

Skirting the Law: Sudan's Post-CPA Arms Flows

By Mike Lewis



Ministerie van Buitenlandse Zaken



HM Government



NORWEGIAN MINISTRY
OF FOREIGN AFFAIRS

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First published in September 2009

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Small Arms Survey

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47 Avenue Blanc, 1202 Geneva, Switzerland

Copy-edited by Tania Inowlocki

Proofread by Donald Strachan

Cartography by MAP*grafix*

Typeset in Optima and Palatino by Richard Jones (rick@studioexile.com)

Printed by nbmedia in Geneva, Switzerland

ISBN 978-2-940415-17-5

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The HSBA receives financial support from the UK Government Global Conflict Prevention Pool, the Norwegian Ministry of Foreign Affairs, and the Netherlands Ministry of Foreign Affairs. The project has previously received direct support from the Global Peace and Security Fund at Foreign Affairs and International Trade Canada and the Danish International Development Agency (Danida).

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HSBA *Working Paper* series editor: Emile LeBrun

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Acronyms and abbreviations

AMIS	African Union Mission in Sudan
AU	African Union
APC	Armoured personnel carrier
Comtrade	UN Commodity Trade Statistics Database
CPA	Comprehensive Peace Agreement
DRC	Democratic Republic of the Congo
EU	European Union
EUC	End-use(r) certificate
GNU	Government of National Unity
GoS	Government of Sudan
GoSS	Government of Southern Sudan
HEAT	High-explosive anti-tank (shells)
JDB	Joint Defence Board
JEM	Justice and Equality Movement
JIU	Joint Integrated Unit
JMT	Joint Monitoring Teams
LRA	Lord's Resistance Army
MANPADS	Man-portable air defence system(s)
MIC	Military Industry Corporation
NCP	National Congress Party
NIF	National Islamic Front
NRF	National Reconciliation Front
PDF	Popular Defence Forces
POF	Pakistan Ordnance Factory

RPG	Rocket-propelled grade (launcher)
SAF	Sudanese Armed Forces
SLA	Sudanese Liberation Army
SPLA	Sudan People’s Liberation Army
SPLM	Sudan People’s Liberation Movement
SSDDRC	Southern Sudan Disarmament, Demobilization and Reintegration Commission
SSDF	Southern Sudan Defence Force
UAE	United Arab Emirates
UNAMID	African Union–United Nations Hybrid operation in Darfur
UNMIS	United Nations Mission in Sudan

About the author

Mike Lewis (lewismh@gmail.com) has researched and published on the human rights and human security impact of conventional arms, conflict, policing, corruption, and development financing. He has conducted investigative research on destabilizing arms trade and transportation in southern Africa, Libya, the Russian Federation, Brazil, Kenya, Sudan, China, and India. Since 2006 he has designed and delivered research for Amnesty International, Oxfam GB, Saferworld, Bradford University's Centre for International Cooperation and Security, and the Small Arms Survey. He was previously a research associate at the Omega Research Foundation, and communications adviser to the international Tax Justice Network.

Acknowledgements

Research of this kind is inevitably a far more collaborative effort than is implied by listing a single author. I am extremely grateful for extensive support from the Small Arms Survey during the course of this research, particularly from Claire Mc Evoy and Carole Touraine. Chris Foss, Chris Koll, Khaldoun Kabbani, and researchers at the Omega Research Foundation and Mispo.org, especially Kate Wraith, provided expert analysis of ammunition and arms. I am particularly grateful to Peter Danssaert, Claire Mc Evoy, Peter Cross, and Lydia Stone, who gave me invaluable orientation on Southern Sudan, and generously and repeatedly opened their address books to me. Staff at non-governmental organizations in Juba and Nairobi kindly offered logistical support and political advice. Sergio Finardi at Transarms and Oliver Sprague at Amnesty International UK provided essential assistance regarding shipping and much else. A number of journalists also shared insights and information with me: I am especially grateful to Daniel Pepper, David Leppard, Andrew Carter, and several Sudan- and Kenya-based journalists who cannot be named here. Lauren Gelfand and Allison Puccioni at *Jane's Defence Weekly* discussed crucial satellite imagery. Reviews, corrections, and comments from Claire Mc Evoy, Emile LeBrun, Eric Berman, David Huxford, Brian Wood, and James Bevan greatly improved the final text. Finally, I am indebted to numerous interlocutors in Kenya, Sudan, Germany, and the UK who cannot be named here, but without whom this work would have been impossible.

Abstract

In an effort to reduce insecurity in Darfur and throughout Sudan, the international community has established legal restrictions on arms transfers to Sudan, including the 2004 and 2005 United Nations arms embargoes on Darfur, and the 1994 European Union (EU) arms embargo on Sudan (updated in 2004). In addition, the 2005 Comprehensive Peace Agreement (CPA) between the Government of Sudan and the Sudan People's Liberation Movement/Army establishes restrictions on the resupply of military equipment to forces within the agreement's Ceasefire Zone. Despite these measures, however, arms transfers to all parts of Sudan continue unabated and, in some instances, are increasing. On the basis of interviews, customs and trade data, original documentation, published reports, and evidence from photographs and satellite imagery, and by focusing on specific case studies, this Working Paper provides a snapshot of what is known about arms transfers to Sudan's state forces since the signing of the CPA, as well as the distribution and circulation of weapons to non-state armed groups. It argues that arms flows to and within Sudan remain substantially characterized by patterns, actors, and methods established during the second Sudanese civil war. They continue to be dominated by supplies mediated by well-established state sponsors in the region and internationally. These are facilitated, however, by private arms brokers, financiers, and transport actors from a wider and more diverse set of countries, including EU member states—which may constitute more pliant targets for legal sanctions and interdiction. Finally, it appears that small arms and light weapons obtained by non-state armed groups, albeit intermediated by a variety of supply mechanisms, continue to originate largely in the inventories of governments in the region, and particularly in those of the Sudanese Armed Forces themselves.

I. Introduction

Since 2005, as international political concern over armed conflict in Darfur has grown, the question of the scope and dynamics of arms supplies to Sudan has migrated from being a humanitarian concern to an international political issue. Much international and civil society criticism of arms supplies to Sudan has been narrowly focused on Darfur, and on a small number of state suppliers to the Khartoum regime, particularly China, as well as Iran and the Russian Federation (*Economist*, 2008). Rearmament in the context of North–South tensions, and arms flows to communities and armed groups outside of Darfur, have received far less international attention.¹ This paper seeks to move beyond the basic trade maps of international arms flows on which some current analyses have been based.² Instead, it aims to understand the structure, mechanics, and agency of arms flows to and within Sudan since 2005, and to refocus attention on the scope of arms flows both to the Khartoum regime and to Southern Sudan.

This paper thus analyses existing and new information regarding arms transfers to Sudan’s state forces: the Sudanese Armed Forces (SAF) of the Khartoum-based national government³ and the Sudan People’s Liberation Army (SPLA) of the Juba-based Government of Southern Sudan (GoSS).⁴ It presents the first significant snapshot of post-2005 arms supplies to both the North and the South. This account situates transfers of small arms and light weapons within wider networks of military assistance and supply, from which Sudan’s small arms flows cannot be separated. It argues that current, accelerating arms supplies to the SPLA and—in far greater volume and sophistication—to SAF forces are developments involving regional and international patterns of supply established in the early to mid-1990s during the second Sudanese civil war. It further asserts that these flows are grounded in governmental allegiances: military, ideological, diplomatic, and economic. These *politicized* governmental transfers nonetheless often depend upon a much more diverse and international set of private, commercial actors.

Map 1 Sudan



The paper also provides an analysis of available information regarding the sourcing of small arms and light weapons by non-state armed groups operating in Darfur and Southern Sudan, and in eastern Chad. It builds on investigative work by NGOs, journalists, and the UN Panel of Experts on Sudan since 2005, as well as new information provided by UN officials, governments, and armed group members to establish a tentative model of arms flows to non-state armed groups in Sudan. It does not provide a comprehensive survey of armed groups, their arms holdings, or their arms acquisitions. Instead it focuses on six key vectors of supply to a number of armed groups that represent significant threats to human security in Southern Sudan and Darfur.⁵

The model presented here suggests that arms originating from the SAF and its regional and international suppliers dominate the holdings of armed groups on all sides in both Southern Sudan and Darfur. To a lesser extent, arms come from neighbouring states, including Chad and Libya, with varying degrees of complicity from these countries' governments. Arms from Egypt, Kenya, and the Democratic Republic of the Congo (DRC) may also be flowing into Sudan's internal private markets. However, the impact of these flows on the holdings of the most significant armed groups in Southern and western Sudan is probably less than that of large-scale flows from government stocks.

Some popular accounts of black market arms supplies to Africa's conflicts have focussed on networks of private actors, characterizing them as privatized 'transnational criminal groups' operating independently of any governments.⁶ Such accounts have sometimes overlooked the role of governments and government forces in the supply chain.⁷ The evidence presented below suggests that the relationship between the global arms trade and Sudan's armed forces and armed groups is mediated principally by states, both within Africa and further afield. New international deliveries to the region continue to be dominated by established and partly politically motivated patterns of supply to the North, the GoSS, and neighbouring states. Once on Sudanese soil, some arms are then circulated quite rapidly, and often deliberately, to non-state armed groups in the region. Significantly, evidence suggests that patterns and sources of arms supplies to non-state groups in Southern Sudan up to 2005 have been partly replicated in supplies to Darfur's armed groups since 2005. In short, since the 1990s Sudan's non-state armed groups have been supplied not by

private ‘lords of war’, but through the negligence, complicity, and often active efforts of governments within and outside the region.

These government-sponsored transfers do not operate through purely governmental channels, however. Like any significant trade activity, they involve an international set of commercial actors engaged in arms production, brokering, transport, and finance—networks not fundamentally dissimilar to the diffuse, international configurations of illicit and grey-market arms traffickers. The three case studies in this report illustrate these wider sets of actors. They show the mechanics of arms transfers to the Government of National Unity (GNU) and GoSS from Ukraine, China, and Belarus—three state arms suppliers that have proved slow to respond to international political pressure over arms supplies to Africa’s conflicts. In all three cases, arms supplies relied on commercial actors in Europe and elsewhere. This wider set of commercial actors may in future be more susceptible than supplier states to political and legal pressure to restrict the state-sponsored arms flows that feed both Sudan’s governments and its non-state armed groups.

As well as reviewing Sudan’s post-2005 arms flows, this paper documents the scope of the escalating procurement of major weapons systems by government forces in both Northern and Southern Sudan. The scale of new arms acquisitions, apparently ongoing in the North since the 1990s and initiated in the South shortly after the signing of the CPA in 2005, provides one indication of the intensity of a conflict that might follow the CPA’s collapse, with enormous negative consequences for human security. The paper finds that:

- Existing mechanisms designed to regulate arms transfers to Sudan—and particularly to prevent arms transfers to Darfur—remain extremely inadequate.
- Substantial expansion of state military capacity is occurring in both Northern and Southern Sudan, but of much greater volume and sophistication in the North. Current, accelerating arms supplies to the SPLA and the SAF reflect regional and international supply patterns established in the early to mid-1990s during the second North–South civil war.
- Some SPLA decision-makers do not fundamentally distinguish between the strategic purposes of the SPLA’s donor-assisted defence transformation programme (which is mandated by the CPA) and its major rearmament

(which is restricted by the CPA), even though they are conducted separately. Both are viewed as serving the GoSS's strategic aspirations to become a force capable of countering internal security threats and defending the fledgling territory against Northern aggression.

- Khartoum's supplies of both heavy weapons systems, and small arms and light weapons, are dominated by likely government-sponsored transfers, largely from the Russian Federation, Belarus, China, and Iran.
- State-sponsored and -facilitated transfers to Khartoum often rely on a diverse and international set of commercial actors, some of which are European, despite the EU arms embargo on Sudan. Improved enforcement of the EU embargo—particularly measures covering European arms transporters, brokers, and intermediaries—could therefore have a significant impact on international flows of arms to Sudan.
- Many of the arms held by Darfuri and former Southern Sudanese armed groups can be traced to governments in the Horn of Africa, and particularly to the GNU itself. Commonalities between the types and manufacturers of arms held by armed groups in Southern Sudan and Darfur suggest common intermediate suppliers. In addition to deliberate supply from governments, supply mechanisms include leakage and sale from government stocks; the capture of government weapons during fighting; capture and theft of African Union (AU) and African Union–United Nations Hybrid operation in Darfur (UNAMID) arms stocks; and a substantial 'ant trade' of small arms and ammunition from across Sudan's borders.
- Both UN missions in Sudan—the UN Mission in Sudan (UNMIS) and UNAMID—lack the capacity, security, and structures to monitor and verify the movement of new arms to Darfur and Southern Sudan, as they are mandated to do. Although sustained obstruction from Sudanese authorities continues to hinder this function, it could also be greatly enhanced by technical improvements to monitoring procedures.
- UNAMID lacks procedures or force protection capacity to properly monitor or secure its own weapons imports; the mission now constitutes a significant source of stolen weaponry for non-state armed groups on all sides in Darfur.
- Little firm evidence exists of substantial Sudanese domestic arms production beyond small arms ammunition, although secrecy surrounding Sudan's

military facilities makes an accurate assessment difficult. What arms production does take place remains reliant upon foreign technical assistance and machinery. This includes previous technical assistance from Pakistan, and machine tools originating in Germany and the Russian Federation.

This report is based partly on original and unpublished documentation, including photographs, video, and arms transport documentation, and partly on interviews and correspondence with key actors involved with arms supplies, arms transportation, arms control, and military/political affairs in Germany, the UK, Kenya, and Sudan. These materials have been combined with a review of open-source documentation, including reports by governments, analysts, NGOs, and the UN Panel of Experts on Sudan; news organization photographs and video footage; and international arms trade datasets (including the UN Register of Conventional Arms and the UN Comtrade dataset).

Attempts have been made to verify interview evidence with documentary sources or other well-placed interviewees wherever possible. Single-sourced or uncorroborated claims of arms transfers, and those responsible for them, have not been included except in discussions of the political effects of such allegations themselves.

This report examines supplies of small arms and light weapons as well as larger weapons systems. The centrality of small arms and light weapons⁸ to conflict and armed violence in Sudan is uncontested. They dominate the arms used by non-state armed groups in Darfur and Southern Sudan, and by armed communities across the country. But although some arms supply vectors are confined to small arms and light weapons—particularly the ant trade across and within Sudan’s borders—they are often supplied alongside larger weapons systems to governmental forces in Sudan (and more recently to the best-armed of Darfur’s non-state armed groups). Both small arms and major weapons systems are often supplied by the same actors and supply routes. Understanding the dynamics of arms flows into Sudan thus requires appreciating how small arms and light weapons supplies are embedded in the flow of weaponry and military supplies of all kinds. 📌

II. Legal restrictions on arms supplies to Sudan

International responses to Sudan's overlapping conflicts have produced a patchwork of legal regimes restricting international and internal arms transfers to state and non-state forces in Sudan.

The Comprehensive Peace Agreement

The Ceasefire Agreement that forms part of the 2005 Comprehensive Peace Agreement between the Sudan People's Liberation Movement/Army (SPLM/A) and the Government of Sudan prohibits the '[r]eplenishment of ammunition, weapons and other lethal or military equipment' by SAF or SPLA forces within an agreed Ceasefire Zone. Another section of the Agreement allows the '[r]esupply of armed forces lethal items as shall be deemed appropriate by the JDB [Joint Defence Board] and coordinated with UN Mission' (GoS and SPLM/A, 2004, arts. 5.3.5, 9.6). In addition to three areas of central Sudan and the east, the Ceasefire Zone also covers all of Southern Sudan.⁹ Almost all SPLA forces thus remain within this Ceasefire Zone, while the SAF have substantially withdrawn from the Zone into Northern states.¹⁰ In theory, therefore, the GNU effectively retains a veto over the resupply of the SPLA through the JDB, a body with equal SPLA and SAF representation that makes decisions by consensus. Yet the SPLA has no such voice regarding the rearmament of Khartoum's armed forces positioned outside central, eastern, and Southern Sudan.

In practice it does not appear that the JDB currently plays an active role in scrutinizing the acquisition of arms by SPLA or SAF forces.¹¹ However, the GNU has lodged a number of complaints with the Ceasefire Political Commission alleging arms transfers from outside Southern Sudan to the SPLA in breach of the CPA.¹² The GoSS, conversely, cannot legitimately level complaints against far more open arms acquisitions by SAF forces in the North. By restricting the resupply of the SPLA in this way, the CPA effectively postpones the equipping of an armed force—nonetheless charged with providing secu-

rity against military threats across Southern Sudan's ten restive states—until the 2011 referendum can determine whether the SPLA and SAF will be re-integrated into future Sudanese National Armed Forces.

The CPA's restrictions on resupplying 'lethal items' into the South has also led to accusations of CPA violations on occasions when the SPLA may have simply moved military equipment and assets within Southern Sudan. While this paper provides evidence that SPLA rearmament *has* occurred in the circumscribed Ceasefire Zone without the assent of the JDB or the notification of UNMIS, it also argues that wider, unsubstantiated accusations¹³ contribute to a climate of suspicion and insinuation surrounding the SPLA's logistical movements, which is itself a source of political tension between the parties to the CPA. By contrast, the movement of Northern military assets within the unmonitored Northern states occurs freely.¹⁴

The UN arms embargo on Darfur

The initial 2004 UN arms embargo on Darfur, imposed by the UN Security Council in July 2004, prohibited only the supply of arms and related material to non-state actors operating in the states of North, South, and West Darfur (UNSC, 2004).¹⁵ This prohibition was expanded in March 2005 to include 'the parties to the N'Djamena Ceasefire Agreement and other belligerents' in Darfur's three states, including the SAF (UNSC, 2005b).¹⁶ The UN Sanctions Committee established to assess violations of the embargo has interpreted this provision as applying only to transfers of military equipment to SAF forces and non-state actors *within Darfur*. The Northern government may transfer military equipment and supplies into Darfur if approved in advance by a UN Security Council Committee; in practice Khartoum has never sought such approval, while regularly moving arms and military equipment into Darfur in clear violation of the embargo.¹⁷

The EU arms embargo on Sudan

Finally, all Sudanese actors, both governmental and non-governmental, across the whole of Sudan's territory, are covered by the EU arms embargo on Sudan,

in force since 16 March 1994 (CEU, 1994). This embargo was strengthened in early 2004 to include a ban on technical, financial, brokering, transport, and other assistance relating to military activities and equipment.¹⁸ It forbids EU nationals to:

[engage in the] sale, supply, transfer or export of arms and related materiel of all types, including weapons and ammunition, military vehicles and equipment, paramilitary equipment and spare parts for the aforementioned to Sudan by nationals of Member States or from the territories of Member States, or using their flag vessels or aircraft [. . .] whether originating or not in their territories; grant, sell, supply or transfer technical assistance, brokering services and other services related to military activities and to the provision, manufacture, maintenance and use of arms and related materiel of all types, including weapons and ammunition, military vehicles and equipment, paramilitary equipment, and spare parts for the aforementioned, directly or indirectly to any person, entity or body in, or for use in Sudan;

provide financing or financial assistance related to military activities, including in particular grants, loans and export credit insurance, for any sale, supply, transfer or export of arms and related materiel, or for any grant, sale, supply, or transfer of related technical assistance, brokering services and other services, directly or indirectly to any person, entity or body in, or for use in Sudan. (CEU, 2004a)

The EU embargo, legally binding on all 27 EU member states and their nationals (although reliant upon member states to establish and enforce a penalty regime for breaches), thus explicitly includes organizational aspects of arms supplies, such as brokering and financing. It is the most comprehensive of the three regimes restricting arms transfers to Sudan. This paper illustrates the limits even of this extensive regime, presenting new evidence that EU nationals and companies continue to be involved in the supply of military equipment, including small arms and light weapons, to SAF and SPLA forces. Reasons for the shortcomings of both the EU and UN embargoes—including inadequate end-use monitoring by exporting member states and poor export risk assessment, allowing the diversion of arms in third countries—are discussed more fully in Section V. 📄

III. Arms supplies to the SAF and the SPLA

Arms supplies to the SAF

Two public sources, both partial, provide a preliminary map of arms supplies to Northern Sudan: arms transfers declared annually by states to the United Nations Register of Conventional Arms (the 'UN Register'); and customs data submitted by Sudan and other states to the UN Commodity Trade Statistics Database (Comtrade). These sources, supplemented with field observations and information about the mechanics of several substantial arms deals and deliveries, indicate sustained, relatively public, and escalating arms acquisitions by the Government of Sudan (GoS), particularly of small arms and light weapons, since the signing of the CPA in 2005. Evidence indicates that the government's acquisitions of heavy weaponry as well as small arms and light weapons are embedded within military–governmental relationships established during the North–South civil war in the 1990s. Yet these involve much more international, commercialized, and, crucially, *Europeanized* networks of supply actors than has been acknowledged by many humanitarian and human rights advocates.¹⁹

Although the Sudanese government does not report its arms imports to the UN Register, other states' UN Register reports record exports to Sudan of heavy weapons systems, including vehicles, aircraft, missiles, artillery, and weapons platforms (see Table 1).²⁰ The trade of large weapons systems is more often state-sponsored than that of small arms, making it a better barometer of governmental military relationships with supplying states than small arms transfers (although, as Case Study 2 indicates, even transfers of major weapons systems may be commercialized and internationalized to a considerable degree). The UN Register indicates Sudan's ongoing relationships with two key ex-Soviet state suppliers of military vehicles and aircraft, the Russian Federation and Belarus. These relationships were well established during the North–South civil war.²¹

Table 1 Transfers to Sudan of major weapons systems reported to the UN Register, 2004–07

Year	Exporter	Equipment	Type	Quantity
2004	Russian Federation	Fighter aircraft	MiG-29S	9
	Belarus	Armoured personnel carrier	BTR-80	7
	Belarus	Infantry fighting vehicle	BMP-1	1
	Russian Federation	Attack helicopter	Not known*	4
2005	Russian Federation	Attack helicopter	Not known*	12
2006	Russian Federation	Attack helicopter	Not known*	4
2007	Belarus	Armoured personnel carrier	BTR-70	2
	Russian Federation	Attack helicopter	Not known*	4
2008	Belarus	Fighter aircraft	Su-25	11
	Russian Federation	Attack helicopter	Not known*	4

Note: Although publicly available 2008 reports have been included here, not all reporting states' 2008 reports had been published at the time of writing.

* The aircraft could be armed Mi-8/17 transport helicopters or Mi-24 attack helicopters; both are operated by the Sudanese Air Force.

Source: UN Register of Conventional Arms

Several of Sudan's state suppliers, notably China and Iran, are invisible within the UN Register's voluntary reporting. Sudan's acquisition of Iranian and Chinese heavy weaponry is nonetheless evidenced by photographs and parades of Sudanese military equipment. In several cases either these weapons systems are of relatively recent production, or Sudan constitutes their only known foreign user. It is thus likely that they were acquired directly from China or Iran, rather than from other foreign users or international private markets. The weapons systems include Chinese Type 85II main battle tanks, introduced in the 1990s for the export market and first seen in Sudan in 2007;²² ZSL92 (Type 92) wheeled armoured vehicles, introduced in China in the mid-1990s and also first seen in Sudan in 2007;²³ and K-8 combat jet trainers, reportedly acquired in 2006 (*Jane's Defence Industry*, 2007). Deliveries of Iranian-origin heavy weaponry have emerged more recently: new Iranian-origin Rakhsh armoured personnel carriers (APCs) mounted with 12.7 mm

machine guns appeared on the streets of Khartoum following protests surrounding the death of SPLA leader John Garang in August 2005; they were also seen in larger numbers in a Sudanese military parade held in Khartoum in December 2007.²⁴

It seems, then, that the GNU’s major arms acquisitions continue to derive from military relationships familiar since the North–South civil war, when from the mid-1990s onwards Russian and Chinese military vehicles and weapons systems were reportedly supplied to Khartoum, in some cases with Iranian financing of Chinese equipment (HRW, 1998).²⁵

Small arms and light weapons: China and Iran

What roles do these established government–military relationships play in the supply of small arms and light weapons to GNU forces? Customs data from UN Comtrade suggests that transfers from Iran and China of small arms and light weapons, and other military weapons, escalated between 2003 and 2005, and that they have remained at relatively high levels since then (see Tables 2–4).

Table 2 Reported exporters to Sudan of SALW, SALW ammunition, military weapons and parts, 2003–08, in USD, according to UN Comtrade

	Reported by exporting states	Reported by Sudan
China	774,089	43,136,048
Egypt	1,846	1,147,410
France	1,746,079	10,824
Germany	295,000	364,644
Hong Kong		1,015,973
Iran	4,452,577	17,524,249
Italy		285,776
Saudi Arabia	240	783,411
Senegal	5,906,755	
Turkey	241,524	152,337
UAE	63	390,139

Table 3 Sources of Sudanese-reported imports of SALW, SALW ammunition, military weapons and parts, 2003–08, in USD, according to UN Comtrade

	2003	2004	2005	2006	2007	2008
China	2,824,999	19,864,146	23,292,923	9,546,241	5,976,229	102,902
Egypt	9,934	40,127	82,816	564,530	384,513	1,846
Germany	68,712		34,863	46,965	214,104	128,000
Hong Kong		1,015,973				
Iran	15,800,514	1,242,676	452,069	183,247	817,530	
Italy		2,880	281,078		1,818	
Kuwait		31,260	21,742	82,380		
Russian Federation		182,875				
Saudi Arabia	8,258	9,825		156,850	587,474	
Turkey	10,733	281,142	14,396	87,471	582,001	
UAE	2,636	4,261	32,385	285,596	65,261	
TOTALS	18,725,786	22,675,165	24,212,272	10,953,280	8,628,930	232,748

Table 4 Sources of exporter-reported exports of SALW, SALW ammunition, military weapons and parts, 2003–08, in USD, according to UN Comtrade

	2003	2004	2005	2006	2007	2008
China	420,438	176,245	35,920	38,584		102,902
Cyprus	139	25,969	31,041	47,560	88,618	41,591
France	124,505	468,861	83,364	266,132	422,637	380,580
Germany			21,000	25,000	121,000	128,000
Iran		4,452,577				
Senegal			5,906,755			
Turkey	14,765	31,221	39,521	89,992	66,025	
TOTALS	559,847	5,154,873	6,117,601	467,268	698,280	653,073

Notes for Tables 2–4:

Only countries with cumulatively reported transfers during this period of over USD 100,000 have been included (see Box 1 for a discussion of the limitations to Comtrade customs data).

Comtrade codes included:

SALW	930200	Revolvers and pistols
	930320	Sporting/hunting/target-shooting shotguns, including combination shotgun-rifles (excluding muzzle-loading)
	930330	Rifles, sporting, hunting, or target-shooting
	930510	Parts and accessories of revolvers or pistols
	930521	Shotgun barrels
	930529	Parts and accessories of shotguns or rifles
SALW ammunition	930621	Shotgun cartridges and parts thereof
	930630	Other cartridges and thereof bombs, grenades, torpedoes, mines, missiles, and similar munitions of war
Military weapons and parts	930100	Military weapons, other than handguns, swords, etc.
	930111	Artillery weapons (e.g. guns, howitzers, and mortars), self-propelled
	930119	Artillery weapons (e.g. guns, howitzers, and mortars), other than self-propelled
	930120	Rocket launchers; flame-throwers; grenade launchers; torpedo tubes and similar projectors
	930590	Parts and accessories of weapons
	930630	Other cartridges and thereof bombs, grenades, torpedoes, mines, missiles, and similar munitions of war
	930690	Munitions of war, ammunition/projectiles, and parts

Transfers to Sudan erroneously reported in Comtrade as originating from Switzerland in 2003, 2004, and 2005 have been allocated to China.²⁶

Sudan's own customs reporting of arms imports—much fuller than corresponding reporting by other states of exports to Sudan—suggests that these two countries have come to dominate Sudan's reported imports of military weapons, and particularly small arms and light weapons, since 2003.

For reasons outlined in Box 1, customs data on its own cannot demonstrate the state-sanctioned supply of arms to Sudan's armed forces. Chinese and Iranian small arms and light weapons observed in Sudan provide further evidence of such supply. Given the prevalence of Chinese-origin arms held by state and non-state actors in neighbouring parts of Africa and beyond, and the complexities of small arms and light weapons circulation in the regions bordering Sudan,²⁷ the prevalence of Chinese-origin weapons and munitions observed in Sudan is not itself evidence of Chinese arms transfers to Sudan.²⁸ However, Chinese-made small arms and ammunition of recent production or late model have been observed both in SAF holdings and in the holdings of GNU-backed non-state actors, a likely indication that the supply chain to those actors is relatively short, if not necessarily direct. Indeed, the appearance of 'latest-model' Chinese-made small arms and light weapons and ammunition

Box 1 **UN Comtrade data in context**

Research organizations and activists have used UN Comtrade customs data—coupled with frequent field observations of Chinese-origin small arms and light weapons and ammunition used by SAF and non-state forces in Darfur²⁹—to indict the Governments of China and, to a lesser extent, Iran as the major source of small arms and light weapons supplies to Khartoum in recent years, and, by extension, to SAF and government-backed forces operating in Darfur (HRF, 2008; Small Arms Survey, 2007a, p. 6; 2007b). It is important, however, to understand the limitations of UN Comtrade data in capturing arms transfers.

Comtrade data suffers from considerable evidential shortcomings. Transparency in reporting by many countries is poor, resulting in an incomplete dataset whose reliability is essentially unknown.³⁰ For example, Comtrade fails to show any imports of small arms ammunition from China between 2003 and 2007, despite the recovery in Darfur of Chinese small arms ammunition manufactured during these years (discussed below). As a result of uneven reporting, very large disparities exist between exports to Sudan declared by other states and (much greater) imports declared by Sudan, as Tables 2 and 3 indicate. Comtrade data may not include government-to-government transfers not cleared through normal customs channels, or transfers not approved by the importing or exporting state. Reporting accuracy is also difficult to determine.³¹ In addition, declared values and quantities of imports and exports may be altered for commercial, political, or fiscal reasons.

Critically, Comtrade data does not indicate the purposes or end users of military imports or exports. For example, it is likely that at least some reported exports to Sudan have constituted military material for use by the AU Mission in Sudan (AMIS), UNAMID, or UNMIS peace support operations, including imports from states commonly regarded as military providers to Khartoum. For example, the Chinese engineering corps contingent of UNAMID (a total of 315 non-combat personnel) has imported substantial quantities of weaponry since November 2007, including 12 tons of 5.8 mm and 12.7 mm ammunition. These may account for some of the 2007 Chinese military imports declared by Sudan to Comtrade, as shown in Table 4 (*China People's Daily*, 2009; UNSC, 2008b, para. 328).

Beyond these limitations, the trade picture presented by Comtrade says little about the structure and agency of transfers.

among both SAF forces and GNU-backed rebel groups is a striking feature of the Darfur conflict³² in contrast to other African conflicts characterized by the use of older, often recycled small arms and light weapons.

Similarly, although recent-production Iranian small arms and light weapons have not been positively identified in Sudan, credible older reports of Iranian small arms and light weapons provided to the National Islamic Front (NIF) government³³ alongside training and military assistance have appeared since the early 1990s. Following a December 1991 military cooperation deal between Iran and Sudan, a range of Iranian weapons systems and small arms and light

weapons, including G3 assault rifles, medium-range artillery, and mortars (60 mm/82 mm), were reportedly supplied and later observed in captured SAF stocks (HRW, 1998). Iranian arms have also reached GNU-backed militias. For instance, a large number of Iranian YM-III anti-tank mines, manufactured in 1991, were identified in arms stocks taken by the SPLA from a Southern Sudan Defence Force (SSDF) militia in Jonglei state after the group's reintegration in May 2007.³⁴

Chinese state-led investment, particularly in Sudanese oil development, has arguably provided both the resources and motivation for Chinese arms sales to Sudan, in addition to China's diplomatic defence of Sudan's sovereignty (Small Arms Survey, 2007b). Iranian military assistance, conversely, appears to be grounded partly in ideological support for the NIF since 1989. Arms supplies have been accompanied by ideological and military training, particularly for Sudan's Islamist-inspired paramilitary Popular Defence Forces (PDF), undertaken in part by senior military advisers from Iran's Pasdaran (Islamic Revolutionary Guard Corps) from 1992 onwards (Salmon, 2007, pp. 17–18). Munitions crates identified in the stores of an SSDF militia in Jonglei state in 2007—marked 'FM: PASDARAN [. . .] TO: SHEIKAN FOREST'—suggest a possible relationship between ideologically inspired military training and Iranian arms supplies.³⁵ While the Small Arms Survey has been unable definitively to verify the manufacturer or supplier of these munitions, one plausible interpretation is that they constitute arms supplies consigned directly from Pasdaran sources to Sheikan Forest, a region of North Kordofan, which has long constituted the heartland of the Iranian-trained PDF.³⁶

Arms supplied from these countries clearly help to drive human insecurity in Sudan, as evidenced by their recovery from state and non-state forces fighting in Darfur and Southern Sudan. But arms transfers embedded in political or strategic relationships are difficult to regulate directly. Significantly, however, some of these transfers have relied upon wider international networks of actors involved in their organization, financing, brokering, and transportation: networks of private actors who are arguably far more amenable to regulation than the governments of China, Iran, the Russian Federation, or Belarus. Some, as Case study 1 reveals, already fall within the regulation of regional mechanisms, such as the EU arms embargo.

* * *

Case study 1

Brazilian and Ukrainian arms to Khartoum: anatomy of an arms deal

In May 2004, three end-user certificates (EUCs) apparently issued by Sudan's Military Industry Corporation (MIC) authorized the import into Sudan of military equipment ranging from Antonov 26 cargo aircraft and T-72 main battle tanks to 9 x 19 mm pistols for use by Sudan's military, law enforcement, and 'drug enforcement agencies'. The EUCs were subsequently obtained and publicized by a British newspaper, and with the exception of the cargo aircraft, it appears that the prospective deal collapsed and none of the other materiel was delivered (Leppard and Winnett, 2004). Although this deal took place in 2004 and was widely publicized at the time (AI, 2004), previously unpublished correspondence surrounding the deal is instructive in illustrating the involvement of a wider international network of actors.³⁷ This network continues to characterize arms supplies to both Northern and Southern governments, as this paper's other case studies show.

The EUCs state that the equipment was to be obtained by two companies: Endeavour Resources Ltd, registered in the British Virgin Islands, and Sinclair Holdings 7 Ltd, registered in the Republic of Ireland (see Table 5). These two companies were controlled by two well-established UK-based arms dealers, John Knight and Brian Edwin Footer, respectively.³⁸

The global reach of this deal—involving arms manufacturers and suppliers in Ukraine and Brazil, and arms brokers operating from the UK, the British Virgin Islands, and Ireland—is further elaborated by an October 2004 email message from Knight to a Russian collaborator, based in Greece and reportedly involved in the financing of the deal. The message, apparently written to cancel the deal after it had come to the attention of the British customs authority, mentions a company belonging to this Russian collaborator in Austria, and also suggests that Chinese goods and Iranian financing formed part of the deal:

*[w]e can still do the aircraft for Sudan and the underwear [sic] and we have a Chinese manufacturer who will pay all expenses. I have committed my word to my Iranian friend as he has paid the money I have sent to you so far.*³⁹

Table 5 Equipment covered by three Sudan Military Industry Corporation EUCs

Date of EUC	Quantity	Equipment	Supplier	Broker named on EUC	End user
25 May 2004	12	AN-26 cargo aircraft	Ukrspetsexport (Ukraine)	John Knight (Endeavour Resources Ltd)	'Defence forces'
	50	AN-2 utility aircraft fully equipped for 'crop spraying'			
25 May 2004	12	BM-21 Grad 122 mm multiple rocket launcher (containing Ural diesel chassis)	Ukrspetsexport (Ukraine)	John Knight (Endeavour Resources Ltd)	'Defence forces'
	50	T-72S main battle tanks			
	40	V84-4 diesel engines for T-72S main battle tanks			
	50	BMP-2 APCs			
	30	BTR-80 APCs			
	30	M-46 130 mm field guns			
23 June 2004	5,000	M973 9 mm semi-automatic pistols, magazines, and cleaning kits	Imbel (Brazil)	John Knight (Endeavour Resources Ltd)	'Internal law and drug enforcement agencies'
23 August 2004	50	T-72S main battle tanks	Ukrspetsexport (Ukraine)	Brian Footer (Sinclair Holdings 7 Ltd)	'Defence forces'
	40	V84-4 diesel engines for T-72S main battle tanks			

Sources: unpublished EUCs

If authentic and accurate, this message illustrates how a (prospective) arms deal characterized by the familiar combination of equipment from China and the former Soviet Union, and Iranian financing, involved a much wider range of actors and jurisdictions. The principal arms suppliers and brokering companies

did not fall under the control of either the UN arms embargo on Darfur (since they were not supplying arms to Darfur itself), or the EU arms embargo on Sudan (since they were not European companies). However, several other actors involved in financing or organizing the deal did fall within the scope of the EU arms embargo (see bolded cells in Table 6). In this case, UK authorities' prompt enforcement of the embargo—only made fully enforceable in the UK by new national controls on arms brokering that came into force in May 2004, as the deal was being finalized⁴⁰—appears to have successfully prevented the deal from being completed.⁴¹

Table 6 Restrictions on actors involved in the prospective Knight–Footer arms deal to the GoS, 2004*

Type of restriction	Suppliers	Brokers	Financiers
Not controlled by national arms export or brokering legislation	None of the known suppliers	Endeavour Resources Ltd (British Virgin Islands) Sinclair 7 Holdings Ltd (Ireland) ^a	Iranian national
Requiring national arms export or brokering licence	Ukrspetsexport (Ukraine) Imbel Ltda (Brazil) Chinese manufacturer (China)	John Knight (UK national) Brian Footer (UK national)	None of the known financiers
Restricted by EU arms embargo on Sudan	None of the known suppliers	John Knight (UK national) Brian Footer (UK national)	Resident of Greece^b Austrian company
Restricted by UN arms embargo on Darfur^c	None of the known suppliers	None of the known brokers	None of the known financiers

Notes:

* Bolding indicates that actors fall within the scope of the EU or UN arms embargo.

^a Prior to 2008, Irish arms export legislation did not control arms brokering, leaving a gap in Ireland's national implementation of the EU embargo on Sudan.

^b The supply or brokering of arms is embargoed by an EU Common Position that must be implemented through member state national legislation. The *financing* of arms supplies to Sudan, however, is prohibited by an EU Regulation, which is automatically legally binding in all EU member states without national legislation (CEU, 2004b).

^c The embargo imposed by UN Security Council Resolution 1556, passed in July 2004, did not apply to the GoS, or to arms supplied outside of Darfur. See UNSC (2004).

Sources: unpublished EUCs and correspondence

Case study 2

'Europeanized' arms supplies: 30 mm weapons turrets for SAF armoured fighting vehicles

In December 2007 the SAF paraded a number of BMP-1-type infantry fighting vehicles in Khartoum, at least three fitted with a distinctive upgraded weapons turret/station not previously seen by international observers. The weapons stations visually matched Cobra-S turrets originally produced by a consortium of Slovak arms companies, in collaboration with a Belorussian vehicle repair plant. According to defence press reports, these were first marketed in 2001 by a Slovak arms supplier, Metapol Group, reportedly a joint Slovak–Belorussian company.⁴² The Cobra-type turret replaces the BMP-1's original armaments with a new 30 mm cannon, a co-axially mounted 7.62 mm machine gun, and a 9P135M anti-tank missile launcher (140th Repair Plant, 2007; Metapol Group, 2002).

An armoured vehicle expert consulted by the author confirmed the identification of the Sudanese turrets as Cobra-model weapons stations,⁴³ either produced in Slovakia or built elsewhere based on the Slovak design. Their route to Sudan, however, remains unclear. According to defence press interviews with Metapol staff, Cobra turrets for BMP-1 vehicles have been supplied from Slovakia to the armed forces of at least two countries (Gander, Gething, and Sen, 2001): one not publicly identified, the other identified as Belarus (Stickland and Foss, 2008, p. 415). According to the Slovak government, two individual export licences were issued in 2001 and 2002 for 11 Cobra-S systems and an unknown number of Cobra-S 2A42 systems, both to the Belorussian Ministry of Defence. Both licences reportedly contained non re-export clauses.⁴⁴ Belarus's reports to the UN Register support the supposition that the country may have acted as a transit state for the weaponry: in 2007 Belarus reported that it had transferred two further Cobra-equipped armoured vehicles to Sudan (BTR-70s, not the BMP-1-type vehicles visible in the Khartoum parade) (Belarus, 2008).⁴⁵

The Slovak government confirmed that the Slovak firm Metapol a.s. had previously traded legally with the Belorussian armoured vehicle manufacturer, but stated that it was no longer authorized to trade in military equipment in the Slovak Republic.⁴⁶

There is no evidence that Metapol or any other Slovak companies are guilty of any wrongdoing, or were knowingly involved in the provision of Cobra turrets

to the Sudanese armed forces.⁴⁷ Nonetheless, despite a comprehensive EU embargo forbidding the supply of military equipment ‘directly *or indirectly* to any person, entity or body in, or for use in Sudan’ (CEU, 2004a, emphasis added), it appears that military equipment of EU origin or design was transferred to Sudan’s armed forces between 2001 and 2007, and almost certainly since 2007. This case suggests that for states to adequately implement the EU embargo, they must also exercise adequate due diligence over the end user and final destination of arms supplies to Sudan’s circle of key arms suppliers, including Belarus.

* * *

Sudan’s domestic arms production

Both the NCP and major arms suppliers such as China claim that Khartoum’s arms imports are increasingly being replaced by its own domestic production (BBC, 2008a). The NCP now claims that it is capable of producing equipment ranging from assault rifles and rocket-propelled grenades (RPGs) to main battle tanks (Reuters, 2007). Evidence for this capability, however, comes almost entirely from Sudanese government statements, and from photographs and capability statements on the website of Sudan’s overarching military production and procurement organization, Military Industry Corporation (MIC, n.d.a).

MIC claims to operate five military production factories, including the following (MIC, n.d.a):

- Elshaheed Ibrahim Shamseldeen Complex for Heavy Industries, producing tanks and armoured vehicles;
- Safaat Aviation Complex, an aviation factory allegedly capable of producing avionics and assembling military aircraft;
- Yarmouk Industrial Complex, a munitions factory established in the mid-1990s;
- Alshagara Industrial Complex, an older munitions factory, allegedly producing small arms and mortar ammunition and established in the early 1960s; and
- Alzargaa (Zargaa) Engineering Complex, supposedly producing electronics and electro-optical military equipment.

In addition to these, the GIAD Industrial Complex, a major production centre for licence-produced vehicles and trucks, has also reportedly produced small arms and munitions (Christian Aid, 2001), but further substantiation is needed. Two additional companies, Sudan Technical Centre and Sudan High Tech Group, have been placed under sanction by the US government for alleged involvement in the supply of military- or weapons of mass destruction-related technology to Iran, Syria, and North Korea (US, 2008).

Secrecy surrounding these facilities makes it difficult to assess what the factories actually produce. Sudanese-made ammunition for AK-type and G3-type rifles (7.62 x 39 mm and 7.62 x 51 mm calibres, respectively), with production dates as recent as 2003, has been found in Sudan, Kenya, and Uganda (Bevan, 2008). Ongoing small arms ammunition production, or at least distribution, is also suggested by ammunition boxes labelled 'Sudan Technical Centre' and 'Yarmouk Technical Centre' and bearing 2006 contract dates, found separately in Sudan and Chad during 2008 (abandoned by Chadian opposition rebels near Abéché in eastern Chad, and in the possession of a GNU-backed militia in Darfur, respectively).⁴⁸ But there exists no concrete evidence that Sudan is capable of producing larger equipment, rather than simply assembling and maintaining it. Even the photographs of 'Sudanese-produced' small arms, light weapons, and military vehicles distributed by Sudan's MIC can be largely traced to brochures and publicity materials produced by European, Chinese, and Iranian arms manufacturers.⁴⁹ The Small Arms Survey has yet to positively identify any Sudanese-produced small arms or light weapons, despite some access to stockpiles and caches within Sudan and its neighbours.

Even this limited domestic armaments production requires foreign support and supply. Changing patterns of Sudanese ammunition marking (head-stamping) suggests that Sudan's ammunition production facilities were replaced or refurbished between 1984 and 1996 (Bevan, 2008, annexe 3). Ukrainian and Bulgarian arms manufacturers, acting with brokering companies based in Cyprus, have reportedly been investigated by their national authorities for seeking to supply ammunition factory facilities to Sudan in 1996–97 (Kuzio, 1999; Dzonkhova and Sholeva, 2002). In 1999 a representative of Pakistan's state-owned arms production company, Pakistan Ordnance Factory (POF), wrote to an undercover British journalist stating that a '[f]ew years ago experts

from POF recommissioned Ordnance Factory of Sudan which was lying dormant'.⁵⁰ Undated photographs of the Saria section of the Yarmouk Industrial Complex, distributed by MIC, show relatively modern machine tools bearing logos of the manufacturers in Bad Döben, Germany, and the Sverdlov Machine Tool Plant in St. Petersburg (MIC, n.d.b). The suppliers of this machinery and associated technical expertise remain unverified; such machinery is widely circulated on international markets, and there is no suggestion that either of these companies was involved in the supply of machinery to Sudan.

It seems likely, therefore, that even Sudan's limited ammunition production capabilities have relied upon networks of producers and procurers in Europe and elsewhere, just as the NCP's physical arms procurement has relied on international networks and resources.

Arms supplies to the SPLA

Military assistance to the SPLA since the CPA also appears to be partly characterized by relationships with countries in the region established during the North–South civil war, including Kenya and Ethiopia, as well as with major international arms suppliers such as Ukraine. But in contrast to the SAF's ongoing, relatively public arms acquisitions, reports of significant SPLA rearmament only began to emerge in mid-2008.⁵¹ These reports appeared at a time of severe strain on the CPA, with ongoing disputes over the 2008 census results, border demarcation, and oil revenue sharing; uncertainty over preparations for prospective elections; and, in May 2008, the most serious fighting between SPLA and SAF forces since 2006, in the strategically important town of Abyei. Some analysts have thus linked suspected SPLA rearmament to growing dissatisfaction with the CPA among elements of the GoSS and the GNU (O'Brien, 2009; Enough Project, 2009).

Commercial documentation and informants close to SPLA arms procurement, however, indicate that in fact negotiations for major new SPLA arms acquisitions began in early to mid-2006, forming part of a longer-term process of developing the SPLA's post-war capacities.

The extent of the 2007–09 arms shipments to the SPLA illustrates the considerable scale of the arms build-up on both sides since 2005. The symmetry of

this build-up should not be overestimated, however: despite their substantial new arms acquisitions, the SPLA's capabilities remain dwarfed in comparison to the sustained and increasing flows of military equipment to the SAF since 2000, as described above. In 2006 GNU military spending, discussed in Appendix 1, began to escalate well beyond 2006–09 GoSS military spending levels, alongside acquisitions of armour, aircraft, and small arms and light weapons whose volume and sophistication far outweighs the military equipment held by the SPLA.⁵² By contrast, despite the SPLA's significant new armour capabilities, and its acquisition of comparatively sophisticated light weapons, such as second-generation SA-16 man-portable air defence systems (MANPADS),⁵³ a significant proportion of the SPLA's existing arms stocks—particularly small arms—may in fact be non-operational.⁵⁴ The fact that the best-functioning weapons collected during civilian disarmament exercises in Jonglei in mid-2006 and late 2008 have reportedly been redistributed to local police—and in some cases recycled into SPLA stocks themselves—may indicate the poor state of SPLA stocks.⁵⁵

Post-2005 SPLA rearmament must thus be understood in terms of the SPLA's assessment of its capability needs as a force charged with responding to internal armed security threats in Southern Sudan as well as its aspirations to become a national force capable of protecting Southern Sudan's territorial integrity. Recently arrived arms shipments form part of a long-term SPLA procurement plan rather than an immediate response to the deterioration of the CPA since 2008. Moreover, senior SPLA staff and military advisers interviewed by the author did not regard SPLA rearmament as fundamentally distinct from the SPLA's legitimate transformation and professionalization, which are being carried out with the assistance of the UK, US, and Swiss governments.⁵⁶ Indeed, this CPA-mandated process has itself involved the enhancement of the SPLA's material preparedness, for example through the acquisition of a fleet of new logistics vehicles alongside associated training (procured in part through the US private security company DynCorp International).⁵⁷

In short, while international donors are keen to distinguish SPLA rearmament from the professional expertise and material assistance provided as

part of the SPLA's post-CPA 'defence transformation',⁵⁸ it is clear that at least some sections of the SPLA's leadership view both as part of a broad range of military assistance obtained from a number of sources in Europe, the United States, and East Africa in pursuit of the SPLA's strategic aspirations and needs.

This lack of distinction is underlined by the relative openness of some arms supplies to the SPLA, particularly from Ethiopia. On 3 July 2008 UN police in Kormuk observed a heavily equipped SPLA troop company moving 18 T-55 series tanks into Blue Nile state. The SPLA (credibly) claimed these were previously acquired tanks returning from repair in Ethiopia (UNSC, 2008a; 2008c).⁵⁹ Ethiopian military assistance was again suspected on 10 October 2008 when an Ethiopian military C-130 cargo aircraft landed at Juba airport and offloaded light and heavy weaponry. UNMIS observers were not permitted to verify the cargo offloaded or returned to the aircraft, which the SPLA claimed was imported temporarily for a trade fair (Reuters, 2008).⁶⁰ Again, this explanation is partly credible, even perhaps indicating Ethiopian and GoSS efforts to normalize and commercialize their arms supply relationship. The delivery coincided with the First Ethio-South Sudan Trade Fair, a wide-ranging commercial event organized in Juba by a private Ethiopian trade promotion company. The public part of the fair included a display of uniforms and other paramilitary supplies, alongside brochures detailing small arms and light weapons such as AK-47 rifles and RPGs, according to attendees. It is believed that the physical weaponry was shown in a second, private part of the fair.⁶¹

Finally, recent air movements of weaponry within Southern Sudan have led to GNU accusations of small arms deliveries to the SPLA. Two shipments of 1,000 new assault rifles were discovered by UNMIS observers in Malakal on 14 and 16 November 2008 (560 and 440 weapons, respectively) (UNMIS, n.d.). The SAF alleged that these weapons had been flown in from Ethiopia, while the SPLA claimed they had simply been transferred by air from Juba. According to UNMIS sources, civil aviation authorities in Juba subsequently reported that there had been no records of corresponding flights from Juba to Malakal on those dates.⁶²

These reports certainly indicate the movement of SPLA military supplies into strategically important and volatile regions of central Southern Sudan, including Malakal, where tanks and small arms were used by both SPLA and SAF elements of Malakal's Joint Integrated Unit (JIU) during fighting in February 2009.⁶³ Some significant movements of SPLA assets to Malakal have continued since February: on 30 April 2009 UNMIS military observers reported that six SPLA tanks, destined for the Malakal JIU according to SPLA officials, as well as three KrAZ trucks and a BM-21 truck-mounted 122 mm multiple-barrel rocket launcher, left Juba by barge for Malakal, precipitating SAF protests, and UNMIS concern given the continuing potential for volatility in Malakal (UNMIS, 2009). Yet none of these episodes have been verified as deliveries of new weaponry from outside Sudan. This uncertainty is due in part to the limitations and obstacles to UNMIS arms monitoring, discussed further below, and to the failure of both the SAF and the SPLA to coordinate military supply operations to the JIUs and other military forces within the Ceasefire Zone with the JDB and UNMIS, as required by the CPA.⁶⁴

These small-scale weapons movements are nonetheless minor compared to the SPLA's new acquisitions of heavy weaponry and small arms and light weapons supplied from Ukraine through Kenya since late 2007. As in the preceding case studies of SAF arms acquisitions, the Ukrainian deals are characterized by a combination of sponsorship by well-established states and broader international networks of commercial and logistical actors. In the case of Southern Sudan—lacking a sea port, and with poor roads—the involvement of these wider actor networks is increased by sheer logistical necessity: major weaponry whose air transport is prohibitively expensive must be shipped indirectly to East Africa, and then moved by land. Thus in contrast to the smaller-scale air deliveries that have been the focus of several studies of arms trafficking and diversion in Africa (SIPRI and SPITS, 2007; UN, 2007), these arms deliveries have required the complicity of a large number of governmental and non-governmental actors.

* * *

Case study 3

Ukrainian arms shipments to the SPLA

On 25 September 2008 a 10,000-ton cargo vessel, the *Faina*, was hijacked by Somali pirates in the Indian Ocean en route from Oktyabrsk, Ukraine, to Mombasa, Kenya. The vessel's substantial military cargo consisted of both heavy weaponry and small arms and light weapons, including T-72M1 main battle tanks, BM-21 multiple-launch rocket systems, 14.5 mm anti-aircraft guns, and a large quantity of RPG-7V grenade launchers (MV *Faina*, 2008). Western military and diplomatic sources, including the spokesperson of the US Navy's 5th Fleet in the Indian Ocean, immediately alleged that the *Faina's* military cargo, consigned to the Kenyan Ministry of Defence according to accompanying shipping documents, was in fact en route to the GoSS (AP, 2008). Both the GoSS and the Kenyan government denied this allegation, the latter claiming that its existing British-built Vickers Mk III tanks were to be replaced by the Soviet-origin T-72s (*Nairobi Chronicle*, 2009). The credibility of this claim is questionable. A complete conversion from NATO-origin to Soviet-origin armour would entail a major shift in training and equipment—unlikely to have taken place unnoticed. Indeed, despite the Kenyan army's insistence that they are converting to T-72s, procurement and training for Kenya's Vickers Mk III tanks has evidently continued. Mk III tanks were photographed in West Pokot in March 2009, reportedly destined for training exercises there; in May 2007, two months *after* the signing of the February 2007 Ukrainian contract for T-72M1 tanks, Kenya imported 2,000 105 mm tank shells from India, suitable for Vickers Mk III tanks but not for the 125 mm armament of T-72M1 tanks (India, 2007).⁶⁵

Documentation obtained by the author and Amnesty International's UK Section shows that the *Faina's* cargo—transported to the Kenyan army's Kahawa barracks near Nairobi after its release and arrival in Mombasa in February 2009—was in fact the latest of three major maritime arms shipments under contracts for 'MOD/GOSS' since September 2007. The Kenyan government has yet to acknowledge the existence of the first two shipments.

At least three contracts were signed with Ukrainian state-owned arms exporter SSSFTF 'Ukrinmash' on 29 December 2006, 15 February 2007, and 5 May 2008.⁶⁶ The first contract covered the supply of ZU-23-2 (23 mm) and ZPU-4 (14.5 mm) anti-aircraft guns; BM-21 'Grad' 122 mm multiple-launch rocket systems, mounted

on URAL trucks; RPG-7Vs; and a large number of AKM assault rifles. The second contract consisted of T-72M1 and T-72M1K (command-version) main battle tanks, along with spare parts, tools, and accessories.⁶⁷ The third included 13,926 rounds of 125 mm tank ammunition, suitable for T-72 tanks (MV *Faina*, 2008).

These types of arms correspond precisely with those listed in the Ukrainian government’s national reports, and in its reporting to the UN Register of Conventional Arms, as having been transferred from Ukraine to ‘Kenya’ during 2007 and 2008, suggesting that these publicly reported transfers correspond to the first two ‘MOD/GOSS’-designated contracts of 2006 and 2007 (see Table 7).

Both diplomatic and military sources close to the SPLA in Juba have informed the author that these weapons were destined for Southern Sudan, and that many have already arrived from Kenya.⁶⁸ One military source close to the SPLA described in some detail the political and military considerations of their acquisition following a visit by former SPLA Chief of Staff Lt. Gen. Oyei Deng Ajak and other senior SPLA officers to Ukraine in early 2006. Three eyewitnesses in Juba described seeing new tanks, which matched the description of T-72 tanks,

Table 7 Arms shipped from Ukraine to Mombasa under ‘GOSS’ contracts, 2007–09

Armament type	Transferred from Ukraine in 2007	Transferred from Ukraine to ‘Kenya’ in 2008–09
T-72 main battle tanks	77	33
125 mm tank ammunition rounds	n/a	13,926
BM-21 122 mm multiple-launch rocket launchers*	2*	6
Anti-aircraft guns	15 (ZU-23-2, 23 mm)**	6 (ZPU-4, 14.5 mm)
RPGs	405	n/a (36 packages)
Automatic rifles	40,000	n/a

Notes:

* The 2007 report of the Ukraine State Service for Export Control lists the transfer of two BM-21 systems to Kenya; Ukraine’s submission to the UN Register of Conventional Arms, by contrast, lists the transfer to Kenya of five ‘large-calibre artillery systems’, including BM-21 (122 mm) systems and 203 mm systems.

** Figures in this column have all been taken from Ukrainian government reporting except one weapons category—anti-aircraft guns—which is not included in these reports. Figures for anti-aircraft guns are taken from the shipping documentation of the *Beluga Endurance*, and so should be regarded as a minimum figure.

Sources: col. 2: DSECU (2008); col. 3: MV *Faina* (2008); MV *Beluga Endurance* (2007)

in two military facilities near Juba from July 2008 onwards; satellite imagery subsequently confirmed the presence of T-72-size vehicles in these locations during 2009, some covered in distinctive camouflage identical to that seen in satellite images of T-72 tanks being moved out of Mombasa port in February 2008 (Gelfand and Puccioni, 2009).⁶⁹ Some tanks may have arrived earlier: an eyewitness in Lokichoggio, a Kenyan town on the main Kenya–Sudan road around 30 km from the Sudanese border, described seeing two night-time convoys of tanks being conveyed by around 15 lowboy wide-load trucks in late 2007 and February 2008, heading in the direction of Sudan. These dates correspond with the (unreported) arrival by sea of the first two arms shipments in Mombasa in September 2007 and January 2008, and with subsequent Kenyan press reports of tanks being transported by rail from Mombasa on 22 November 2007 and 25 January 2008.⁷⁰ An SPLA spokesperson, while denying that the *Faina's* cargo was theirs, confirmed publicly to *Jane's Defence Weekly* in late May 2009 that the SPLA had acquired T-72 tanks 'since last year and some even earlier' (Gelfand and Puccioni, 2009).

The logistics of large arms transfers, and their diversion, is always complex. Delivering any large, heavy goods to Southern Sudan poses particular logistical challenges. In contrast to Northern Sudan, the South lacks a sea border. Arms must thus be supplied directly by air, or else must arrive in a neighbouring country by sea or air and transit (across poor roads) through one of Southern Sudan's five neighbours.

In this case, delivering these shipments involved ship operators from Ukraine and Germany; ships flagged in Belize, Ukraine, and Antigua/Barbuda; maritime shipping brokers and charterers in Ukraine, the UK, and the Isle of Man; and Kenyan commercial shipping agents and road hauliers. Table 8 summarizes the actors involved in the maritime part of the journey, from Oktyabrsk to Mombasa. Commercial and eyewitness sources, as well as photographic evidence, indicate that after unloading at Mombasa, the military vehicles at least were transported by rail from Mombasa port as early as February 2008;⁷¹ subsequently, they were moved by road using trucks provided both by the Kenyan army and by at least one commercial Mombasa-based road haulier.⁷² According to an eyewitness account, the final part of this road journey passed along the major road through north-western Kenya, past Lokichoggio, into Southern Sudan.⁷³

Table 8 Summary of 'Kenya' shipments, 2007–09

Vessel name	Date of departure from Oktyabrsk	Date of arrival in Mombasa	Military cargo	Vessel operator	Charterers
<i>Radomyshl</i>	14 Sept. 2007	29 Oct. 2007	Confirmed as military shipment forming part of these transfers, but full cargo details not obtained.	Ukrainian shipping company	UK-registered company (partnership of two anonymous British Virgin Island companies)
<i>Beluga Endurance</i>	12 Dec. 2007	8 Jan. 2008	42 T-72M1 tanks	German shipping company	Isle of Man-registered company; Ukrainian freight forwarder
			138 packages of spare parts for T-72 tanks		
			15 ZU-23-2 anti-aircraft guns		
			90 packages of spare parts for ZU-23-2 anti-aircraft guns		
			26 packages (2,190 kg) of RPG-7 weapons and spare parts		
2 BM-21 122 mm multiple-launch rocket launchers on Ural wheelbase	5 40-foot shipping containers containing AKM assault rifles and spare parts (1,000 packages, 95,000 kg; probably 10,000 AKMs)				

Faina	1 Sept. 2008	10 Feb. 2009	Ukrainian shipping company	33 T-72M1 and T-72M1K tanks with Kontakt-1 explosive reactive armour
				8,926 rounds of VOF-36 high-explosive fragmentation (HE-FRAG) 125 mm tank ammunition
				5,000 rounds of VDK-10 high-explosive anti-tank (HEAT) 125 mm tank ammunition
				73 packages of spare parts for T-72M1 and T-72M1K tanks
				6 ZPU-4 anti-aircraft guns
				36 packages of spare parts for ZPU-4 anti-aircraft guns
				36 packages (2,818 kg) of RPG-7V launchers and spare parts
				6 BM-21 122 mm multiple-launch rocket launchers on Ural wheelbase

Sources: interviews with shipping sources, Mombasa, May 2009; MV *Faina* (2008); MV *Beluga Entourage* (2007); email message from a Ukrainian shipping company to Amnesty International UK, 10 December 2008; email message from a Ukrainian shipping company to the author, 2 June 2009

These shipments thus involved an international array of actors—including, at a minimum, Sudanese, Kenyan, and Ukrainian government actors, as well as companies and private individuals in Kenya, Germany, Ukraine, the UK, and the Isle of Man. Significantly, two of the European commercial transport actors involved in the shipments informed the author and Amnesty International UK that they had been aware that the shipments were destined for Southern Sudan.⁷⁴ Such statements raise serious questions regarding the adequate enforcement of the EU arms embargo on Sudan.

* * *

IV. Arms supplies to non-state armed groups in Sudan

The preceding account depicts ongoing and escalating arms supplies to both CPA signatories since 2005, conducted through a relatively stable set of established government–military relationships, both regional and international. In fact, Sudan is also situated within international, regional, and local arms markets that are far less orderly than is suggested by government supply chains. They offer Sudan’s non-state armed groups and civilian populations multiple opportunities for acquiring arms, and particularly small arms and light weapons and ammunition.

This section summarizes available information about small arms and light weapons acquisition by prominent armed groups in Southern Sudan and Darfur, identifying six mechanisms by which such arms have been acquired:⁷⁵

- supply from government stockpiles of neighbouring states;
- arms supplied by the SAF;
- arms captured from SAF stocks;
- arms supplied by the SPLA;
- arms stolen from UN and AU peace support operations; and
- smuggling and ‘ant trade’ of small arms and ammunition across Sudan’s borders.

While not comprehensive, this account proposes a tentative model for non-state arms supplies and circulation within Sudan. It argues that arms supplies to Sudan’s non-state groups cannot be separated from the legal, international, state-organized arms flows described in the previous section. Evidence suggests that the holdings of armed groups in both Southern Sudan and Darfur substantially contain arms that originated from the SAF and its regional and international suppliers and, to a lesser extent, in neighbouring states including Chad and Libya, with varying degrees of complicity from these countries’ governments.⁷⁶ In contrast to many popular and media depictions of the illicit

arms trade in Africa, there is little evidence that Sudan's armed groups have tapped into separate, international illicit arms networks.⁷⁷ Similarly the 'ant trade' of weapons carried across Sudan's borders by armed groups and civilians is not insignificant in absolute terms, but is likely small in comparison with intra-Sudan arms flows, and with the regional, government-assisted movements of weapons to Sudan's armed groups.

In general, the holdings of Darfur's armed groups since 2005 have been characterized by an escalation in both size and sophistication. A January 2006 report by the UN Panel of Experts on Sudan states hopefully that:

[i]t is quite likely that the arms embargo does have a very tangible impact on the deployment of easily observable heavy weapons. The heaviest weapons commonly employed by all parties to the conflict are rocket-propelled grenade launchers, mortars, and heavy machine guns or anti-aircraft artillery mounted on pickup trucks.
(UNSC, 2006)

By 2007, however, new small arms were appearing in the hands of armed groups (alongside armoured vehicles, attack helicopters, and fighter jets moved into Darfur by the GNU in contravention of the UN arms embargo). Although still dominated by well-worn AK-pattern assault rifles, RPG-2s, and RPG-7s, small arms observed among Darfur's armed group members have also included 2006-packed AKMC assault rifles, new-production Chinese 35 mm grenade launchers, and newly produced Israeli Tavor-21 assault rifles (UNSC, 2007b; AI, 2006).

By the following year, heavier weapons observed with JEM forces, or captured from them, included 106 mm recoilless rifles, 107 mm multiple-barrel rocket launchers, MANPADS surface-to-air missiles, and 122 mm rockets (UNSC, 2008b, paras. 188–192).

According to an eyewitness, captured arms displayed in March 2008 in Omdurman, Sudan, and May 2009 in N'Djamena, Chad, suggest the further acquisition of MANPADS both by better-armed Sudanese groups such as JEM, and by opposition Chadian rebel forces.⁷⁸ The UN Panel of Experts also indicates that APCs may have been acquired (even if not successfully operated) through thefts from AMIS and UNAMID (UNSC, 2008b).

By 2006–07, therefore, the scale and diversity of the armaments of Darfur’s armed groups at least matched those of Southern Sudan’s best-armed groups during the civil war, with the exception of the SPLA. Weapons relinquished even by relatively small armed groups in Southern Sudan in post-2005 disarmament exercises reveal comparable diversity and sophistication (ranging from AK-pattern, FAL-type, and G3-type small arms to 120 mm mortars, 107 mm rockets, and SA-7-type MANPADS).⁷⁹ These former armed group holdings in the South also have striking commonalities, discussed below, with the holdings of all the major armed groups currently operating across Darfur and eastern Chad,⁸⁰ suggestive of common intermediate sources.

Arms from government stockpiles of neighbouring states

While it is difficult to establish confidently when particular newer or heavier weapons were introduced into armed groups’ stocks in Darfur, several can be traced to the state stockpiles of neighbouring countries. Since the 1960s, Sudan’s politics and geography have combined to make the country a staging ground for rebel forces assisted and armed by influential neighbours.⁸¹ The length and remoteness of Sudan’s 7,000-km borders and adjoining airspace, coupled with the long tradition of proxy intervention by neighbouring states in the region, have permitted the cross-border movement of Sudanese rebel groups into Chad, Ethiopia, Eritrea, and Uganda. These conditions have also facilitated the supply of arms and equipment to rebel groups from neighbouring governments and from a spectrum of quasi-official sources—ranging from deliberate supply efforts by semi-autonomous elements of state security organizations to financially motivated theft from poorly controlled state stockpiles. New light and heavy weapons captured from JEM, the National Reconciliation Front (NRF), and Chadian groups since 2006 originated in government stockpiles in Libya and Chad. Meanwhile, testimony from a senior JEM official suggests that substantial numbers of small arms from an Eastern European country transited through Eritrea to Chad and subsequently into Darfur in 2007 (UNSC, 2007b, paras. 75–80).⁸²

While the specific logistics of these transfers remain unclear, unmonitored borders in Northern and western Sudan appear to allow cross-border armed groups—or their military sponsors—simply to drive vehicles and arms across

the border into Sudan. Such transfers stand in marked contrast to the maritime and aerial supply chains to NCP and GoSS forces detailed in the previous section. Indeed, porous land borders may partly remove the need for international commercial supply actors such as those involved in arms supplies to the NCP and the GoSS (Bevan, 2007).

At least one exception exists. JEM, perhaps the best-supplied Darfur armed group, does appear to have exploited commercial aviation and air cargo logistics. According to a UN source, a senior JEM official reported to UN investigators in 2007 that an aircraft controlled by another JEM official had been used to move arms for JEM, including more than 3,000 AK-type weapons and anti-aircraft guns, from Eritrea to Chad in early 2007.⁸³ The UN Panel has since reported receiving further indications that ‘Chadian Government and commercial aviation assets are used within Chad to provide logistical support for JEM’, although the Panel has stated that ‘JEM does not have air assets of its own’ (UNSC, 2008b, para. 185). In fact, two senior JEM officials previously owned an air operator based in the United Arab Emirates that flew passengers and cargo to N’Djamena and Abéché in Chad starting around 2000. One official continues to control a Dubai-based cargo and air charter company that he stated had been used to move vehicles, but not embargo-violating arms or materiel.⁸⁴

Nonetheless, significant arms supplies to JEM and other Darfur groups appear to rely simply upon Sudan’s unmonitored, remote land borders. For example, JEM’s heaviest weaponry, its 122 mm rockets, were reportedly driven from Chad into Darfur immediately prior to JEM’s most ambitious attack, on Omdurman, in March 2008 (UNSC, 2008b, paras. 191–92).⁸⁵ Similar reports from JEM and Sudanese Liberation Army (SLA) sources since 2006 describe Darfur-bound arms being collected by Sudanese rebel groups from sources in eastern Chad, and from the Al Kufrah region in south-eastern Libya (UNSC, 2005c, paras. 91, 100–01).

These transfers evidently had varying degrees of foreign governmental involvement. In the case of Chad, the role of government agencies seems almost incontrovertible. A number of Darfuri rebel groups, including JEM and several SLA factions, have operated openly within eastern Chad since 2005, sometimes interacting operationally with elements of Chad’s military and security forces (UNSC, 2007b, para. 23; 2008b, para. 246). Significantly, small arms and ammu-

dition delivered from Israel and Serbia to Chadian armed forces from July to September 2006 quickly appeared in Darfur in the hands of the NRF (in March 2007) and subsequently with JEM forces (in July 2008). While not conclusive evidence of direct transfers from Chad's government, this nonetheless indicates short, relatively direct supply chains from elements in the Chadian security forces to the Darfuri groups (UNSC, 2007b, para. 82; 2008b).

The involvement of the Libyan government is less well substantiated. The UN Panel received allegations in 2007 of direct support for Minni Minawi's faction of the SLA from elements of the Libyan security services, including the supply of Land Cruiser vehicles and ammunition (UNSC, 2005c, paras. 90–92). More recent UN Panel investigations have directly linked some of the heaviest weapons in the stocks of both JEM and Chadian armed opposition groups to Libyan stockpiles. But these weapons arrived in Libya's stockpiles during the early and mid-1980s, delivered by European countries at the height of Libya's conflict with Chad.⁸⁶

What remains clear is that light weapons supplied to both sides of the so-called Chad–Libya 'Toyota War'⁸⁷ during the 1980s are now being used by Darfuri armed groups. Specifically, European light weapons were delivered to Libya and 106 mm HEAT shells were supplied to Chad between 1983 and 1987, while French troops and military assistance from the United States sought to bolster President Hissène Habré of Chad as a bulkhead against President Muammar al-Qadhafi's Libya (UNSC, 2008b, para. 216; Nolutshungu, 1995, p. 210). The reappearance in Darfur of arms supplied to the region during the 1980s Chad–Libya conflict illustrates the familiar process by which arms supplied to parties in one regional conflict may bleed into neighbouring conflicts years later. The 'bulge' of arms supplied since 2005 to the NCP, GoSS, and neighbours such as Chad by their regional and international supporters may pose a similar long-term threat to human security in the region.

Weapons supplied by the SAF or captured from SAF stocks

The Chadian government, GoSS officials,⁸⁸ and JEM sources⁸⁹ have all alleged that arms and ammunition continue to be actively supplied by the SAF to government-supported militias in Darfur; to Chadian opposition rebels in east-

ern Darfur and western Chad; and to armed groups operating in Southern Sudan, including the Lord's Resistance Army (LRA) and groups in Jonglei and Upper Nile states (AFP, 2009).

SAF supplies to allied Darfuri militias are perhaps the best established. Close operational collaboration between militia groups and SAF forces in Darfur has been well documented, as has the interchange of personnel between militias and paramilitary groups such as the PDF, Border Intelligence Guards, and Central Reserve Police, which receive arms and training directly from the SAF (UNSC, 2005c, annex II; 2008b, paras. 136–41).⁹⁰

Evidence of liaisons between the SAF and Chadian armed opposition groups is also relatively well established. UN observers have reported seeing vehicles marked with Chadian armed group acronyms openly visiting SAF warehouses in El-Geneina, West Darfur, although the nature and scale of arms transferred by the SAF to these groups is unclear (UNSC, 2008b, paras. 154–57).⁹¹ In November 2007, the Chadian government seized new small arms ammunition cases apparently packed in the Sudan Technical Centre plant (see Section III) from Chadian armed groups; it subsequently used the seizure to support its claims that Sudan was directly arming Chad's rebel groups, although the contents of the boxes, and their original provenance, could not be verified.⁹²

Weapons held in 2007 by SAF-backed Southern Sudanese militia groups similarly provide evidence of sourcing from SAF stocks at some time (discussed below). Yet GoSS officials and UNMIS observers have yet to provide evidence to substantiate more recent rumours and reports of SAF arms supplies and financial support to ethnic Murle and other armed communities, to former SSDF groups in Southern Sudan, and to elements of the LRA operating in the South.⁹³ Certainly the SAF have armed both the LRA and SSDF groups in the past, and GoSS claims of ongoing material support from Khartoum for such groups carry wide currency within Southern Sudan. At the time of writing, former Murle SSDF leaders such as Ismael Konye were spending long periods of time in Khartoum.⁹⁴ Undeniably, the armed capacity and ambition of some of these groups appear to be increasing significantly.⁹⁵ Hundreds of civilian deaths have occurred as a result of retaliatory Murle–Nuer violence in 2009 in Jonglei. LRA attacks in Western Eatoria and along the Sudan–DRC border have likewise terrorized communities and displaced thousands.⁹⁶

There is also evidence that non-SPLA actors continue to move quantities of arms around Southern Sudan. Most recently, two reliable sources indicate that prior to the outbreak of fighting in Malakal in February 2009, SPLA forces intercepted a large quantity of ammunition travelling by barge on the Sobat river near Malakal.⁹⁷ Whether the SAF or the National Intelligence and Security Service had a direct hand in these transfers, however, remains unclear; small arms and light weapons are readily available from a number of other sources within Southern Sudan itself, including unrecovered civil war arms caches,⁹⁸ poorly secured SPLA and disarmed militia stockpiles,⁹⁹ and military weapons held by civilians. Moreover, considerable sums of money given to the leaders of armed communities and groups during some disarmament operations could be used to procure fresh weapons independently of SAF assistance.¹⁰⁰

In addition to varying levels of government and government-sanctioned arms supplies, much weaponry used by rebel groups in Darfur is clearly captured from hijacked SAF convoys and battlefield engagements.¹⁰¹ With the continuing fragmentation of Darfur's armed factions, it is entirely possible that arms captured from the SAF may subsequently circulate to other groups, both allied and opposed to the SAF.

Irrespective of their supply routes, arms from the same manufacturer, often with the same dates and batch numbers, can be identified in SAF stocks, across armed groups in both Southern Sudan and Darfur, and among both government-backed and rebel groups. The UN Panel has noted these commonalities within Darfur. Photographs obtained and reviewed by the author demonstrate that ammunition cases with identical markings (MO-81-667) have been recovered from the scene of SAF-JEM fighting in 2009 and from Murle SSDF militia in Jonglei state in 2007. The same markings were found on cases captured from Chadian armed opposition groups during 2006.¹⁰²

These findings do not constitute statistically robust proof that SAF stocks are the single common source of this shared weaponry across these different groups. Nor do they indicate when and how transfers to these groups took place.¹⁰³ However, the SAF is arguably the strongest candidate as a common source. These common arms types demonstrably match arms in the SAF's own stocks. In addition, the SAF is the single common agent cited in corroborating UN Panel and other reports both of arms supplies to SAF-backed groups, and

of arms thefts from the SAF by opposing armed groups. These commonalities support the view, therefore, that arms originally supplied to Khartoum are among the most widely used on all sides of Sudan's conflicts.

Ammunition holdings common to SAF stocks and armed groups also suggest common sources of supply. For example, crates of 7.62 x 51 mm ammunition (production date 2004) reportedly captured by JEM from SAF stocks in western Darfur in May 2009 matched markings on a crate of 12.7 x 108 mm ammunition (production date 2002 or 2003) amongst weapons given up by a former Murle SSDF militia in Jonglei in 2007.¹⁰⁴ Similarly labelled 12.7 x 108 mm ammunition boxes (production date 2008) were also captured from SAF forces in Darfur in late 2008.¹⁰⁵ These contained ammunition headstamped '41/08'. The UN Panel believes this 'headstamp 41' ammunition to be of Chinese manufacture (UNSC, 2008b, para. 202), although it may have been repackaged and relabelled elsewhere. Other 'headstamp 41' 12.7 x 108 mm ammunition was found by the UN Panel in JEM stocks in Omdurman and Darfur during 2008 (UNSC, 2008b, para. 202); encountered by the Government of Chad in the stocks of the Chadian armed opposition group during its attack on N'Djamena in January 2008 (UNSC, 2008b, para. 197, fn. 9); and observed by journalists while used by the 'Janjawid' militia group led by Mohammed Hamdan in Darfur in February 2008 (Unreported World, 2008).¹⁰⁶

Arms stolen from AU and UN peace support operations

As the capabilities of several Darfuri armed groups have increased since 2006—coupled with a general increase in insecurity, carjacking, and ambushes within Darfur as armed groups have fragmented and become more opportunistic—losses of weaponry from AMIS and UNAMID personnel appear to have increased.¹⁰⁷ In several cases since 2007, attacks on UNAMID have extended beyond opportunistic ambushes, constituting instead well-planned, large-scale assaults on UNAMID facilities and forces (UNSC, 2008b, para. 311). These may have enhanced the equipment of armed groups both quantitatively and qualitatively. Some 12 tons of Chinese-made small arms ammunition was stolen from a commercial truck convoy operating for a UNAMID contingent on its way to Nyala in South Darfur in March 2008. Meanwhile, thefts in armed attacks on UNAMID forces reportedly added armoured vehicles to the hold-

ings of both rebel and GNU-aligned militia forces in 2007 and 2008,¹⁰⁸ although these have yet to be observed being used by these armed groups.¹⁰⁹

UNAMID's role as an inadvertent arms vector thus appears to be growing, not only as a result of the ambition, opportunism, and capabilities of Darfur's armed groups, but also due to the inadequate protection afforded to UNAMID forces and convoys. In several cases, UNAMID forces reported that their attackers were much better and more heavily armed than they were (UNSC, 2008b, paras. 314, 333). The escalation and growing sophistication of armed groups' stocks, evident from the captured weapons and field observations discussed above, supports that assessment.

This problem cannot be solely attributed to UNAMID's insufficiently equipped forces, however. Precautions taken by some UNAMID contingents in transporting arms also appear to be highly inadequate. The Chinese ammunition consignment stolen in March 2008—whose transportation was reportedly organized by UNMIS—was carried by a commercial Sudanese trucking company without UN security provisions through a highly insecure region between El-Obeid in North Kordofan and Nyala in South Darfur (UNSC, 2008b, paras. 328–29). More broadly, it is currently impossible to determine whether other weaponry or ammunition is leaking from UNAMID stocks to actors in Darfur, since UNAMID maintains no internal system for recording the arms and ammunition it brings into Darfur (UNSC, 2008b, paras. 328–29). In the case of the stolen Chinese ammunition, precise information regarding the quantities, markings, and packaging of the ammunition—essential for tracing it within Darfur—is not available.¹¹⁰ A major source of weaponry entering Darfur thus remains poorly protected, and inadequately recorded. If this weaponry is now reaching the hands of armed groups and posing a growing threat to UNAMID, then accounting for and securing its own stocks is not simply an important part of maintaining the integrity of the UN arms embargo on Darfur, but also an essential element in UNAMID's own force protection.

Two further vectors provide arms and ammunition to armed groups and civilian communities, although they are probably less significant in terms of volume and sophistication of weaponry than those described above. Both SPLA arms supplies and micro-flows feed local arms markets within Sudan and across its borders in the DRC and Kenya.

Arms supplied by the SPLA

Historically, 'leakage' from SPLA arms stocks has occurred both deliberately and accidentally. During the North–South civil war, each side captured materiel from the other when garrisons changed hands during fighting; both sides also supplied arms to allied non-state armed groups. SPLA sources, and the SLA's Minni Minnawi faction, have insisted that SPLA military assistance to Darfur's armed groups ended after mid-2004, when at least ten flights conveyed supplies from the SPLA to Sileah in West Darfur for the SLA (UNSC, 2005c, paras. 87–89). Research for this report found no concrete evidence to indicate that direct SPLA assistance to Darfuri groups has resumed. At the micro-level, however, supplying small arms and ammunition to Southern Sudanese communities remains both a means of political patronage for the SPLA and a tool for outsourcing the provision of security in the absence of the GoSS's ability to provide for community security.¹¹¹ GoSS officials involved with disarmament policy privately insist that, although not officially (or necessarily centrally) sanctioned, local SPLA units continue to distribute ammunition to communities, particularly their own.¹¹²

There also continues to be anecdotal evidence that arms and ammunition are sold by (often unpaid) SPLA personnel in local markets, more for commercial than for strategic reasons. High levels of small arms and ammunition continue to circulate, particularly in Jonglei, Upper Nile, Western Equatoria, and the Transitional Areas. While this trade reflects demand sustained by ongoing insecurity and the inability or unwillingness of the GoSS to protect communities in these areas, it also provides the means for continued inter-communal violence whose escalating levels arguably pose the greatest current threat to human security in any part of Sudan.¹¹³

Smuggling and the 'ant trade' across Sudan's borders

As discussed above, Sudan's long, unmonitored borders facilitate arms supplies to Sudan's armed groups by neighbouring state sponsors. They also make possible a smaller-scale private trade in small arms and ammunition, ranging from commercial smuggling to flows of weapons moving across borders with pastoralist civilians and foreign visitors. The scale of these micro-flows is dif-

difficult to assess. Evidence suggests that they are considerable in absolute terms, but that their contribution to the arms stocks of Sudan's major armed groups is likely much smaller than major military arms flows.

Available figures from 2006 show that in that single year Sudanese customs seized 4,249 pistols, 533 Kalashnikov rifles, 16,851 rounds of ammunition, and other weapons illicitly imported from neighbouring countries, particularly Egypt and Eritrea (UNSC, 2007a, para. 48).

Actual flows are likely to be several orders of magnitude larger than these seized quantities, thus probably amounting to several thousand small arms and perhaps hundreds of thousands of ammunition rounds each year. Flows across Sudan's southern borders appear relatively small (although customs coverage and systematic reporting of seized weapons in Southern Sudan is also weaker than in Northern Sudan).¹¹⁴ Evidence from supply chain interviews and ammunition tracing by the Small Arms Survey also suggests that micro-flows of small arms and ammunition substantially flow *out* of Sudan to communities in northern Kenya and northern DRC (Marks, 2007; Bevan, 2008). By contrast, Northern Sudanese customs claim that Sudan's northern and eastern neighbours are significant sources of illicit *inflows* (UNSC, 2007b, para. 129). GoSS officials responsible for firearms policy concur, citing the seizure of several smuggled consignments of Egyptian-made 7.62 x 39 mm ammunition in Jonglei state in early 2007—although the supply chain of their initial export and diversion has not been determined.¹¹⁵ In the absence of adequate national and international monitoring of disarmed and seized arms and ammunition (discussed in Section V), the geography of Sudan's illicit arms trade remains difficult to verify.

In addition, some firearms in Darfur may be initially supplied to Sudan's *legal* commercial market. According to a reliable eyewitness source, small quantities of specialist hunting ammunition have been identified in the stocks of several militias in Darfur.¹¹⁶ Such weapons may be introduced into Sudan by Western and Middle Eastern safari hunters who continue to frequent the Nuba Mountains and parts of Southern Sudan,¹¹⁷ and gun shops in Khartoum also supply handguns and hunting guns imported from Egypt and elsewhere.¹¹⁸ Some of these weapons may also come from Europe, despite the EU embargo. According to the government of Cyprus, the secretariat of the European Council

Working Group on Conventional Arms advised Cyprus in 2006 that the EU embargo did not explicitly cover hunting weapons or their ammunition, and a Cypriot company was thus allowed to export hunting rifles and ammunition to Sudan during that year.¹¹⁹ Although Cyprus has prohibited such exports since April 2008, this loophole in the EU embargo remains at the EU level.

Legal and illicit internal markets, supplying heterogeneous small arms to armed groups in Darfur and the South, may thus slightly temper the popular stereotype of an endless, homogeneous stream of Chinese AK-pattern assault rifles flowing from Khartoum to Darfur. Nonetheless, the tracing evidence discussed above, and the commonalities between SAF and armed group holdings, support the view that flows from SAF and other state stockpiles in the region—rather than smaller-scale illicit markets—are the primary source of the small arms, light weapons, and ammunition held by both Darfuri and Southern Sudanese armed groups. In particular, these state stockpiles appear to be the source of their more recent acquisitions of heavier and more sophisticated weapons. 📄

V. Inadequate monitoring of arms flows into and within Sudan

While the evidence set out above illustrates some of the difficulties inherent in determining supplies of arms to government forces and armed groups in Darfur and Southern Sudan, it has outlined the contours and main vectors of arms flows to and within Sudan. Improved monitoring of arms stocks and movements within and into Sudan, using the international resources and mandates already in place, would further clarify the scale and impact of these arms flows. In Darfur, it would reduce the impunity with which state and non-state actors currently supply arms in contravention of the UN embargo. In Southern Sudan it might, paradoxically, also be a confidence-building measure, reducing the politically destabilizing effect of persistent and often unsubstantiated rumours about SPLA arms movements in contravention of the CPA.

Monitoring violations of the UN arms embargo, and the CPA's military resupply and disarmament provisions, form part of the formal mandates of UNAMID and UNMIS, respectively. The drafters of these mandates clearly envisaged that these functions would be much more prominent than is currently the case.¹²⁰ One UNMIS military source, quoting a strategy paper written by the current UNMIS Joint Monitoring Coordination Office chief of staff, succinctly described the ideal priority given to such activities: 'If [UNMIS and UNAMID] are monitoring missions, then the military observers are the weapons system of the mission.'¹²¹

In practice, however, neither UNAMID nor UNMIS personnel are currently able to monitor arms flows or holdings within Sudan sufficiently to establish breaches of the UN embargo or the CPA. In UNAMID's case, no permanent operational structures yet exist for monitoring arms flows into Darfur, either by UNAMID observers or by a dedicated embargo-monitoring cell. Growing insecurity, coupled with UNAMID's serious lack of equipment and force protection capacity, further hampers the basic movement and activities of UNAMID

patrols necessary for such monitoring. And both missions' observer teams remain seriously understaffed. At the time of writing:

- UNAMID has only 189 military observers to cover Darfur's 493,180 km² (one observer to every 2,623 km², an area roughly twice the size of London; around half the complement of 360 observers and liaison officers mandated by the UN Security Council) (UNSC, 2007c; UNDPKO, 2009).
- UNMIS is somewhat better provisioned, but it still has only 540 military observers across the 823,944 km² of the CPA Ceasefire Zone, a substantial staffing drop from its peak of 705 in September 2006 (UNDPKO, 2006, 2009). Consequently, there is one observer for every 1,525 km², although international UNMIS observers are joined on patrol by equal numbers of SAF and SPLA observers.

UNMIS and weapons monitoring

UNMIS does undertake arms monitoring activities: patrols by the Joint Monitoring Teams (JMT), established under the CPA to monitor and verify the ceasefire, report instances of heavy weaponry and large consignments of small arms being moved around the Ceasefire Zone (UNMIS, 2009). But this monitoring is not systematic, and its ability to detect new arms supplies into the Ceasefire Zone is almost completely precluded by problems of access, JMT structure, and the monitoring procedures themselves.

Access. Neither UNMIS nor UNAMID military observers are granted access to SPLA or SAF arms stocks; only the redeployment of forces themselves can be verified.¹²² This is a narrow reading of the UNMIS verification mandate: a clear picture of existing government holdings is a necessary first step in verifying that unauthorized supplies to government stocks in the Ceasefire Zone have not been made in contravention of the CPA. It is also key to establishing subsequent leakage from these stocks through comparison with arms recorded elsewhere, which is vital given the evident centrality of these government stocks to the arms supplies of armed actors throughout Sudan. The denial of access to SPLA and SAF stocks also runs contrary to the CPA, which mandates UNMIS to coordinate permission for the resupply of forces within the Cease-

fire Zone along with the SAF/SPLA Joint Defence Board. Although UNMIS's observer status at the JDB has now been accepted, at the time of writing it had not been implemented.¹²³

Structure. The innovative structure of the UNMIS JMTs—which incorporates equal numbers of SAF, SPLA, and international observers—was established under the CPA to increase the parties' confidence in the verification of the ceasefire and to improve the access of JMTs to SPLA and SAF forces, to be facilitated by their counterparts within each JMT. In practice, however, senior UNMIS military officials admit that these structures of consensus have acted as an impediment to monitoring, rather than building confidence in it. They have enabled SAF and SPLA personnel to operate *de facto* vetoes over verification and monitoring activities they deem undesirable.

UNMIS military sources cite a range of common tactics that they believe have effectively prevented around 200 UNMIS monitoring missions each year. In some cases SAF or SPLA JMT members simply do not turn up for patrols. This sometimes leads to the cancellation of 'unbalanced' patrols, despite the CPA's stipulation that if SAF or SPLA members decline to participate in verification and monitoring activities, those activities should nonetheless go ahead (GoS and SPLM/A, 2004, art. 15.8). In other cases, GNU or GoSS local authorities in patrol areas have declined to grant security clearance to patrols, thus unacceptably increasing the risks of monitoring activities while still allowing the GNU or GoSS to claim that they are not strictly preventing them from taking place. UNMIS sources also argue privately that the need for the JMT's findings and reports to be approved by both sides, and at the sectoral level, has decreased the completeness and utility of such reports.¹²⁴

Monitoring procedures. Beyond the practical and structural impediments to UNMIS's monitoring of arms supplies within the Ceasefire Zone, its technical procedures are inadequate to establish breaches of the CPA and of the arms embargoes. When monitors do verify weapons, they are rarely uniquely identified in UNMIS monitoring reports. Their serial numbers or identifying marks are rarely recorded, and JMT patrol report forms include no specific format or space to record such basic weapons information.¹²⁵ When JMTs encounter suspicious weapons, they tend to record only their number and broad type. Even if identifying details of weapons were recorded, there exists no

information system within UNMIS to record verified or collected weapons, or to compile and analyse details of verified weapons from patrol reports or disarmament, demobilization, and reintegration activities.¹²⁶ Nor has a comprehensive survey of government forces or equipment—necessary to serve as a baseline for verification of new supplies—been carried out since 2006. This is partly due to the mission’s lack of access to SAF and SPLA forces and stocks, and also because the UNMIS mandate only extends to monitoring the Ceasefire Zone, from which SAF forces have been largely removed since 2006. UNMIS observers hold little information, therefore, on the status or composition of the SPLA’s arms since 2006, and none on SAF forces. The systematic sharing of such information by UNAMID has reportedly not yet taken place (although UNMIS reports are routinely shared with other UN missions in the region, including UNAMID, MINURCAT in the Central African Republic and Chad, and MONUC in the DRC).¹²⁷

In short, it is impossible for weapons verified by UNMIS within the Ceasefire Zone to be uniquely identified. Nor do current monitoring procedures allow the retrieval of general information about the current arms holdings of the SAF, SPLA, and other armed groups. It is thus impossible for the mission to establish whether weapons found by military observers have been brought from outside the Ceasefire Zone. Consequently, it is virtually impossible for UNMIS to fulfil its CPA mandate to monitor the resupply of forces within the Zone.

SAF and SPLA arms acquisitions are among the most sensitive and potentially destabilizing issues between the GNU and GoSS, and in the absence of an international embargo on Southern Sudan, it is understandable that UNMIS might interpret its ceasefire monitoring mandate more narrowly than the detailed monitoring of arms flows. But the opacity of SAF and SPLA arms acquisitions in Southern Sudan may be as destabilizing as transparency. Allegations of covert arms acquisition and distribution, exchanged by both the GoSS and the GNU, have increased with the growing political tensions surrounding the CPA. These allegations are also being connected to other sensitive aspects of CPA implementation, thereby threatening to provide pretexts to discredit or destabilize those processes as well. Notably, in early 2009 the SPLA submitted a complaint to the Ceasefire Political Commission—the highest arbitration body of the CPA—that GNU-supplied census-takers had been covertly


distributing arms and ammunition to communities in Jonglei state (home to a number of former armed groups backed by the SAF during the civil war).¹²⁸ Subsequent wrangling over this complaint, and over the authenticity of the SPLA's memorandum of complaint itself, then threatened to further delay the census results.¹²⁹

More complete recording of arms holdings and flows in Sudan by both UNMIS and UNAMID might bring long-term benefits in reducing the evident impunity with which the SAF, SPLA, and neighbouring states arm communities and non-state armed groups. It would also assist a range of force protection and civilian protection activities, including helping to identify the parties responsible for armed attacks on civilians and UN forces. More significantly, in political terms, credible monitoring of arms stocks and flows in Southern Sudan might actually be a confidence-building measure, reducing the evident destabilizing effect on the CPA of allegations and rumours about arms convoys, Antonov air drops, and bullet-peddling census-takers.

Monitoring the EU arms embargo on Sudan

In addition to the lack of systematic and well-resourced monitoring of arms flows within Sudan, the roles of European arms manufacturers, brokers, and transporters in supplying both Khartoum and the GoSS indicate inadequate monitoring and enforcement of the EU arms embargo, and EU member states' inability to identify and prevent diversions of EU-origin arms. The supply of Slovak arms to Belarus, a well-known supplier of arms to Sudan (as discussed above), provides one such example of inadequate end-user monitoring and verification.

The anatomy of the failed arms deal described in Case Study 1 powerfully illustrates the potential of effective, intelligence-led monitoring of the EU embargo. Although the British brokers involved were not successfully prosecuted for negotiating an embargo-breaching arms deal, correspondence surrounding the deal indicates that intervention by UK law enforcement agencies stopped the deal from being completed. By contrast, one European transporter involved in one of the arms shipments described in Case Study 3 alleged that they had made enquiries to their own European government after loading the

cargo, and that their government had subsequently informed them, prior to the cargo being delivered in Mombasa, that it was likely these arms were bound for Southern Sudan, but that they were not told to stop the shipment despite the EU arms embargo on Sudan. It has not been possible to verify this allegation with the government in question.¹³⁰ 

VI. Conclusion

The current international legal, political, and technical framework is manifestly failing to prevent arms from reaching Darfur and non-state groups and civilians throughout Sudan. A better understanding of the structure of arms flows to and within Sudan is needed to formulate more effective supply-side solutions. Although the outlines of these flows are clear, further detailed investigation is needed to establish the relative importance of the vectors sketched here, and of the specific chains of actors involved in each one.

It is nonetheless clear that many of the arms used to commit much of Sudan's armed violence derive from major, international, and often technically legal arms transfers to Sudan's governments and several of their neighbours. From state forces the weapons reach non-state forces through deliberate proxy arming, theft, capture, leakage, and other recirculation routes—both internal and cross-border.

In the case of Darfur, arms reach rebel groups and militia primarily from the Khartoum and N'Djamena regimes. The UN Panel of Experts has called for the extension of the UN arms embargo to cover the entirety of Sudan and Chad, with a system of regulated exemptions for arms supplies in support of those aspects of CPA-mandated force transformation and security sector reform that will improve state capacity to provide meaningful security to Sudan's communities (UNSC, 2007b). This option is politically problematic for the international community, however, as both regimes have powerful backers in the UN Security Council. Moreover, given the NCP's history of ignoring the current embargo, the effect of an expanded one on the Darfur conflict would be uncertain without measures also targeting the wider network of governments and commercial actors involved in arms supplies to embargo violators.

Adequate monitoring and verification of arms in Darfur and neighbouring regions could help to reduce the impunity with which governments and allied non-state armed groups currently move arms into Darfur and other parts of Sudan. In theory, this type of monitoring already lies within UNAMID and

UNMIS mandates. In practice, it would require a range of improved resources, including:

- greater resources of personnel and equipment for these missions' military observers;
- properly designed monitoring procedures;
- the development of a data system capable of recording serial numbers and identifying details of individual verified weapons; and
- observer teams free from political interference from SAF and SPLA personnel.

Tracing cross-border arms supply vectors would also require collaboration and data sharing with MINURCAT in the Central African Republic and Chad, and with MONUC in the DRC.

In the absence of an expanded embargo, better enforcement of current UN and EU embargoes would require states actively to enforce measures that cover the ancillary actors involved in the supply chain. As has been shown, transporters, producers, brokers, and financiers are often based in states with existing comprehensive legal regimes restricting arms supplies to Sudan, as is the case in the European Union. If the international community is serious about reducing arms flows to Sudan, it needs to identify and interdict transporters, component suppliers, and financiers of arms supplies to Sudan and the wider region—wherever they may be located. Case Studies 2 and 3 also illustrate the limited due diligence obligations placed on commercial actors. Transporters are not required to establish the final destination of a major military cargo to East Africa, even if, according to those transporters, it is not accompanied by an end-user certificate. Likewise military co-producers in Case Study 2 are not required to enquire about the ultimate customers for vehicles to which they supply weapons systems. Insistence on documentation regarding the end-user and final destination of arms supplies, built into transport contracts and co-production deals of these kinds, would generate enforcement benefits, and probably end some of the most egregious forms of concealment.

Ultimately, however, supply-side restrictions are likely to remain ineffective without a change in the political context of these arms flows. While much of the international community's attention remains focused on Darfur, the CPA continues to falter, and organized armed violence in Southern Sudan continues

to escalate. Increased North–South tensions, the GoSS budget crisis, mounting armed group and inter-tribal violence, and the lack of a ‘peace dividend’ in the South threaten to sour irreversibly the parties’ commitment to the CPA. In light of the agreement’s possible collapse, the scale of recent SPLA and SAF arms acquisitions is worthy of sustained and high-level diplomatic attention, indicating the urgency with which confidence building in the CPA is needed to insulate against future widespread North–South conflict. More broadly, the GoSS’s current focus on the enemy in the North, and on increasing its military capacities to counter it, has diverted both political and economic resources from improved governance within the South and the management of Southern (internal) security threats. As Appendix 1 shows, between 30 and 40 per cent of the GoSS budget since 2006 has been spent on SPLA affairs—roughly equivalent to its entire spending on education, health, and infrastructure combined (GoSS, 2009). More than 85 per cent of declared GoSS expenditure on the SPLA—nearly a quarter of the entire GoSS budget in 2009—is spent on army salaries: the continued fiscal burden of a massive, unreformed, and largely un-demobilized civil war force.

Increasing the transparency of arms acquisitions on both sides has a role to play in efforts to support the CPA and refocus the GoSS’s security agenda. Such an effort will require greater political support and institutional resourcing of the UN missions mandated with monitoring such acquisitions; it will also call for the cooperation of donor governments already embedded in Sudan’s security sector reform. 🗨️

Appendix I. Who pays what? GNU and GoSS military spending

The lack of transparency in GNU and GoSS military spending makes it difficult to assess what resources are being used to sustain the accelerating levels of arms procurement by the SAF and SPLA. It seems unlikely, however, that publicly declared military spending by both the GNU and GoSS is sufficient to finance the arms acquisitions detailed in this report. This suggests either the partial financing of GNU and GoSS arms acquisitions from foreign assistance or commodity exchange, or the spending of off-budget ‘war chests’ in both the North and the South.

Direct comparison of GNU and GoSS spending is difficult, since public figures for GNU defence spending are only available up to 2006, the year that the GoSS began to publish its SPLA spending.

GNU defence spending probably continues to outpace that of the GoSS. In 2006 alone, the GNU’s defence and security spending rose to a level comparable to

Table A1 **GoSS spending on the SPLA, 2006–09 (USD)**

	2006	2007	2008*	2009 (budget)
SPLA affairs	585,861,852	579,961,851	916,650,409	448,549,389
Salaries	N/A	N/A	547,091,419	391,225,969
Operating	N/A	N/A	250,943,609	42,216,675
Capital	N/A	N/A	118,615,381	15,106,745
Total GoSS spending	1,752,236,794	1,436,651,084	2,794,862,789	1,586,777,385
% of total spent on SPLA affairs	33%	40%	33%	28%

Note: * The 2008 figure includes additional funds from a supplementary budget request approved by Southern Sudan’s Legislative Assembly in September 2008. Additional funds to SPLA affairs were broadly in line with the level of additional funding across government.

Source: GoSS (2009)

Table A2 GNU spending on defence, national security, public order, and safety, 2000–06 (USD)

	2000	2001	2002	2003	2004	2005	2006
Defence and national security	298,418,400	310,527,000	362,848,000	422,604,000	413,489,200	324,800,000	1,120,980,000
Public order and safety	92,572,200	103,899,600	141,933,000	204,723,000	227,438,400	98,252,000	428,876,000
Total defence, security, and safety	390,990,600	414,426,600	504,781,000	627,327,000	640,927,600	423,052,000	1,549,856,000
Total current expenditure	1,055,791,800	1,240,155,000	1,345,431,000	1,938,870,000	2,743,185,600	2,965,830,000	3,877,972,000
Total federal government expenditure	1,259,685,000	1,500,685,200	1,825,188,000	2,609,541,000	3,909,387,600	4,174,898,000	5,647,740,000
% of total current expenditure	37%	33%	38%	32%	23%	14%	40%
% of total federal government expenditure	31%	28%	28%	24%	16%	10%	27%

Source: World Bank (2007, table 3.1). Converted from Sudanese Pounds using historical exchange rates at www.oanda.com.

that of the GoSS's entire 2009 budget. This dramatic escalation even of the GNU's publicly declared defence and security spending probably continued into 2007 and 2008, especially given the apparently accelerating import of heavy weapons and small arms and light weapons detailed elsewhere in this report. These figures do not include off-budget military spending or military acquisitions directly funded by commodity exchange. A former SPLA official, now serving as GNU foreign minister, estimates that by 2004 a further USD 430 million in annual oil revenues was being converted to weapons acquisition and production (Goodman, 2004).¹³¹ Moreover, while the GNU and GoSS appear to spend a comparable percentage of their total current expenditure on military and security affairs (between 30 and 40 per cent), any direct comparison overlooks the additional burdens on the GoSS that remain from the civil war. More than 85 per cent of declared GoSS expenditure on the SPLA—nearly a quarter of the entire GoSS budget in 2009—is spent on army salaries (many of which, despite this, were at the time of writing in arrears by at least three months).¹³² The overwhelming majority of the GoSS's military budget is thus spent on the SPLA's huge non-demobilized force, whose salaries effectively act as the country's major social protection mechanism.

Within these extreme financial constraints, major new arms acquisitions by the GoSS appear surprising, even if still dwarfed by the SAF's existing military capacity and procurement levels. The probable market cost of the single arms package procured by the GoSS from Ukraine during 2007–08 (see Case Study 3) would probably exceed the GoSS's entire declared 2008 expenditure

Graph A1 **Declared GNU and GoSS military spending, 2000–09, in USD millions**

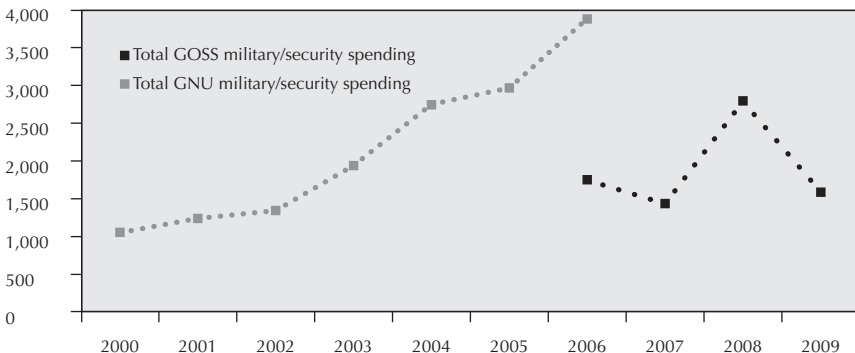


figure for SPLA capital spending.¹³³ Although the GoSS might have mitigated its market value through some form of loan financing, offset, or barter trade, it nonetheless seems likely that GoSS arms procurement expenditure, like the GNU's, remains substantially off-budget. 📌

Endnotes

- 1 Exceptions include Gelfand and Puccioni (2009) and various IRIN reports, including IRIN (2009).
- 2 See, for example, HRF (n.d.), based substantially on public data from UN Comtrade, the UN Register of Conventional Arms, and defence press reports of arms transfers.
- 3 The Khartoum-based Government of National Unity (GNU) comprises a majority from the National Congress Party (NCP) and a minority from the Sudan People's Liberation Movement (SPLM) and other parties. Elements within the NCP, in particular, are resisting full implementation of key aspects of the CPA. Similarly, the Government of Southern Sudan is a coalition in which the NCP is a minority member. Thus, when distinguishing between 'the North' and 'the South' as political entities, it is important to bear in mind that it is not one government acting against another, but elements of each operating against one another.
- 4 This does not include paramilitary organizations in various stages of alignment or integration with the SAF or the SPLA, such as the Popular Defence Forces, or various partially integrated elements of the Southern Sudan Defence Forces. These groups are documented in Small Arms Survey (2008) and Salmon (2007).
- 5 For this report, it was not possible to obtain comparable information for armed groups operating in the Transitional Areas.
- 6 See, for example, Farah and Braun (2006), pp. 39–47.
- 7 For example, the role of neighbouring governments such as Rwanda and Uganda in arms supplies to non-state armed groups in the DRC has been well documented (AI, 2005). The Government of Guinea reportedly played a similar role in supplying arms to armed groups in Liberia (HRW, 2003).
- 8 Although no uniformly accepted definition of small arms and light weapons exists in international law, 'small arms' are generally taken here to mean man-portable weapons to be operated by a single person, and 'light weapons' are taken to mean weapons that can be carried and operated by a crew of two or three people. Small arms and light weapons generally include revolvers and pistols, rifles and carbines, sub-machine guns, assault rifles, light and heavy machine guns, hand-held under-barrel and mounted grenade launchers, portable anti-tank missile/rocket launchers, mortars under 100 mm in calibre, portable anti-tank guns and recoilless rifles, as well as ammunition for the above, hand grenades, and landmines. For a similar definitional list, see UN (1997).
- 9 The Ceasefire Zone covers Southern Sudan (Bahr el Ghazal Area, Equatorial Area, and Upper Nile Area); Nuba Mountains Area; Southern Blue Nile Area; Abyei Area; and Eastern Sudan Area (Hamashkoreb, New Rasai, Kotaneb, Tamarat, and Khor Khawaga). See GoS and SPLM/A (2004, art. 6).
- 10 Exceptions include the SAF and SPLA members of Joint Integrated Units to be based in Southern Sudan, Abyei, the Nuba Mountains, Blue Nile, and Khartoum.
- 11 Neither the Government of Sudan (GoS) nor GoSS replied to requests for information on this question. The UNMIS Joint Monitoring and Coordination Office has requested participation

in the JDB. Sources within both UNMIS and the Southern Sudan Disarmament, Demobilization and Reintegration Commission (SSDDRC) indicated that the JDB was not currently dealing with substantive rearmament and resupply issues in its meetings, and did not believe that any SPLA or SAF requests for resupply had been forwarded to the JDB.

- 12 Interview with UNMIS official, Juba, May 2009.
- 13 For more details on such accusations, see Section IV of this report.
- 14 Interview with UNMIS official, Juba, May 2009.
- 15 Hereafter, 'Darfur' refers to the states of North, South, and West Darfur—the area covered by the UN arms embargo.
- 16 The Humanitarian Cease Fire Agreement on the Conflict in Darfur (the N'Djamena Cease-fire Agreement) was signed by the GoS, the SPLM/A, and the Sudanese Justice and Equality Movement (JEM) on 2 April 2004.
- 17 Email correspondence with UN official, May 2009. See also UNSC (2005c; 2006; 2007b; 2008b).
- 18 The amended embargo came into effect on 19 February 2004. See CEU (2004b).
- 19 Exceptions include AI (2004).
- 20 A growing number of states also report imports and exports of small arms and light weapons to the UN Register, which were formally added as a voluntary eighth reporting category in 2006. None of these additional reports since 2004 records transfers of small arms and light weapons to Sudan.
- 21 Russian arms supplies to Sudan resumed following a military agreement signed between the Russian Federation and Sudan in 1993. According to the UN Register, the Russian Federation and Belarus have been supplying military vehicles and aircraft to Sudan since at least 1996.
- 22 Sudanese TV footage of Independence Day Parade, Khartoum, 31 December 2007.
- 23 Sudanese TV footage of Independence Day Parade, Khartoum, 31 December 2007.
- 24 Photograph taken by Khaled Desouki, 4 August 2005 (Getty Image No. 53324928); Sudanese TV footage of Independence Day Parade, Khartoum, 31 December 2007. Sudan is currently the only known export customer for Rakhsh APCs.
- 25 Iran reportedly helped to finance the purchase of fighter jets and transport aircraft from China and Kazakhstan during the 1990s. See HRW (1998).
- 26 According to the Government of Sudan, Chinese imports were incorrectly coded as 'CH', which is the code for Switzerland. Correspondence from the Republic of Sudan to the Embassy of Switzerland, 5 March 2006.
- 27 One example is the prevalence of Chinese-made Type-56 assault rifles in eastern DRC, which account for 17 per cent of a sample of 1,100 weapons seized by MONUC in 2005 (AI, 2006, p. 8). On cross-border small arms, light weapons, and ammunition flows into Sudan, see Marks (2007) and Bevan (2008).
- 28 Nevertheless, there have been claims based on such field observations and customs data. See, for example, HRF (n.d.).
- 29 For field observations of Chinese-origin weapons in Sudan, see HRW (1998, pp. 18–20); AI (2006, pp. 12, 15–16; 2008, pp. 91–97); Unreported World (2008).
- 30 In addition to certain states (including China) declining to provide data to the database on military imports and exports, wide discrepancies typically exist between Country A's reported exports to Country B, and Country B's reported imports from Country A. To determine

whether the importing or exporting state's figures should be used in each case, the Norwegian Initiative on Small Arms Transfers has generated a 'reliability index' of states' reporting based upon these discrepancies. See Marsh (2005, pp. 8–9). For this paper, however, import and export reports are simply presented side by side.

- 31 For example, a survey of India's Customs Daily Lists, one of the few publicly available sources of national customs data that provides nominal descriptions of exports as well as customs codes, reveals that more than half of all Indian exports reported under customs category code 930630 (cartridges and other ammunition and projectiles: other cartridges and parts thereof) during 2007 were in fact exports of recycled printer cartridges (Omega Research Foundation, 2008).
- 32 See photo of 2007-production 12.7 mm ammunition from JEM stocks, recovered after JEM's attack on Omdurman, March 2008, in UNSC (2008b).
- 33 The NIF became the National Congress Party (NCP) in 1998. It is the majority party in the GNU, inaugurated in 2005.
- 34 Photographs of YM-III/Mirsad-III anti-tank landmines, marked (in Farsi) Year [13]70 (corresponding to 1991 in the Gregorian calendar). Photographs taken in early 2009, obtained from a confidential source and reviewed by the author.
- 35 Photograph taken in early 2009, obtained from confidential source.
- 36 Photograph taken in early 2009, obtained from confidential source.
- 37 This correspondence, as well as subsequent statements by arms dealer John Knight to British newspapers, also supports the authenticity of the EUCs.
- 38 Knight and Footer's names and passport numbers appear on the EUCs. John Knight was convicted in a British court in November 2007 for brokering the supply of MP-9T (MP-5 type) sub-machine guns from Iran to Kuwait without a UK trade control licence, and at the time of writing was serving a four-year prison sentence. According to the prosecution, the UK Export Control Organisation suspected that the sub-machine guns were to be diverted to another end user (the stated end user being the Kuwaiti Ministry of Interior), although no positive evidence for this was presented during the trial beyond an allusion to 'problems' with the EUC provided by Knight. The prosecution further stated that the consignee of the sub-machine guns also had a firearms outlet in Khartoum, although again without concretely stating that Sudan was the suspected destination of the weapons. See *Regina v. John Knight* (2007).
- 39 Email message from John Knight, 2 October 2004. Knight subsequently insisted to an Irish newspaper that the EUCs had been forged (O'Farrell, 2004). However, their authenticity is supported by this email correspondence and by Knight's own statements to a Scottish newspaper that he had indeed negotiated to supply weaponry to Sudan until a new British law was brought to his attention; he supplied the Antonov aircraft detailed on the EUCs nonetheless (Chamberlain, 2004).
- 40 The Trade in Goods (Control) Order 2003 (UK Statutory Instrument 2003 No. 2765) entered into force on 1 May 2004.
- 41 Had the deal been completed, this internationalization would likely have been increased by the involvement of commercial shipping companies and transport agents. Certainly for other deals, Knight's practice has been to tender for transport providers on the open commercial freight market. See tender posted on 16 May 2006 for transport of ammunition and explosives from Mumbai, India, to the Port of Sepetiba, Brazil (Knight, 2006).
- 42 MNAI–AVN (2001); Gyürösi (2002); Szulc (2004); Luczak (2001).

- 43 Telephone interview with armoured vehicle expert who viewed photographs and footage, June 2009.
- 44 Correspondence to the author from the Ministry of Economy of the Slovak Republic, 29 July 2009.
- 45 Belarus's 2008 submission to the UN Register notes that the vehicles were '[d]elivered from the territory of the exporter after modernization as "Kobra K2K" and MTP "Kobra K2"'. In the course of the research for this Working Paper, it has not been possible positively to identify these K2K and K2 designations, but the 'MTP Kobra K2' designation may refer to the newest version of the Cobra turret, the 'Cobra II', displayed by Slovak companies at the International Defence Exhibition Bratislava (IDEB) in April 2008. Alternatively, it may refer to the Cobra-K BTR-70 upgrade advertised by Metapol since 2002, while 'MTP' may refer to the Slovak company Metapol Group. See IDEB (2008) and Metapol Group (2002).
- 46 Correspondence to the author from the Ministry of Economy of the Slovak Republic, 29 July 2009.
- 47 At this writing, repeated attempts to contact Metapol Group's offices in Slovakia, the Russian Federation, and the United Arab Emirates by telephone and email had received no response.
- 48 Based on (1) a photo of an ammunition box for 7.62 x 39 mm cartridges labelled 'Sudan Technical Centre', taken in Chad in November 2007 by Sonia Rolley for AFP Photo/Getty Images; and (2) a film of an ammunition box labelled 'Yarmouk Industrial Complex' (and with a contract number in the same format as cited photograph), filmed in a vehicle operated by militia led by Mohammed Hamdan in Darfur, February 2008 (Unreported World, 2008).
- 49 For example, a photograph on the MIC website of an Amir APC allegedly produced by Military Industry Corporation is identical to that of a Rakhsh APC produced by Defence Industries Organization, Iran (<http://www.mic.sd>; DIO, 1998).
- 50 Correspondence to undercover journalist from Pakistan Ordnance Factory, October 1999, on file with author.
- 51 Because Southern Sudan remains a semi-autonomous territory in the interim period, there is no official public information about arms supplies to the SPLA. Comtrade does not include data from Southern Sudan (email communication from International Trade Statistics Section, UN Statistics Division, 26 May 2009). Similarly, no states report arms transfers to the GoSS/SPLA, either in national arms export reports or to the UN Register.
- 52 A forthcoming *Issue Brief* from the Small Arms Survey will explore current SAF and SPLA military holdings.
- 53 Photographs of an SPLA parade in Juba on 26 May 2009 (SPLM Today, 2009).
- 54 Interview with military source, Juba, April 2009.
- 55 Interview with GoSS official, Juba, 14 May 2009, regarding disarmament that took place in 2008 in Pibor County; interview with UN official, Juba, 6 April 2009, regarding disarmament that took place in 2006 in Akobo. Neither of these allegations could be verified, since although detailed inventories were reportedly taken of arms recovered in both Akobo (2006) and Pibor (2008), these were retained by SPLA personnel in SPLA barracks where the recovered weapons were held. These inventories have been made available to local officers of the SSDDRC, but not to UN or UNMIS observers.
- 56 Interviews with SPLA staff, Juba, May 2009; interview with military adviser, Juba, April 2009.
- 57 Author's observations of trucks in Juba, 7 April 2009; UNMIS (2009); DynCorp (n.d.); email communication from Senior Communications Director, DynCorp International, 2 June 2009. DynCorp's responses to questions regarding these acquisitions have varied. Following an email to the author stating that DynCorp 'can confirm the procurement of these vehicles

several years ago', DynCorp's spokesman sent a further email two days later stating that this response was 'premature' and that 'this response could not be offered', referring the author instead to State Department authorities. Neither in this communication, nor in a subsequent telephone call, would DynCorp's spokesperson specifically deny their previous admission. Telephone communication from Senior Communications Director, DynCorp International, 4 June 2009.

- 58 Interview with diplomatic sources, Juba, March 2009.
- 59 The SPLA's claim that these tanks were pre-2005 acquisitions is credible, given other old T-55-series tanks in SPLA possession (author observation, Juba, 5 April 2009).
- 60 Interview with UNMIS personnel, Juba, 13 May 2009.
- 61 Interviews with trade fair attendees, Juba, 5 April 2009. See also photographs at PP&T (n.d.).
- 62 Interviews with UNMIS military personnel, 10 April 2009 and 13 May 2009.
- 63 Footage from an UNMIS media report of fighting in Malakal on 25 February 2009 (UNIFEED, 2009); interview with eyewitness, Juba, 9 April 2009; interview with UNMIS personnel, Juba, 10 April 2009.
- 64 Interview with UNMIS personnel, Juba, 13 May 2009.
- 65 Under Indian Customs (HC-ITS) Code 93062100, this list includes 2,000 '105 mm illuminating shells' and 2,000 'Fuze 213 Mk. 5', all listed as destined for Nairobi.
- 66 SSSFTF Ukrinmash is a subsidiary of Ukraine's main state-owned arms exporter, Ukrspetsexport.
- 67 The contract numbers are Contract No. MOD/GOSS/ARMS/06-07-3/87-K dated 29 December 2006 and Contract No. MOD/GOSS/T-72/06-07-5/9-1K dated 15 February 2007 and Contract No. MOD/GOSS/ARMS/07-08-5/35-1K dated 5 May 2008 (MV *Faina*, 2008; MV *Beluga Endurance*, 2007; DSECU, 2007). Documents obtained by author and Amnesty International UK.
- 68 Confidential interview with diplomatic source, Juba, 6 April 2009; confidential interview with military source, 2009. Although no reliable survey of SPLA armour holdings is available, all previous reports of other SPLA-operated tanks suggest that the SPLA only possessed older T-55/Type 59 series tanks. Interview with UNMIS personnel, Juba, 10 April 2009, regarding 18 SPLA tanks verified by UNMIS military observers in Blue Nile state, August 2008. The author observed eight T-55/Type 59 tanks outside Juba town, 5 April 2009. The distribution of new small arms and light weapons is obviously more difficult to verify visually than that of large weapons systems.
- 69 Interviews with eyewitnesses, Nairobi and Juba, March–April 2009. Specifically, one eyewitness reported large tanks with 'boxes' mounted on their surface, as is characteristic of the explosive reactive armour visible on the T-72s shipped on the MV *Faina*. T-55 SPLA tanks viewed by the author did not have this armour.
- 70 Telephone interview with confidential source, Lokichoggio, May 2009. See also Wabala (2008). An eyewitness source in Lokichoggio reported that in the first convoy, the tanks were clearly visible although covered by tarpaulins; in the second convoy they had been covered by plywood coverings, but with their main guns still visible.
- 71 Satellite image of 17 tanks being transported by rail from Mombasa container port, 2 February 2008. While the image cannot demonstrate the diversion of the tanks, it does confirm their delivery to Mombasa in early 2008. Their proportions and dimensions match those of T-72s, and it is unclear why older Kenyan army tanks would be transported by rail through Mombasa port.
- 72 Interview with logistics source, Mombasa, 7 May 2009. This source reported that a particular Kenyan trucking company had moved eight of the tanks from the January 2008 shipment

from Nairobi to Eldoret, in western Kenya, but insisted that the company had not moved them any further. An eyewitness in Lokichoggio described seeing a tank convoy around this time being moved on trucks with a combination of Kenyan commercial number plates, Kenyan army number plates, and Sudanese number plates. Telephone interview with confidential source, Lokichoggio, May 2009.

73 Telephone interview with confidential source, Lokichoggio, May 2009.

74 Interviews in Germany (November 2008) and Kenya (May 2009).

75 This account does not include eastern Sudanese rebel groups such as the Eastern Front (including the Free Lions and the Beja Congress) prior to their signature of the Eastern Sudan Peace Agreement in October 2006. See the list of proxy forces and their backers in the Horn of Africa in *Small Arms Survey* (2007a, p. 3).

76 The author was unable to obtain concrete information regarding the arms holdings of non-state groups in the Transitional Areas in central Sudan, which arguably pose a greater threat to the CPA than SSDF remnants in the South. See *Small Arms Survey* (2008, p. 5).

77 A possible exception—discussed below—is Darfur’s JEM, which claims to have established air supply routes. Senior JEM personnel control air cargo companies outside Sudan that transport vehicles and other supplies to Chad, but not necessarily weapons.

78 Interview with confidential source, May 2009.

79 Based on photographs of disarmament stocks in Pibor (from the Murle Pibor Defence Forces) and Akobo, 2009; obtained from a confidential source.

80 See Tubiana (2008).

81 These forces include: the Ananya militias backed by Ethiopia in the first Sudanese civil war; the SPLA and Sudan Alliance Forces assisted by Ethiopia, Uganda, and Eritrea during the second Sudanese civil war; the Beja National Congress and Eastern Front groups sponsored by Eritrea since the 1990s; Chadian rebels backed by the GoS since at least 2004–05; and various rebel groups in Darfur, reportedly backed by Chad, Eritrea, and Libya. See ‘Selected Proxy Wars in the Horn of Africa, 1960s to Today’ in *Small Arms Survey* (2007a, p. 3).

82 Based on testimony from a senior JEM source, the UN Panel alleged in 2007 that JEM had received a shipment of more than 3,000 Kalashnikov-type rifles, rocket launchers, and anti-aircraft guns, shipped by sea from an Eastern European state to Eritrea, from where it was flown to Chad and transferred to JEM. More than 800 AKMC rifles, packed in May 2006 in the Russian Federation, were subsequently recovered from the NRF in Darfur; these were reportedly part of a shipment from JEM to the NRF’s leader, Adam Bakhit, although it was not established definitively that these rifles formed part of the Eritrea–Chad shipment. Similarly, the JEM source’s testimony could not be verified; in particular, no record exists of commercial cargo voyages from the Eastern European state in question to any Eritrean port between 2005 and 2008.

83 Interview with confidential source, 10 March 2009.

84 Interview with JEM official, May 2009. See also case studies of Toyota vehicles shipped by other Dubai-based cargo companies to Chad, allegedly for JEM, in UNSC (2008b, paras. 295–300) and *Sudan Tribune* (2008). The UN Panel of Experts regards transfers to Darfur armed groups of vehicles suitable for conversion into ‘technicals’ to constitute a breach of the UN embargo.

85 The UN Panel has reported that Egyptian-made 122 mm rockets captured from JEM after this attack were held on storage racks marked for the Jordanian armed forces, and that according

- to the Egyptian government rockets of this type had been delivered to Iraq in 1983. Although the provenance of these rockets has not been definitively established, the UK's 1992 inquiry into the export of defence equipment and dual-use goods to Iraq (the Scott Inquiry) found that Jordan was a common conduit for arms to Iraq during the 1980s. See HMSO (1996, sec. E, ch. 2). The route from Jordan or Iraq to Chad/Sudan remains a matter of speculation.
- 86 These include Spanish-made 106 mm recoilless rifles and ammunition, and Belgian-made 106 mm HEAT cartridges for such rifles, as well as small arms such as Bulgarian PG-7 anti-tank grenades (UNSC, 2008b, paras. 217–24).
- 87 Libya sought to oust Chadian President Hissène Habré and take Chadian territory by supporting the opposition Transitional Government of National Unity. The latter eventually turned against their benefactors and, with military intervention from France, the Libyans were routed. The conflict came to a formal end with a resolution over the disputed Aouzou Strip, awarded to Chad by the International Court of Justice in 1994.
- 88 For example, GoSS officials in Lankien, northern Jonglei state, reported seeing a cargo aircraft make three low passes, heading from the north to the south, at around 3:30–4:00 a.m., sometime during the first week of April 2009. This report could not be substantiated by other observers or UN monitors. Interview with UNMIS source, Juba, April 2009. See also Birungi (2009).
- 89 Interview with JEM source, May 2009.
- 90 See also Border Intelligence Guard identity cards carried by members of 'Janjawid' group led by Mohammed Hamdan, filmed in February 2008 (Unreported World, 2008).
- 91 For examples of these groups' extensive holdings of light weaponry, including MANPADS, see Correau (2007).
- 92 Based on a photograph taken by Sonia Rolley of AFP, 27 November 2007.
- 93 Interview with UNMIS official, Juba, 13 May 2009.
- 94 Schomerus (2007, p. 27); BBC (2009); interview with GoSS official, Juba, 14 May 2009; interview with UNMIS official, Juba, 9 April 2009.
- 95 Interview with UNMIS official, Juba, 9 April 2009.
- 96 Interview with UNMIS official, Juba, 9 April 2009; Miraya FM (2009b); BBC (2009).
- 97 Interview with military source, Juba, 7 April 2009; interview with NGO representative previously in Malakal, Nairobi, 6 May 2009.
- 98 Interview with military source, Juba, 7 April 2009; interview with unexploded ordnance clearance personnel, Juba, 8 April 2009.
- 99 Interview with UN disarmament official, 6 April 2009.
- 100 For example, Ismail Konye, former leader of the (Murle) Pibor Defence Forces, was reportedly given several hundred thousand Sudanese pounds during the disarmament exercise in Pibor in December 2008, as part of an effort to encourage disarmament by groups still loyal to Konye. Interview with GoSS official, Juba, 14 May 2009. Once his force was formally integrated into the SPLA in 2007, Konye was appointed Presidential Advisor on Peace and Reconciliation to GoSS president Salva Kiir.
- 101 See, for example, SAF Dong Feng military trucks (produced in 2005) and arms shown to BBC journalists and UN panellists by JEM, reportedly captured from an SAF convoy between El-Geneina and Kulbus in West Darfur in early 2008 (UNSC, 2008b, paras. 58–64; BBC, 2008b).
- 102 Photographs obtained from confidential sources showing cases marked MO81-1-667.
- 103 For the most comprehensive statistical analysis of illicit ammunition flows to date, based partly on headstamps and batch data, see Bevan (2008).

- 104 Photographs from confidential sources, April and May 2009, reviewed by author.
- 105 Interview with confidential source, May 2009; photograph seen by author.
- 106 Photo available at <<http://www.flickr.com/photos/andrewgcarter/2330245025/sizes/o/>>.
- 107 UN Security Council Resolution 1769 (31 July 2007) mandated the replacement of AMIS by December 2007 with a joint AU–UN force, UNAMID, incorporating AMIS personnel and the UN Heavy and Light Support Packages to AMIS.
- 108 APCs were reportedly captured by SLA/Unity Faction and JEM–Banda forces from the AMIS base at Haskanita in North Darfur in September 2007, and by GoS-backed militia forces from an armoured UNAMID convoy near Gusa Jamat in North Darfur in July 2008 (UNSC, 2008b, paras. 311–36).
- 109 Interview with JEM source, May 2009; interview with UN source, London, May 2009. Only part of the Chinese ammunition consignment will be of use to armed groups, since it consists partly of 12.7 mm ammunition, which is suitable for heavy machine guns widely used by armed groups, but also of 5.8 mm ammunition, a calibre unique to Chinese QBZ-95 assault rifles, which have not previously been observed in Darfur.
- 110 Interview with confidential source, May 2009. Questions submitted to UNAMID regarding losses of UNAMID equipment and precautions taken to prevent such losses were unanswered at the time of publication.
- 111 For example, Western Equatoria’s state governor has formally encouraged local self-defence militias (‘arrow boys’), principally armed with spears and bows, to protect communities against LRA attacks (*Sudan Tribune*, 2009). Coordination with SPLA actions against LRA elements has also been reported (Miraya FM, 2009a).
- 112 Interview with GoSS official, Juba, 14 May 2009. The official cited a recent incident near Kapoeta in Eastern Equatoria in February 2009 during which a man was found with a large quantity of small arms ammunition allegedly given to him by a relative in the SPLA.
- 113 Interview with GoSS official, Juba, 14 May 2009.
- 114 Figures for firearms seized by Southern Sudanese customs authorities are not systematically available. Interview with GoSS official, Juba, 14 May 2009.
- 115 Interview with GoSS official, Juba, 14 May 2009.
- 116 Interview with confidential source, May 2009.
- 117 The supply route from hunting safaris may be closing. One major operator of hunting safaris in the Nuba Mountains stated that he had begun to discourage customers in recent months from bringing their own firearms and ammunition, due to the growing reluctance of international airlines to carry them to Sudan. In theory, safari companies operating in Sudan must sign import guarantees at the port/airport that any firearms and ammunition imported for hunting trips will be exported afterwards. The deterrent effect of these undertakings is unclear. Email correspondence from hunting safari operator, 2 June 2009.
- 118 Interview with commercial source, May 2009.
- 119 Letter from the Republic of Cyprus Ministry of Foreign Affairs to the author, 22 June 2009.
- 120 UNMIS’s mandate is established by operative paragraph 4 of UN Security Council Resolution 1590 (2005). Its first item is ‘[t]o monitor and verify the implementation of the Ceasefire Agreement and to investigate violations’ (UNSC, 2005a). It thus includes a duty to monitor the unauthorized ‘[r]eplenishment of ammunition, weapons and other lethal or military equipment’ by GoS or SPLA forces within the Ceasefire Zone (GoS and SPLM/A, 2004, annex 1, art. 5.3.5). UNAMID has a more explicit embargo monitoring role: UN Security Council

Resolution 1769 (2007) formally tasks it with 'monitoring whether any arms or related material are present in Darfur in violation of the Agreements and the measures imposed by paragraphs 7 and 8 of resolution 1556 (2004)' (UNSC, 2007c, para. 9). This duty is not listed on the 'mandate' page of UNAMID's website, however (UNAMID, n.d.).

- 121 Interview with UNMIS personnel, Juba, 13 May 2009.
- 122 Interview with UNMIS personnel, Juba, 13 May 2009.
- 123 Information from UNMIS personnel, June 2009.
- 124 Interviews with UNMIS military personnel, Juba, 10 April 2009 and 13 May 2009.
- 125 Categories recorded on the patrol report forms are: 'date', 'call sign', 'task', 'composition [of JMT]', 'route', 'route reconnaissance', 'movement of personnel', 'M[onitoring] & V[erification]', 'other activities & observations', and 'recommendations'. Most of the descriptive information is generally recorded in the 'other activities & observations' box.
- 126 Interview with UNMIS military personnel, Juba, 13 May 2009; correspondence with former UNMIS personnel, June 2009.
- 127 Interview with former GoSS official, April 2009.
- 128 Interview with UNMIS military personnel, Juba, May 2009.
- 129 The census results were eventually released on 19 May 2009 but rejected by the GoSS after figures for Southern Sudan's population were lower than one-third of the total Sudanese population, a proportion anticipated by the GoSS and significant in electoral terms.
- 130 Interview with European shipping source, 12 December 2008.
- 131 GNU Foreign Minister Lam Akol stated that 80 per cent of a USD 596 million windfall in oil revenues was spent on weapons purchases by 2004. See Goodman (2004).
- 132 Interview with diplomatic official, Juba, 6 April 2009.
- 133 Although the Ukrainian export permit issued for part of this package stated that each T-72M1 tank cost USD 195,000, a defence analyst familiar with Eastern European arms markets, having viewed photographs of some of the tanks being supplied, estimated the likely market value at around USD 1 million. A total of 110 T-72 tanks were acquired. Taking into account the additional cost of the small arms and light weapons, anti-aircraft cannon, and truck-launched rocket launchers that were also supplied, the entire package would probably exceed the USD 18.6 million that the GoSS reported spending on SPLA capital spending during 2008. See Case Study 3.

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