 per cent</td>
<td>59 per cent</td>
</tr>
<tr>
<td>Middle East</td>
<td>12 per cent</td>
<td>3 per cent</td>
<td>2.5 per cent</td>
</tr>
</tbody>
</table>

Hence, European countries are large suppliers of surplus. Since the beginning of the budgetary crisis in Europe in 2008-2009, there has been a sharp decrease in military spending and reduction of armed forces. According to SIPRI military expenditure data, “between 2008 and 2012, 20 of the 37 countries” in Western and Central Europe “reduced military spending by more than 10 per cent in real terms.”\(^{14}\) Given the fact that sales of surplus weapons are considered as the most cost-effective way to deal with surplus stocks, and that such sales can contribute to ministries of Defence’ (MoD) budgets, we might expect that budget reductions in the current era of defence austerity will likely generate new surplus in Europe in coming years. In addition, this decrease of arms procurement budgets augmented pressure on European arms firms to find external markets. In the 1990s, budget cuts in Europe combined with increased competition in international markets later on in the 2000s, accelerated the arms industry’s strategy of international expansion.\(^{15}\) Whereas the international arms market used to be a “sellers’ market” during the Cold war,\(^{16}\) it has become a “buyers’ market”\(^{17}\) in the post-Cold war world. This paved the way for rising pressure on the arms industry to succeed in the international market.


In light of these circumstances and the particular significance of surplus exports for some European states, this paper will focus on surplus exports from the current 28 members of the European Union (EU). We will first establish a typology of surplus export patterns by the 28 EU member states, based on the share of surplus in total arms exports and the size and scope of production of each state’s indigenous arms industry; and secondly evoke some of the destinations of European surplus exports, in particular to areas of concern.

II. European surplus arms exporters: a typology

It is obvious that EU member states have different profiles with regards to arms exports in general, and surplus arms exports in particular. In recognition of the differences in scale, decision-making and promotion of exports of surplus arms, this paper proposes to establish a typology of surplus exporters in the EU. This section explains the different categories of surplus exporters in the EU and how the categories relate to EU member states.

(a) Typology of EU surplus exporters

Table 2 provides an overview of the trend in EU member states surplus arms exports in the post-Cold war period, presenting the share of surplus in overall arms exports during the period 1991-2012. These figures show different ways to deal with surplus in various European countries. Regarding the volumes of surplus exports, the top 10 European suppliers are as follows. Between 1991-1995, the top 10 included Germany (57 per cent of EU surplus exports), the UK (16 per cent), the Netherlands (10 per cent), Denmark (6 per cent), Belgium (2.6 per cent), France (2.5 per cent), Bulgaria (1.4 per cent), Czech Republic (1.4 per cent), Romania (0.8 per cent) and Poland (0.6 per cent). During the 2008-2012 5-year period, Germany remained the most important European surplus supplier (41 per cent of EU surplus exports), the Netherlands came up to the second position (20 per cent), followed by Belgium (10 per cent), the UK (7 per cent), Sweden (6 per cent), Italy (2.9 per cent), France (2.7 per cent), Portugal (2.6 per cent), Poland (2.3 per cent) and Finland (1.4 per cent).
Table 2. Share of surplus in EU 28 member states’ arms exports

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Austria</td>
<td>0 per cent</td>
<td>2 per cent</td>
<td>62 per cent</td>
<td>2 per cent</td>
</tr>
<tr>
<td>Belgium</td>
<td>100 per cent</td>
<td>83 per cent</td>
<td>76 per cent</td>
<td>95 per cent</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>75 per cent</td>
<td>89 per cent</td>
<td>83 per cent</td>
<td>100 per cent</td>
</tr>
<tr>
<td>Croatia</td>
<td>--</td>
<td>0 per cent</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Cyprus</td>
<td>--</td>
<td>100 per cent</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>20 per cent (1993)</td>
<td>51 per cent</td>
<td>76 per cent</td>
<td>72 per cent</td>
</tr>
<tr>
<td>Denmark</td>
<td>78 per cent</td>
<td>78 per cent</td>
<td>0,4 per cent</td>
<td>33 per cent</td>
</tr>
<tr>
<td>Estonia</td>
<td>--</td>
<td>100 per cent</td>
<td>--</td>
<td>---</td>
</tr>
<tr>
<td>Finland</td>
<td>10 per cent</td>
<td>3 per cent</td>
<td>31 per cent</td>
<td>35 per cent</td>
</tr>
<tr>
<td>France</td>
<td>4 per cent</td>
<td>5 per cent</td>
<td>2 per cent</td>
<td>2 per cent</td>
</tr>
<tr>
<td>Germany</td>
<td>44 per cent</td>
<td>14 per cent</td>
<td>23 per cent</td>
<td>23 per cent</td>
</tr>
<tr>
<td>Greece</td>
<td>42 per cent</td>
<td>69 per cent</td>
<td>88 per cent</td>
<td>--</td>
</tr>
<tr>
<td>Hungary</td>
<td>11 per cent</td>
<td>0 per cent</td>
<td>100 per cent</td>
<td>--</td>
</tr>
<tr>
<td>Ireland</td>
<td>--</td>
<td>--</td>
<td>0 per cent</td>
<td>5 per cent</td>
</tr>
<tr>
<td>Italy</td>
<td>1 per cent</td>
<td>0,4 per cent</td>
<td>28 per cent</td>
<td>5 per cent</td>
</tr>
<tr>
<td>Latvia</td>
<td>100 per cent</td>
<td>--</td>
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<td>--</td>
</tr>
<tr>
<td>Lithuania</td>
<td>--</td>
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<td>--</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>--</td>
<td>--</td>
<td>100 per cent</td>
<td>--</td>
</tr>
<tr>
<td>Malta</td>
<td>--</td>
<td>--</td>
<td>100 per cent</td>
<td>---</td>
</tr>
<tr>
<td>Netherlands</td>
<td>33 per cent</td>
<td>55 per cent</td>
<td>58 per cent</td>
<td>40 per cent</td>
</tr>
<tr>
<td>Poland</td>
<td>12 per cent</td>
<td>46 per cent</td>
<td>10 per cent</td>
<td>39 per cent</td>
</tr>
<tr>
<td>Portugal</td>
<td>100 per cent</td>
<td>--</td>
<td>--</td>
<td>98 per cent</td>
</tr>
<tr>
<td>Romania</td>
<td>85 per cent</td>
<td>23 per cent</td>
<td>61 per cent</td>
<td>1 per cent</td>
</tr>
<tr>
<td>Slovakia</td>
<td>7 per cent (1993)</td>
<td>59 per cent</td>
<td>71 per cent</td>
<td>100 per cent</td>
</tr>
<tr>
<td>Slovenia</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Spain</td>
<td>0,3 per cent</td>
<td>14 per cent</td>
<td>1 per cent</td>
<td>1 per cent</td>
</tr>
<tr>
<td>Sweden</td>
<td>0,3 per cent</td>
<td>17 per cent</td>
<td>0,4 per cent</td>
<td>14 per cent</td>
</tr>
<tr>
<td>UK</td>
<td>18 per cent</td>
<td>10 per cent</td>
<td>23 per cent</td>
<td>8 per cent</td>
</tr>
</tbody>
</table>

These two sets of figures – the share of surplus exports and the most important suppliers in terms of volume - reveal different types of surplus exporters in the EU. A first category of surplus supplying states consists of the EU’s largest arms
exporters, i.e. countries that have a significant defence industry and where surplus arms exports represent less than 15% of overall exports. For these exporters, mainly the Letter of Intent (LOI) countries, surplus is not particularly significant when expressed as a share of total exports. Nevertheless, it can still dwarf the overall and surplus exports of other suppliers. Their surplus exports tend to be of indigenously produced weapons that are deemed surplus to requirements as a new generation of arms and military equipment is entering into service or because of major structural reforms to national armed forces. This group includes: the UK, France, Sweden, Spain, Italy.

Germany’s pattern of surplus exports is an anomaly for this group of states, as German surplus sales represented almost a quarter of total exports in the latest decade, and 44% in the immediate post-Cold war period. However, German surplus exports are often connected with situations in which surplus is exported as part of deals for new or licensed production or as an ‘interim solution’ while recipients are waiting for new production; like other states included in this first group of surplus exporters. In addition, Germany differs from the other states in this group as it not only houses a highly developed west European arms industry but also inherited significant quantities of major conventional arms from East Germany following re-unification. Therefore, the end of the Cold War and reunification created a significant quantity of surplus in Germany giving the state a profile that means that it shares characteristics of category 1 and 3 during the post-Cold War period.

A second category of European surplus exporters includes countries that have small indigenous arms industry, but where surplus arms exports represent an important means of funding for procurement for the MoD. This group includes Austria, Belgium, Denmark, Finland, the Netherlands and Poland. Although Belgium’s share of surplus sales is much higher than the other states within this group, its profile is otherwise comparable.

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18 For example, in 2003 Germany and Greece concluded a deal for the licenced production of 170 Leopard-2A6 tanks and as an interim measures in 2005 concluded a deal for the supply of 183 surplus Leopard-2A4 tanks and 150 Leopard-1A5.
A third type of surplus suppliers states are those that have small indigenous arms production capabilities, but surplus represents a significant share of their arms exports (often over 75%) – although the volume of exports is lower than that of the first two groups Central European states mainly are among the suppliers covered by this category. These states are exporting arms and military equipment that was inherited at the collapse of the Soviet Union and which has been added to by the downsizing of the armed forces in subsequent years. Additional surplus has been created as a result of acquiring weapons that are of NATO rather than Warsaw Pact standards. This group includes: Bulgaria, Czech Republic, Hungary Romania, and Slovakia. For example, 72 per cent of Czech exports of major conventional arms during 2008-2012 consisted of surplus and 100 per cent of Bulgarian and Slovakian exports. In the case of Hungary, the sale of two new Mi-8T helicopters in the 1990s explains the 1991-1995 and 1996-2000 figures. However, with Hungary’s military expenditures declining from 1.2% to 0.8% of GDP between 2008 and 2012, the Hungarian ministry of Defence now seeks to increase exports of surplus, in order to generate funding for the modernisation of the armed forces. One example of this is the decision in 2011 to offer for sale 8 surplus MiG-29 aircraft.

A fourth group of surplus suppliers is made up of states that have a niche domestic industry producing major conventional weapons, or none at all, but that export small quantities of surplus arms. This is one of the features of the surplus arms trade that distinguishes it from the overall arms trade - any state that has acquired major conventional weapons could potentially become a supplier. For these states, exports of surplus represent their only exports of major conventional weapons. This group includes: Croatia, Cyprus, Estonia, Greece, Ireland, Latvia, Luxembourg, Malta, and Portugal. In the case of Ireland, almost all Irish exports during 1991 – 2012 are based on the license of the Bushmaster armoured personal carrier (APC), sold to an Australian company

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21 Венгрия намерена продать истребители МиГ-29 [Hungary intends to sell MiG-29], Коммерсанть, 30 August 2011, http://www.kommersant.ua/doc/1762933/print
who produces it locally. Such licensed production is counted as new in the SIPRI arms transfers database.

(b) Exploring the typology of EU surplus arms exporters: case studies

To provide a fuller explanation of the differences between the categories, as well as some common features of European surplus arms exports, case studies are detailed below for the first three categories of EU surplus exporters.

*France: Major exporter, but limited surplus exports*

France is perhaps one of the more extreme cases in the first category of the typology, because while there is a large potential for the export of surplus weapons, surplus exports represented only 2% of total exports in 2008-2012. There are two key factors for explaining this low share of surplus in French arms exports. Firstly, the life-cycle of French military equipment is such that it is unlikely that it would be attractive for the surplus arms market at the end of its period of service in the French armed forces. This is because there is a tendency in the French armed forces to continue to utilise equipment until it is no longer considered fit for service and beyond repair. This policy of using material for as long as possible means that there disposal by export is unlikely to be an option.

Secondly, the Ministry of Defence department in charge of military procurement and exports (Direction générale de l’armement, DGA), is not organized so as to take into account surplus exports. The administration gives high priority to the export of new equipment, and depends on the various Armies’ general staff to decide whether a weapons systems is to be declared surplus or not. In this way, one could argue that the system has been established to support external

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22 The General Staff estimated the following amounts of surplus material that could possibly be exported (as of March 2011): 40 ships, 130 helicopters, 150 aircraft, 1500 tanks, 15 000 military vehicles. Source: Grall M., ‘Rapport d’information sur la fin de vie des équipements militaires’, Commission de la défense nationale et des forces armées de l’Assemblée Nationale, 16 March 2011, p.83; see also Pierson de Brabois Y., ‘Valoriser le matériel militaire en fin de vie’, Tribune n°407, Revue Défense Nationale, Juillet 2013.

markets for newly produced arms rather than surplus; with surplus perhaps viewed as a competitor to the newly produced items. This thesis has an intuitive appeal, especially in a time of austerity in Europe and intense competition on the international arms market. Furthermore, this policy reflects the interests and concerns of the ‘big’ French arms producers and exporters towards surplus exports. French defence firms consider the sale of surplus equipment as a threat to their own business. ‘Industrials, the big companies, do not necessarily want the second-hand material to be made available on the market’.24 Because defence firms spend a significant share of their revenue into research and development, they tend to favour technological development, hence seeing the overhaul of older generation materials and second-hand sales as a threat to the sale of new equipment.25 Therefore, despite several reports26 and briefings27 on the issue of the potential for French surplus arms exports, France still lacks a coherent policy regarding surplus arms transfers. As an arms industry executive put it: ‘We are late with regard to the structure of our offer [of second-hand equipment]. The sales are done at random, on a case-by-case basis’.28

The position of the French arms producing companies and the DGA might explain why the few economically significant French surplus exports rely typically on big “coupes”, often related to the tentative sales of new weapons. For instance, there were reports in recent years that France might arrange for the re-export from the UAE of French-supplied Mirage-2000 to help facilitate a deal to export Rafale combat aircraft to the UAE.29 France also leased the Agosta-class submarine ‘Quessant’ to Malaysia, for training purpose in advance of acquiring two Scorpene submarines. The Quessant was decommissioned in 2001 and

24 Interview, French defence firm, June 2013.
27 Interview, DGA, July 2009.
28 Interview, French defence firm, June 2013.
leased to Malaysia between 2005 and 2009. Yet another example would be the sale of 12 second-hand Mirage-2000 aircraft to Brazil, a deal that can be perceived from the French side as a means to facilitate a Rafale choice in the F-X2 competition. Surplus exports would therefore be seen mostly as a tool for new generation weapons sales; an approach that has also been used to good effect by other major European arms exporters, in particular Germany.

The Netherlands: High quality surplus for sale

The Netherlands is a very interesting case for illustrating the third category of European surplus exporters. It not only clearly shows the way in which surplus exports represent an important source of revenue for purchasing new equipment, but also the demand for well-maintained surplus arms. Surplus arms have accounted for at least a third of total Dutch exports of major conventional weapons since 1991. Although the Netherlands was the 11th largest supplier of major conventional weapons during 2008-2012, it was the fourth largest exporter of surplus major conventional weapons during this period.

Since the end of the Cold War, Dutch governments have programmed a number of budget and equipment reductions for the armed forces. The initial impetus came from the decision to change to a professional army after 1996, which generated considerable surplus equipment on top of a series of initial format reduction decisions in the early 1990s. The creation of surplus in the mid-1990s continued as a result of the 1998 defence budget, the 2000 white paper, the 2003 Defence Budget and Policy Letter, the update of the latter in 2006 and the 2007 Headlines of Defence Policy document. Therefore, since 1991, ‘the navy was reduced from 18 to 9 frigates; 16 maritime patrol aircraft from 13 to nil; submarines from 6 to 4; mine-hunters from 29 to 10; and personnel from 22,000

to 11,000. The army suffered a reduction in brigades from 10 to 3; tanks from 913 to 82 (22 for training); artillery from 543 guns to 24; armoured anti-aircraft artillery from 95 to nil; armoured fighting vehicles from 1,327 to 794; and personnel from 75,000 to 25,700. The air force was reduced from 162 F-16s to 87 (with 15 for training) whilst Hawk units were reduced from 16 to nil, with personnel cut from 18,500 to 9,400'.

The Netherlands operates a policy under which the export of surplus arms is linked to the procurement of new weapons as part of modernization plans. For example, the export of eighteen surplus F-16s to Chile was explicitly linked to the generation of funds to buy precision-guided weapons. Similarly, the sale of second-hand Karel Doormans frigates to Chile (2006 and 2007), Belgium (2008) and Portugal (2010) was intended to provide funding for new military equipment. The decision to export the Karel Doormans reflected the fact that they were designed for anti-submarine warfare in the North Sea in the Cold War, a role that the Dutch navy abandoned in 2005. Therefore, this type of ship was no longer regarded as an integral part of the Dutch navy in the post-Cold war geopolitical situation. The funds raised from their sale were used to procure new corvettes-OPVs to deal with new types of threats and required capabilities. The Netherlands’ main markets for surplus between 2003 and 2012 were Belgium, Chile, Egypt, Jordan and Portugal.

The Netherlands is also of interest as the parliament has a role with regards to advice and consultation is with regards to exports of arms and military

equipment designated as surplus to the requirements of the armed forces. The Dutch parliament receives prior confidential notification from the Minister of Defence of (significant) exports of surplus Dutch weapon systems. The Standing Committee and eventually the Plenary Session of the Second Chamber can question the government on a proposed transfer of surplus military equipment, although the decision on individual transactions remains with the executive. This is of particular interest as concerns raised by the parliament have had an impact on Dutch exports of surplus equipment. For example, the Dutch armed forces wanted to export 80 Leopard 2 tanks to Indonesia to raise €200 million to fund the procurement of UAVs. However, a majority of Dutch MPs opposed the deal and the delay in the decision on whether to export led to Indonesia turning to Germany to supply the 104 surplus Leopard 2 tanks instead.

**Bulgaria: A dormant arms industry, but booming surplus arms exports**

Bulgaria is a clear example of the second category of exporters outlined above; a state that had large amounts of arms and military equipment after the end of the Cold war, and a major arms industry ill-equipped for survival in a competitive arms market. Under the People’s Republic of Bulgaria, the Bulgarian defence industry was almost entirely dedicated to exports to allies in the Warsaw Pact, India and states in the Middle East and Africa. After the fall of the USSR, Bulgarian arms producers lost many of their established clients as these recipients became targets of UN embargoes, developed their own arms production capabilities or saw the demand for Warsaw-Pact standard equipment replaced by demand for NATO standard weapons. The cancellation of projected sales to former Soviet republics, Iraq and Libya had a detrimental impact on Bulgarian arms production. In addition to a drop in demand for newly

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produced Bulgarian arms, the Bulgarian arms industry lost its significant state subsidies with the end of the socialist regime.\textsuperscript{46}

At the same time that the demand for newly produced Bulgarian weapons was suffering, Bulgaria was creating considerable quantities of surplus as it took equipment out of service to fulfil obligations under the treaty on Conventional Armed Forces in Europe (CFE treaty) and replaced Warsaw-Pact standard equipment with NATO standard equipment as it sought to join NATO.\textsuperscript{47} This helps to explain why between 1991 and 2000, 84 per cent of Bulgarian exports were surplus, mostly tanks (T-55 and T-62), and artillery (mortars, towed guns).\textsuperscript{48} Cold War surplus stock continues to represent the bulk of Bulgarian exports of major conventional weapons, as during the period 2003-2012 surplus accounted for 86% of the volume of Bulgarian exports of major conventional weapons (Mi-24 helicopters, BTR-60 APCs, Mig-23 aircraft).\textsuperscript{49} For example, Iraq recently ordered 500 MT-LB armoured vehicles from Bulgaria: which had been produced in the USSR during the 1970s.\textsuperscript{50}

In many respects, Bulgaria supplies markets where there is a demand for Warsaw Pact standard equipment and therefore has a different recipient profile to many EU member states.

### III. Destinations of European surplus exports

This section considers the destinations for European surplus exports, in particular to areas of concern with regards to the potential for exported arms to be used in conflict or for violations of human rights. Since the adoption of a Code

\textsuperscript{46} Human Rights Watch, ‘Bulgaria: Money Talks - Arms Dealing with Human Rights Abusers’, April 1999, TP

\textsuperscript{47} Human Rights Watch, ‘Bulgaria: Money Talks - Arms Dealing with Human Rights Abusers’, April 1999, TP

\textsuperscript{48} SIPRI arms transfers database, last accessed 22 August 2013

\textsuperscript{49} SIPRI arms transfers database, last accessed 22 August 2013; Genov E., ‘Defense Officials Sell MiG-21s for 4,000 Leva Each’, Sofia Trud, 17 August 2011; Morkin D., ‘Four Arms Trade Companies Fighting To Win ‘King of War’ Prize’, Sofia Trud Online, 18 November 2011.

\textsuperscript{50} ‘Iraq orders Bulgarian MT-LBs’, Jane’s Defence Weekly, 13 June 2012.
of Conduct on arms exports (1998)\textsuperscript{51}, later transformed into a Common Position (2008)\textsuperscript{52}, European Union (EU) member states claim a responsible conduct in the field of arms exports. Some academic studies have already shown the weak impact the Code and the Common Position have had on European arms transfers policy harmonization, or limitations of transfers to countries where human rights are violated.\textsuperscript{53} Nonetheless, due to the significance of surplus exports for some European countries it is worth looking more closely at EU member states’ surplus transfers to destinations against the criteria set out in the Common Position.

\textbf{(a) Intra-European transfers of surplus equipment as a consequence of defence austerity}

European initiatives, either coming from the European Commission or from member states’ governments, to progressively institutionalize a common defence industrial base, have developed since the 1990s. The latest of these efforts was the “defence package” initiated by the Commission, in order to reach a more open intra-European defence market.\textsuperscript{54} In 2007, intra-European Union arms transfers represented around 30\% of arms exports by European member states.\textsuperscript{55}


\textsuperscript{54} Efforts to overcome the challenges for a more open European defence market have launched the creation of several organisations, as well as recent European legislation: Organisation Conjointe de Cooperation en matiere d’Armement (OCCAR) (1996) (France, Germany, Italy and the UK); Letter of Intent (LoI) signed by 6 key arms-producing European countries (1998) (France, Germany, Italy, Spain, Sweden and the UK); Creation of the EDA (2004); (Voluntary) Code of Conduct on Defence Procurement under Article 346 (2006) by EDA ; EDA ‘A Strategy for he European Defence Technological and Industrial Base (EDTIB)’ (2007) ; EDA Code of Conduct on Offsets (2008); 2009 defence package with the Defence (and Security) Procurement Directive 2009/81/EC and Intra-Community Transfers Directive 2009/43/EC.

In recognition of intra-EU surplus arms transfers, the European Defence Agency (EDA) has launched in June 2013 an online information exchange platform and market called e-QUIP, dedicated to surplus weapons, so that potential European buyers or seller could contact each other directly. The main motivation stated for this initiative is the expected increases of surplus military equipment made available by European states.\(^{56}\) E-QUIP references not only equipment, but also services such as training, logistics and maintenance.\(^{57}\) The e-QUIP platform is considered as a means to contribute to the “pooling and sharing” objective\(^ {58}\) launched in 2010 by the EU to encourage savings and cooperation in the military procurement sector. One of the aims is reportedly to encourage the transfers of surplus NATO equipment from West European states to “new” EU member states, and to avoid unnecessary competition in extra-EU markets. Such surplus transfers could additionally increase inter-operability among EU member countries.\(^ {59}\)

Such a step by the EDA takes place in the context of new surplus created by the withdrawal of European forces from Afghanistan and Iraq as well as the impact of the financial crisis on defence budgets and arms procurement. Therefore, in several cases the creation of surplus and the lowering of arms procurement budgets has led some European states to choose to procure surplus weapon systems instead of newly produced weapons as they may have earlier planned to do.

For example, Bulgaria and Romania have abandoned the purchase of new combat aircraft and now plan to procure second-hand F-16s from Portugal, who

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owns 45 of these aircraft as surplus. In 2010 Romania was considering buying 23 surplus F-16s from the US Air Force. This figure was later reviewed to 12 F-16s, the choice of second-hand aircraft being made explicitly ‘due to budgetary constraints’ according to the Prime Minister. In Bulgaria, ‘talks have been held with Portugal, the Netherlands, the United States and Germany, with Belgium, Italy and Norway also named as possible sellers to Bulgaria of used F16s or, in the case of Italy, also possibly used Eurofighters’. The Portuguese F-16s Bulgaria and Romania consider acquiring would actually be third-hand, as Portugal originally purchased those aircraft from the US Air Force. Similarly, Croatia originally planned to purchase 12 combat aircraft in 2007, but in October 2012 eventually estimated that ‘funds were insufficient for the acquisition of either new or second-hand aircraft and would instead focus on overhauling its inventory of MiG-21s’.

The intra-EU surplus trade therefore has mainly consisted of transfers from north and west European member states transfer to states in southern and central Europe. In the case of the central European states, they have acquired NATO surplus equipment to replace aging Soviet-era equipment, which has in turn been exported to former clients and allies of the USSR. The cascade of second-hand and refurbished weapons thus continues some twenty years after the end of the Cold war.

(b) European surplus exports to areas of concern

61 ACT Media (Romanian Business News), ‘EU warns Romania, Bulgaria, Czechs over defence procurement’, 4 September 2012.
The main factors for explaining the continuing demand for surplus arms can be summarised as follows: First, second-hand equipment is obviously cheaper than newly produced weapons, and these acquisitions often represent excellent value for money. Second, there are certain roles for which second-hand equipment is, or has been, the best option available. For example, since the end of the Cold war, the most striking example of a platform that has only been available for import in used condition is an aircraft carrier.66 The only international transfer of a newly produced aircraft carrier since 1992 is the HTMS Chakri Naruebet, which Thailand ordered from Spain in 1992 and which was commissioned in 1997. All other deliveries of aircraft carriers during the past 20 years have been of surplus aircraft carriers. Third, there is usually a much quicker delivery schedule with second-hand equipment when compared to new production. Fourth, second-hand equipment can be acquired to provide a cheap platform for conversion, with armoured vehicles in particular acquired for this purpose. In February 2011, Switzerland announced that Canada had purchased 12 second-hand Leopard-2 tanks from Switzerland, which were supplied without armaments, radio and inter-phone systems, because they are to be converted into support vehicles.67 Fifth, second-hand equipment can be acquired as a cheap option for training purposes before the induction of a new system into the armed forces.

For these different motives, European surplus weapons can be an attractive option for states looking for cost-effective or simply low cost purchases. However, there have been a number of exports of surplus major conventional arms from EU member states in recent years that are of potential concern with regards to impacts on regional stability and contributions to conflict.

*Africa: Arming questionable end-users*

Surplus exports to African states often highlight former colonial ties. One example would be the transfer by Portugal to Mozambique of surplus FTB-337G

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66 The definition of an aircraft carrier used here refers to ships that can deploy and recover fixed-wing aircraft and does not include helicopter-only carrier ships.
aircraft in 2012, as well as several military ships. In the case of France, such transfers are limited in terms of revenue, but are important in strategic and geopolitical terms. Between 2008 and 2012, France delivered one second-hand EDIC landing craft in 2012 to Djibouti; 5 second-hand EMB-312 Tucano trainer aircraft in 2010-2012 and 70 VAB-VTT second-hand APC in 2010 to Mauritania; one second-hand AS-355 light helicopter and 2 second-hand TB-30 Epsilon trainer aircraft in 2006, as well as 8 second-hand TR-F-1 155mm towed gun and one second-hand EDIC landing craft in 2011 to Senegal. However, some of these transfers are also of potential concern with regards to their use in armed violence and conflict and human rights abuses. At the risk of fuelling internal conflicts against rebels and inter-state conflict against Sudan, France supplied Chad with 25 second-hand VAB-VTT APC in 2008. Those were likely supplied via a Belgium company that upgraded the vehicles.

African military and security forces are often perceived as potentially dangerous end-users, presenting some of the risks identified by the EU Common Position criteria (human rights violations, risks of diversion). For example, Bulgarian surplus arms exports were delivered during 2003-2012 to a number of recipients involved in armed conflicts or to security forces with a poor human rights record in Africa, including: Chad, Côte d'Ivoire, Eritrea, Ethiopia, and Mali. Bulgaria was for example Mali’s primary supplier of major conventional weapons during 2003-2012, supplying four surplus Mi-24 helicopters to Mali in 2007-2009 and 20 BTR-60 armoured personnel carriers (APCs) in 2012. These deliveries took place as the Bamako government was fighting the Tuareg rebellion in Northern Mali, and the equipment was quickly deployed in the conflict. European NGOs have drawn attention to these transfers and voiced

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69 SIPRI arms transfers database, last accessed 22 August 2013.
71 SIPRI arms transfers database, last accessed 22 August 2013.
concerns that such transfers ‘violate’ the criteria of the EU Common Position.\textsuperscript{74} In the case of the 20 BTR-60 APCs, the shipment was stopped en route to Mali by the government of Guinea. In November 2012, it was also reported that Bulgaria had sold 6 surplus Su-25 aircraft to Mali, via a Bulgarian company.\textsuperscript{75}

\textit{Asia: Contributing to low intensity conflict between Cambodia and Thailand}

At the height of the cross-border clashes between Cambodia and Thailand, during 2008-2011 Sweden delivered various surplus military aircraft to Thailand (2 Saab-340AEW&C and one Saab-340 transport aircraft) and Bulgaria delivered 40 second-hand BTR-60PB armoured personnel carriers and 4 second-hand BRDM-2 reconnaissance armoured vehicles to Cambodia.\textsuperscript{76} There were also reports of Bulgaria willing to transfer T-55 tanks to Cambodia that same year.\textsuperscript{77} One would think that there is a high risk that the arms being transferred could be used in conflicts or have a negative impact on regional peace, security and stability and therefore raise concerns when assessed against criteria 4 (preservation of regional peace, security and stability) of the Common Position.

\textit{Latin America: Fuelling an arms race?}

Chile has been a major importer of European surplus, at a time of significant concerns that Latin American countries were engaged in an arms race\textsuperscript{78}. Between 2008 and 2012, 77 per cent of arms imports by Chile came from EU countries.\textsuperscript{79} During this five-year period, Chile received around 20 second-hand M-108 VBCL

\textsuperscript{74} Vranckx A. (ed.), ‘Rhetoric or restraint? Trade in military equipment under the EU transfer control system. A Report to the EU Presidency’, Academia Press Gent, November 2010, p.59

\textsuperscript{75} ‘Sources Say Bulgarian Defense Ministry Sold Six SU-25 Bombers to Mali’, Sega Online, 3 November 2012

\textsuperscript{76} ‘Thailand/Cambodia: Thailand, Cambodia border dispute talks underway as reinforcements grow’, Thai News Services, 22 July 2008.

\textsuperscript{77} Miladinov N., ‘Гражданско сдружение подадо сигнал до главния прокурор срещу министър Николай Младенов’ [Civic Association reported to the Attorney General against the Minister Nikolay Mladenov], Radio Bulgaria, 17 September 2012, http://bnr.bg/sites/horizont/Shows/Current/12plus3/Politic/Bulgaria/Pages/mladenov_narusheniq1709.aspx.


APCs by Belgium; one second-hand Foudre AALS and one second-hand CDIC AALS by France; around 20 second-hand M-113 APCs, over two hundred refurbished and second-hand Marder 1A3 infantry fighting vehicles, and more than 150 second-hand Leopard-2A4 tanks from Germany; 4 second-hand AS-365/AS-565 Panther helicopters by Ireland; 18 F-16C fighter aircraft and 24 AIFV APCs by the Netherlands; 1 Boeing-767 transport aircraft by Portugal; around 15 Scorpion light tanks by Spain, and 2 AS-532 Cougar/AS-332 helicopters and 3 Duke/Type-23 frigates by the United Kingdom. As a result, Chile has become the first country in South America to possess 'NATO-standard' military forces. Chile's arms purchases have sparked some concern in the region, particularly in Bolivia and Peru, both of which have long-standing border disputes with Chile.

However, in response to regional tensions, Chile, together with its neighbours, has developed a range of CBMs relating to defence and security issues. Defence and foreign ministers from Argentina, Chile and Peru meet for bilateral exchanges of information. However, it appears that arms acquisitions in this area have rather been 'primarily motivated by efforts to replace or upgrade military inventories in order to maintain existing capabilities; respond to predominantly domestic security threats; strengthen ties with supplier governments; boost domestic arms industries; participate in peacekeeping missions; or bolster each country's regional or international profile'. Therefore, concerns in this particular case are largely misplaced, although questions can be raised about the decision to spend copper revenues on the armed forces.

**Middle East: European surplus supplies and the Arab Spring**

The Arab Spring has proven to be a challenge for Europe's reputation for 'responsible' arms export controls. According to one NGO report, armoured
vehicles used by the Bahraini government against protesters were ‘of the type transferred to that Gulf state from Dutch army surplus’, while Belgium had transferred ‘similar surplus vehicles to Bahrain in 2008’. The Netherlands had also in 2010 transferred to Jordan various military vehicles (APCs and infantry fighting vehicles). The Dutch Parliament later on questioned such sales, leading the government to adjust its arms export policy. In 2007, the French had also begun to execute a contract for the refurbishment of Libya’s Mirage-F1 aircraft, which were later used by Kadhafi’s air force during the following 2011 rebellion. Much attention in EU member states has been given to reviewing risk assessments for arms exports that could be used for internal repression, and it is worth highlighting that this applies particularly for exports of surplus military equipment.

(c) Afghanistan drawdown: post-conflict leftovers

In post-conflict settings, second-hand equipment is often regarded as the only option for equipping national armed forces, as well as interior ministry, police and other security services. In the case of Afghanistan, supplying surplus military equipment was regarded as the most appropriate by the US Department of Defense (DOD), which has been responsible for overseeing the training and equipping of the Afghan National Army (ANA). The DOD advisers to the ANA considered Soviet-designed arms from Afghanistan’s Disarmament, Demobilization and Reintegration and Heavy Weapons Cantonment projects, as well as Soviet-designed surplus from coalition allies in Central and Eastern Europe, to offer the best solution for quickly arming the forces with equipment

with which they were familiar.\textsuperscript{87} Furthermore, several coalition allies were willing to provide surplus from their stockpiles, in particular SALW and ammunition.

However, the value-for-money arguments for acquiring second-hand equipment has been undermined on numerous occasions, with a range of cases showing, as with orders for new equipment, corruption plagues deals for cut-price weapons. As in Iraq, official US reports have highlighted that deliveries of military equipment were late and that supplies were often old, faulty and overpriced.\textsuperscript{88} For example, the USA supplied the Afghan Air Force with 16 second-hand C-27 transport aircraft purchased from Italy, with deliveries that began in 2009.\textsuperscript{89} The ex-Italian C-27s were produced between 1977 and 1985.\textsuperscript{90} But, the contractor originally chosen for the refurbishment of the planes, Alenia Aermacchi North America (subsidiary of Finmeccanica) proved incapable of ensuring the maintenance of the aircraft.\textsuperscript{91} An Afghan Air Force spokesperson explained in an interview: ‘The basic problem is that these airplanes were purchased without spare parts. [...] For a small part, you need to wait for weeks or months.’\textsuperscript{92} The planes were grounded several times\textsuperscript{93}, the programme was eventually cancelled by late 2012,\textsuperscript{94} and ‘the USAF moved to scrap both the contract and the planes’.\textsuperscript{95}

\textsuperscript{89} SIPRI arms transfers database (C-27s noted as G-222), last accessed 22 August 2013.
\textsuperscript{91} ‘US scraps entire fleet of Afghan cargo planes’, Stars and Stripes, 28 December 2012.
\textsuperscript{92} ‘US scraps entire fleet of Afghan cargo planes’, Stars and Stripes, 28 December 2012.
This programme has cost around $275 million to the US and was supposed to be an important step towards an efficient Afghan air force.\(^96\)

Besides risks of inefficiency, surplus weapons transfers to Afghanistan entail other risks, such as diversion to unwanted end-users or to neighbouring dictatorships.

Like the United States, European countries engaged in the ISAF will dispose of weapons, too costly to repatriate to the home country. Such decisions appear submitted to the risk of arms diversion given the still unstable situation in Afghanistan and the risks of corruption among the ranks of the Afghan government. For instance, about 50% of the UK’s armoured vehicles will by left to the Afghan armed forces.\(^97\) It appears that the main reason for leaving military equipment in Afghanistan is due to the costs of returning it to the UK.\(^98\) But the military authorities do not ignore the risks of such a move, as renewed Taliban attacks cannot be excluded.\(^99\) Such attacks may lead to the Taliban seizing Afghan armed forces’ material. Furthermore, as in the case of the C-27 transport aircraft, the Afghan armed forces could be unable to maintain the equipment left behind, or the Afghan government could decide to sell part of this equipment to other states.\(^100\)

The latter possibility could appear all the more true as the future leftovers from Afghanistan provoke the envy of neighbouring states. Uzbekistan, who has been under a EU embargo between May 2005 and October 2009,\(^101\) indicated its interest in military equipment left behind by US and various European governments, in exchange of providing a safe passage out of Afghanistan. The


\(^{97}\) Williams D. and Drury I., ‘Our war legacy to Afghans: £1bn of military vehicles will be given to national army when British troops pull out’, Mail online, 11 May 2012.

\(^{98}\) Whitehead T., ‘Almost half of British military kit to be left in Afghanistan’, Telegraph, 7 February 2013.


\(^{100}\) Whitehead T., ‘Almost half of British military kit to be left in Afghanistan’, Telegraph, 7 February 2013.

Uzbek government has reportedly contacted its American, German and British counterparts, initially asking for ‘armored vehicles, mine detectors, helicopters, navigation equipment and night-vision goggles’. Uzbekistan more specifically demanded German helicopters as well as British military vehicles. While such prospect has raised debates in Germany, the UK has reportedly agreed to donate military vehicles and spare parts in exchange of the right to go through Uzbek territory during the Afghan withdrawal operations. According to the New York Times, Uzbekistan’s intention to procure NATO military equipment could be due to its ongoing disputes with Russia, in order to reduce its reliance on Russian weapons.

IV. Conclusion

This paper has highlighted the fact that surplus conventional arms exports are related to legacies of particular conflicts (here, the Cold war and Afghanistan), and as such appear of particular significance for European exporters that have been or are involved in those conflicts. The stockpiles of surplus arms created at the end of the Cold War have not been exhausted but are still with us today. However, they have also been regularly ‘topped up’ by surplus created in the post-Cold War and post-9/11 era resulting from modernization and downsizing processes in European armed forces. The cascade of weapons therefore continues unabated, all the more so that according to actors in the field of surplus exports, the availability of second-hand and refurbished equipment today increases ‘in volume and in quality’. There is today ‘an explosion with the

106 Interview, Belgium defence firm, March 2010. ‘Western armies now hand out material from the immediate previous generation (compared to the equipment currently in service) rather than two or three older generations as it was the case before.’
economic crisis\footnote{Interview, French defence firm, June 2013} that will continue to fuel this cascade of Cold war-designed materials, which might end up in controversial situations, as we have shown.

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