Index

655 Report 113 AAAS see American Association for the Advancement of Science ABA see American Bar Association 'Abdulaye Miskine' 309 Abkhazia, Georgia 171, 184, 214 accessories, manufacturing sectors 44, 45, 49-51, 58-62 Aceh 249 ACS see Ammunition Coding System Afghanistan conflict deaths 234, 237, 244, 246-7 DDR and weapons reduction 291 illicit transfers to Tajikistan 171 imports 104, 106 masculinity and firearms 211 post-conflict 199, 271-2 short-term gain-seeking groups 195 stockpiles 71 violence clustering surveys 240 AFL see Armed Forces of Liberia AK-47, ammunition availability 19 Albania ammunition 30 arms for the KLA 218-19 DDR and weapons reduction 290, 292 'gun culture' 208-10 Albanians, 'gun culture' in Kosovo 205-23 Algeria conflict deaths 248, 249 imports 102 stockpiles 87, 89 All Up Weight, ammunition 11 Alliant Techsystems, Inc. (ATK) (United States) 59 Alüs, Francis 143 Amadeo Rossi (Brazil) 54 American Association for the Advancement of Science (AAAS) 242 American Bar Association (ABA) 242 ammunition 9-33 .50 calibre sniper rifles 53 availability 18-23 calibre 11-12 construction 10-12 counting 11 legal transfers 98-9 marking and tracing 25-9, 31 measures 23-31 non-lethal weapons 16 production 13-17 shelf life 17-18, 31 storage 21 technology 16-17 terminal ballistics 23 transportation 26 UN Programme of Action 126-7

unleaded 16-17 US producers 44 Ammunition Coding System (ACS) 28 amnesties 73, 75, 84, 281 Angola 284, 285, 290 ant trade 160, 163, 165 anti-aircraft weapons 124, 125 anti-tank guided weapons (ATGWs) 59, 60, 61-2 anti-tank missiles 124 APEC see Asia-Pacific Economic Cooperation A.Q. Khan Laboratories (Pakistan) 60 Arabic Islamic Front of Azawad (FIAA) 165 Arcus (Bulgaria) 57 Argentina 54, 61, 77, 106 Aristide, Jean-Bertrand 163, 288 Armalite (United States) 54 armed conflict, definitions of 230-2 Armed Forces of Liberia (AFL) 167-9 armed groups, organizational factors 188-99 armour-piercing bullets 21-2 art 142-57 ASEAN see Association of Southeast Asian Nations Asia-Pacific Economic Cooperation (APEC), MANPADS controls 128 assault rifles ammunition 12, 19, 21 Central African Republic 312 manufacturing sectors 50, 51, 55-7 post-conflict violence 274 US ban 50, 75 Association of Southeast Asian Nations (ASEAN). MANPADS controls 128 ATGWs see anti-tank guided weapons AUC see United Self-Defence Forces of Colombia Australia border seizures 114, 115, 116 disarmament 74-6 exports 107 imports 103, 104, 105, 106 manufacturing sectors 46, 52, 61 Austria exports 102, 107, 108, 109, 112 imports 103, 106 manufacturing sectors 57, 59, 61 availability of weapons armed conflict 179, 180-1, 182-7, 200 Central African Republic 304-13 post-conflict 274-5 Backer, Berit 214 Bahrain 86, 87, 89, 106 Balawas 308, 312

Bamako Declaration see Organization

of African Unity

bandits, Chad 317

Barrett Firearms Manufacturing Inc. (United States) 52 beanbags 16 Belgium ammunition production 14 exports 97, 98, 100, 102, 107, 108, 112 imports 102, 103, 104, 106 manufacturing sectors 57, 61 police inventories 78 Belize 290 Beretta (Italy) 54 Bernstrup, Tobias 146 Bersa (Argentina) 54 besa (solidarity or trust) 208, 211-12, 216-17, 219-20 Bester, Willie 147 Bhutan, imports 104 Bicesse Peace Accord 192 blood feuds. Kosovo 211-12. 214. 216-17 Bokassa, Jean-Bédel 303, 314, 315 Bombayeke, General 312, 315 Bosnia and Herzegovina border seizures 114 conflict deaths 229, 234 DDR and weapons reduction 290, 292 Bougainville 18, 22-3, 185, 290 Boutros-Ghali, Boutros 285 Bowling for Columbine 21 Bozizé, General François 303-9, 310-11, 315, 316, 320 Brahimi Report 285, 287 Brazil ammunition 22, 26, 27 disarmament 74, 75-6 drug trade 195 exports 97, 98, 100, 102 list of importers 107, 108, 109 to Colombia 161, 163 transparency 112 imports 106 MANPADS 136-7 manufacturing sectors 54, 55, 57, 61, 64 military stockpiles 77 smuggling from Paraguay 26 Statute of Disarmament 2003 27 brokering, transfers to conflict zones 159, 168 Bulgaria DDR and weapons reduction 290 exports 100, 102 MANPADS 130-6 manufacturing sectors 57 seizures of illicit arms 114 bullets armour-piercing 21-2 expanding 22-3 lead-free 17

marking 28 new technology 16 production 13 regulation 21-3 types 10 Burkina Faso 168, 192 Burundi ammunition availability 19 conflict deaths 252, 253, 258 DDR and weapons reduction 289, 290 buy-back initiatives 164, 279, 280, 281, 288, 289 calibre 11-12 Cambodia 18, 19, 253, 258, 271 Canada border seizures 114-15, 116 exports 103, 106, 107, 108, 112 imports 104, 105, 107 manufacturing sectors 61 military stockpiles 77 capture-recapture 240 CAR see Central African Republic caseless cartridges 16 casualties conflict deaths 229-59 post-conflict 268-9, 271-4, 275 type of weapons used 182-7 'casualty agnosticism' 234 CDC see Centers for Disease Control and Prevention CECORE see Center for Conflict Resolution celebratory fire Kosovo 214, 220, 272 Morocco 86, 87, 88 Center for Conflict Resolution (CECORE) 198 Centers for Disease Control and Prevention (CDC) 242 Central African Republic (CAR) 303-27 ammunition 9, 18-19 armed groups 305-10 DDR and weapons reduction 284, 290 heads of state 303 military stockpiles 77 Chad 313 315-17 Chechnya, conflict deaths 248, 249 Chile 57, 61, 108 China exports 97, 98, 100, 101, 103, 108 illicit transfers to Liberia 168 manufacturing sectors 49, 58, 59, 61 stockpiles 79-82, 85 transfers to Central African Republic 316 CIS see Commonwealth of Independent States civil wars, definitions of armed conflict 231 civilian market, manufacturing sectors 45-56 civilian ownership Australia 74-5 Brazil 74 Central African Republic 312-13 China 82 control 74-5 disarmament 74-6 Iraq 73 Kosovo 'gun culture' 206-7, 208-23 Middle East 90-1 Morocco 86, 87-8 north-east Asia 80, 85 South Africa 75

United States 75 weapons reduction 280 civilians post-conflict violence 269, 271 as targets 20 CNC see Computer Numeric Control cold war weapons 162, 165, 166 Colombia arms sourcing to conflict 160, 161-3, 165, 172-3 conflict deaths 248, 249 diaspora resources 187 imports 102, 104, 107 manufacturing sectors 47 short-term gain-seeking groups 194 Colt (United States) 56 Columbine High School 21 Commonwealth of Independent States (CIS) ammunition 14 MANPADS 128 manufacturing sectors 48, 59 components, manufacturing sectors 44, 45, 46-7, 49-51, 58-62, 63, 64 Computer Numeric Control (CNC) machines 49, 54 conflict 2004 271 ammunition availability 18-20, 30, 31 arms sourcing 159-73 consequences of 231 deaths 229-59 definitions of 230-2 disarmament initiatives 72-6 distinguishing from post-conflict 269-71 'gun culture' 205-23 manufacturing sectors 55, 57 parties 231 purpose of 231 variations in the use of small arms 179-200 conflict deaths 229-59 datasets 238-9 estimation techniques 239-41 media reports 235-8 official reports 233-5 post-conflict zones 268-9 role of small arms 248-51 underreporting 241-8 Congo-Brazzaville (Republic of the Congo) conflict deaths 252, 253, 258 UNITA 192 see also Republic of the Congo control ammunition 9, 10, 20-31 of firepower 184-5 light weapons 123-38 manufacturing sectors 50, 64 Correlates of War Project (CoW) 231, 238 Costa Rica 162, 290 Côte d'Ivoire 106, 169, 193, 248, 249 CoW see Correlates of War Project craft production ammunition 10, 15-16, 18 Colombia 161-2 Mali 166 repairs and sporadic production sector 46-9 crime Central African Republic 322-3

Taiwan 84

definitions of armed conflict 231 European border seizures 116 long-term gain-seeking groups 196 Morocco 88 post-conflict 271-4 short-term gain-seeking groups 192-3 Taiwan 84 UNITA 192 weapons reduction 279 Croatia 54, 55, 290, 292 culture 180 'gun culture' 205-23 'cultures of violence' 205-23 customs data 98, 99-100, 113-16 Cyprus 97, 98, 104, 106, 107 Czech Republic exports 102, 103, 107, 108, 112, 161 illicit transfers to Georgia 172 imports 106, 107 manufacturing sectors 61 transparency, exports 112 Darfur, Sudan, conflict deaths 236-7, 247, 252, 253 258 data collection, conflict deaths 229-59 datasets, conflict deaths 238-9, 241-8 Dayton Peace Agreement 1995 217 DDR see disarmament, demobilization, and reintegration deaths Central African Republic 321 conflicts 229-59 post-conflict 268-9 Defense Threat Reduction Agency (DTRA) (United States) 74 Democratic Republic of the Congo (DRC) community's view of armed groups 193 conflict deaths 230, 245-7, 252, 255, 258 DDR and weapons reduction 280, 284, 290. 291 post-conflict deaths 268 short-term gain-seeking groups 193, 195 Denel 61 Denmark imports 103, 104, 105, 107 manufacturing sectors 61 Desert Storm, Operation (1990-91), conflict deaths 234-5 development, DDR and weapons reduction 276-7, 279, 284, 286, 287 Diamond, Larry 275-6 diaspora assistance 186-7, 197, 215, 218-19 direct conflict deaths compared to indirect deaths 253, 254-6, 257-9 counting methods and sources 233-41 definition 232 global 230, 256-7 post-conflict zones 268-9 underreporting 241-8 disarmament 72-6 2004 71 bias of DDR 283-4 Central African Republic 323-7 Haiti 164 Iraq 72, 73 Kosovo 212–13, 221, 280 weapons reduction programmes 280

SMALL ARMS SURVEY 2005

disarmament, demobilization, and reintegration (DDR) 267-93 Central African Republic 325-7 history of 277-9 incentives 280-3 Liberia, ammunition 30 link with weapons reduction programmes 280 management of expectations 284-5 measuring success 284 militarization of refugee camps 273 post-conflict 267-8, 274, 275-89 short and long-term gain-seeking groups 198-9 shortcomings 283-9 Solomon Islands 283 disease, conflict deaths 254-5, 269 displacement, indirect conflict deaths 232 diversion, ammunition 14 Dominican Republic 164 donors, DDR and weapons reduction 276, 277, 284, 285, 286, 289 DPKO see United Nations, Department of Peacekeeping Operations Draeger, Christoph 144 DRC see Democratic Republic of the Congo drug trade 88, 161-3, 195 Du, Wang 144-5 Duyvendak, Yan 145 EADS see European Aeronautic Defence and Space Company Economic Community of West African States (ECOWAS) ammunition 24 Code of Conduct 24 DDR 287 light weapons 125 Moratorium 24, 125 ECOWAS see Economic Community of West African States Ecuador 163 EDM see Electrical Discharge Machining Egypt 60, 86, 87, 89, 105 El Salvador DDR and weapons reduction 277, 290, 292 'gun culture' 207 illicit transfers to Colombia 162 post-conflict injuries 275 weapons reduction programmes 280 Eldoret (Kenya) 13 Electrical Discharge Machining (EDM) 49 embargoes group resources 187 Liberia 168 MANPADS 133-4 UNITA 192 end users MANPADS 132-6 production sectors 42, 43 transparency 111 environmental pollution, ammunition 16-17 epidemiological surveys, conflict deaths 239-40, 242. 245-6 estimation techniques, conflict deaths 239-42 Ethiopia 104 Europe ammunition 14 illicit trade 113-16

manufacturing sectors 57, 59 see also European Union European Aeronautic Defence and Space Company (EADS) 59, 61 European Union (EU) ammunition 24 Central African Republic 310 Code of Conduct on Arms Exports 14, 24, 125, 131 - 2Common Military List 102 Council Common Position on the control of arms brokering 24 DDR and weapons destruction 281, 287 light weapons 125 MANPADS 131-2 excess mortality definition 232 Guatemala, post-conflict 270 post-conflict 268-9 see also conflict deaths expanding bullets 22-3 exports 97, 98, 100-5, 116-17 MANPADS 131-7 Small Arms Trade Transparency Barometer 112 extensive-range production 45, 55-7, 63-4 Fábricas y Maestranzas del Ejército (FAMAE) (Chile) 57 FAC see Forces armées congolaises FACA see Forces armées centrafricaines FAMAE see Fábricas y Maestranzas del Ejército FARC see Revolutionary Armed Forces of Colombia Farrell, Malchi 149 Federal Republic of Yugoslavia (FRY), Kosovo 206, 210, 212-16, 219 Finland exports 103, 108, 112 imports 104, 105, 107 manufacturing sectors 61 military stockpiles 77 firearm homicides China 82 Guatemala 270 Japan 80 firepower, weapons availability 182-5 FN-Herstal 13, 57 Force spéciale de défense des institutions républicaines (FORSDIR) 307, 309 Forces Armées d'Haïti (FADH) 163-4 Forces armées centrafricaines (FACA) 304, 311, 312, 315 Forces armées congolaises (FAC) 304, 305-6, 317-18, 324 Former Yugoslav Republic of Macedonia (FRYOM), DDR and weapons reduction 292 FORSDIR see Force spéciale de défense des institutions républicaines Fort Association (Kazakhstan) 56 France Central African Republic 313-15 civilian ownership 80 exports 103, 106, 108, 112, 113 imports 102, 103, 104, 105, 107 manufacturing sectors 57, 61 transparency 111, 112, 113 FRY see Federal Republic of Yugoslavia

full-metal jacket (FMJ) 22, 23 G8, MANPADS 129, 133 Galil rifles 161 Ganda Koye Patriotic Movement (MPGK) 165-7 gender, 'gun culture' 211 General Dynamics 59 Georgia arms sourcing to conflict 160, 169, 171-2 DDR and weapons reduction 292 'gun culture' 213-14 weapons availability 184 Germany border seizures 115, 116 exports 97, 98, 100, 102, 103 list of importers 106, 107, 108, 109 transparency 112, 113 imports 102, 103, 104, 105, 107 MANPADS 130-6 manufacturing sectors 46, 54, 56, 59, 61 Ghana 18, 47, 48, 105, 167 GIAT Industries (France) 57 Glock (Austria) 55 Golden Sentry programme 135 González-Torres, Félix 150-1 Greece 57, 61, 107 'green' ammunition 16-17 grenade launchers 45, 124 Guadalcanal 30 Guatemala conflict deaths 237, 240, 242-3, 246-7 DDR and weapons reduction 290 post-conflict deaths 269, 270, 274 guided weapon systems 46 Guinea 169, 273, 290 Gulf War 1990-91 269 'gun culture' 90, 205-23, 275, 280 gun-free spaces 281, 282 gunsmiths 46-9, 51-3 Haaning, Jens 154 Hague Conference 1899 22 Haiti arms sourcing to conflict 160, 163-5, 172 DDR and weapons reduction 72, 200, 288, 289. 292-3 police use of automatic rifles 183 post-conflict demand for weapons 281 handguns, border seizures 115-16 handloading 15-16, 17 health Central African Republic 321 post-conflict 272-4 heavy machine-guns 51, 124 Heckler & Koch (Germany) 56 Hellenic Arms Industry (Greece) 57 Henry Repeating Arm Co. (United States) 54 Hezbollah 187, 196 high-tech electronics production 46, 58-62, 63-4 Hirtenberger Group (Austria) 57 hollow-point bullets 23 Honduras 106, 162, 290, 293 Hong Kong 61

Fujimori Alberto 163

household-name producers 45, 53–5, 63 HS Product (Croatia) 54, 55 Human Rights Watch 183

Human Security Report (HSR) 238-9, 247

INDEX

humanitarian aid conflict deaths 252-3 militarization of refugee camps 273 post-conflict phase 269 humanitarian law, definitions of armed conflict 231 Hungary 61, 107 hunting guns 87-8, 214 ICAO see International Civil Aviation Organization Iceland 61 ICG see International Crisis Group ICRC see International Committee of the Red Cross Idema, Jonathan Keith 195 IDPs see internally displaced persons IISS see International Institute for Strategic Studies illicit transfers 113-16 fuelled by DDR programmes 285-6 production sectors 46-7 to conflict zones 159-73 imports 97, 98, 116-17, 161 India 61 101 indirect conflict deaths compared to direct deaths 253, 254-6, 257-9 counting 233-41, 251-7 definition 232 global estimates 230, 256-7 Indonesia 104, 105, 106, 291 Industria de Material Bélico de Brasil (IMBBEL) (Brazil) 57 Industria Militar (INDUMIL) (Colombia) 161-2 injuries Central African Republic 321 post-conflict 271-2 insurgent groups Colombia 161-3 Georgia 171-2 Haiti 163-6 Liberia 167-9 Mali 165-7 organizational factors 188-99 resources 186-7 structure 188 Tajikistan 169-71 internally displaced persons (IDPs) definitions of armed conflict 231 militarization of refugee camps 273, 274 International Civil Aviation Organization (ICAO), MANPADS 129, 136 International Committee of the Red Cross (ICRC) 15, 22, 234 International Criminal Court (ICC) 22 International Criminal Tribunal for the Former Yugoslavia (ICTY) 242 International Crisis Group (ICG) 183 International Institute for Strategic Studies (IISS), conflict deaths 238-9, 241, 242, 244, 245-6, 247, 248, 249 international instruments ammunition 22-3, 23-5, 28-9 light weapons 123-7 MANPADS 127-9 International Narcotics Control Program (Plan Colombia) 161 International Organization for Migration (IOM) 281

International Trade Centre 100 Internet, conflict deaths 238 IOM see International Organization for Migration Iran exports 100, 107 illicit transfers to Liberia 169 imports 103 stockpiles 86, 87, 89 Iraq coalition combat deaths 250-1 conflict deaths 229, 234-5, 237, 239, 240, 244-7, 252-3, 255, 258 DDR and weapons reduction 291 masculinity and firearms 211 post-conflict 199, 268 stockpiles 71, 72, 73, 87, 89, 90, 91 Iragi Body Count 229 IRC see International Rescue Committee Ireland 61, 104 Israel civilian stockpiles 90, 91 exports 97, 103 list of importers 107, 108 to Colombia 161 transparency 110, 112, 113 imports 103, 105, 107 manufacturing sectors 60, 61 rubber bullets 16 stockpiles 86, 87, 89 transparency 110, 112, 113 Israeli Military Industries (IMI) (Israel) 60, 61 Italy exports 97, 98, 100, 103 list of importers 106, 107, 108, 109 to Colombia 161 transparency 112 imports 102, 103, 104, 105, 107 manufacturing sectors 48, 54 Izhevsk Arms Plant 57 Japan

International Rescue Committee (IRC) 245-6

civilian ownership 80 exports 104, 106, 107, 109, 112 imports 105, 107 manufacturing sectors 59, 61, 64 stockpiles 78, 80, 82, 85 Jashari, Adem 219–20 J.G. Anschütz (Germany) 54 Jordan imports 104, 106, 107 stockpiles 87, 89, 90, 91 transparency 110 journalists, conflict deaths 235–8

kaçaks (outlaws) 210 Kahr Arms (United States) 54 kanun (customary law) 207, 208, 210, 211–17, 219–20 Karakos 308, 312 Kazakhstan 56 KBP Instrument Design Bureau (Russia) 60 Kenney, George 234 Kenya ammunition 13 imports 104, 105, 106, 107 Khmer Rouge, ammunition 18, 19 KLA *see* Kosovo Liberation Army Kmart ammunition 21 Kolingba, André 303, 305, 306, 312 Korea, Democratic People's Republic of see North Korea Korea. Republic of see South Korea Kosovo conflict deaths 241-2, 246-7, 258 estimation techniques 240 DDR and weapons reduction 292 'gun culture' 205-23 indirect conflict deaths 252, 253, 255 post-conflict violence 271, 272 seizures of illicit arms 114 Kosovo Liberation Army (KLA) 206, 210, 215, 218-21 Kuwait imports 107 stockpiles 87, 89 Kyrgyzstan, 'gun culture' 213-14 The Lancet, Iraq conflict deaths 229 landmines, violence clustering surveys 240 Latin America, stockpiles 77, 162 Latvia 110 law enforcement ammunition 23 Central African Republic 307, 311, 312, 323-4 China 80-1 controls on firepower 185 manufacturing sectors 45-6, 51, 57 post-conflict 276 security sector reform 276 use of automatic rifles 183 weapons reduction programmes 279 see also police stockpiles lead, ammunition 16-17 leadership, armed groups 190-1, 194-5, 196 League of Arab States, illicit trade 86 Lebanon imports 104, 106 masculinity and firearms 211 stockpiles 87, 89, 90, 91 legal transfers 98-113 Liberation Tigers of Tamil Eelam (LTTE) 47, 185, 187, 196 Liberia ammunition 30 arms sourcing to conflict 160, 165, 167-9, 172 - 3DDR and weapons reduction 30, 72, 284-5, 285, 290, 291 group goals 189, 193 imports 106 shelling of Monrovia 2003 182-3 Liberians United for Reconciliation and Democracy (LURD) 167-9, 182-3 Liberman, Ruth 152-3 Libva Chad 316-17 illicit transfers, to Liberia 168 military stockpiles 87 police stockpiles 89 transfers to Central African Republic 313, 315 licensed production, Tanzania 14 licensing ammunition 21 China 82 civilian ownership 80, 82, 84

SMALL ARMS SURVEY 2005

Japan 80 MANPADS 132, 133 Morocco 87-8 South Africa 75 Taiwan 84 transparency 111 Lieshout, Atelier Van 154 light machine guns, ammunition types 12 light weapons control 123-38 definition 123-4 export data 102 Iraq 72, 73 manufacturing sectors 57, 58 post-conflict violence 274 UN Register of Conventional Arms 109-10 US production 44 livestock, Central African Republic 321, 322 Lockheed Martin Corporation 61 long-term gain-seeking groups 191, 196-8, 198-9 lot numbers 25-6, 27 LTTE see Liberation Tigers of Tamil Eelam LURD see Liberians United for Reconciliation and Democracy Lusaka Protocol (1994) 192 M-16 rifles, manufacturing sectors 57 McCallum, Bradley 152 Macedonia 77, 290 machine guns ammunition types 12 definition of light weapons 124 manufacturing sectors 45, 55-7 McMillan Bros. Rifles (United States) 52 Malaita 30 Malaysia imports 102, 104, 106, 108 manufacturing sectors 61 transparency 110 Mali ammunition availability 19, 20, 30 arms sourcing to conflict 160, 165-7, 169, 172-3 availability factors in conflict 186 benefits of peace 199 community's view of armed groups 193 insurgent resources 187 long-term gain-seeking groups 196, 197 manufacturing sectors 47 malnutrition, indirect conflict deaths 254-5 man-portable air defence systems (MANPADS) controls 109, 110, 124, 127-9, 130-7 manufacturing sectors 58, 59, 60, 61-3 MANPADS see man-portable air defence systems manufacturers linkages between 41 sectors 41, 43-62 Maoism 77 marking, ammunition 25-9, 31 Marlin Firearms Co. (United States) 54 masculinity, 'gun culture' 205, 211 massed infantry doctrine, military stockpiles Mauritania 87, 89, 167 Medécins sans frontières (MSF), Darfur 236-7 media 143-5 conflict deaths 150-1, 235-8, 241-8, 242-3, 244, 245

mental health, post-conflict 274 Meste, Philippe 155 Metallist Urlask Plant (Kazakhstan) 56 Mexico illicit transfers to Colombia 162 imports 103, 105, 108 Middle East ammunition 14 stockpiles 71-2, 78, 79, 85-91 militarization of refugee camps 273, 274 military markets, manufacturing sectors 45-6, 49-53, 55-7, 58-62 military stockpiles ammunition 29-30 Central African Republic 311, 312, 314 China 81 estimating inventories 76-8 illicit transfers from Colombia 161 conflict sourcing 172 Georgia 171-2 Mali 165-6, 169 Tajikistan 170 Japan 82 Middle East 86-7 multipliers 77 North Korea 83 north-east Asia 79-80, 84 seizures from, Central African Republic 320 South Korea 83 Taiwan 84 militias Central African Republic 305-10, 311, 312 command and control 195 militarization of refugee camps 273, 274 Nigeria 75 Millennium Project 287 MINURCA see United Nations, Mission in the Central African Republic Miskine, Abdulaye 309 ML see Wassenaar Arrangement Munitions List MLC see Movement de libération du Congo MLPC see Mouvement de libération du peuple centrafricain Mobutu Sese Seko 192, 304, 317-18 MODEL see Movement for Democracy in Liberia mokabala 88 Moldova 290 Monrovia (Liberia) 182-3 Montesinos, Vladimiro 163 Moore, Michael 21 Moro National Liberation Front 285 Morocco, stockpiles 86-8, 89, 90 mortars 57, 124, 182-3 Mouvement de libération du peuple centrafricain (MLPC) 307-8, 312 Movement de libération du Congo (MLC) 304 Movement for Democracy in Liberia (MODEL) 167 - 9Movement of Democratic Forces in the Casamance (MFDC) (Senegal) 199 Mozambique, DDR and weapons reduction 277, 285 290 multiple system estimation (MSE), conflict deaths 239, 240, 241, 242-3 mutinies, Central African Republic 320, 321-2 muzzle-loading rifles 51-3

Nairobi Protocol 24, 125, 126, 135 Namibia 103, 290 national controls, MANPADS 130-7 National Liberation Army (ELN) (Colombia) 161 - 3National Patriotic Front of Liberia (NPFL) 167, 193.194 National Reloading Manufacturers Association 15 National Resistance Army (NRA) (Uganda) 187.196 National Rifle Association (NRA) (United States) 75 National Union for the Total Independence of Angola (UNITA) 191-2, 286 NATO see North Atlantic Treaty Organisation Ndoubabé, Victor 309 Nepal 106, 248, 249 Neshat, Shirin 148-9 Netherlands exports 104, 108, 112 imports 103, 108 manufacturing sectors 61 transparency 110, 111, 112 New Lachaussée 14 New Partnership for Africa's Development (NEPAD) 287 New Zealand 61, 103 NGOs see non-governmental organizations Nicaragua DDR and weapons reduction 277, 290 illicit transfers to Colombia 162 post-conflict violence 271 Niger 291 Nigeria ammunition production 15 disarmament attempt 75 illicit supply to Mali 167 imports 103 night-vision equipment 46, 58 NISAT see Norwegian Initiative on Small Arms Transfers non-governmental organizations (NGOs) DDR and weapons destruction 277, 287 official statistics on conflict deaths 233-4 non-lethal weapons 16, 51, 53 non-state actors Central African Republic 304, 305, 312 definitions of armed conflict 231-2 factors in the use of weapons in armed conflict 181 Iraq 73 MANPADS controls 127-8, 133 resources 186-7 North Atlantic Treaty Organisation (NATO) ammunition 12 DDR 287 Kosovo Force (KFOR) 205, 219, 221 Partnership for Peace Trust Fund 72-4 North Korea exports 101 stockpiles 83, 85 north-east Asia, stockpiles 71-2, 78, 79-85 Northern Ireland, rubber bullets 16 Norway exports 104 list of importers 106, 107, 108 transparency 112

INDEX

imports 103, 105, 108 manufacturing sectors 61 police inventories 78 Norwegian Initiative on Small Arms Transfers (NISAT) 98 NPFL see National Patriotic Front of Liberia NRA see National Resistance Army (Uganda); National Rifle Association (United States) OAU see Organization of African Unity Obote, President Milton 196 OECD see Organisation for Economic Co-operation and Development O.F. Mossberg & Sons, Inc. (United States) 54 official reports, conflict deaths 233-5 Oman 87, 89, 104 optics systems manufacturing 46, 58-62 Organisation for Economic Co-operation and Development (OECD) 277 Organization of African Unity (OAU) Bamako Declaration ammunition 24, 28-9 light weapons 125, 126, 136 Organization of American States (OAS) Inter-American Convention 24, 124, 125, 136 Model Regulations 24, 124, 125 Organization for Security and Co-operation in Europe (OSCE) MANPADS 123, 127-8, 130-8 OSCE Document on Small Arms and Light Weapons 24 125-6 organizational factors, use of weapons in armed conflict 179, 180-1, 188-99, 200 OSCE see Organization for Security and Co-operation in Europe Ottoman Empire 208-10 outcomes, type of weapons used 182-7 Pacific Islands Forum, light weapons 125, 126 Pacific region, ammunition 21 Pakistan exports 101, 104 manufacturing sectors 47, 48, 60 Pakistan Ordnance Factories 57 Palestinian Territories ammunition 23 group goals 189 stockpiles 87, 89 Panama 162, 290 Papua New Guinea 19, 22-3, 292 Paraguay 26, 163 Parker, Cornelia 157 Patassé, President Ange-Félix 303, 305-9, 311, 314-16, 319, 324-5 PBRs see plastic baton rounds peacekeeping forces DDR and weapons reduction programmes 277 280 post-conflict security and development 276 weapons lost by 320 Peru conflict deaths 240, 242-3, 246-7 illicit transfers to Colombia 163 Philippines DDR 284-5 imports 103, 106, 108 manufacturing sectors 47 Physicians for Human Rights 242

ammunition types 12 manufacturing sectors 45, 51, 53, 54 plastic baton rounds (PBRs) 16 PNDR see Programme national de désarmement et de reinsertion poaching, Central African Republic 310, 321. 324 Poland border seizures 115, 116 exports 107 imports 103, 106, 108 manufacturing sectors 61 transparency 110 police see law enforcement police inventories, estimating 78 police stockpiles Central African Republic 311, 312, 314 China 81 illicit transfers from Colombia 161 Georgia 171-2 Haiti 163-4 Tajikistan 170 Japan 82 Middle East 88-90 Morocco 87 North Korea 83 north-east Asia 79-80, 84, 85 South Korea 83 Taiwan 84 politics art 147-9 conflict deaths 229, 233-5 conflict sourcing 172 pollution, disposal of ammunition 29 Popular Front for the Liberation of Azawad (FPLA) 165 Popular Movement of Azawad (MPLA) 165-6, 187 Portugal exports 104, 106, 108, 112 imports 102, 103, 105, 108 manufacturing sectors 61 transparency 112 post-conflict 267-93 conflict deaths 232 distinguishing from conflict 269-71 'gun culture' 205 indirect conflict deaths 252, 255-6 KLA in Kosovo 221 short and long-term gain-seeking groups 199 violence 271-4 zones 1994-2004 271 pre-fragmented bullets 16 production 39-64 ammunition 10, 13-17, 14, 30-1 art 154-5 bundles of characteristics 42-3 Central African Republic 319-20 Colombia 161-2 controls on firepower 184-5 manufacturing sectors 41-62 Morocco 86 production processes, manufacturing sectors 42, 45-6, 47, 49, 52, 53-4, 57-8 Programme national de désarmement et de reinsertion (PNDR) (Central African Republic) 325-7

nistols

Project Ploughshares, Armed Conflict Report 238-9, 241, 242, 244, 245-6, 247 propaganda, conflict deaths 233-4 Qatar 86, 87, 89 Quik-Shok 16 Ramadan, Yaya 309 RAMSI see Regional Assistance Mission for Solomon Islands rape 193, 196, 322 Raytheon Company (United States) 59, 60 reconstruction and development 276, 277 refugee camps, militarization of 274 refugees 231, 273 Regional Assistance Mission for Solomon Islands (RAMSI) 282-3 regional instruments ammunition 23-4, 28-9 light weapons 124-6 reloading 15-16 Remington (United States) 54 repairers 43-4, 45, 46-9 Republic of the Congo DDR and weapons reduction 290, 291 transfers to Democratic Republic of the Congo 319 see also Congo-Brazzaville Revolutionary Alliance for the Liberation of Azawad (ARLA) 165 Revolutionary Armed Forces of Colombia (FARC) 47, 161-3, 187 Revolutionary United Front (RUF) (Sierra Leone) 194, 278 revolvers ammunition types 12 manufacturing sectors 45, 53 rifles .50 calibre 51, 52, 53 ammunition 12, 16 manufacturing sectors 45, 51-3 Rio de Janeiro (Brazil) 195 Robar Companies Inc. (United States) 52 rocket launchers 45, 55-7 rocket-propelled grenades (RPGs) 57, 182, 183, 184-5 Romania border seizures 115, 116 DDR and weapons reduction 290 exports 100, 104, 112 illicit transfers to Georgia 172 imports 105 manufacturing sectors 56, 57, 61 transparency 112 RomArm (Romania) 56 RUAG Ammotec 13 rubber baton rounds 16, 53 Rugova, Ibrahim 216, 217, 218 Russian Federation exports 97, 98, 100, 101, 104 list of importers 107, 108 transparency 112 imports 103, 106, 108 MANPADS 130-6 manufacturing sectors 48, 56, 57, 61 stockpiles 77 transparency 112

SMALL ARMS SURVEY 2005

Rwanda ammunition 19-20 conflict deaths 249 DDR and weapons reduction 290 militarization of refugee camps 273 short-term gain-seeking groups 195 transfers to Democratic Republic of the Congo 319 SADC see South African Development Community safety, post-conflict 269-71 Sakr Factory for Developed Industry (Egypt) 60 Sarawis 308, 312 Sarsilmaz (Turkey) 56 Saudi Arabia imports 97, 98, 106, 108 list of exporters 102, 104, 105 stockpiles 87, 89 Savage Arms, Inc. (United States) 54 Savimbi, Jonas 191-2, 285 Schmidt & Bender (Austria) 59 scope mounts 49 SCPS see Société centrafricaine de protection et de surveillance security, post-conflict 269-71, 276, 279 security sector reform (SSR) 276, 287, 289, 303 seizures ammunition 11 China 82 international illicit trade 113-16, 114 Serbia and Montenegro DDR and weapons reduction 290, 292 illicit transfers to Liberia 168 rule of Kosovo 210, 216-20 service life, ammunition 17-18 shelf life, ammunition 17-18, 31 shells, construction 10-12 short-term gain-seeking groups 191, 192-5, 198-9 shotguns 12, 51, 53 Sierra Leone conflict deaths 252, 253, 258 DDR and weapons reduction 278, 284, 290, 291 post-conflict crime 274 short-term gain-seeking groups 193, 194 Singapore exports 100, 107 imports 103, 104, 105 manufacturing sectors 61 Slovakia 61, 104, 107 Slovenia 61 Small Arms Trade Transparency Barometer 110-13, 117 Smith & Wesson (United States) 54, 55 smuggling ammunition 26 Kosovo 215, 219, 221 sniper rifles 51-3 social factors 180-1, 188-99 Société centrafricaine de protection et de surveillance (SCPS) 309, 312 soft-point bullets see expanding bullets Solomon Islands availability factors 184, 186 craft production, ammunition availiability 18

DDR and weapons reduction 282-3, 290. 292 post-conflict demand for weapons 281, 282-3 transportation of weapons 185 Somalia 193, 291 South Africa ammunition 21 DDR and weapons reduction 75, 290 exports 104 list of importers 107, 108 to Colombia 161 to Haiti 164 transparency 112 MANPADS 136, 137 manufacturing sectors 52, 61 support for UNITA in Angola 192 South African Development Community (SADC), SADC Firearms Protocol 24, 124, 125, 126, 136 South Korea exports 105, 107, 112 imports 97, 98, 104, 105, 106, 108 manufacturing sectors 61 stockpiles 83, 85 South Ossetia 171, 184, 214 Southern African Regional Police Chiefs Co-operation Organisation 280 Soviet Union 'gun culture' 213-14 Tajikistan 169-70 Spain exports 105, 107, 108, 112 imports 103, 104, 108 manufacturing sectors 61 specialist production sector 45, 51-3, 63 sporting weapons 51, 56 Springfield Armory (United States) 56 Sri Lanka 47, 106 see also Liberation Tigers of Tamil Eelam SSR see security sector reform state-armed groups 186-7 definitions of armed conflict 231-2 factors in the use of weapons in armed conflict 181 group goals 194, 197 Stevr Mannlicher 57 Stinger Project Group 59 stockpiles 71-92, 186 Albania and the KLA 218-19 ammunition 11, 17-18, 29-30 availability factors in conflict 185-6 Central African Republic 310-13 disarmament initiatives 72-6 estimating inventories 76-8 Iraq 72, 73 management 29-30, 72-6 Nigeria 75 post-conflict 275 security of 186, 284 storage, ammunition 21, 29-30 Sturm, Ruger & Co., Inc. (United States) 54, 55 sub-machine guns 51 sub-Saharan Africa, conflict deaths 253-5, 256, 259 substitution effects 271, 272 Sudan conflict deaths 252, 253, 258 DDR and weapons destruction 284, 289 imports 103, 106

stockpiles 87, 89, 90 transfers to Central African Republic 317 see also Darfur Swarovski Optik 58 Sweden border seizures 114, 115, 116 civilian ownership 80 exports 105, 107, 108, 112 imports 103, 104, 108 manufacturing sectors 61 transparency 110, 112 Switzerland exports 106, 107, 108, 109, 112 imports 102, 103, 104, 108 manufacturing sectors 61 Syria, stockpiles 86, 87, 89 tactical rifles 51 tactical weapon systems 49, 50, 51 Taiwan imports 105, 106 manufacturing sectors 49, 58, 61 stockpiles 84, 85 Tajjikistan 172 ammunition 18 arms sourcing to conflict 160, 169-71 'gun culture' 213-14 Tanzania 14, 273 target rifles 51 Taurus International MFG, Inc. (Brazil) 54, 55 Taylor, Charles 167-9, 182-3, 193 teargas launchers 53 terminal ballistics 23 Thailand 106 Thales 59, 61 Tillessen, Peter 156 Togo 77, 192 Torsson, Palle 146 tourism, Central African Republic 322-3 tracing, ammunition 25-9, 31 trafficking arms sourcing to conflicts 159-73 Central African Republic 313-20 Colombia 163 transfers 97-117 Central African Republic 313-20 MANPADS 127-8, 130-7 to conflict zones 159-73 transit trade, Cyprus 106 transparency ammunition 13, 25 customs data 99-100 exports 101 legal transfers 98, 109-13 stockpiles 72, 79, 84-6, 91-2 transfers 97 Transparency Barometer 110-13 transportation 26, 185 Tulsky Oruzheiny Zavod 57 Tunisia 87, 88, 89 Turkey exports 105, 107, 112 imports 103, 104, 105, 108 manufacturing sectors 56, 61 stockpiles 86, 87, 89, 90, 91

UCDP see Uppsala Conflict Data Program Uganda

INDEX

ammunition 20 conflict deaths 248, 249 DDR and weapons reduction 290 group goals 196 militarization of refugee camps 273 post-conflict crime 274 Uganda National Rescue Front (UNRF) 198 Ukraine 56, 74, 168 UNDP see United Nations, Development Programme (UNDP) UNITA see National Union for the Total Independence of Angola Unité de la Sécurité Présidentielle (USP) (Central African Republic) 307 United Arab Emirates 87, 89, 108 United Kingdom ammunition 21 border seizures 115, 116 civilian ownership 80 disarmament 75-6 exports 97, 105, 106, 107, 108, 112, 113 imports 103, 109 MANPADS 130-6 manufacturing sectors 47-8, 49, 52, 59, 61 transparency 110, 111, 112, 113 United Liberation Movement for Democracy in Liberia (ULIMO) 182 United Nations (UN) ammunition 26, 28 Bosnia 234 Brahimi Report 285, 287 Comtrade 98, 99-100, 101-2 DDR and weapons reduction 267-8, 277, 279, 280, 285, 287-9 Department of Peacekeeping Operations (DPKO) 277, 289 Development Programme (UNDP) 30, 207, 280, 281, 285, 287, 289 Economic and Social Council (ECOSOC) 26 Group of Experts, ammunition 9, 13, 28, 31 Haiti 164 High Commissioner for Human Rights (UNHCR) 183, 273 Interim Administration Mission in Kosovo (UNMIK) 220-1 Kosovo 217, 220-1 MANPADS 128-9 Mission in the Central African Republic (MINURCA) 316, 324-5 Panel of Experts, definition of small arms 39-40 Register of Conventional Arms 109-10, 128-9 Report of the Panel of Governmental Experts on Small Arms 123-4 UN Firearms Protocol 23-4, 28, 125, 126, 136 UN Programme of Action 25, 28, 125, 126-7, 132.136 United Self-Defence Forces of Colombia (AUC) 161-3, 194 United States Afohanistan 234 ammunition 15, 17, 21-2, 28, 29 arms sourcing to conflicts 160 art 150-2 Assault Weapon Ban 21, 50, 62-3, 75 Bosnian conflict deaths 234 disarmament initiatives 72-4 exports 97, 98, 100, 105

list of importers 106, 107, 108, 109 to Colombia 161, 162, 165 transparency 112, 113 Haiti 163-5 imports 97, 98, 106, 109 list of exporters 102, 103, 104, 105 Iraqi conflict deaths 234-5 MANPADS 130-6 manufacturing sectors 47-59, 61 police inventories 78 United States Agency for International Development (USAID) 285 United Tajik Opposition 169-71 unleaded ammunition 16-17 Uppsala Conflict Data Program (UCDP) 231-2, 234, 238-9, 241-7 use of weapons, factors in armed conflict 179 - 200USP see Unité de la Sécurité Présidentielle Uzbekistan 170-1 V.A. Degtyarev Plant (Russia) 60 Venezuela 61, 106, 163 video games 145-6 Vietnam 104 violence art 150-3 definitions of conflict 230-1 group goals 192-3, 196 'gun culture' 205-23 militarization of refugee camps 273 post-conflict 268, 271-4 violence clustering surveys 239-40, 241, 244 war definitions of 230-2 types of 180 Warhol, Andy 142, 143 Wassenaar Arrangement 109-10 light weapons 125, 127 MANPADS 123, 127-8, 130-8 Transparency Barometer 110 Wassenaar Arrangement Munitions List (ML) 102 WCD see Weapons in Competition for Development weapons reduction 72-6, 267-93 ammunition 29-30 Central African Republic 323-7 history of 279-80 incentives 280-3 Kosovo 'gun culture' 206 measuring success 284-5 post-conflict 267-8, 275-89 shortcomings 283-9 West African Moratorium 125 WHO see World Health Organization World Bank Central African Republic 310-11, 312 DDR and weapons destruction 267-8, 277, 279, 287, 289 post-conflict 269, 276 World Health Organization (WHO) 232, 235, 236-7.247 World Wildlife Fund (WWF) 310 wounds 16, 23 Yemen 87, 89, 90, 91, 103 Yugoslavia 77

Zaire transfers to Central African Republic 304, 317–19 UNITA 192 *see also* Democratic Republic of the Congo Zastava Oruje (Serbia and Montenegro) 56 Zimbabwe, DDR and weapons reduction 290