

# The Military Balance 2009

## Editor's Foreword

*The Military Balance 2009* is a comprehensive and independent assessment of the military capabilities and defence economics of 170 states; it also functions as a reference work on developments in global military and security affairs.

As in recent editions there is focus on remaining operations in Iraq, notably the impact of the 'surge' of US troops and the Status of Forces Agreement signed by the US and Iraq in November 2008. The number of coalition partners in Iraq is due to fall further towards the end of 2008. Some are considering whether to boost participation in Afghanistan. *The Military Balance* discusses counter-insurgency efforts in that country and the drive to improve the capacity of its security forces. The activities of the NATO-led International Security Assistance Force (ISAF) have expanded in the year, and ISAF troops are now tasked with interdicting drug traffickers and the destruction of opium factories. After defeats in open combat, insurgents established bases in areas where there was a smaller international presence and have continued to target perceived areas of weakness, such as the Afghan National Police. With a presidential election scheduled to take place in 2009, delivering the security necessary to enable a credible election process will be of importance for the international forces.

As NATO marks its 60<sup>th</sup> anniversary in 2009, tensions remain over burden-sharing in Afghanistan. Although the Alliance has been able to secure increased commitments from its members during 2008, there is a growing need for Allies to collectively improve their efforts to define mission objectives, and criteria for success. Meanwhile, 2008 also forced NATO to re-examine its expansion programme in the light of the sharp conflict between Russia and aspirant-member Georgia. The conflict highlighted a number of capability gaps among the Russian forces deployed to Georgia, as well as obvious strengths.

In East Asia, China's military focus during 2008 was on dealing with natural disasters, safeguarding the Beijing Summer Olympic Games and assisting in containing internal unrest. The responses to the January storms and May earthquake in Sichuan province demonstrated that the PLA's efforts to transform itself into a force capable of mobility and rapid response clearly had some way to go. The PLA's reputation was enhanced by positive and extensive media and Internet coverage of its role in these crises; the PLA introduced a media spokesperson for the first time during the earthquake-recovery operations. However, there continued to be concern, especially in the United States, about a general lack of transparency and the consequent difficulty in assessing PLA developments.

Conflict continues to dominate the defence and security debate in Africa. Violence in the Democratic Republic of Congo has led to the displacement of over 250,000 civilians.

There have been calls for an enhanced international presence to supplement the existing UN force, which has proven ill-equipped to address the challenges in the east of the country. Meanwhile, the UN–African Union Hybrid Mission in the Darfur Region of Sudan continued to be under strength, as did the AU force further east in Somalia. Ethiopian forces remained in Somalia in support of the Transitional Federal Government and, as of late 2008, insecurity prevailed in large portions of the country. Piracy has dominated international perceptions of Somalia in the last year. While a number of warships have been despatched to the region to try to ensure free passage for shipping, the coordination of such deployments, their rules of engagement and the legal environment governing actions against pirates remained uncertain.

In the United States, the incoming Obama administration faces a raft of defence issues. While Afghanistan and Iraq will undoubtedly preoccupy the administration, other matters will be pressing, such as decisions on equipment programmes, the issue of force readiness and the strain on personnel of eight years of combat. Furthermore, it will be up to the new administration to set the Pentagon's long-term priorities, such as whether counter-insurgency and other missions contributing to the 'long war' on terror will be at the centre of planning. The Pentagon, still led by Robert Gates, will have to consider such issues within the context of an economic crisis that will inevitably call into question the level of defence spending.

The effects of the banking crisis (that developed into an economic crisis) will have an impact on defence establishments around the world, not just in the US. Nations that have spent considerable sums on foreign operations and expensive equipment programmes will find future military budgets pressured by the need to spend more on other domestic priorities; nations that had funded defence expenditures through buoyant commodity export prices will witness a fall in available revenues; and nations that based their public finances on other export sectors will also see a fall in revenues as customer demand tails off. However, a potential positive aspect of these stringencies is that nations may be more willing to cooperate on operational deployments and procurement programmes, in a bid to reduce duplication. If 2008 is a guide, it is unlikely that the range of missions nations undertake, or the multiplicity of threats they face will diminish; while the long-term consequences of the banking crisis on public finances are not yet clear, how governments move to balance these competing priorities will be of prime importance in the year ahead.

James Hackett  
Editor, *The Military Balance*

# The Military Balance 2009

## Preface

*The Military Balance* is updated each year to provide an accurate assessment of the military forces and defence expenditures of 170 countries. Each edition contributes to the provision of a unique compilation of data and information enabling the reader to discern trends through the examination of editions back as far as 1959. The data in the current edition are according to IISS assessments as at November 2008. Inclusion of a territory, country or state in *The Military Balance* does not imply legal recognition or indicate support for any government.

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### GENERAL ARRANGEMENT AND CONTENTS

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The Editor's Foreword contains a summary of the book and general comment on defence matters.

Part I of *The Military Balance* comprises the regional trends, military capabilities and defence economics data for countries grouped by region. Thus North America includes the US and Canada. Regional groupings are preceded by a short introduction describing the military issues facing the region. There are essays on UN peacekeeping and defence industries in the Asia-Pacific region. There are tables depicting aspects of defence activity including selected major training exercises, non-UN and UN multinational deployments, total US aircraft holdings, international defence expenditure, and the international arms trade.

Part II contains information on selected non-state groups with an essay detailing trends in non-state activity in 2008.

Part III comprises reference material.

There are maps showing selected deployments in Iraq, Afghanistan, Chad and the Central African Republic, as well as Georgia, NATO's membership and partnership and cooperation arrangements, and anti-piracy activities off Somalia.

The loose Chart of Conflict is updated for 2008 to show data on recent and current armed conflicts, including fatalities and costs.

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### USING THE MILITARY BALANCE

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The country entries in *The Military Balance* are an assessment of the personnel strengths and equipment holdings of the world's armed forces. Qualitative assessment is enabled by relating data, both quantitative and economic, to textual comment. The strengths of forces and the numbers of weapons held are based on the most accurate data available or, failing that, on the best estimate that can be made. In estimating a country's total capabilities, old equipment may be counted where it is considered that it may still be deployable.

The data presented each year reflect judgements based on information available to the IISS at the time the book is compiled. Where information differs from previous editions, this is mainly because of changes in national forces, but it is sometimes because the IISS has reassessed the evidence supporting past entries. An attempt is made to distinguish between these reasons for change in the text that introduces each regional section, but care must be taken in constructing time-series comparisons from information given in successive editions.

In order to interpret the data in the country entries correctly, it is essential to read the explanatory notes beginning on page 7.

The large quantity of data in *The Military Balance* has been compressed into a portable volume by the extensive employment of abbreviations. An essential tool is therefore the alphabetical index of abbreviations for data sections, which appears at the back of the book.

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### ATTRIBUTION AND ACKNOWLEDGEMENTS

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The International Institute for Strategic Studies owes no allegiance to any government, group of governments, or any political or other organisation. Its assessments are its own, based on the material available to it from a wide variety of sources. The cooperation of governments of all listed countries has been sought and, in many cases, received. However, some data in *The Military Balance* are estimates.

Care is taken to ensure that these data are as accurate and free from bias as possible. The Institute owes a considerable debt to a number of its own members, consultants and all those who help compile and check material. The Director-General and staff of the Institute assume full responsibility for the data and judgements in this book. Comments and suggestions on the data and textual material contained within the book are welcomed and should be communicated to the Editor of *The Military Balance* at: IISS, 13-15 Arundel Street, London WC2R 3DX, UK. Suggestions on the style and method of presentation are also much appreciated.

Readers may use data from *The Military Balance* without applying for permission from the Institute on condition that the IISS and *The Military Balance* are cited as the source in any published work. However, applications to reproduce portions of text, complete country entries, maps or complete tables from *The Military Balance* must be referred to the publishers. Prior to publication, applications should be addressed to: Taylor and Francis, 4 Park Square, Milton Park, Abingdon, Oxon, OX14 4RN, with a copy to the Editor of *The Military Balance*.

# The Military Balance 2009

## Explanatory Notes

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### ABBREVIATIONS AND DEFINITIONS

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Abbreviations are used throughout to save space and avoid repetition. The abbreviations may be both singular or plural; for example, 'elm' means 'element' or 'elements'. The qualification 'some' means up to, while 'about' means the total could be higher than given. In financial data, '\$' refers to US dollars unless otherwise stated; billion (bn) signifies 1,000 million (m). Footnotes particular to a country entry or table are indicated by letters, while those that apply throughout the book are marked by symbols (\* for training aircraft counted by the IISS as combat-capable, and † where serviceability of equipment is in doubt). A list of abbreviations for the data sections appears in the reference section (page 475).

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### COUNTRY ENTRIES

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Information on each country is shown in a standard format, although the differing availability of information and differences in nomenclature result in some variations. Country entries include economic, demographic and military data. Population aggregates are based on the most recent official census data or, in their absence, demographic statistics taken from the US Census Bureau. Data on ethnic and religious minorities are also provided in some country entries. Military data include manpower, length of conscript service where relevant, outline organisation, number of formations and units and an inventory of the major equipment of each service. This is followed, where applicable, by a description of the deployment of each service. Details of national forces stationed abroad and of foreign forces stationed within the given country are also detailed.

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### ARMS PROCUREMENTS AND DELIVERIES

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Tables at the end of the regional texts show selected arms procurements (contracts and, in selected cases, contracts involved in major development programmes) and deliveries listed by country buyer, together with additional information including, if known, the country supplier, cost, prime contractor and the date on which the first delivery was due to be made. While every effort has

been made to ensure accuracy, some transactions may not be fulfilled or may differ – for instance in quantity – from those reported. The information is arranged in the following order: land; sea and air.

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### GENERAL MILITARY DATA

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#### Manpower

The 'Active' total comprises all servicemen and women on full-time duty (including conscripts and long-term assignments from the Reserves). When a gendarmerie or equivalent is under control of the MoD, they may be included in the active total. Under the heading 'Terms of Service', only the length of conscript service is shown; where service is voluntary there is no entry. 'Reserve' describes formations and units not fully manned or operational in peacetime, but which can be mobilised by recalling reservists in an emergency. Unless otherwise indicated, the 'Reserves' entry includes all reservists committed to rejoining the armed forces in an emergency, except when national reserve service obligations following conscription last almost a lifetime. *The Military Balance* bases its estimates of effective reservist strengths on the numbers available within five years of completing full-time service, unless there is good evidence that obligations are enforced for longer. Some countries have more than one category of 'Reserves', often kept at varying degrees of readiness. Where possible, these differences are denoted using the national descriptive title, but always under the heading of 'Reserves' to distinguish them from full-time active forces.

#### Other forces

Many countries maintain paramilitary forces whose training, organisation, equipment and control suggest they may be used to support or replace regular military forces. These are listed, and their roles described, after the military forces of each country. Their manpower is not normally included in the Armed Forces totals at the start of each entry. Home Guard units are counted as paramilitary. Where paramilitary groups are not on full-time active duty, '(R)' is added after the title to indicate that they have reserve status.

## Units and formation strength

Company	100–200
Battalion	500–800
Brigade (regiment)	3,000–5,000
Division	15,000–20,000
Corps (Army)	60,000–80,000

## Non-state groups

*The Military Balance* continues to list in Part II selected non-state groups which pose a significant challenge to state and international security. The list of non-state groups, drawn from a wider database of such groups that is held within the IISS, is this year ordered according to a defined identifying character of such groups, and then alphabetically. This year the IISS has added to its analysis by producing a brief essay on trends in non-state activity.

## Equipment

Quantities are shown by function and type, and represent what are believed to be total holdings, including active and reserve operational and training units and 'in store'

stocks. Inventory totals for missile systems – such as surface-to-surface missiles (SSM), surface-to-air missiles (SAM) and anti-tank guided weapons (ATGW) – relate to launchers and not to missiles. Stocks of equipment held in reserve and not assigned to either active or reserve units are listed as 'in store'. However, aircraft in excess of unit establishment holdings, held to allow for repair and modification or immediate replacement, are not shown 'in store'. This accounts for apparent disparities between unit strengths and aircraft inventory strengths.

## Deployments

*The Military Balance* mainly lists permanent bases and operational deployments including peacekeeping operations, which are often discussed in the text for each regional section. Information in the country data files detail deployments of troops and military observers and, where available, the role and equipment of deployed units; tables 35 and 36 in the country-comparisons section constitute fuller listings of UN and non-UN deployments, including of police and civilian personnel. In these tables, deployments are detailed by mission, by region, and with the largest troop contributing country at the head of the list.

## Principal Ground Equipment Definitions

*The Military Balance uses the following definitions of equipment:*

**Main Battle Tank (MBT).** An armoured, tracked combat vehicle, weighing at least 16.5 metric tonnes unladen, that may be armed with a turret-mounted gun of at least 75mm calibre. Any new-wheeled combat vehicles that meet the latter two criteria will be considered MBTs.

**Armoured Combat Vehicle (ACV).** A self-propelled vehicle with armoured protection and cross-country capability. ACVs include:

**Armoured Infantry Fighting Vehicle (AIFV).** An armoured combat vehicle designed and equipped to transport an infantry squad, armed with an integral/organic cannon of at least 20mm calibre. Variants of AIFVs are also included and indicated as such.

**Armoured Personnel Carrier (APC).** A lightly armoured combat vehicle, designed and equipped to transport an infantry squad and armed with integral/organic weapons of less than 20mm calibre. Variants of APCs converted for other uses (such as weapons platforms, command posts and communications vehicles) are included and indicated as such.

**(Look-a-like.** The term 'look-a-like' is used to describe a quantity of equipment, the precise role of which is unknown, but which has the basic appearance – and often employing the chassis – of a known equipment type.)

**Artillery.** A weapon with a calibre greater than 100mm for artillery pieces, and 60mm and above for mortars, capable of engaging ground targets by delivering primarily indirect fire. The definition also applies to guns, howitzers, gun/howitzers, multiple-rocket launchers.

## Principal Naval Equipment Definitions

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To aid comparison between fleets, the following definitions, which do not necessarily conform to national definitions, are used:

**Submarines.** All vessels equipped for military operations and designed to operate primarily below the surface. Those vessels with submarine-launched ballistic missiles are also listed separately under 'Strategic Nuclear Forces'.

**Principal Surface Combatant.** This term includes all surface ships with both 1,000 tonnes full-load displacement and a weapons system for purposes other than self-protection. All such ships are assumed to have an anti-surface-ship capability. They comprise aircraft carriers (defined below); cruisers (over 8,000 tonnes) and destroyers (less than 8,000 tonnes), both of which normally have an anti-air role and may also have an anti-submarine capability; and frigates (less than 8,000 tonnes), which normally have an anti-submarine role. Only ships with a flight deck that extends beyond two-thirds of the vessel's length are classified as aircraft carriers. Ships with shorter flight decks are shown as helicopter carriers.

**Patrol and Coastal Combatants.** These are ships and craft whose primary role is protecting a state's sea approaches and coastline. Included are corvettes (500–1,500 tonnes with an attack capability), missile craft (with permanently fitted missile-launcher ramps and control equipment) and torpedo craft (with anti-surface-ship torpedoes). Ships and craft that fall outside these definitions are classified as 'patrol' and divided into 'offshore' (over 500 tonnes), 'coastal' (75–500 tonnes), 'inshore' (less than 75 tonnes) and 'riverine'. The prefix 'fast' indicates that the ship's speed can be greater than 30 knots.

**Mine Warfare.** This term covers surface vessels configured primarily for mine laying or mine counter-measures (such as mine-hunters, minesweepers or dual-capable vessels). They are further classified into 'offshore', 'coastal', 'inshore' and 'riverine' with the same tonnage definitions as for 'patrol' vessels shown above.

**Amphibious.** This term includes ships specifically procured and employed to disembark troops and their equipment onto unprepared beachheads by such means as landing craft, helicopters or hovercraft, or directly supporting amphibious operations. The term 'Landing Ship' (as opposed to 'Landing Craft') refers to vessels capable of an ocean passage that can deliver their troops and equipment in a fit state to fight. Vessels with an amphibious capability but not assigned to amphibious duties are not included. Amphibious craft are listed at the end of each entry.

**Support and Miscellaneous.** This term covers auxiliary military ships. It covers four broad categories: 'underway support' (e.g., tankers and stores ships), 'maintenance and logistic' (e.g., sealift ships), 'special purposes' (e.g., intelligence-collection ships) and 'survey and research' ships.

**Merchant Fleet.** This category is included in a state's inventory when it can make a significant contribution to the state's military sealift capability.

**Weapons Systems.** Weapons are listed in the following order: land-attack missiles, anti-surface-ship missiles, surface-to-air missiles, guns, torpedo tubes, other anti-submarine weapons, and helicopters. Missiles with a range of less than 5km, and guns with a calibre of less than 76mm, are not included. Exceptions may be made in the case of some minor combatants with a primary gun armament of a lesser calibre.

**Aircraft.** All armed aircraft, including anti-submarine warfare and maritime-reconnaissance aircraft, are included as combat aircraft in naval inventories.

**Organisations.** Naval groupings such as fleets and squadrons frequently change and are often temporary; organisations are shown only where it is meaningful.

## Principal Aviation Equipment Definitions

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*Different countries often use the same basic aircraft in different roles; the key to determining these roles lies mainly in aircrew training. In The Military Balance the following definitions are used as a guide:*

### Fixed Wing Aircraft

**Fighter.** This term is used to describe aircraft with the weapons, avionics and performance capacity for aerial combat. Multi-role aircraft are shown as fighter ground attack (FGA), fighter, reconnaissance, and so on, according to the role in which they are deployed.

**Bomber.** These aircraft are categorised according to their designed range and payload as follows:

**Long-range.** Capable of delivering a weapons payload of more than 10,000kg over an unrefuelled radius of action of over 5,000km;

**Medium-range.** Capable of delivering weapons of more than 10,000kg over an unrefuelled radius of action of between 1,000km and 5,000km;

**Short-range.** Capable of delivering a weapons payload of more than 10,000kg over an unrefuelled radius of action of less than 1,000km.

Some bombers with the radius of action described above, but designed to deliver a payload of less than 10,000kg, and which do not fall into the category of FGA, are described as light bombers.

### Helicopters

**Armed Helicopters.** This term is used to cover helicopters equipped to deliver ordnance, including for anti-submarine warfare.

**Attack.** Helicopters with an integrated fire-control and aiming system, designed to deliver anti-armour, air-to-ground or air-to-air weapons.

**Combat Support.** Helicopters equipped with area-suppression or self-defence weapons, but without an integrated fire-control and aiming system.

**Assault.** Armed helicopters designed to deliver troops to the battlefield.

**Transport Helicopters.** The term describes helicopters designed to transport personnel or cargo in support of military operations.

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## GROUND FORCES

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The national designation is normally used for army formations. The term 'regiment' can be misleading. It can mean essentially a brigade of all arms; a grouping of battalions of a single arm; or a battalion group. The sense intended is indicated in each case. Where there is no standard organisation, the intermediate levels of command are shown as headquarters (HQ), followed by the total numbers of units that could be allocated to them. Where a unit's title overstates its real capability, the title is given in inverted commas, with an estimate given in parentheses of the comparable unit size typical of countries with substantial armed forces. For guidelines for unit and formation strengths, see p. 8.

## Military formations

The manpower strength, equipment holdings and organisation of formations such as brigades and divisions differ widely from country to country. Where possible, the normal composition of formations is given in parentheses. It should be noted that where both divisions and brigades are listed, only independent or separate brigades are counted and not those included in divisions.

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## NAVAL FORCES

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Categorisation is based on operational role, weapon fit and displacement. Ship classes are identified by the name of the first ship of that class, except where a class

is recognised by another name (such as *Udaloy*, *Petya*). Where the class is based on a foreign design or has been acquired from another country, the original class name is added in parentheses. Each class is given an acronym. All such designators are included in the list of abbreviations. The term 'ship' refers to vessels with over 1,000 tonnes full-load displacement that are more than 60m in overall length; vessels of lesser displacement, but of 16m or more overall length, are termed 'craft'. Vessels of less than 16m overall length are not included. The term 'commissioning' of a ship is used to mean the ship has completed fitting out and initial sea trials, and has a naval crew; operational training may not have been completed, but otherwise the ship is available for service. 'Decommissioning' means that a ship has been removed from operational duty and the bulk of its naval crew transferred. Removing equipment and stores and dismantling weapons, however, may not have started. Where known, ships in long-term refit are shown as such.

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## AIR FORCES

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The term 'combat aircraft' refers to aircraft normally equipped to deliver air-to-air or air-to-surface ordnance. The 'combat' totals include aircraft in operational conversion units whose main role is weapons training, and training aircraft of the same type as those in front-line squadrons that are assumed to be available for operations at short notice. Training aircraft considered to be combat capable are marked with an asterisk (\*). Armed maritime aircraft are included in combat-aircraft totals. Operational groupings of air forces are shown where known. Squadron aircraft strengths vary with aircraft types and from country to country.

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## DEFENCE ECONOMICS

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Country entries in Part I include defence expenditures, selected economic performance indicators and demographic aggregates. There are also international comparisons of defence expenditure and military manpower, giving expenditure figures for the past three years in per capita terms and as a % of GDP. The aim is to provide an accurate measure of military expenditure and the allocation of economic resources to defence. All country entries are subject to revision each year, as new information, particularly regarding defence expenditure, becomes available. The information is necessarily selective.

Individual country entries show economic performance over the past two years, and current demographic data. Where these data are unavailable, information from the last available year is provided. Where possible, offi-

cial defence budgets for the current year and previous two years are shown, as well as an estimate of actual defence expenditures for those countries where true defence expenditure is thought to be considerably higher than official budget figures suggest. Estimates of actual defence expenditure, however, are only made for those countries where there are sufficient data to justify such a measurement. Therefore, there will be several countries listed in *The Military Balance* for which only an official budget figure is provided but where, in reality, true defence-related expenditure is almost certainly higher.

All financial data in the country entries are shown both in national currency and US dollars at current year, not constant, prices. US-dollar conversions are generally, but not invariably, calculated from the exchange rates listed in the entry. In a few cases, notably Russia and China, a US-dollar purchasing power parity (PPP) rate is used in preference to official or market exchange rates.

## Definitions of terms

Despite efforts by NATO and the UN to develop a standardised definition of military expenditure, many countries prefer to use their own definitions (which are often not made public). In order to present a comprehensive picture, *The Military Balance* lists three different measures of military-related spending data.

- For most countries, an official defence budget figure is provided.
- For those countries where other military-related outlays, over and above the defence budget, are known, or can be reasonably estimated, an additional measurement referred to as defence expenditure is also provided. Defence expenditure figures will naturally be higher than official budget figures, depending on the range of additional factors included.
- For NATO countries, an official defence budget figure as well as a measure of defence expenditure (calculated using NATO's definition) is quoted.

NATO's definition of military expenditure, the most comprehensive, is defined as the cash outlays of central or federal governments to meet the costs of national armed forces. The term 'armed forces' includes strategic, land, naval, air, command, administration and support forces. It also includes paramilitary forces such as *gendarmerie*, the customs service and the border guard if these forces are trained in military tactics, equipped as a military force and operate under military authority in the event of war. Defence expenditures are reported

in four categories: Operating Costs, Procurement and Construction, Research and Development (R&D) and Other Expenditure. Operating Costs include salaries and pensions for military and civilian personnel; the cost of maintaining and training units, service organisations, headquarters and support elements; and the cost of servicing and repairing military equipment and infrastructure. Procurement and Construction expenditure covers national equipment and infrastructure spending, as well as common infrastructure programmes. It also includes financial contributions to multinational military organisations, host-nation support in cash and in kind, and payments made to other countries under bilateral agreements. R&D is defence expenditure up to the point at which new equipment can be put in service, regardless of whether new equipment is actually procured. Foreign Military Aid (FMA) contributions of more than US\$1 million are also noted.

For many non-NATO countries the issue of transparency in reporting military budgets is fundamental. Not every UN member state reports defence budget data (even fewer real defence expenditures) to their electorates, the UN, the IMF or other multinational organisations. In the case of governments with a proven record of transparency, official figures generally conform to the standardised definition of defence budgeting, as adopted by the UN, and consistency problems are not usually a major issue. The IISS cites official defence budgets as reported by either national governments, the UN, the OSCE or the IMF.

For those countries where the official defence budget figure is considered to be an incomplete measure of total military-related spending, and appropriate additional data are available, the IISS will use data from a variety of sources to arrive at a more accurate estimate of true defence expenditure. The most frequent instances of budgetary manipulation or falsification typically involve equipment procurement, R&D, defence industrial investment, covert weapons programmes, pensions for retired military and civilian personnel, paramilitary forces and non-budgetary sources of revenue for the military arising from ownership of industrial, property and land assets.

The principal sources for national economic statistics cited in the country entries are the IMF, the Organisation for Economic Cooperation and Development (OECD), the World Bank and three regional banks (the Inter-American, Asian and African Development Banks). For some countries basic economic data are difficult to

obtain. This is the case in a few former command economies in transition and countries currently or recently involved in armed conflict. The Gross Domestic Product (GDP) figures are nominal (current) values at market prices. GDP growth is real, not nominal, growth, and inflation is the year-on-year change in consumer prices. Dollar exchange rates relate to the last two years plus the current year. Values for the past two years are annual averages, while current values are the latest monthly value.

### Calculating exchange rates

Typically, but not invariably, the exchange rates shown in the country entries are also used to calculate GDP and defence budget and expenditure dollar conversions. Where they are not used, it is because the use of exchange rate dollar conversions can misrepresent both GDP and defence expenditure. For some countries, PPP rather than market exchange rates are sometimes used for dollar conversions of both GDP and defence expenditures. Where PPP is used, it is annotated accordingly.

The arguments for using PPP are strongest for Russia and China. Both the UN and IMF have issued caveats concerning the reliability of official economic statistics on transitional economies, particularly those of Russia, some Eastern European and Central Asian countries. Non-reporting, lags in the publication of current statistics and frequent revisions of recent data (not always accompanied by timely revision of previously published figures in the same series) pose transparency and consistency problems. Another problem arises with certain transitional economies whose productive capabilities are similar to those of developed economies, but where cost and price structures are often much lower than world levels.

PPP dollar values are used in preference to market exchange rates in cases where using such exchange rates may result in excessively low dollar-conversion values for GDP and defence expenditure data.

### Arms trade

The source for the data for the global and regional arms trade is the US Congressional Research Service (CRS). It is accepted that these data may vary in some cases from national declarations of defence exports which is due in part to differences in the publication times of the various sets of data and national definitions of military-related equipment.