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Japan Geopolitics

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Donald Skinner

MD, Japanese Equities
donald.skinner@clsau.com
(813) 45805538

Guest author

Richard Tanter

Senior Research Associate,
Nautilus Institute for
Security and Sustainability



About face

Japan's remilitarisation

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Richard Tanter

Richard Tanter is Senior Research Associate at Nautilus Institute for Security and Sustainability, and Director of its Australian node, Nautilus Institute at RMIT University. He coordinates the Austral Peace and Security Net project, as well as the Nautilus Global Collaborative and Global Problem-Solving projects.

From 1989-2003, he was Professor of International Relations at Kyoto Seika University and, from 2003-05, Senior Curriculum Advisor to the security studies programme at the Centre for Strategic and Defence Studies, Australian Defence College, where he lectures regularly.

He is a specialist on Japanese and Indonesian security issues, and has published widely on Japanese security issues. Richard is currently working on Japanese nuclear and intelligence concerns. His most recent book is *Masters of Terror: Indonesia's Military in East Timor in 1999* (second edition, 2006).

Foreword

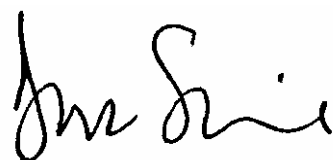
In March 2005, our Global Strategist, Christopher Wood, authored a report on Asian security named *The Earth Moves: China flexes its military muscle*. This document discussed the rise of China militarily and the growing tensions with Japan. In the opening paragraph, Chris wrote:

East Asia is now the scene of an escalating build-up in arms spending as China flexes its muscles, and as Japan responds to this reality by groping its way to becoming a normal country again - in the sense of a country that provides for its own security. Add to this the potential flash points of Taiwan and a divided Korean peninsula and it is no wonder Asia is likely to be the growth market for the world's arms sellers for the next 10, and probably 20, years.

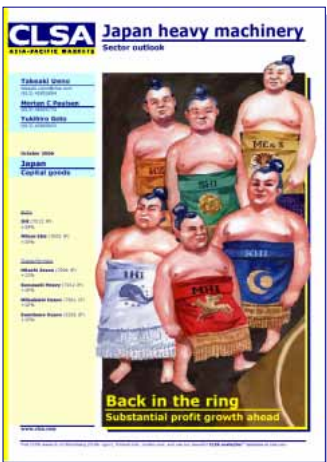
Since then, we have been looking for a suitably well informed and competent writer to enlarge on this topic with specific reference to Japan. To this end, Richard Tanter has exceeded our expectations. In *About face: Japan's remilitarisation*, Richard touches on all the issues surrounding Japan becoming a "normal country" with intelligence, insight and added value. All too often one is faced with reading articles from brokers and research houses that are a chore to get through. I defy you to have that feeling when you complete this report.

This presupposes that this topic is worth your time in the first instance. In that, I have no doubt that it is. Since Chris wrote *The Earth Moves*, there has been little apparent increase in arms spending in the region. But the fundamental problems are not going away: North Korean claims that it is a nuclear-weapons state, Taiwan's continued source of tension, energy security, China's drilling in the East China Sea and its burgeoning blue-water aspirations - nothing much has changed. In this document, Richard explores the capability of Japan's military forces - their structure, budget and weaponry, the American bases, special forces and more. All of this, he sets well within both the historical and current political context. A compelling read.

As portfolio managers, the theme of remilitarisation immediately causes one to consider the market impact to the heavy-machinery companies: Mitsubishi Heavy Industries, Ishikawajima-Harima Heavy Industries, Kawasaki Heavy Industries and so on. This report will help you understand the impact of increased military spending on these and other firms. But for more depth here, I would point you towards our recently released research report on the Japanese heavy-machinery sector, *Back in the ring: Substantial profit growth ahead*, released in October 2006.



Donald Skinner
 Managing Director
 Japanese Equities



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More on Japan and East Asian geopolitics

Global Geopolitics
Japan, pacifism and al Qaeda
 Asia-Pacific and the 'War On Terror' in 2006
 Since a 'pacifist constitution' was imposed upon Japan by the US occupation authorities in 1947 following its defeat in the Second World War, Japan has operated as a state that has retained (although limited) its international capacity as a nation. It has habitually adhered to the principle of abstinence of all form of self-defence, which prevented war and made the threat or use of force by nations international illegitimate. But they may be set for change...

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About face: Japan's remilitarisation

Japan attracts more than its share of misconceptions

Compared to other countries, Japan seems to attract more than its share of misconceptions - especially about security. Many people are all too willing to think the worst about Japan, seeing it as always potentially backsliding into militarism. Others see it as a victim of an overbearing ally, with no say in its future, whatever the evidence. Both views distort the reality.

'With its pacifist constitution, it has no armed forces worth the name'

Article 9 of the Japanese Constitution has not prevented the country's Self Defence Forces (SDF), with a quarter of a million men and women under arms, from becoming East Asia's most advanced military force, second only to its American ally's presence in the region.

'The Japanese are coming - again'

Japan's security capacity is indeed expanding, and its security policy makers are now willing to use military force in defence of national interests more than at any time since 1945. But in this it resembles countries such as France, Britain and Germany, and bears no resemblance to pre-war militarist Japan.

'You don't give a reformed alcoholic a box of candy liqueurs'

Singapore's former leader Lee Kwan Yew has expressed his abiding mistrust of Japan's ability to remilitarise in even a limited way without reverting to pre-1945 type. In fact, the culture of SDF is more "peace-oriented" than the armed forces of any other OECD country. A decade and a half of post-Cold War overseas operations have shown no hint of militarism in Japan's forces.

'Japan - the free rider on American grunt'

Until the end of the Cold War, Japanese conservative governments strenuously avoided any foreign military entanglements. Since then, Japan has committed forces to a number of UN-led peacekeeping operations, and to US-led coalitions in the Afghanistan and Iraq theatres. Japan pays for most of the upkeep costs of US bases in Japan, at a rate far higher than Germany.

'Article 9 of the constitution is an American imposed nonsense'

Article 9 was indeed an American creation, which the United States rapidly came to regret. Yet, for at least four decades, the great majority of the population, which had suffered through decades of militarism and war, deeply embraced the Constitution and Article 9. As those generations pass, and as Japan and world politics have changed, nationalist and realist voices against Article 9 have grown stronger and more influential.

'Missile defence will protect Japan from North Korean and Chinese missiles'

To be politically useful, missile defence must be close to 100% reliable. Theatre missile defence remains an unproven technology for both Japan and the United States. Moreover, the expected cost of Japan's missile defence tripled in its first year, with no limits yet in sight. Looked at from the outside, the necessarily integrated character of the Japanese and US missile-defence systems undermines China's nuclear deterrent, and will provoke a long-term arms race in the region.

'Neither Japanese public opinion nor the US will ever allow Japanese nuclear weapons'

The generations profoundly marked by the experience of nuclear attack are passing from the political scene. Nuclear threat from North Korea and China is a central political issue. The once inviolable nuclear taboo is fading, and the topic of nuclear armament is firmly on the policy agenda. Public opinion may still be opposed, but its depth and effectiveness is now uncertain. An internal debate has begun in US strategic circles: should the US allow or even encourage Japanese nuclear armament? A nuclear Japan inside the American alliance would then be able to take the role of Great Britain in Asia.

The culture of Article 9

The inescapable background of any discussion of security policy in Japan is Article 9 of the 1946 Constitution:

Aspiring sincerely to an international peace based on justice and order, the Japanese people forever renounce war as a sovereign right of the nation and the threat or use of force as means of settling international disputes.

In order to accomplish the aim of the preceding paragraph, land, sea, and air forces, as well as other war potential, will never be maintained. The right of belligerency of the state will not be recognized.

The background to any discussion on Japanese security policy

The importance of Article 9 is not legal

Even though it was drafted by the American occupation authorities, for more than 60 years the great majority of the Japanese public have accepted - and indeed embraced - Article 9. On the other hand, virtually all Japanese and US governments opposed it with varying degrees of candour. While moves to revise the Constitution, including Article 9, have gathered serious political momentum, the importance of Article 9 is finally not legal. Despite the clear intent, Japan has a large and powerful armed force. The highest court in the country has managed to never finally rule on the question of the constitutionality of the SDF, and successive Japanese governments have found themselves able to live with these difficulties.

The power of Article 9 is symbolic and cultural, but quite real too

The power of Article 9 is rather symbolic and cultural: it stands for and invokes a deep and widely-held belief that the militarism of the 1930s and 1940s must be repudiated and never allowed to return. Much of what would be normal levels of defence preparation and activity in other advanced industrial democracies are considered to be unacceptable and potentially dangerous levels of militarisation by large parts of the Japanese population - including many supporters of the conservative Liberal Democratic Party.

"Pacifist" is not the right label

There is a culture of Article 9 that has dominated Japanese public discussion of security until recently. Often this culture is labelled "pacifist" from outside Japan, though this is a misnomer. It is not so much a matter of deeply-held principles of rejecting state violence in any form, so much as a deep and abiding scepticism about the final utility of military force and about the ability of governments and publics to control the tendency to excessive use of force inherent in "normal militarisation".

The culture of Article 9 is visible

The culture of Article 9 is visible in almost every aspect of security policy in Japan. It has resulted in many of the restrictions on the activities and powers of the SDF that so clearly differentiated it from its counterparts in Europe and North America - not least in its name. There are dysfunctional aspects of Japanese politics that can be traced to Article 9 culture, as well as many that are admirable and not to be lightly discarded.

Impact on mass culture

The culture of Article 9 is equally evident in Japanese mass culture. For more than half a century, manga, anime and movies have explored the legacy of the nuclear attacks of the summer of 1945, the Bikini atoll thermonuclear tests, and the reaction against militarism. Osamu Tezuka's *Atom Boy* (or *Astro Boy*), the movie *Godzilla* and Hayao Miyazaki's early movie *Nausicaa: Valley of the Winds* all worked from what was then recent apocalyptic history to create national icons. Godzilla, the prehistoric creature awakened by the atomic blasts, in particular, became a kind of anti-hero symbolising Japan's

particular historical predicament. These very popular non-realist, anti-hero treatments sat beside equally popular powerful realist treatments such as Isao Takahata's *Grave of the Fireflies*.

Figure 1

Astro Boy, robot child of the Atomic Age



Source: Tezuka Productions

Article 9 culture has both admirable and limiting aspects

There are many standard western-style popular novels and manga and movies on the theme of the Pacific War – and many explore alternative endings or reruns with results more favourable for Japan. But one of the most distinctive and popular writers on this theme is the manga artist Kanji Kawaguchi in his *Silent Service and Zipang* series. In *Silent Service*, the Maritime Self Defence Force (MSDF) crew of an advanced nuclear submarine declared themselves an independent state that then sought to press the nations of the world to end nuclear conflict. In *Zipang*, Kawaguchi used the timewarp genre to throw a contemporary MSDF destroyer and its crew into the World War Two Battle of Midway, resulting in a complex but realistic series of moral dilemmas. No radical, Kawaguchi's characters on both sides of the time divide face continual moral dilemmas that make clear that Article 9 culture has both admirable and limiting aspects.

Figure 2

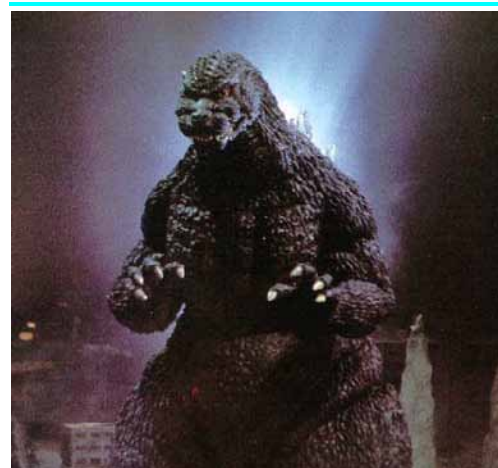
The moral dilemmas of Zipang



Source: Tokyo Broadcasting System

Figure 3

Godzilla and the atomic disaster



Source: Wikipedia

**The invisibility of
the military in Japan**

For those coming from outside Japan, one of the most striking characteristics of the country is the invisibility of the military. Many Japanese people are unaware of the fact that their country has an army under another name. Uniforms are rarely seen in Tokyo away from the Ichigaya Defence Agency headquarters. The special case of Okinawa apart, in most parts of the country uniformed SDF personnel are rarely seen away from bases. Even though there are about a quarter of a million Japanese in the military, SDF personnel report experiencing a strong sense of an "SDF allergy". For substantial parts of the population, the armed forces of the country are not just unconstitutional, but deeply illegitimate.

Over half a century, successive Japanese governments have both expressed this culture as a framework for policy, and at the same time opposed and sought to transform it. Heisei militarisation is the story of Japanese political elites finding the political space - especially after the end of the Cold War and the 9/11 attacks - to roll back and transform the culture of Article 9.

Heisei militarisation

Security policy transformation

Japanese governments over the past decade and a half have transformed the country's security policy along almost every dimension. This transformation is properly speaking a process of militarisation - an ever-increasing stress on military conceptions of security at the expense of previously well-developed comprehensive conceptions of security.

A process of militarisation

This process of militarisation includes: a continual and growing government-sponsored hollowing-out of the meaning of Article 9 of the Constitution and of the concept of "defensive defence"; military budgets that put Japan in the top four world military spenders; comprehensive upgrading and expansion of military forces' structural capacities; legitimisation and legalisation of use of military force abroad; a willingness to rely on military solutions to address international problems; and expansion of the domestic coercive powers of the government. There is also a growing promotion of the possibility of the Japanese military acquiring and using strategic offensive weapons and weapons of mass destruction.

End of the Showa era

For at least four decades after the end of World War II in 1945, Japanese conservative governments largely declined to bow to consistent American pressure to remilitarise. From about the end of the Cold War period, this began to change. In 1989, Japan marked the end of the reign of the Showa emperor (1925-89), usually referred to in the West as Hirohito, and the accession of his son Akihito, with the reign name of Heisei.

Far-reaching shift in the 1990s and 2000s

If the second half of the Showa emperor's reign was a period of peace and relative foreign policy minimalism, the first part of his reign remains known in Japan as the period of Showa militarism, sometimes called the Dark Valley. The new policy of militarisation can be called Heisei militarisation, to distinguish it both from the militarism of the first half of Showa, and from the militarily quiescent policies of the second half of Showa. Heisei militarisation in democratic Japan is very different from the military dictatorships and expansionism of the 1930s. But it also marks an important and far-reaching shift in the 1990s and 2000s.

Becoming 'a normal state'

For many years, rightist and nationalist politicians and activists promoted the goal of Japan becoming, in the words of the politician Ichiro Ozawa, 'a normal state'. By this, they mostly meant throwing off what they saw as the constraints on the Japanese polity imposed by the American occupation. In external relations, they campaigned for Japan to free itself of legal, political and cultural restrictions on the use of force in international society. The most important symbols of that lack of "normality" were Article 9 of the 1946 Constitution, the name and cultural standing of the "Self Defence Forces", and legal and political limitations on the operations of the SDF abroad.

Not a return to militarist fascism

These goals have now either been achieved or are within reach: "Japan as a normal country" is a phrase that has entered the mainstream of Japanese politics. The goals make it clear that whatever else Heisei militarisation is, it does not in itself add up to the return to militarist fascism so often predicted by some foreign governments unwilling to let the memory of World War Two die. But equally, this kind of "normality" brings its own problems.

Militarisation and muscle is normal in this region

By definition that status of "normal," for an economic giant in the most militarised region of a highly militarised world, is a militarised state with the capacity and willingness to consider the use of force to settle its international

disputes. Japan is moving to that kind of normality, which under such conditions carries high risks, risks that the Japanese polity may not be well-equipped to deal with. More importantly, it may be proceeding with confidence into a future role rather different from the one it foresees.

A wave of new legislation with Heisei militarisation

Figure 4

Japanese security-related legislation, 1992-2004¹

1992	International Peace Cooperation Law (Peace Keeping Operations Law)
	Law to Amend Part of the Law Concerning the Dispatch of Japan Disaster Relief Teams
1999	Rear-Area Support Act
	Agreement to Amend the Acquisition and Cross-Servicing (ACSA) Agreement Between Japan and the United States
	Law to Amend the Self-Defence Law
	Law Concerning Measures to Ensure the Peace and Security of Japan in Situations in Areas Surrounding Japan
	Communications Interception Law
2000	Ship Inspection Operations Law
2001	Anti-Terrorism Special Measures Law
	Law to Amend the Maritime Safety Agency Act
2003	Law Concerning Measures to Ensure National Independence and Security in as Situation of Armed Attack (Armed Attack Response Law)
	Law to Amend the Self-Defence Forces Law
	Law to Amend the Security Council Establishment Law
	Iraq Reconstruction Special Measures Law
2004	Revision to the Foreign Exchange and Foreign Trade Law
	Bill to refuse port calls by North Korean ships
	Bill to protect citizens
	Bill on the use of designated public transport and communications facilities
	Bill to facilitate smoother operations of US military forces
	Bill for revision of the Self-Defence Force Law (revision of ACSA)
	Bill to permit the interdiction of military equipment on foreign ships on the high seas
	Bill to penalise violations of international humanitarian law
	Bill on the treatment of prisoners of war

¹ As of April 2004. Source: Richard Tanter, "With Eyes Wide Shut: Japan, Heisei Militarization" in Melvin Gurtov and Peter Van Ness (eds.), *Confronting the Bush Doctrine: Critical Views from the Asia-Pacific* (New York: RoutledgeCurzon, 2005), pp. 153-180

The Japanese security system

Two cores of defence: the SDF and US forces

The two cores of the Japanese security system are the Japan Self Defence Forces (SDF) and Japan Defence Agency (JDA), along with the substantial American military forces based in the country.

A high-technology army, navy and air forces to all intents and purposes

The SDF, composed of the Ground, Maritime and Air Self Defence Forces, is to all intents and purposes a high-technology army, navy and air force under another name. Until recently, legislation, political preference and strong cultural resistance from the Japanese public limited its role. As a result, while large and well-equipped, the SDF was limited in real-world military capacity, and in fact was even limited in the assistance it could give civilian authorities at times of natural disaster at home. Since the end of the Cold War, however, all three branches of the SDF have been reshaped to closely resemble their counterparts in Britain and France and other advanced industrial countries.

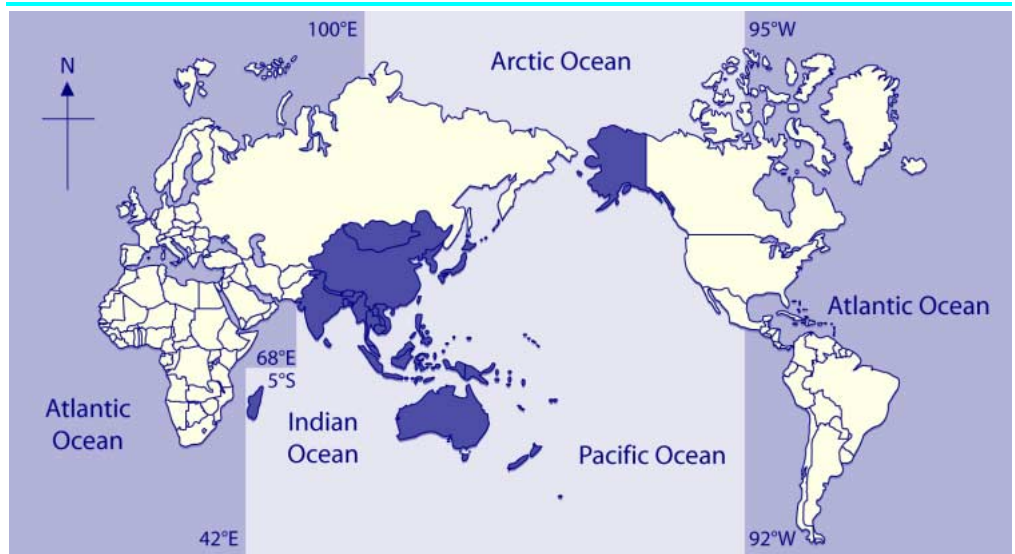
More than 50,000 US personnel across Japan

Complementing the Japanese domestic forces are more than 37,000 US military personnel stationed throughout Japan across more than 89 US bases, plus 14,000 afloat nearby. US Forces Japan, headquartered at Yokota Air Base in Tokyo, are part of the wider network of US air, land and sea forces under the Hawaii-based Pacific Command, whose area of responsibility ranges from the west coast of the continental United States all the way to the Indian Ocean.

Part of the US Pacific Command, which covers half the world

Figure 5

United States Pacific Command



Source: United States Pacific Command, CLSA Asia-Pacific Markets

Bound together through the Japan-US Mutual Security Treaty

The Japan-US Mutual Security Treaty provides the legal and political framework that binds the two forces together through a complex institutional and operational set of arrangements. Signed in 1960 as the successor to a 1951 treaty that opened the way to the post-war return of Japanese sovereignty, the treaty is the legal heart of an bilateral institutional system that has evolved over half a century. In fact, it is becoming more tightly integrated than ever at the same time as the SDF develops into more potent and effective military force capable of advancing Japan's national interests abroad.

US alliance and a semi-sovereign country

The US-Japan alliance

If one key factor determining the makeup of half a century of Japanese security policy has been the culture of Article 9, the second has undoubtedly been the US-Japan alliance. The two determining forces are in fact strongly connected through the ambivalence many Japanese policy makers feel towards the United States, including many who are undoubtedly firmly conservative and basically pro-American.

The central concern of security policy makers

Japan's relationship to the United States has been the central concern in the minds of security policy makers in Japan, both in terms of direct relations with the US, but also in terms of the consequences for Japan's relations with other countries, especially in East Asia. Like their counterparts in other Asia-Pacific countries with military alliances with the United States, such as South Korea and Australia, Japanese policy makers have been preoccupied with both the risk of desertion by the US and the consequent need for reassurance, and with the costs of imperial embrace, with a consequent need for distance.

Another "unequal treaty"

The present US-Japan Mutual Security Treaty was signed in 1960, following deep political turmoil about its predecessor treaty, and about the signing of the 1960 treaty. The 1951 Security Treaty was essentially the price of the return to sovereignty. It amounted to the Japanese government accepting a US right to retain bases wherever it wished, and for Okinawa and the rest of the Ryukyu archipelago to be abandoned as an effective US military colony. It was often regarded as a humiliating restriction on Japanese sovereignty, not without reason, and was described often as another "unequal treaty", invoking the painful memory of European and American colonialism in Asia.

The long road to throwing off semi-sovereign status

The Peace Treaty and the 1951 Security Treaty brought de jure national sovereignty that was coupled with imposed conditions that contained severe limits on actual independence. The country had no external military capacity, and no means to protect access to external sources of energy on which it was almost wholly dependent. The country was physically divided - Okinawa did not revert to Japanese control until 1972. The Japanese government accepted a large number of permanent foreign bases, together with the deployment of nuclear weapons, and severe constraints on its foreign policy, such as prohibition on diplomatic relations with China. The result was a semi-sovereign status for Japan that despite all its progress in the subsequent half century it has not completely been able to throw off.

Treaty promises and obligations

Figure 6

Japan-US Mutual Security Treaty: Key clauses

Article III: The Parties, individually and in cooperation with each other, by means of continuous and effective self-help and mutual aid will maintain and develop, subject to their constitutional provisions, their capacities to resist armed attack.

Article V: Each Party recognizes that an armed attack against either Party in the territories under the administration of Japan would be dangerous to its own peace and safety and declares that it would act to meet the common danger in accordance with its constitutional provisions and processes...

Article VI: For the purpose of contributing to the security of Japan and the maintenance of international peace and security in the Far East, the United States of America is granted the use by its land, air and naval forces of facilities and areas in Japan...

Source: Treaty Of Mutual Cooperation And Security Between Japan And The USA (1960)

What the treaty requires

The revised 1960 treaty is similar in phrasing to agreements with other alliance partners such as Australia. Both parties undertake to develop capacities to resist attack. The parties also promised to consult 'whenever the security of Japan or international peace and security in the Far East is threatened' – but the legal promise did not go beyond consultation, other than the promise to meet 'to meet the common danger'. The reference to 'constitutional processes' was a fig leaf offered to both Article 9 and to US constitutional concerns.

What the treaty system provides

For the United States, the key result of the treaty has always been access to bases throughout the archipelago and, as time has gone by, increasing potential to build an effective partnership with Japan in regional strategic concerns - first as bulwark against the Soviet Union, and more recently in its global post 9/11 planning. From the Japanese side, the benefits have varied, but there have been the promise of involvement in regional security - a promise that Japanese politicians and officials always seek to have reiterated and confirmed – and the promise of extended nuclear deterrence by the United States.

The renewed promise of extended nuclear deterrence

For Japan, nothing epitomises the ambiguity of the alliance so much as the American promise of nuclear deterrence. Originally formulated in the Cold War against the Soviet threat, in particular, successive American administrations have made clear – to both Japan's potential antagonists and to the Japanese public - that they would mount a nuclear retaliation to a nuclear attack on Japan. In the aftermath of the October 2006 North Korean nuclear test, American Secretary of State Condoleezza Rice assured the governments of Japan and Korea that the United States had 'the will and capability to meet the full range of its deterrent and security commitments' – diplomatic code for the promise to meet nuclear threat with nuclear threat.

The strategic logic of extended deterrence is difficult and complex

Extended deterrence is a difficult strategic act, dependent on the side making the promise of deterrence convincing the would-be aggressor about its willingness and ability to act. But there is a second question of whether or not the country that is sheltering under the nuclear umbrella is itself convinced of the strength of resolve of the umbrella holder. Perceptions, as well as actions, are critical. The strategic logic of extended deterrence has been the subject of much debate, and is a genuinely complex matter, depending on the forces on each side, the political attitudes, and the effectiveness of communication in particular circumstances.

'Would the US sacrifice Los Angeles to avenge an attack on Tokyo?'

It is not surprising that there has always been fundamental doubt about the issue, especially as the logic of the three-part scenario of attack on Japan, retaliation on the enemy, and the enemy's second strike on a US target is played out. This is best summed up in the often-asked question: 'Would the United States really be willing to accept the sacrifice of Los Angeles as the result of its willingness to avenge a nuclear attack on Tokyo?'

Tensions over the alliance's hierarchy

Yet despite the continuous balance of government opinion in favour of close ties with the United States through the treaty system, the tensions inherent in that system persisted, as they do today. A core problem is its bilateral and, more importantly, hierarchical character. A comparison with the relationship with Germany makes this clear: the US has had to deal with Germany as an equal and crucial member of the most important multilateral alliance in the world, the North Atlantic Treaty Organisation (Nato). While there is a clear inequality of power in both cases, the hierarchical character of the US-Japan

bilateral relationship is evident in institutional arrangements, the economics of the alliance, and even the tone of language used by US officials. This is much resented by ruling party nationalists in Japan.

Wide bilateral institutional system

The treaty itself provides the legal foundation for a much wider bilateral institutional system that has evolved and dug deep into the fabric of Japanese political and social life over five decades. Policy is managed and developed through a tiered system of consultative committees, both civilian and military. These in turn have been avenues for the articulation of American policy pressure. At a military level, this has led to co-location of bases, joint training, joint military research and development, and favoured status for military exports and imports to and from the US.

New operational guidelines and a new level of cooperation

In the mid-1990s, this system was enhanced through the development of new operational guidelines for the integration of US and Japanese defence forces. The new guidelines, replacing a much narrower 1978 set, effectively redefined the alliance in a post-Cold War setting, and required the Japanese side of the partnership to move to a much more active level of support for United States forces in the region, not only for the immediate defence of Japan, but also in support of US forces' global role.

Intentionally vague about Taiwan Straits

Japanese forces were committed to assist the US in a number of new ways, including support of economic sanctions and, most importantly but ambiguously, Rear Area Support 'primarily in Japanese territory or on the high seas and international airspace around Japan'. This was more specific than the language of the treaty itself ('peace and security in the Far East'). But government interpretations were vague on one crucial question about the application of the guidelines: did they require SDF support of US forces in the Taiwan Straits? The vagueness of the government's public response was likely intentional.

Civilian infrastructure brought into the alliance framework

Under legislation subsequently introduced by the Hashimoto cabinet to implement the guidelines, not only was the role of the SDF transformed, but for the first time civilian national and prefectural infrastructure such as ports and airports were brought under bilateral military planning arrangements.

New guidelines redefining practicalities of alliance

Figure 7

Japanese defence guidelines	
Normal circumstances	
Maintain cooperation in international peacekeeping operations	
Establish bilateral coordinating bodies	
Contingency in Japan	
Establish joint operation plans	
Japan launches counterattacks, the US cooperates	
Contingency in surrounding areas	
Inspection of ships for economic sanctions	
Use of private port and airport facilities by the US Forces	
Supply of materials, except weapons and ammunition	
Transport of materials to US naval ships and aircraft	
Supply of fuels and medical treatment to the wounded	
Removal of mines in Japanese territorial land and sea	
Evacuation of Japanese nationals abroad by the Self Defence Forces	

Source: Japan, Ministry of Foreign Affairs

An extensive US military presence in Japan

Following the Korean War, US forces in Japan reached their high-water mark at 247,000. In 2005, US Forces Japan numbered 51,655, including about 14,000 afloat, with by far the largest portion of those on land being Marines and Air Force personnel. US Navy personnel are located all over the country, but especially at Yokosuka south of Yokohama, Sasebo near Nagasaki and White Beach in Okinawa, as well as at naval air facilities in Okinawa and Honshu. Air Force personnel are similarly scattered from Kadena Air Base in Okinawa to Yokota up to Misawa in the north of Honshu. While the Marines are numerically important (and proportionally more disturbing), in the long run they are less important than Navy, Air Force and intelligence deployments, and are starting to be moved offshore to the US territory of Guam.

Figure 8

US Department of Defence personnel in Japan, 2005	
US Army	1,793
US Navy	6,738
US Air Force	13,092
US Marine Corps	16,013
Total US forces ashore	37,636
7th Fleet (at sea)	14,019
Total US forces	51,655
Japanese employees	25,047
DoD employees	5,532
Military family members	48,376
Total US DoD personnel	105,563

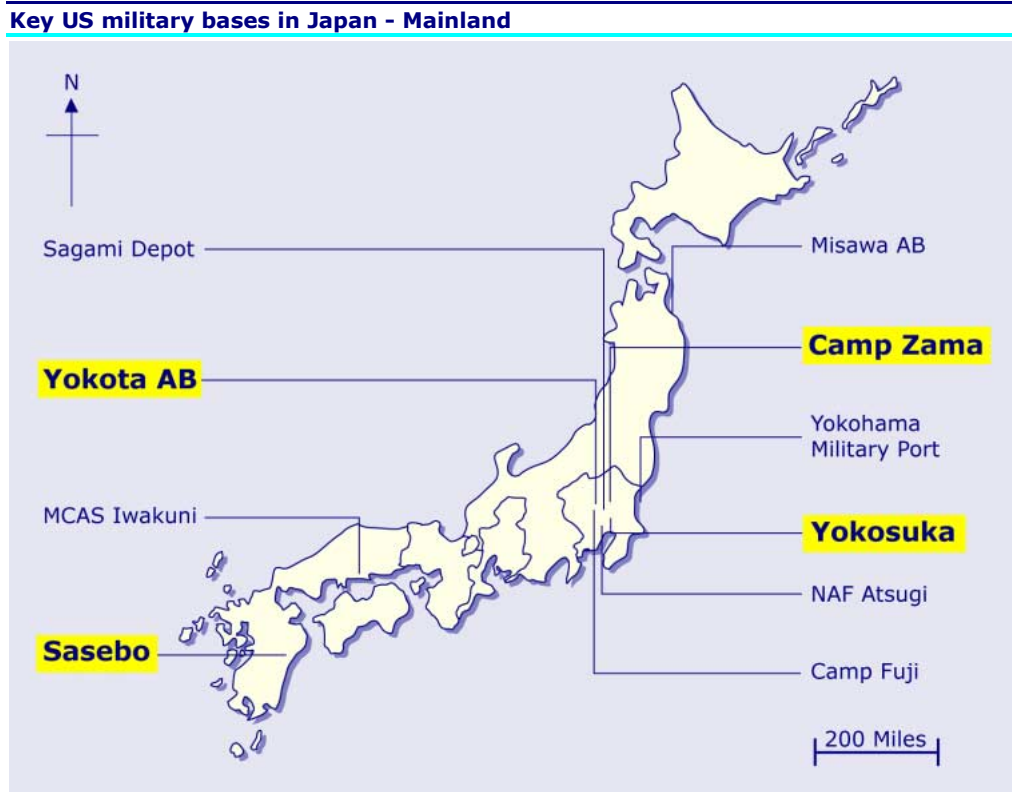
Source: US Forces Japan

US operates 89 military bases across Japan

At present, the United States operates 89 military bases in Japan, ranging from north to south, small to large, inescapably prominent and intrusive to small and almost unnoticed.

Figure 9

Key US bases in Japan from Hokkaido to Okinawa

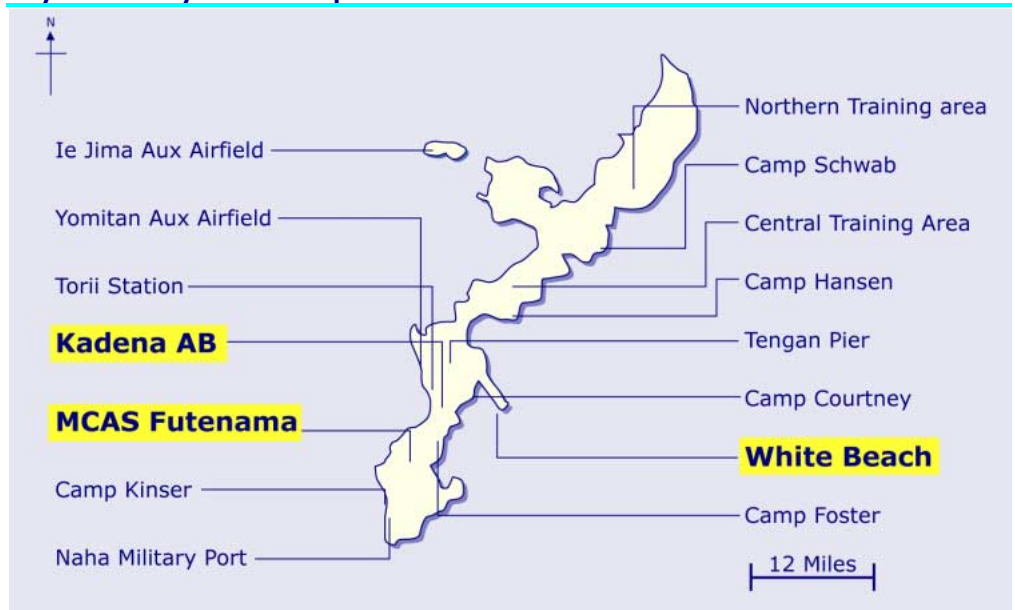


Source: US Forces Japan, CLSA Asia-Pacific Markets

US bases occupy one-quarter of the land area of Okinawa

Figure 10

Key US military bases in Japan - Okinawa



Source: US Forces Japan, CLSA Asia-Pacific Markets

US intelligence presence in Okinawa

Figure 11

US intelligence presence in Okinawa



Source: Richard Tanter

US Forces Korea and US Forces Japan

The picture in the United States' other East Asian alliance partner, South Korea, is very different. While it retains its 85 bases there, the US is reducing its forces in South Korea from 37,000 in 2004 to about 25,000 by 2007. In part, this reflects a realistic direct military assessment: the combination of the highly competent and well-equipped South Korean military together with remaining US troops is judged to be more than enough to deal with the once vaunted one-million-plus North Korean force, now much degraded. Those US troops are needed elsewhere in the world.

Japan-US command coming together versus South Korea-US moves for separation

But the differences between the situations of the US in Japan and Korea are much more than a matter of numbers. Whereas the nationalist and realist wave in Japanese politics has led to a tightening of the alliance and closer operational integration with the US, South Korean nationalism of a more leftist variety is leading the to a separation of the once even more closely integrated joint US-Republic of Korea command structure.

Three other particular burdens have strained the US-Japan alliance

Yet in Japan, three other particular burdens have strained the alliance, and continue to do so: the legal status of US forces in Japan; the immense pressure of the US military presence on the island of Okinawa; and the level of financial support provided by the Japanese government for the maintenance of US forces in Japan under the heading of "burden sharing".

Legal friction over the status of forces

Any foreign basing operation contains inevitable possibilities for legal friction with host countries in the event of criminal and inappropriate behaviour by foreign troops. In the Japanese case, as elsewhere, these are managed by a Status of Forces Agreement (SOFA) between the two governments. However, the difficulty has been that even after a number of SOFA revisions at Japanese instigation following public outrage, there is still legal and institutional resistance by the US military to following the SOFA procedures.

Difficulties of treating Japan as an equal partner in practice

The United States military seem to find it hard to accept the more equal relationship on the ground with their alliance partners implied by the revisions of SOFA in Okinawa in particular. In one recent case, Japanese police were excluded from a US helicopter crash site in Okinawa until US investigators finally allowed them entry once they had finished their work. In other cases, US authorities have been reluctant to allow US personnel arrested as suspects by Japanese police to be detained for questioning, citing concerns about the fairness and transparency of Japanese police and prosecutor approaches. Pressure for SOFA revision will continue.

Okinawa bears a heavy burden in hosting forces

More than three decades after the reversion of the Okinawa islands to Japanese control, Okinawa still hosts more US personnel than any of the country's other prefectures. One-fourth of the main island of Okinawa is made up of US military bases. The prefectural capital of Naha hosts major bases, including Futenma Marine Air Base in the heart of the city.

Despite discussions and realignments, the problem will remain

Even though the United States has worked closely with the prefectural and national governments to develop a plan to shift the Futenma facility and reduce the overall burden on Okinawa, the issue remains largely unchanged. US global shifts in deployment are removing some forces from Japan, but at the same time bringing in new elements. The US will move 8,000 Marines and their 9,000 dependents from Okinawa to Guam by 2014. On the other hand, some carrier-based Marine aviation units are being moved onshore to stations on the main islands. Even with the departure of half of the Marine contingent, the problem of Okinawa will remain.

The question of who pays the bills

The remaining major irritant to alliance relationships is what the United States calls "host nation support". In Japan this is generally known in Japanese as the "sympathy budget", a term coined by the Liberal Democratic Party senior politician responsible for its introduction in 1978, Kanemaru Shin, in an attempt to assuage Japanese public resentment over US pressures for allied "burden sharing". Since about 1995, Japanese host nation support has levelled out at about 230 billion yen a year, and according to US military sources, pays for about half of the costs of US Forces in Japan.

US bases cover a quarter of the main island of Okinawa

Figure 12

Futenma Marine Corps Airbase, Okinawa



Source: US Forces Japan

Host nation support has levelled out at about 250 billion yen a year

Figure 13

Japanese host nation support - Total (¥bn)

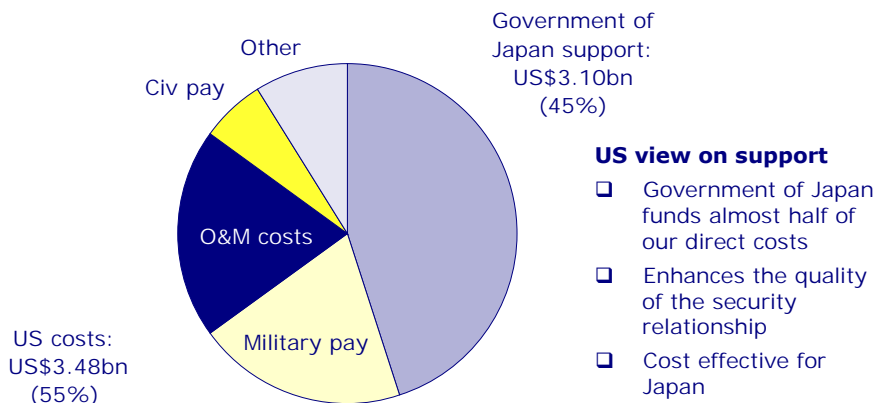
1978	6.2
1979	28.0
1980	37.4
1985	80.7
1990	168.0
1995	271.4
2000	256.7
2001	257.3
2002	250.0
2003	246.0
2004	244.1
2005	237.8
2006	232.6

Source: JDA

Pays for about half of the costs of US Forces Japan

Figure 14

The US view of Japanese host nation support - As a percentage of US Forces costs



Note: Calculated at an exchange rate of ¥122/US\$. Source: US Forces Japan, CLSA Asia-Pacific Markets

Japan pays for US in the country and for relocation abroad

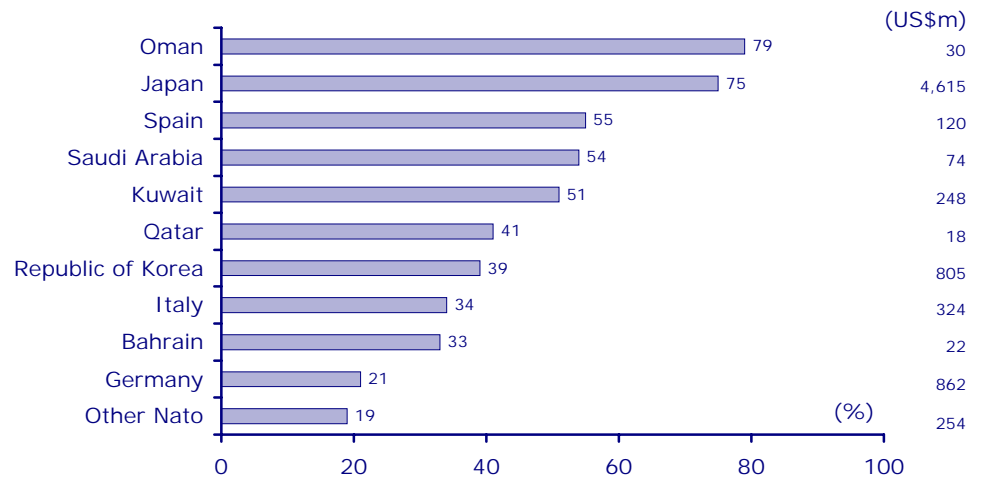
Sympathy indeed: Japan pays three times the German rate of host nation support

The key issue is not absolute cost, but relative fairness

When US forces are moved out of Japan to lower the physical and social burden on Okinawa in particular, Japan pays the lion's share of the moving costs. According to the US Embassy in Tokyo, Japan will provide 60% of the US\$10.3 billion cost of moving 8,000 Marines from Okinawa to Guam.

Figure 15

Share of US overseas stationing costs paid by selected allies (2001)



Source: US, Department of Defence, CLSA Asia-Pacific Markets

Yet the key issue is not so much the absolute cost to Japanese taxpayers, or even the question as to whether the deployment of US forces in Japan is primarily for the defence of Japan or rather simply a part of US global power projection. Japanese commentators of different political stripes display the core ambivalence to the alliance that underlies the whole discussion when they point to the fact that when it comes to demands for burden sharing the United States appears to treat Japan differently from most of its other allies, especially those in Europe. In 2001, for example, Japan paid 75% of the costs of stationing US forces on its soil, compared to Germany which paid only 21% of the same costs. Even South Korea, the other East Asian bilateral alliance partner, paid only 39% of US costs. Why, these commentators ask, should Japan pay at a rate more than three times that of Germany?

Foreign policy and security doctrine

Competing visions since the restoration of sovereignty in 1951

Security doctrine is shaped by the wider aims of a country's foreign policy as a whole. Since the restoration of sovereignty in 1951, foreign policy in Japan has been dominated by a mainstream of conservative low-profile resistance to militarisation under the American umbrella in competition with a lesser more nationalist stream marked by a deeper ambivalence about the nature and worth of the alliance, as well as a desire to return Japan to full sovereignty.

The dominant stream: the Yoshida doctrine

The mainstream is known as the Yoshida doctrine after its founder, long-serving immediate post-war Prime Minister Shigeru Yoshida. Yoshida, and his mainstream successors through to the 1990s, were suspicious of the military, holding them responsible for the disaster of the 1930s and 1940s. They recognised and often sympathised with the depth of cultural change defeat and occupation brought about. And based on Japan's own experience in China most were sceptical about the wisdom of US military entanglements in Asia.

Swallowing pride to build rebuild an economy

Yoshida and his colleagues were prepared to swallow their pride and accept sometimes humiliating subordination to the United States in order to pursue a strategically planned national economy as the pathway to recovery. Allocation of resources to the military was regarded as wasteful and unnecessary, and in its place was investment in technology and education for strategic civilian economic expansion.

Minimum acceptance of American demands for remilitarisation

American demands for remilitarisation were accepted to the minimum necessary: the SDF and the JDA were established in 1954, but limited remilitarisation always avoided any armament that could pose an offensive threat to other countries. Pressure to participate in the Korean and Vietnam Wars was effectively resisted.

Avoiding militarisation to open a path to economic superpower status

At root the Yoshida doctrine was based on a belief that Japan did not have strategic interests that could not be met by reliance on the United States, and on the belief that avoiding militarisation as much as possible opened up a pathway to economic superpower status.

A nationalist stream emerged in the 1950s

The lesser nationalist stream, associated in the 1950s with Prime Ministers Hatoyama and Kishi, emerged in its clearest form in the 1980s with Prime Minister Yasuhiro Nakasone. Nakasone came to power as an outspoken nationalist, deeply critical of most of his predecessors. Nakasone called for 'a settling of post-war accounts', by which he meant that a new and economically powerful Japan would throw off the shackles imposed by the United States in the occupation period and after. The result would be a Japanese state with full sovereignty restored, in place of what many of Nakasone's allies regarded as a nation castrated by the United States.

Nationalist aspirations frustrated in the 1980s

Although the Japanese public - and most business elites - were always opposed to the nationalist stream, Nakasone pressed the nationalist reconstruction agenda hard in his long period in office. Yet by the time he stepped down in 1987 he had disappointed most of his nationalist supporters. Part of the reason was domestic opposition - within the LDP and the bureaucracy. Like other Japanese prime ministers, Nakasone found himself far less powerful than counterparts in Europe or North America.

The Ron and Yasu partnership

But the other reason for his nationalist disappointment was because he had the misfortune to be in power at the same time as Ronald Reagan was president of the United States. This was a period of great tension between the

US and the Soviet Union often known as the Second Cold War. For the Reagan administration, Japan was a vital ally against a Soviet Union seen to be expanding its power in the Pacific and Southeast Asia. It was not a good time for a nationalist at heart sceptical about the US-Japan alliance - epitomised by the "Ron and Yasu partnership".

'Japan will be an unsinkable aircraft carrier'

Nakasone became famous for his public declaration of loyalty to the Reagan-led anti-Soviet cause in 1983 when he promised that 'Japan will be an unsinkable aircraft carrier' off the coast of communist mainland Asia. The problem for Nakasone the nationalist was this carried with it the promise of deepened commitment to shared goals with the United States: most of the planes on this Japanese aircraft carrier, so to speak, were American, not Japanese.

The beginnings of remilitarisation laid down

Yet the effective beginnings of remilitarisation were laid down in Nakasone's time, with an implicit model of cooperation within the alliance, all the time with an eye for the possibilities of contributing long-term to a less subordinate position. By the mid-1990s, the fruits of Nakasone's work were evident in the Hashimoto administration, and then, in the new century in that of the long-serving Junichiro Koizumi.

A more threatening world

A profusion of threats

Clearly shifts in the global and regional strategic situation have increased the Japanese sense of threat, and diminished feelings of security. Globally, the 9/11 attacks and those in Europe and Bali, together with the American-led response in Afghanistan and then in Iraq, all affected Japan deeply. The eruption of Islamist violence targeting foreigners in Southeast Asia amplified this sense of threat, and brought it closer to home to a region Japan knows well. Moreover, Japan has had its own experience with non-state terror and indiscriminate use of weapons of mass destruction in the Aum Shinrikyo Tokyo subway sarin attack in March 1995.

The end of non-proliferation?

For Japan, nuclear weapons have a special salience, and the cause of stopping the proliferation of nuclear weapons has greater public support in Japan than anywhere else. Yet proliferation is the name of the game in the post-Cold War period. The old nuclear club of the five Security Council members has now been joined by India, Pakistan, and Israel. North Korea has declared itself a nuclear-weapons state, even though its test failed. Five of the eight nuclear weapons states are in Asia. Iran may well become the second Middle Eastern nuclear state. Aum Shinrikyo pioneered the attempts of non-state groups to acquire nuclear weapons, and the black market network of Pakistan's nuclear hero A.Q. Khan showed how flawed the non-proliferation early warning system was in reality. Japanese citizens could be forgiven for concluding that the US-led non-proliferation regime has weakened so much that it may be irretrievable.

Escalating North Korean threat

In East Asia, Japanese insecurity derived from three main sources. The multifaceted North Korean crisis has had the most direct effect on the Japanese strategic debate in three stages. First came the August-1998 launch of the three-stage Taepodong missile. This was followed by the admission by North Korean leader Kim Jong-il in September 2002 that under his father's leadership two decades before the country had abducted 13 Japanese citizens. The third stage was the North Korean missile tests of July 2006 and nuclear test on 9 October.

China: Warm economics ties, but political relations cold and getting colder

Relations with China have steadily deteriorated in recent years, despite closer economic ties and moves towards greater levels of economic integration. Tensions have derived from three main sources. The failure of the two countries to effect reconciliation 60 years after the end of the China-Japan War, is visible in the conflicts over Japanese leaders' visits to the Yasukuni Shrine and Japanese government-approved history textbooks. Both sides, but especially China, have used the demonisation of the other to gain domestic political advantage. And the ongoing conflict over maritime boundaries, island territories and resources rights in the East China Sea, which should have been relatively easy to resolve, has been managed poorly by both sides and allowed to smoulder and occasionally flare up quite dangerously.

South Korea: Nationalism of the left

The third East Asian contribution to Japanese insecurity came in relations with South Korea, which had been progressing well after former President Kim Dae-jung had loosened legal restrictions on access of Japanese movies and manga in Korea. Despite Kim's efforts to encourage South Koreans to move beyond the wounds of the colonial period, as with China, the Yasukuni and textbook issues ensured the wounds remained open, particularly with the more nationalist - though leftist - administration of President Roh Moo-hyun.

Border disputes with three and a half neighbours

Japan has border disputes with all of its neighbours: the Diaoyutai/Senkaku Islands dispute with China (and Taiwan), the southern Kurils/Northern Territories dispute with Russia (with whom there is still no peace treaty after six decades), and the Tokdo/Takeshima dispute with South Korea. The Tokdo/Takeshima dispute flared at the same time as the textbook and Yasukuni issue, and overlapped with an otherwise fairly readily soluble dispute about fishing resources.

Coalescing threat perceptions

For many Japanese, even if they did not support Prime Minister Koizumi's casually provocative invocation of nationalist symbols, there was an accumulating sense of unease, of trouble with every neighbour, in a world where terror, nuclear proliferation and energy insecurity seemed, rightly or wrongly to be coalescing into a more diffuse and powerful threat.

The end of the Yoshida doctrine?

The centre of gravity of defence and foreign-policy debate in Japan has undoubtedly shifted in the direction of nationalism and great power realism. One cause of this tendency is the diversification and intensification of a sense of threat. But another is a spread of doubt about the continuing validity of key assumptions of the Yoshida doctrine: Is it still true to say that Japan has no important international interests distinct from those of the United States? Can Japan still rely on the American promise of extended nuclear deterrence? In the post-Cold War conditions of globalisation and calls for humanitarian intervention does Japan have a responsibility to match its economic power with the exercise of global political power? Nationalists such as Nakasone had long answered yes to all these questions, but with the turn of the century previously lonely nationalists were joined by a band of great-power realists.

UN commitment runs deep in Japan

Security policy always implies more than purely defence or military policy, and particularly so in Japan with the profound influence of defeat and its expression in Article 9 culture. Commitment to the United Nations runs deep with the Japanese public, and since reaching economic superpower status, Japan has contributed disproportionately to the UN's finances. The country played a low-profile but constructive and sometimes important behind-the-scenes role in UN diplomatic initiatives in the 1990s - for example in relation to East Timor UN diplomacy.

Japan's pioneering security doctrine

The most distinctive Japanese contribution to security-policy thinking on the world stage comes from the concept of comprehensive security, which flourished especially in the 1980s following the oil shocks of the 1970s. Starting from the Yoshida doctrine's scepticism about remilitarisation, the concept of comprehensive security recognised the diversity of threats facing Japan. Security was understood to include security of energy and food supplies, environmental security, and global economic security - including much of what was later to become known as "human security".

From comprehensive security to Heisei militarisation

Equally the means to establishing security needed to be diversified. A low level of military security and retention of the US alliance was to be coupled with diversification of energy supplies, positive support for global environmental initiatives, and support for positive or preventive diplomacy to reduce political and military tensions. Comprehensive security remains on the agenda of security policy in Japan, but has been overtaken and downgraded by the rush towards a more militarised version of security policy - defence policy in the narrower sense.

The foundations of defence policy

Defence policy through this period has been guided by a number of different formulations. The Basic Policy for National Defence adopted in 1957 set very general aims for effective defence and collaboration with the United States. Four goals still at least nominally retained from that approach are: an "exclusively defensive defence"; not becoming a military power; following the three non-nuclear principles; and a firm policy of civilian control. All four goals were, at least in part, aimed at assuaging the doubts of a population that by and large took the wording of Article 9 of the Constitution at face value. They were of course also aimed at neighbouring countries with even stronger doubts and longer memories.

Security policy formulations no longer exclusively defensive

Security policy formulations today invoke the Basic Policy, but no longer much talk about exclusively defensive defence, and at least two of the other basic aims - the avoidance of becoming a military power and the adherence to the three non-nuclear principles - are somewhat less certain outcomes than in the past.

The emergence of threat-based proportional defence

The 2005 National Defence Policy Outline aimed to set the framework for security planning for the following decade and beyond. It pushed well beyond the "exclusively defensive defence" concept to a language of basic defence needs in response to threats - regional and global - including the spread of weapons of mass destruction and international terrorism. This emphasis on a response to threats in the regional neighbourhood, as opposed to a "threat-insensitive" perimeter defence of the country was a shift to what some Japanese analysts talk of as a: "proportional defence policy", where the SDF response is in some measure at least proportional to the claimed threat.

The 2005 National Defence Policy Outline

Accordingly, the 2005 NDPO had three main innovations:

- ❑ The introduction of a ballistic theatre missile-defence system.
- ❑ The expansion of special forces capable of dealing with landings on Japanese islands and terrorist or guerrilla intervention.
- ❑ Establishing a force structure and procedures to make participation in overseas multilateral operations a core SDF activity.

No budget growth - at least until the economy recovers

At the same time there was a hope, in some contradiction with these objectives, of cutting defence costs in an era of budgetary stringency. Prime Minister Koizumi, who always had domestic economic reform as his primary

**A pre-emptive
strike doctrine – and
the tools necessary**

objective, kept a tight rein on the military budget – though not so tight as on other areas. One certain consequence was an exacerbation of the normal inter-service and intra-service competition for budget funds, especially on missile defence. The other was that as the sluggish economy recovered, even with the one percent of GDP rule, the military budget would increase in real terms in short order.

The combination of 9/11 and North Korea led to one further, startling policy development. During his term as Director-General of the Defence Agency Shigeru Ishiba articulated the new hardline realist doctrine to a diffident Japanese public. Ishiba startled Japan's neighbours and many of his fellow citizens by claiming that as part of its right to self defence, Japan has a right to make pre-emptive attacks on imminently threatening developments in other countries: most prominently, on North Korean missile sites.

Technically, such a right had been expressed in the earliest JDA formulations of self defence doctrine in the 1950s, but never spelled out in detail or asserted strongly. Ishiba's forceful assertion carried much greater weight, not only because it echoed the Bush administration's pre-emptive doctrine, but because the Air Self Defence Force now had the means required in the form of aerial refuelling aircraft to support its potent combat aircraft deployments.

The JDA and security decision-making

Japan Defence Agency

The organisation and administration of defence policy is the responsibility of the Japan Defence Agency (JDA), under the leadership of the Director-General of the Defence Agency, formally known as Minister of State for Defence. The JDA is an agency of the Cabinet Office, and is formally subordinate to the Prime Minister under a strict constitutional requirement of civilian control.

Security Council policy resolution

Security policy as a whole is coordinated by the Security Council, chaired by the Prime Minister. The Council is made up of the Ministers of Foreign Affairs and Finance, the Chief Cabinet Secretary, the Directors-General of the Defence Agency and the Economic Planning Agency, and the chairman of the National Public Safety Commission, and on occasion other ministers or the Chief of Staff of the Joint Staff Office of the SDF. Formally, the Security Council resolves disputes over all aspects of security policy.

Japan's missing Ministry of Defence

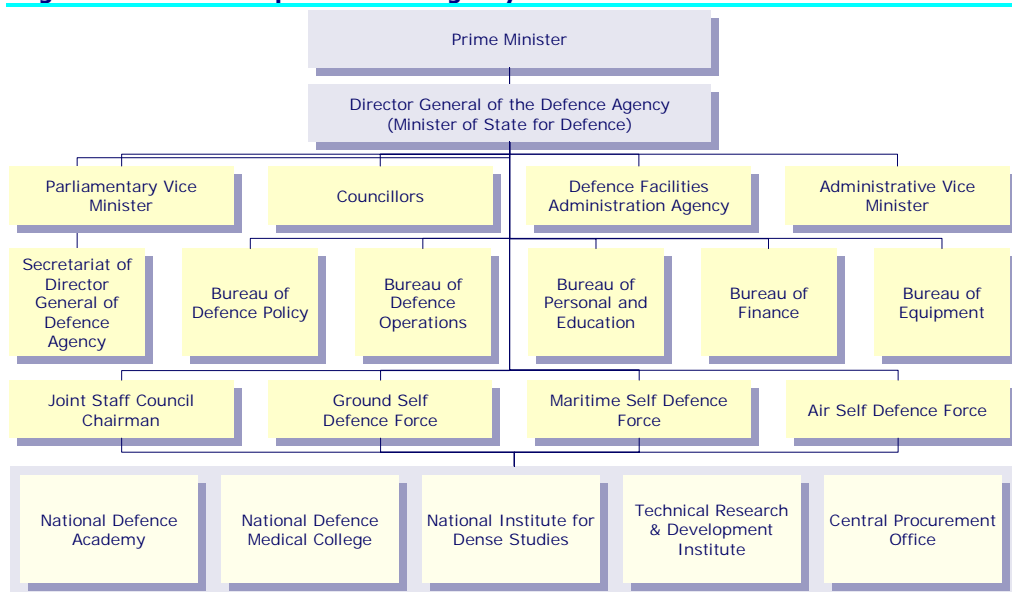
In late 2006 the government made a long-expected announcement that it would introduce legislation into the Diet (the Japanese parliament) to change the Defence Agency into a Ministry of Defence headed by a Minister of Defence. Over the previous half century, conservative governments had been for the most part, with occasional nationalist complaint, content for the nation's military security to be managed from such an apparently subordinate position, under Prime Ministerial and Cabinet Office oversight. This also visibly reinforced the doctrine of civilian control in a country with appalling experience of its failures under the previous constitution.

MOD and 'settling post-war accounts'

Passage of legislation establishing a defence ministry will give both the minister and the senior bureaucrats in the Defence Ministry greater status and political power in negotiations within cabinet and with other ministries. But perhaps even more importantly, the change of name and legal status will be a powerful symbolic representation of progress towards the agenda of Japan as a "normal country", and a highly visible part of Yasuhiro Nakasone's 'settling of post-war accounts'.

Figure 16

Organisation of the Japan Defence Agency



Source: JDA, CLSA Asia-Pacific Markets

**Scandal-ridden
Defence Facilities
Administration Agency**

The Defence Facilities Administration Agency (DFAA) is formally set within the JDA and is responsible for procurement, property management, and for material liaison aspects of SDF relationships with US Forces Japan and with US bases on Japanese soil. Successive procurement and bid-rigging scandals in recent years have so weakened the position of the DFAA that the agency will most likely be abolished and incorporated into the new Ministry of Defence. Whether this will bring the greater transparency and effectiveness called for by Keidanren (the most important Japanese business association) and other critics is not certain.

Officials versus politicians

As in other realms of Japanese politics, the real-world powers of the political head of the JDA, the Director-General, are more limited than his or her ministerial counterparts in most other advanced industrial democracies. Correspondingly, the power of unelected civil servants is much greater, even with directors-general with strong personalities such as Yasuhiro Nakasone.

**JDA under the thumb
of powerful ministries**

From its inception in 1954, the JDA has had much less autonomy within the Japanese bureaucratic system than full ministries. As an agency within the Cabinet Office, it had to accept arrangements whereby most of its long-term senior officials were seconded from other ministries or agencies to which they retained strong connections even after many years in the JDA. For decades, the Ministry of Foreign Affairs and the Ministry of Finance, and to a lesser extent the Ministry of Trade, Economy and Industry (METI) and the National Police Agency controlled policy formation in the JDA through this process of bureaucratic "colonisation". The Ministry of Finance, in particular, was able to apply a more robust negotiating approach to the JDA budget submissions than to those of powerful full ministries. JDA civilian intelligence positions were customarily the preserve of National Police Agency officials.

**Civilian control
and the SDF**

The process of Heisei militarisation, however, has affected the organisation and power of the JDA itself. Gradually the influence of external ministries within the agency has lessened, and that of career JDA officials increased. The shift to full ministry status will undoubtedly increase this tendency. At the same time, a long-standing reluctance to concede decision-making influence to uniformed officers within the JDA has been moderated without any evident damage to the doctrine of civilian control. Today's SDF officer corps bears no resemblance to its militarist predecessors in the Imperial Army and Navy.

240,000 in the Self Defence Forces

The Japanese armed forces

Japan's armed forces are mostly made up of the three Self Defence Forces, but there is also substantial armed capacity in the Japan Coast Guard and the National Police Agency, both of which have special-forces elements. However, the core of Japanese military capacity lies with the Ground Self Defence Force (GSDF), the Maritime Self Defence Force (MSDF) and the Air Self Defence Force (ASDF). The SDF has about 240,000 uniformed personnel, made up of 148,000 in the GSDF, and about 45,000 in each of the other two branches.

Figure 17

Self Defence Force numbers (uniformed): Target and actual (2005)

	GSDF	MSDF	ASDF	Joint Staff Office	Total
Target numbers	157,828	45,842	47,361	2,149	253,180
Actual	147,737	44,327	45,517	1,849	239,430
Fulfilment ratio	93.6	96.7	96.1	86	94.6

Source: JDA

Japanese citizens often do not recognise that the SDF amounts to a substantial armed force

There is a continual tendency in both Japan and abroad to underestimate Japan's actual military strength. Japanese citizens often do not recognise that the SDF in fact amounts to a very substantial armed force. Foreign critics of Japan, especially from the United States, mistakenly claim that Japan is simply a free rider on the US, doing too little for both its own defence and for its global responsibilities. In fact, the three Self Defence Forces are highly competent and well-equipped military forces, and the naval and intelligence capacities of the SDF are second to none in the region.

GSDF: 148,000 personnel

Ground Self Defence Force

The GSDF, the largest part of the SDF grew out of the National Police Reserve (NPR) established during the American occupation, largely to deal with the possibility of civil disturbance in the aftermath of defeat and severe economic distress. While the NPR was primarily a domestic security organisation, it was organised along military lines, and was equipped with a considerable numbers of tanks. The numbers in the GSDF after its establishment in the 1950s grew to more than 200,000 and then shrank to its present size of about 148,000 (though its formal target size is 157,828).

Lingering effects of Cold War configuration

The GSDF is regionally organised into five army groups in Hokkaido (Northern Army), Tohoku (Northeastern Army), Tokyo/Kanto (Eastern Army), Kansai/Chubu (Central Army), and Kyushu and Okinawa (Western Army). Most groups are made up of at least two divisions. This deployment is largely unchanged since the days of the Cold War, when the primary concern was defence of the country against an invasion, most likely from the Soviet Union.

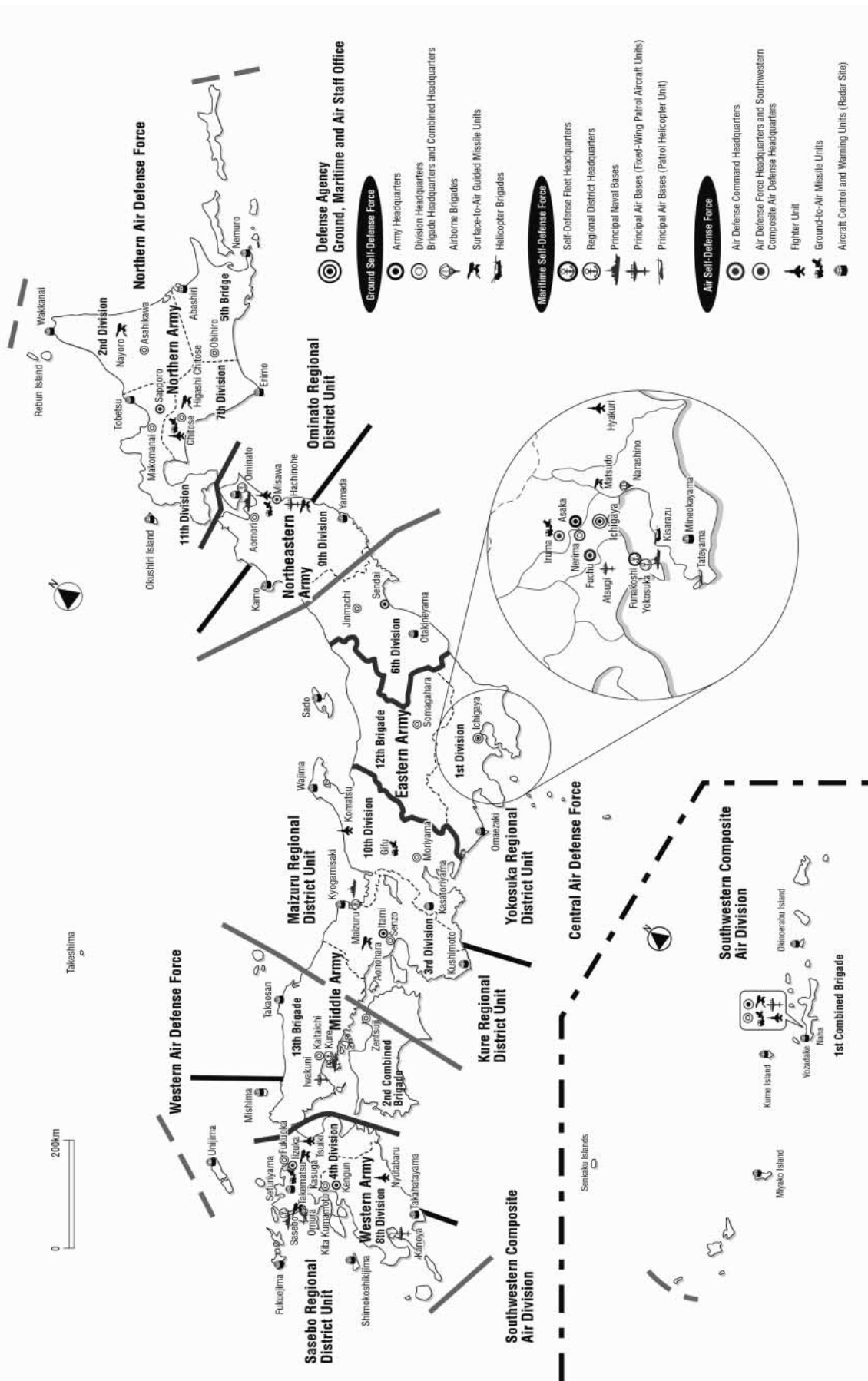
Figure 18

GSDF structure and regional deployment

Army region	Headquarters	Divisions	Brigades
Northern	Sapporo	3 (2nd, 7th, 11th)	1 (5th)
Northeastern	Sendai	2 (6th, 9th)	
Eastern	Asakashi, Saitama	1 (1st)	1 (12th)
Central	Itami	2 (3rd, 10th)	2 (13th, 14th)
Western	Kengun	2 (4th, 8th)	1 (1st Combined)

Source: GDSF

Figure 19
Location of principal SDF units (as of 31 March 2004)



Source: JDA

Towards a more mobile and flexible GSDF

Under the 2005 NDPO and the 2005-09 Mid-Term Defence Program, the GSDF is to be made more flexible and mobile to deal with a more diverse and less predictable set of potential threats and tasks. As a consequence, the divisional and brigade arrangements will be altered to improve responsiveness and mobility. The present 10 divisions will be reduced and the present six brigades increased. The Cold War-oriented numbers of tanks and large artillery will be reduced further, and there will be eight GSDF surface-to-air guided-missile groups. Most importantly, a Central Readiness Force is being established under direct command of the Director-General to coordinate mobile and special-forces units.

Plans for 600 main battle tanks for the GSDF

Despite these imminent changes to increase mobility and flexibility of the ground force, the principal major weapon systems of the GSDF remain tanks and artillery. As with most advanced militaries, the numbers of tanks has declined as unit costs and armed potency rise, and under the 2005 NDPO the GSDF will be equipped with approximately 600 main battle tanks (MBTs).

Type-74 MBT

Most of these tanks will still be the now ageing Mitsubishi Heavy Industries-manufactured Type-74 MBT with a 105mm rifled tank gun produced under licence from Britain. Weighing 35 tonnes with a road speed of 53kph, the first Type-74 was produced in 1975.

Figure 20

Type-74 MBT



Source: JDA

Type-90 MBT

The successor to the Type-74 MBT was the larger and capable Type-90 MBT, again built by Mitsubishi Heavy Industries, with only the 120mm smoothbore gun built under German licence. Weighing about 50 tonnes and with a road-speed of 70kph, the Type-90 is considered to be of world-class standard for MBTs of its generation. Production began in 1992, and at least 200 Type-90s are now in service with the GSDF with 49 new ones to be acquired by 2009.

Figure 21

Type-90 MBT



Source: JDA

AH-64 Apache attack helicopter

The GSDF also has large numbers of attack helicopters: some 90 Vietnam war-era Bell AH-1 Cobras are in the process of being phased out in favour of the US Army's attack helicopter of choice, the Boeing AH-64 Apache.

Other than the US Navy, the MSDF is dominant at sea in Northeast Asia

Maritime Self Defence Force

The MSDF in 2006 had 16 submarines and 54 principal surface combatants (destroyers and frigates), and 109 Lockheed Orion P-3C antisubmarine warfare aircraft in various modes. Other than the United States, no naval force operating in northeast Asian waters can come close to equalling the MSDF in surface vessels, submarines or maritime aerial surveillance capacity. While Russia in its Pacific fleet and China have numerically superior surface and submarine forces, a large proportion of these ships and submarines are inoperable at sea for more than a few days a year, or are obsolete by comparison with their MSDF opposite numbers.

Fleet organisation

The MSDF is organised around five naval regions and three main fleet forces: the destroyer/escort force, the air force, and the submarine force, plus a set of support commands. The destroyer fleets are deployed in naval districts headquartered at Ominato, Aomori Prefecture; Yokosuka, Kanagawa Prefecture; Sasebo, Nagasaki Prefecture; Maizuru, Kyoto Prefecture; and Kure, Hiroshima Prefecture. The submarine fleets are at Sasebo and Yokosuka. Nine naval aviation squads of fixed-wing aircraft are based throughout the country.

20 new ships by 2009

The MSDF's special-forces unit, the Special Boarding Unit set up in 2001, is based at Edajima, Hiroshima Prefecture. Mine sweepers and support vessels are distributed to all the major bases. The total tonnage of the MSDF will expand by more than 59,000 tonnes between 2005 and 2009 with a total of 20 new ships, including five destroyers and four submarines.

The strength of the destroyer fleet - more than 40 ships - is unrivalled in Northeast Asia, and is still being expanded and upgraded: another five destroyers will come into service before 2009. At least two of the new ships

Destroyer-fleet expansion

will be in the new DDG 7,700-tonne class of guided-missile destroyers being built by Mitsubishi Heavy Industries at its Nagasaki shipyards. The new DDGs will build on the achievement of the four existing 7,000-tonne Kongo-class destroyers built by Mitsubishi Heavy Industries in the same shipyards.

Kongo class and DDG 7,700-tonne class destroyers

Both classes are based on the US Navy's Arleigh Burke-class guided missile destroyers. The 161m-long Kongo-class destroyers are equipped with the Aegis Combat Air Defence System incorporating the AN/SPY-1D phased array radar. The Lockheed Martin-manufactured radar utilises 4MW of power to carry out automated search, tracking and missile-guidance functions, reportedly for up to 100 targets at ranges of more than 190km.

Kongo class armament

Kongo-class destroyers are armed with Standard SM-2MR (medium range) surface-to-air missiles deployed in a Vertical Launching System. The DDG 7,700-tonne-class vessels will have either an extended range version of the SM-2 or the yet to be deployed SM-3 under development for the US Navy and the MSDF for upper-tier missile defence. The Kongo-class ships, as well as the DDG 7,700-tonne-class vessels, as well as many of the older but highly potent destroyers, are also equipped with vertical launch ASROC anti-submarine rocket systems, Harpoon ship-to-ship missiles, and torpedoes.

Figure 22

DD 173 Kongo



Source: JDA

13,500-tonne DDH helicopter destroyer

In 2008, the MSDF is scheduled to take delivery of its largest combat vessel - a 13,500-tonne DDH helicopter destroyer. Mainly intended for anti-submarine warfare, the DDH, based on the Haruna-class design, will carry a crew of 350 and either three or four anti-submarine warfare helicopters.

The most competent submarine fleet in East Asia

Japan's submarine fleet is wholly conventionally-powered and armed, but its 16 submarines feature highly advanced technology and long experience of working closely with both the MSDF anti-submarine P-3C air fleet and the underwater sonar arrays in the Tsugaru, Soya and Tsushima straits in the Cold War blocking of the Soviet Pacific fleet. Modernization has been almost continuous with eleven of the present fleet made up of the most modern class, the 2,450-tonne, 82-metre long Oyashio-class, with a crew of 70. In 2007, the first of the 84-metre, 2,900-tonne class submarines will be launched.

Figure 23

Oyashio-class submarine



Source: JDA

109 P-3C long-range surveillance and submarine attack aircraft

After the United States, Japan has the largest number of P-3C long-range aircraft - 109 in at least four different versions. The principal function of the P-3C for the MSDF is ocean surveillance - surface vessel and submarine search and tracking and attack. The MSDF's original primary naval aviation mission in the Cold War was the search for Soviet ballistic missile submarines in the Sea of Okhotsk and attack submarines attempting to pass from Vladivostok and Petrapavlovsk into the Pacific.

Figure 24

MSDF P-3C aircraft



Source: JDA

Japan has the largest fleet of P-3C aircraft outside the United States

**P-3C surveillance:
North Korean spy boats,
Chinese incursions,
and the East China Sea**

These days, the expected targets are Chinese and North Korean surface and submarine naval vessels, North Korean spy boats, Chinese seismic-exploration vessels wandering into maritime territory claimed by Japan, or Chinese nationalist groups planning to raise their flag on islands claimed by Japan. Every day, MSDF P-3Cs undertake long surveillance missions over the Sea of Japan, parts of the western Pacific, and the East China Sea. With the rise of tensions over the Senkaku/Diaoyutai Islands and hotly disputed border issues affecting oil and gas developments, the East China Sea flights have now increased in intensity and frequency.

P-3C for diverse roles

The importance of the P-3C for Japanese defence is reflected not only by the total number of planes operated by the MSDF, but also by their diversity of types. In addition to a large number of "standard" P-3Cs, the MSDF also has five EP-3 aircraft for electronic-intelligence (ELINT) gathering, two UP-3D training aircraft, 10 OP-3Cs converted for reconnaissance purposes and a UP-3C equipment test aircraft.

ASDF: 474 aircraft

Air Self Defence Force

The Japan Air Self Defence Force operates a technically advanced system of air defence using combat aircraft, radar air surveillance, and support aircraft. In 2005, the ASDF possessed 474 aircraft, of which 200 were F15J/JD fighters, more than 60 Mitsubishi Heavy Industries F-2 fighters, about 60 upgraded Japanese versions of the F-4, including a large number of the RF-4E/EJ reconnaissance versions, as well as advanced early-warning aircraft, large numbers of transports, and aerial-refuelling aircraft. The ASDF is organised regionally into four air-defence forces covering the country, and functionally into an air-defence command, and support, training and development commands.

**ASDF reorganisation
in the NDPO**

Following the 2005 NDPO and Mid-Term Defence Plan, the ASDF will be made up of: 20 squadrons formed into eight Aircraft Warning Groups plus an Airborne Early Warning Group; 12 fighter squadrons; three Air Reconnaissance Squadrons; and one Aerial Refuelling and Transport squadron. In addition, the ASDF will operate at least six Surface-to-Air Missile Groups. This force will be made up of 350 combat aircraft, of which 260 will be fighters. To achieve this, 27 new fighters will be acquired by 2009, 20 of them domestically produced F-2 aircraft, while 26 of the existing F-15 aircraft will be extensively upgraded.

**C-X and P-X domestically
produced ASDF aircraft**

Proportionately, the largest expansion will be in transport equipment, with eight new aircraft to be acquired. Some of these may be the Japanese-built C-X transport aircraft now in development for the JDA's Technical Research and Development Institute (TRDI) by Kawasaki Heavy Industries. The company is also developing the P-X, a replacement for the P-3C.

**ASDF, USAF and
divided airspace control**

The ASDF's responsibilities for the country's air space are divided into four main Air Zones: Northern (Misawa command); Central (Iruma command); Western (Kasuga command); and Southwestern (Naha command). In reality, there is a finer-grained system of military control of air space, whereby the ASDF and the US Air Force (USAF) share responsibilities. Under US plans for the global realignment of its forces, the USAF will give up control of Tokyo airspace from its Yokota Air Base to the ASDF, when the ASDF relocates its Air Defence Command to Yokota, co-located with the USAF command.

ASDF expansion

Figure 25

ASDF NDPO projection

Major units	
Aircraft warning and control units	8 warning groups 20 warning squadrons 1 airborne early warning group (2 squadrons)
Fighter aircraft units	12 squadrons
Air reconnaissance units	3 squadrons
Aerial refuelling/transport units	1 squadron
Surface-to-air guided missile units	6 groups
Main equipment	
Combat aircraft	Approximately 350
Of which are fighters	Approximately 260

Source: JDA

Japan's domestically produced surveillance and transport aircraft coming on line

Figure 26

C-X



Source: JDA/TRDI

Figure 27

P-X



Source: Kawasaki Heavy Industry

Figure 28

JASDF BADGE early-warning radar sites



Source: JDA

BADGE early-warning system

The ASDF also operates a network of 28 early-warning radar stations, the Base Air Defence Ground Environment (BADGE) system. These stations employ the FPS-3 radar system, which will be upgraded for incorporation in the missile-defence program. The BADGE early-warning air-defence command centre at Fuchu (about to move to Yokota) controls the four air-defence sector headquarters at Misawa, Iruma, Kasuga and Naha.

Joint Staff Office

Joint Staff Office

In 2006, the SDF replaced the Joint Staff Council of the SDF with the Joint Staff Office headed by a Chief of Staff. The previous position of chairman of the Joint Council was limited to a coordination role. The Chief of Staff of the Joint Staff Office is responsible for directing and integrating the activities of the three services. This was part of a series of steps taken by the SDF and the JDA to integrate the three services more closely.

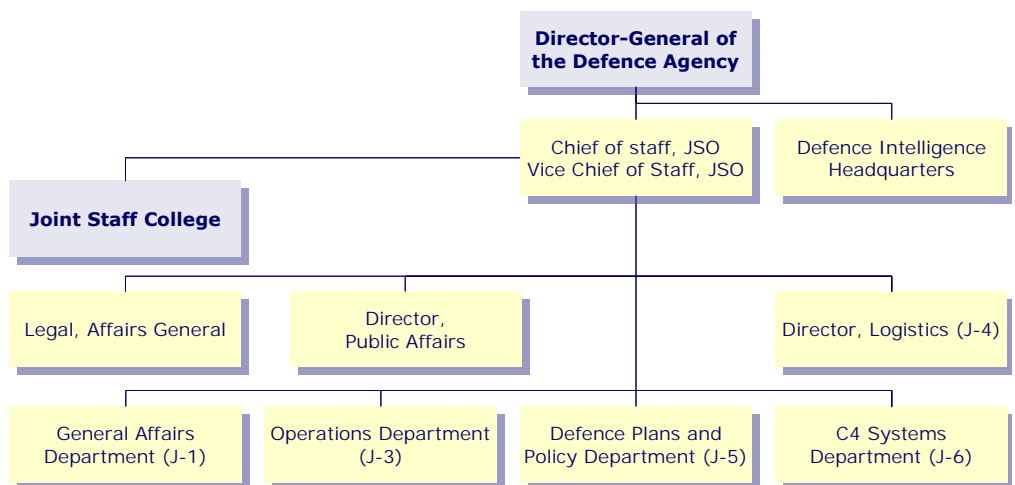
All non-unitary military services face the problem of integration of the usual three services, and minimising potential breakdowns in command, communication and inter-service cooperation. In the Japanese case, the wider restraints on the SDF flowing from the culture of Article 9 exacerbated these limitations. Establishing the US-style position also clarified relations between the civilian head of the JDA and the head of the SDF. As in the US, one of the specified responsibilities of the Chief of the Joint Staff Office is to serve as the principal advisor to the Director-General, and hence to the Prime Minister and Cabinet.

US model of integration

The Joint Staff Office now has much the same structure and functions of the office of the US Chairman of the Joint Chiefs of Staff. The new arrangement is an integrated system of control and command, with the Chief of Staff (COS) and his deputy directly supervising the work of departments for General Affairs (J-1), Operations (J-3), Logistics (J-4), Plans and Policy (J-5), and C4 Systems (J-6).

Figure 29

Organisation of Joint Staff Office



Source: JDA, CLSA Asia-Pacific Markets

Intelligence under direct political control

The only notable difference is the apparent absence of an Intelligence Department (J-2). When the Defence Intelligence Headquarters was established in 1997, the J-2 position was abolished, and a larger and more

powerful integrated defence-intelligence organisation established under the control of the Joint Staff Council and a Defence Intelligence Committee. But the added importance of enhanced intelligence gathering and analytical capacity was emphasised by shifting the Defence Intelligence Headquarters to the direct control of the Director-General of the JDA, rather than the head of the uniformed SDF.

Japan Coast Guard

Japan Coast Guard

The Japan Coast Guard (JCG), like the MSDF, grew out of the occupation-period Maritime Safety Agency. The JCG shares much the same responsibilities of most Coast Guard-type organisations centring on maintaining maritime traffic management, safety and navigation, search and rescue, hydrography and oceanographic surveying, and public order at sea, including border controls.

The Coast Guard and the mysterious-ships incident

However, the JCG is also an armed force. A number of Coast Guard vessels are armed with heavy machine guns, and have had reason to use them. In September 2004, US intelligence satellites followed the movement of a suspicious vessel out of a North Korean harbour into the Sea of Japan, and notified the Japanese government. The vessel, a large fishing boat, approached the Japanese coastline, and may have communicated with North Korean agents by cell phone from close to shore. The ship was then tracked by MSDF P-3C aircraft. Under the legislation governing the MSDF at the time, military force could not be used to stop the Korean ship.

The MSDF requested the JCG intercept the ship, and several large JCG vessels gave chase when the ship refused to stop. The chase lasted many hours, with the suspicious ship heading towards the Chinese coastline. Eventually a fire fight started when, according to the JCG, the Korean vessel fired on the JCG ships, which then returned fire in fierce night-time action. Eventually the Korean boat was sunk with all hands lost. When the boat was later recovered by the JCG with the acquiescence of Chinese authorities, there was clear evidence that the boat had been armed with machine guns and pistols, and had sustained great damage from the JCG vessels heavy machine guns.

Plutonium guard duty for the JCG

The JCG also has another crucial quasi-military role that is both less publicised and likely to expand in the future. Until recently, Japan shipped nuclear waste from its 52 nuclear reactors to France and Britain for reprocessing and waste storage. There is now 24 tonnes of separated Japanese plutonium stored in France, and another 15 tonnes in Britain, while about seven tonnes are in Japan. Nuclear waste was transported to Europe by sea, and in turn plutonium was brought back to Japan. In both cases, the Japanese ships carrying the radioactive material used unpublicised routes, and were accompanied by JCG armed vessels. The biggest of the Coast Guard's vessels used for this purpose was the 6,500-tonne Shikishima, a helicopter-equipped escort vessel, 150m long, armed with twin M61 Vulcan multibarrelled cannons.

30 tonnes of plutonium coming back to Japan

Since both France and Britain have announced that they will no longer store Japanese spent-fuel products, more than 30 tonnes of separated plutonium will need to be escorted back to Japan by the JCG (or by the MSDF if legislation changes) - and kept out of the hands of terrorists or covert nuclear proliferators. The JCG's Special Security Team had its origins in part in an earlier JCG elite squad formed to guard the plutonium shipments.

JCG plutonium escort vessel Shikishima

Figure 30

Japan Coast Guard vessel Shikishima



Source: Japan Coast Guard

Japan Coast Guard and border control in an age of globalisation

Counteracting illegal imports is a key JCG role, which increasingly requires armed intervention. Globalisation has affected illicit transfers of goods as much as the legal variety, and East Asia is rife with high-value smuggling. For the JCG this aspect of border control is of increasing importance. The fact that Chinese smuggling is the key problem for Japan heightens already substantial tensions. As in Europe, the US and Australia, Japan is responding to the growth of illicit flows of goods and people and drugs across its maritime borders with a more and more highly militarised coast guard, integrated into the wider pattern of maritime and aerial surveillance provided by the Self Defence Forces. In time, it is likely that the MSDF will have a more direct role in these border control issues.

New military initiatives

Diversified threats, flexible response

The 2005 National Defence Policy Outline announced a need to respond to new types of threats such as ballistic-missile attacks, guerrilla or special-operations attacks, and invasion of outlying islands. It also required the development of heightened capacity to contribute to the international security environment through participation in multilateral operations overseas. In many respects, this decision formalised developments that had been underway for a number of years in a range of new military initiatives. Four of these initiatives are particularly important: long-term overseas deployments in Iraq and the Indian Ocean; theatre missile defence; the expansion of special forces; electronic and imagery intelligence and military use of space.

MSDF ships have spent five years in the Indian Ocean

Long-term overseas deployments

Under the Anti-Terrorism Special Measures Law passed after the 9/11 attacks, MSDF destroyers and refuelling supply ships have been continually on-station in the Indian Ocean since November 2001. The law has since been extended a number of times, most recently until late 2007. In December 2002, after considerable controversy inside the ruling party and cabinet, Aegis air defence system-equipped Kongo-class destroyers were included among the escort vessels, ostensibly to meet the air-defence needs of the supply ships. The supply ships have done prodigious service for the multinational naval force in and passing through the Indian Ocean, although by late 2006 action had slowed, and the rate of refuelling had dropped to only 10% of the peak rate.

GSDF troops in Iraq from 2004 to 2006

Following the passage of the Iraq Reconstruction Special Measures Law in 2003, the Koizumi cabinet dispatched ground, air and maritime forces to the Iraq theatre. More than 600 GSDF personnel were deployed to a "non-combat zone" in southern Iraq to assist with reconstruction in the southern city of Samawah, capital of that country's Al-Muthanna province. The GSDF troops engaged in reconstruction activities were protected by a comparable number of Australian Defence Force troops. Ten rotations of GSDF troops took part in the Samawah operation until the Koizumi cabinet decided in mid-2006 to not extend the deployment.

Australian protection for GSDF in Iraq

The GSDF troops were severely limited in their possible activities by strict rules of engagement. There was rarely any danger in the two-and-a-half-year operation because of the relatively quiet political character of the province and the constant presence of the Australian Defence Force troops operating under very different rules of engagement. In fact the primary de facto Australia ROE was colloquially known as "No Japanese get hurt". But as with the Indian Ocean deployment, much was learned about interoperability and operations far from home, and the experience contributed to pressure for more realistic rules of engagement on subsequent occasions.

Loosening the bricks in the wall of Article 9

The JDA and SDF not only gained a great deal of experience in multilateral operations from the Iraq and Indian Ocean deployments, but also learned a great deal about the practicalities of power projection. Until these operations, most discussion about power projection in Japan had centred on the need to avoid offensive capacities under existing government interpretations of Article 9. Accordingly there were no long-range bombers or long-range missiles or large landing craft. But in Iraq and the Indian Ocean, the SDF learned a great deal more about what is actually needed to deploy substantial numbers over long periods far from home bases. Perhaps more importantly still, while most of the Japanese public was opposed to the Iraq deployment, there was little effective opposition, loosening one more brick in the wall of Article 9 culture.

What is missile defence?

Missile defence

Current missile-defence programs are a response to the proliferation of ballistic missiles, both with conventional warheads and nuclear warheads. The basic idea of missile defence is that with a suitable early warning of launch of an enemy missile it will be possible to launch an interceptor missile from land or sea and physically hit and destroy the enemy missile. The United States is deploying a National Missile Defence (NMD) system. A number of US allied countries, including Japan, are deploying theatre missile-defence systems, as well as assisting in with the US NMD program by hosting elements of the system such as radar facilities.

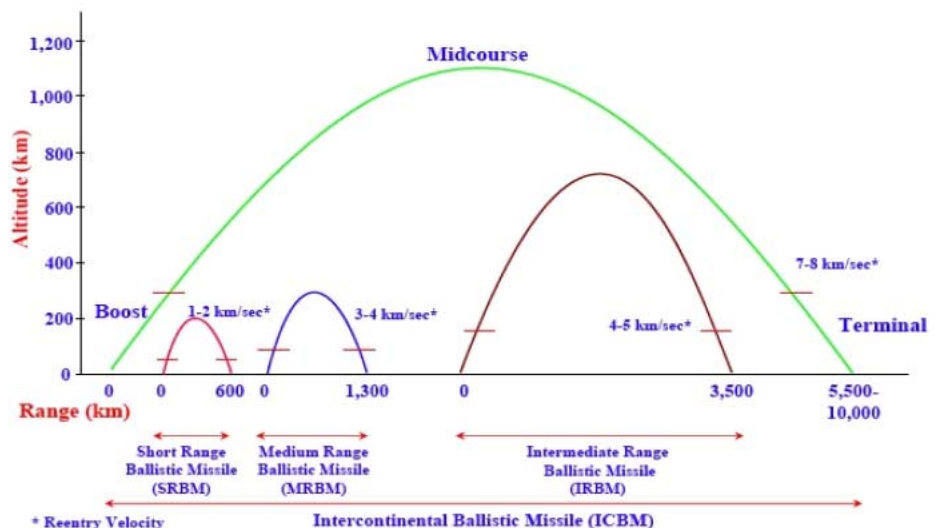
The US vision of missile defence

Figure 31

Ballistic missile challenge



THE BALLISTIC MISSILE CHALLENGE



Source: Missile Defence Agency

The Korean missile launch triggered Japanese-US missile defence collaboration

A formal decision to support joint research for a Theatre Missile Defence system was taken by the Hashimoto administration in 1998 in the immediate aftermath of the launching of the North Korean Taepodong missile. In fact, the issue had been on the agenda of numerous consultations between Washington and Tokyo since the administration of George Bush senior almost a decade earlier.

Patriot and Aegis for Japan's missile defence

However, the cabinet decision in December 2003 to proceed with deployment of upper- and lower-tier missile defence, as well as continuing the joint research and development effort, was an enormous step. Between 2007 and 2011, the Japanese government will deploy four MSDF Aegis-equipped destroyers with Standard-3 missiles to attack enemy missiles in the outer atmosphere, and six ASDF high-altitude air defence units equipped with Patriot Advanced Capability-3 (PAC-3) missiles to attack those that reach the lower atmosphere. The ASDF will deploy four PAC-3 missile batteries by 2010, beginning with the first at Iruma Air Base in Saitama Prefecture by March 2007, with a likelihood of more. Upgrading of the existing four Kongo destroyers for missile defence duties has begun.

Figure 32

ASDF Patriot missile firing



Source: ASDF

AN-SPY-1D phased array radar below bridge on each side

Figure 33

Kirishima 174, Kongo-class Aegis destroyer



Source: MSDF

US missile defence on Japanese territory

The United States itself is deploying PAC-3 missile batteries at Kadena Air Base in Okinawa and Yokota Air Base in Tokyo. In 2006, the US Navy also deployed the Aegis cruiser USS Shiloh to the joint naval base at Yokosuka, as well as deploying Aegis ships in a fixed operational zone off Hokkaido in the Sea of Japan to carry out test surveillance and tracking of North Korean missile launches. These are as much part of the NMD system as they are directly involved in the defence of Japan, as is the deployment of a transportable X-band radar system to the ASDF base at Shariki in northern Honshu.

Japan’s X-band radar

Radar is a key problem for all missile-defence systems. In addition to the US deployment of its Shariki X-band radar facility, Japan is developing its own X-band phased array radar system at the JDA’s research facility at Iioka in Chiba prefecture. Following a budget request in 2006 of 18.8 billion yen four of the giant FPS-XX radars will be deployed, starting from 2009. By 2011, four FPS-XX’s will be deployed: first at an ASDF base at Shimokoshikishima, Kagoshima Prefecture, and then in Oominato in Aomori Prefecture, Yozadake in Okinawa, and on the island of Sadojima in Niigata Prefecture. The Iioka facility reportedly successfully tracked a Russian submarine missile launch in late 2005. Japan has agreed to a US request that the four FPS-XX SDF radars provide input into the US early warning system.

Integration of the US and Japanese-missile defence systems

Command of the Japanese theatre missile system will be located at the joint Yokota Air Force base, closely integrated with the US system linked to the North American Aerospace Defence Command (NORAD) in Colorado. The Japanese system, when complete in 2011, will link four Aegis ships, 16 PAC-3 Firing Units, four FPS-XX radars, and seven upgraded FPS-3 radars.

FPS-XX radar under development at Iioka, near Tokyo

Figure 34

Japan’s FPS-XX X-band radar



Source: JDA

Open-ended costs?

The Japanese missile-defence program involves many serious uncertainties and difficulties. The first of these is cost, which is somewhat open-ended. The initial announcement put the cost of spending in FY3/05 for the upper- and lower-tier systems alone at 100 billion yen, but these figures were almost immediately abandoned. The JDA initially estimated overall costs at 500 billion yen, then doubled, and then expected to be at least double again. The US informed Japan that the cost of the Standard Missile 3 (SM-3) under joint

development would be triple that of 2003 estimates. The *Yomiuri Shimbun* quoted an anonymous Japanese defence agency official as saying 'it's possible that the US estimate includes experiments that are much larger in terms of scale than Japan needs.' After the North Korean missile test launches in mid-2006, the JDA announced it would increase its missile-defence budget request for FY3/08 to 219 billion yen, up from 140 billion for FY3/07.

The strategic politics of radar and satellites

The second set of difficulties concerns the long-term political consequences of the missile-defence decision. In order to locate an incoming missile in flight in a very short time, the SPY-1D radar at the heart of the upper-tier sea-based system will need to be cued in real-time as to the fact of the launch and the missile's general trajectory. Once the relevant small box of lower space or the upper atmosphere is correctly and rapidly specified, the Aegis system has a much higher chance of precisely determining the interceptor missile's trajectory and destroying the enemy missile. Without such cueing, chances of success are much lower. The only source of such cueing is the still-evolving suite of ground- and satellite-based radar and infrared surveillance systems planned for the US National Missile Defence System. Consequently, the nature of the technology involved means that the Japanese system is dependent on its connection to that of the United States for any chance of success.

Missile defence and collective defence

There are two political problems here, one minor and one of great consequence. Firstly, the technological integration renders the missile-defence system a matter of collective defence, at present regarded as unconstitutional by the interpretation of the government's Cabinet Legislation Bureau (CLB). According to the CLB, 'the Japanese government nevertheless takes the view that the exercise of the right of self-defence as authorized under Article IX of the Constitution is confined to the minimum necessary level for the defence of the country. The government believes that the exercise of the right of collective self-defence exceeds that limit and is not, therefore, permissible under the Constitution.' Missile defence, which may involve the defence of the US as much as Japan, is held to violate that proscription. In fact, the constitution does not prohibit collective defence explicitly, and both legal specialists and the US government have on occasion indicated that Japanese administrations can readily change the interpretation, but have chosen not to for political reasons. It is likely this situation will change in the near future.

China and Japanese missile defence

But the nature of the technology carries more serious political implications. Not only does it leave Japan dependent on US technological support in time of crisis, but equally, it implicates Japan in the activities of US missile defence systems in relation to Japan's regional neighbours. Like it or not, Japanese technological dependence on the US for its missile-defence system's viability reinforces the perception by China that a Japanese system and an American system are not separate entities. As far as China is concerned the combined systems have a potential - at least in the future if not yet - to nullify China's small strategic ICBM nuclear deterrent force.

Japanese missile defence and Taiwan

China is also concerned about the mobile character of the Japanese sea-based missile-defence capacity, especially given its linkage to the US system. While the protection of Japan and US bases in Japan are undoubtedly the key objectives, clearly MSDF Aegis destroyers could be moved south to assist in the defence of Taiwan. Japan has no formal defence ties with Taiwan, and deep and growing economic links with China. Yet the studied ambiguity of Japanese interpretations of the area to which its treaty obligations with the United States apply has not eased Chinese threat perceptions.

A long-term structural antagonism with China

The technology of Japanese missile defence then becomes a source of long-term structural antagonism between Japan and China, which can only be obviated by abandoning the technology. A more likely consequence is that China will exercise its long-held options to hasten and deepen its strategic nuclear-modernisation program, and set off a regional strategic arms race.

Expanded and upgraded special-forces units

Special forces

Concern about the possibility of guerrilla or commando raids on nuclear-power facilities by North Korean forces or Chinese occupation of the Senkaku/Diaoyutai Islands led to demands for increased flexibility and mobility in the SDF. ASDF and MSDF transport capacity has been increased. Runways in strategic joint civilian-military airfields such as in Miyakojima south of Okinawa have been greatly extended. Communications and command systems have been upgraded. But perhaps most importantly, rapid reaction and special-forces units have been expanded and upgraded.

A range of special forces

Where there were almost no significant special forces two decades ago, Japan now has a considerable array of clearly differentiated special forces, including the following: the National Police Agency Special Assault Team (SAT) and Special Investigation Team (SIT); the GSDF Special Operations Group (SOG), 1st Airborne Brigade, Western Army Infantry Regiment (WAIr) and Tsushima Guard Unit (ASF); the MSDF Special Boarding Unit (SBU); and the Japan Coast Guard Special Security Team (SST).

3,200-strong GSDF Central Readiness Force

In March 2007, the 3,200-strong GSDF Central Readiness Force will be formed under the direct control of the JDA Director-General. The CDR will be made up of the 1st Airborne Brigade, 1st Helicopter Brigade, 101st Special Weapons Protection Unit (nuclear biological and chemical weapons protection), Special Operations Group and the International Operations Education Unit.

Emerging intelligence giant in East Asia

Electronic and imagery intelligence

The impact of information technology in military matters is often known as the revolution in military affairs, referring to the profound impact of relatively low-cost IT applications to a wide range of military activities. At heart, the most strategically significant component is the impact of technological change in intelligence gathering and analysis, which permits earlier warning of threats and accurate targeting. The collection and analysis of intelligence via high technology - imagery intelligence (IMINT) and signals intelligence (SIGINT) - thus becomes a priority. Japan is now emerging as an intelligence giant on the East Asian stage, far in advance of its neighbours.

Ten Japanese signals-intelligence bases

Today, the Japanese government admits to the existence of nine SIGINT bases. These are generally known to be at located at Wakkanai, Nemuro, Higashi Nemuro, and Higashi Chitose in Hokkaido; Kobunato in Niigata Prefecture; Ooi in Saitama Prefecture; Miho in Tottori Prefecture; Tachiarai in Fukuoka Prefecture; and Kikai-jima in Kagoshima Prefecture. A tenth on the island of Okushiri off the west coast of Hokkaido is also well known.

Greatly upgraded capacity over the past decade

All 10 stations are under operated by the GSDF, and controlled by the Defence Intelligence headquarters within the JDA. All intercept radio communications at various frequencies (HF, VHF, UHF) from neighbouring and distant countries, as well as from within Japan, and most satellite downlinks. All 10 facilities have been greatly upgraded over the past decade in line with JDA policy about the importance of improved signals intelligence capacity.

Defence Intelligence Headquarters established

Defence Intelligence Headquarters (DIH) was established 1997 with 1,700 staff. By 2006, it had close to 2,500. The Signals Intelligence division with more than 350 staff is the largest unit in DIH, and manages and analyses input from the 10 GSDF ground stations, as well as liaison with US SIGINT.

Imagery intelligence in two locations

Imagery intelligence is analysed in two key locations: the relatively small DIH Imagery Intelligence section, and the larger Cabinet Satellite Intelligence Centre within the Cabinet office. Imagery comes from three sources: United States government agencies, commercial imaging companies, and Japanese Information Gathering Satellites.

Military-grade surveillance satellites

The decision to launch Japanese-built military-grade surveillance satellites, of which three are presently in orbit, was taken following the North Korean Taepodong missile launch in 1998. It had in fact been long planned, in part because the government had become convinced that as a loyal ally of the United States it deserved better access to US IMINT than it was getting. Indeed in the wake of the Taepodong launch, the Chief Cabinet Secretary complained about the tardiness of US provision of information to its ally most concerned with the launch over its airspace.

Optical and radar satellites

The first three Information Gathering Satellites (IGS) were manufactured by Mitsubishi Electric, despite strong political pressure within the LDP and the JDA to buy from the United States. IGS 1A is an 850kg satellite with an optical sensor. IGS 1B, weighing 1,200kg, is equipped with a synthetic aperture radar that distinguish objects through cloud and in darkness. According to government statements, resolution is not less than one metre - significantly worse than a number of commercial products available from Europe and the United States. The next two satellites in the same series were destroyed when the H-IIA rocket failed to launch properly, and a third, optical satellite was launched in 2006. A fourth will be launched in March 2007.

53 metres high, 10-tonne payload

Figure 35

H-IIA rocket in action



Source: JAXA

**New generation
of satellites, new
lower-cost rockets**

New generations of military surveillance satellites with much higher resolutions are expected over the next five years. New rockets will lower the unit cost of launches and increase reliability, and bring the launch costs for Japan closer to those of Europe and the United States. At present an H-IIA launch costs about 10 billion yen, compared with 6-7 billion for the French Ariane or Lockheed.

**Japan and the
militarisation of space****The militarisation of space**

While more and better intelligence is generally highly desirable and offers the possibility of increasing military transparency and reducing the likelihood of decisions taken on weak information premises, there is a darker side to Japan's satellite program. The militarisation of space is now a major international issue, and there is a quite real and challenging race for space dominance firmly on the agenda of the US military, and that of other countries as well, including China.

**Rescinding the Diet
resolution on 'the
peaceful uses of space'**

This is a multifaceted contest, ranging from the construction of European and Japanese alternatives to the US-controlled Global Positioning System (in Japan's case through its planned Quasi-Zenith Satellite System) through to fears that the long-term result of the troubled US National Missile Defence Program will be the development of anti-satellite weapons - and US fears that China will move in that direction first. Fears of possible Japanese increasing interest in participating seriously in this contest were exacerbated by the late 2006 announcement by the Liberal Democratic Party that would introduce a bill into the Diet to rescind the 1969 Diet resolution on the peaceful uses of space. In its place, the new bill states that space must be used 'for the sake of peace and safety of the international community and our nation's security.'

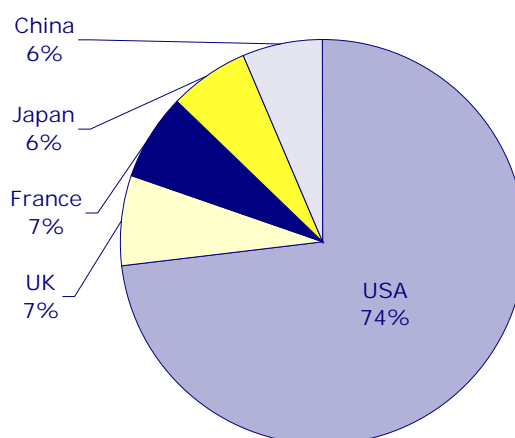
Military spending budget

World's fourth-largest military spender

Japan currently ranks fourth in world military spending, according to the Stockholm International Peace Institute. In constant 2003 US dollars, and at 2003 prices, SIPRI estimates Japan's military spending at US\$42.1 billion, just ahead of China at US\$41 billion, and just behind France at US\$46.2 billion, Britain at US\$48.3 billion. The United States is number one by a factor of ten, at US\$478.2 billion. So without doubt Japan is at least in budgetary terms a military great power. In per capita terms, the picture is different, with Japan spending only US\$329 per person on defence, compared with Britain's US\$804, and the US at five times the Japanese rate with US\$1,604 per capita.

Figure 36

Military spending by the world's top five spenders, 2005



Source: SIPRI 2006, CLSA Asia-Pacific Markets

Japan and Germany - both spending 1% of GNP on defence

At times in the 1990s, at the height of the economic bubble, Japan was the world's second-largest defence spender. The comparative picture fluctuates slightly from year to year, but for the past decade or more Japan's position has been more or less where it is now, fluctuating between second, third and fourth, together with Britain and France and spending much less per capita - and per unit of GNP - than either. Germany is a closer comparison, smaller than Japan but also spending about 1% of its GNP on defence. Were Japan to spend as much on defence per capita as do Britain or France, the whole picture of Japanese security and foreign relations would be unrecognisable.

Figure 37

Japanese defence expenditure, 1997-2007

	(¥bn)
1997	4,941.4
1998	4,929.0
1999	4,920.1
2000	4,921.8
2001	4,938.8
2002	4,939.5
2003	4,926.5
2004	4,876.4
2005	4,830.1
2006	4,790.6
2007	4,863.6

Source: JDA

Defence spending almost level in time of recession

1% level of GNP

The key to Japanese military spending patterns is the 1% of GNP limit imposed by Takeo Miki cabinet in 1976. With a brief exception in the 1980s under Yasuhiro Nakasone, defence-related expenditures have stayed beneath that limit. The FY3/08 defence budget is 4.8 trillion yen (US\$41.4 billion), slightly higher than the two previous years, and moving back towards the 4.9 trillion yen stable figure for most of the period of Japan's end-of-century economic recession.

The politics of 1%

The 1% of GNP limit served to limit mistrust of government intentions regarding remilitarisation among a population with at least a large minority regarding the SDF as being unconstitutional and illegitimate, especially during the Cold War. In the 1990s, the expansion of the SDF's mandate into UN-sanctioned multilateral peacekeeping activities, followed by the post-9/11 Iraq and Indian Ocean operations have all been conducted in a period of fiscal austerity turning to stringency. This has led to a decline in the size of the GSDF in particular and more severe competition for funds. Politically the 1% limit has helped to enforce a measure of fiscal discipline on the JDA - the bid-rigging DFAA scandals notwithstanding.

What is not included

To some extent, the 1% of GNP figure is misleading. Much of the work of the Japan Aerospace Exploration Agency and its predecessors - the Institute of Space and Astronautical Science (ISAS), the National Aerospace Laboratory of Japan (NAL) and the National Space Development Agency of Japan (NASDA) - was dual-function in character. The H-IIA rockets, which launch the military satellites, were not funded out of the defence budget. The development of the technology for ocean-surface temperature sensing for climatic and meteorological studies is helpful for military-related remote-sensing concerns. There is little close scrutiny of apparently non-defence technical development budgets for either government agencies or large corporations with close involvement with the JDA. But Japan is hardly alone in this deficiency. By and large, the 1% of GNP limit is observed.

The lion's share of the defence budget has always gone to the GSDF, which now gets 37% of the total, compared with just 23% for the MSDF and the ASDF. What is striking about Japanese defence expenditure is the size of the wages bill - almost 45% of the total. Maintenance takes up one-fifth of the budget, leaving only 18% for equipment of all sorts and about 3% for research.

The defence industries

Techno-nationalism versus economic rationalism?

Japanese minnows in the world armaments scene

Japanese defence contractors are mostly minnows in the world armaments scene. In 2005 only seven Japanese defence contractors were in the world top 100, and the largest, Mitsubishi Heavy Industries, ranked 23rd. Its defence revenue in 2005 amounted to US\$2 billion - compared to the US\$36 billion earned by the world leader, Lockheed Martin, from defence. Following Mitsubishi Heavy Industries were Kawasaki Heavy Industries (43rd), Mitsubishi Electric (47th) and NEC (53rd), all earning about half of Mitsubishi Heavy Industries' defence revenue.

Big companies, small defence revenues

Yet, while these companies could not compare to the giant US and European weapons-systems producers for total defence sales, they were mostly very large companies in their own right, much bigger than their rivals in total revenues. The immediately obvious characteristic of all but one of the major Japanese defence contractors is that defence revenues account for only very small portions of their total revenue - at most 9-10%, but more often 1-3%. (The outsider, Universal Shipbuilding with a defence concentration of 27%, was previously unranked.) The huge US and European defence contractors on the other hand were in a sense one-trick ponies. Amongst the top seven world companies, only one, the Netherlands-based EADS, had a defence revenue concentration of less than 56%.

Japanese defence industry – the odd one out on the world scene

Figure 38

Defence contractors world ranking

Rank	Company	Defence revenue (US\$m) 2005	% of revenue from defence
1	Lockheed Martin	36,465	98
2	Boeing	30,791	56
3	Northrop Grumman	23,332	76
4	BAE Systems	20,935	79
5	Raytheon	18,200	83
6	General Dynamics	16,570	78
7	EADS	9,120	23
23	Mitsubishi Heavy Industry	2,055	9
43	Kawasaki Heavy Industry	1,103	10
47	Mitsubishi Electric	971	3
53	NEC	917	2
88	Toshiba	421	1
97	Universal Shipbuilding Corp	337	27
100	Ishikawajima-Harima Heavy Industries	296	3

Note: Japanese companies in bold. Source: Defence News Top 100, 2006

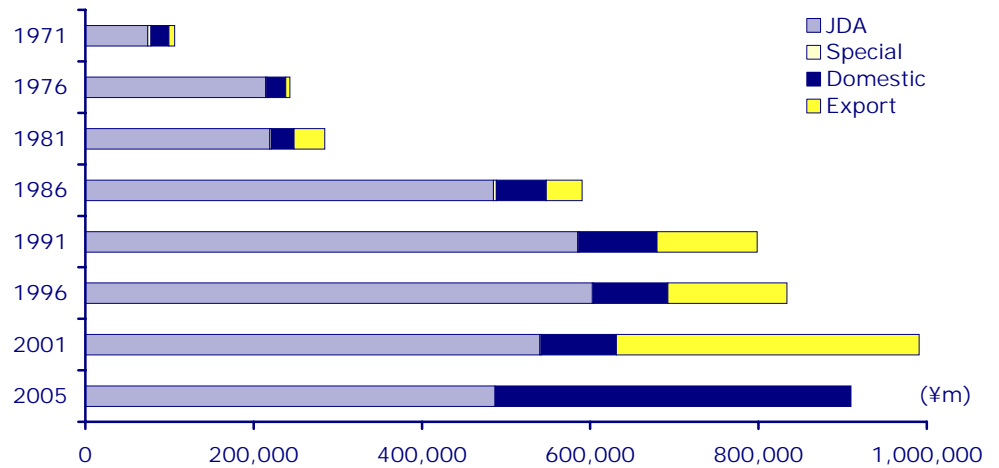
Advantages and disadvantages

While there is no Lockheed Martin or even Boeing in Japan, almost all the major Japanese defence contractors are at the apex of their part of the Japanese corporate world, with great industry and political influence. Against the US and European companies' advantages from high defence concentration of economies of scale, amplification of research benefits, closeness to government defence establishments, and a limited number of competitors, the Japanese companies are able to lay off the risks of fluctuating defence contracts against a much wider production and revenue base. Many of the non-defence activities of these companies are complementary to their defence contract work, giving them a base for expansion when the political climate - domestic and/or international - changes. And in the Japanese context of the culture of Article 9, the less-than-positive status of weapons manufacturer is not so highly emphasised.

The Japanese defence industry has only one customer – the Defence Agency. With the exception of components in the missile-defence program, there are no exports. In every major arms-producing country, defence-industry companies necessarily are close to their governments, but there is always the prospect of at least some foreign orders. For the past half century in Japan there has been none.

Figure 39

Aircraft production, by sector, 1971-2005



Note: 2005 data is merged - JDA/Special and Domestic/Export.

Source: Japan Society of Aerospace Companies, 2006, CLSA Asia-Pacific Markets

Global defence industry: Mergers and multinational consortiums

The global defence industry has been characterised by strong continuing pressures for rationalisation and concentration, mainly by merger and increasingly by the formation of project-based multinational consortiums. The multinational US-led Joint Strike Fighter project to build the F-35 Lightning II fighter epitomises this tendency: Lockheed Martin, Northrop Grumman and BAE will produce the aircraft, within a “tiered” multinational research and acquisition framework with four levels of participation for initial “partner” nations. The F-35 is expected to be the largest military aerospace project in history, with total life-time costs of US\$1 trillion, and generating preferential access to production possibilities to participating countries and their companies. To their chagrin, Japanese companies well aware of the pace of change in the global industry, were unable to participate in the JSF project.

Japanese defence mergers

The same process of defence-industry concentration can be seen in Japan, but on a smaller scale and a slower pace, and with some differences deriving from the lower level of defence revenue concentration. Over the past decade, a number of major companies have bought or sold divisions that have substantial defence revenues. For example, in 2000 Ishikawajima-Harima Heavy Industries bought the aerospace/defence division of Nissan Motor in order to boost its solid fuel rocket technology base. Universal Shipbuilding, the odd company out in the list of top Japanese defence contractors with a quarter of its revenues drawn from defence orders, is the result of a 2002 merger between the NKK Corporation and Hitachi Zosen Corporation - the shipbuilding arm of the Hitachi group.

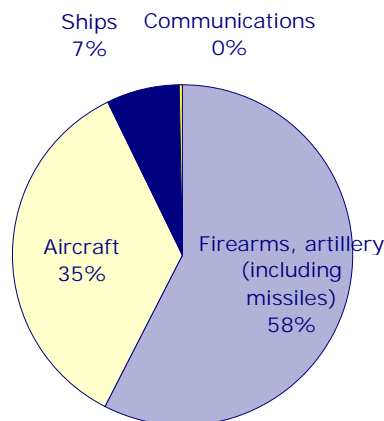
Defence-dependent aircraft industry in Japan

With severe gun control laws, manufacturers of firearms in Japan really have only one customer. The lack of export possibilities mean that artillery and missiles manufacturers are highly dependent on the JDA. Only ship builders are exempt from great dependence on the JDA. The aircraft industry in Japan

has had a particularly chequered history, especially in the field of large passenger aircraft. The defence base is very important for the aircraft industry, despite the lack of military aircraft exports. In recent years, the defence reliance has lessened. If the planned P-X long-range surveillance and C-X transport planes go into production, this may shift again.

Figure 40

Defence industry proportion of industry sectors, 2001



Source: Keizai Shinpo, CLSA Asia-Pacific Markets

Indigenous production

There are three main types of defence production by these large contractors in Japan. The first is the production of more or less wholly-Japanese designed equipment - domestic or indigenous production although given the complexity of large-scale weapons systems, there are in fact almost always at least some non-indigenous components. The Mitsubishi Electric-produced information gathering satellites are one important example of indigenous design and production.

Licensed production

The second type is licensed production of all or most of a weapon system originally produced by a foreign company, and often at first imported. In the case of Patriot Advanced Capability 3 (PAC-3) missiles for ASDF missile defence batteries, Japan will import missiles from Lockheed Martin for two years, before deployment begins in 2009 of PAC-3 missiles produced under licence from Lockheed Martin by Mitsubishi Heavy Industry. The third form is assembly of components imported from overseas.

US import and license sourcing

Given the fact that Japan overwhelmingly imports defence equipment from the United States rather than from European suppliers, and that the US shares more weapon systems with Japan than it does with any other ally, not only is the Japanese market important to US manufacturers, but there is a tendency to a built-in follow-on acquisition cycle.

Joint development in missile defence

The paradigm case of the third category, joint development, is the crucial example of missile defence technology. Under the agreement signed in 1998, Japan and the US agreed that Japan would contribute four elements to the development of the next generation of sea-based ballistic missile interceptor. This will be the next generation of the US-designed and built Standard-3 (SM-3) missile to be deployed on Japanese and US Aegis destroyers. Under the 1998 agreement Japan undertook responsibility for four important components of the new missile system: a lightweight nosecone, infrared sensor, the kinetic kill vehicle, and the second stage motor. The nosecone was successfully tested on an SM-3 missile in March 2006.

Misleading labels

In reality, the complexity of the weapons systems themselves and their production requirements, together with a variety of political and security consideration often lead to a mix of forms on any given project. Until the detailed breakdown of the components of a project and its whole lifecycle history are fully assessed, simple labels of "domestic production" or "licensed production" can be somewhat misleading.

"Military techno-nationalism" versus "economic rationalism"

Every major weapon-system acquisition issue in Japan always brings out a longstanding and unavoidable tension between the proponents of these two approaches, which is perhaps better characterised as an argument between on the one hand what Richard Samuels, the best observer of the Japanese arms industry, calls "military techno-nationalism" and what is probably best labelled as market-oriented "economic rationalism". Time and again the economic rationalist forces have pointed to the undeniable fact of the inevitable high unit cost of domestic armaments production in Japan. Correct cost comparisons are difficult to make even in the case of the same product produced in different countries, because of restricted access to proper pricing and offset data - and a deal of disinformation. But there is little doubt that even in the case of licensed production, unit costs are often several multiples of the original.

Cost issues versus strategic industries

Cost comparisons of wholly or largely domestically produced systems are difficult because of the simple problem of evaluating systems with different non-financial characteristics. Moreover, proponents of domestic production often concede the immediate cost differentials, but place a different value on the contribution of production of advanced defence equipment to the development of a more autonomous basis for strategic industries and aspects of society such as the knowledge base. Military techno-nationalism in Japan is in that respect just an application of characteristic Japanese mercantilist concern to build up and protect industries regarded as strategic.

"First we import; then we build under license; and then we produce ourselves."

The different forms of import and production then make up the possibility of a sequence leading from dependence to autonomy: "First we import; then we build under license; and then we produce ourselves." But converting that possibility into reality is harder than sometimes expected - both technically and politically. Not surprisingly prospective US suppliers and the US government emphasise the advantages of US purchase, whether under licensed production or offsets, or more rarely more or less direct import, for allied forces' interoperability.

Economic rationalism and ties across the Pacific

Every major defence-acquisition project calls forward the proponents of techno-nationalism and economic rationalism, the latter mostly inevitably - given the concentration on US defence technology - having close ties in a wider sense across the Pacific. The acquisition battles are fought in a variety of arenas - inside the LDP, amongst the party heavyweights and the *bouei zoku* or politicians specialising in defence issues; within the powerful media; by companies vying for the inside track on an order; inside the bureaucracy - within and between the JDA, and the Ministries of Foreign Affairs, Finance, and Economy, Trade and Industry.

The big arena: Fighter aircraft acquisition

Fighter aircraft acquisition is a key arena for this contest. The most recent round of defence-acquisition competition to break out concerned the ASDF's next round of aircraft purchases under the Mid-term Defence Review until 2009 and beyond. About 90 McDonnell-Douglas F-4 fighters - first introduced in Japan in 1973, though considerably upgraded in the F-4J Kai ("new")

version - are to be replaced. The ASDF also flies the modernised version of the twin-engine F-15 Eagle, the F-15J, and while that is not as old as the F-4, it was first deployed in the US in 1972.

The best known aircraft version of the recurring techno-nationalist/economic rationalist conflict took place in the 1980s and early 1990s concerning what was initially labelled the F-X fighter proposal. The US reacted strongly to a determined Japanese push for a world class domestically produced fighter. The result of a protracted and very public dispute was a Japanese backdown, in the form of the Mitsubishi F-2, a slightly larger and more powerful version of the F-16. This aircraft is still in the ASDF stable, but no longer produced.

Which American fighter for the next generation?

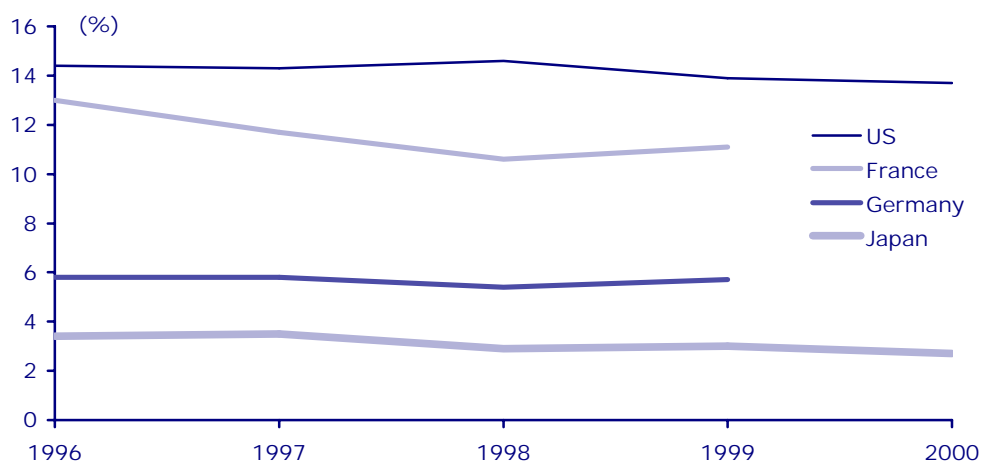
With no Japanese domestically produced fighter plans even on the drawing board, the question now is which foreign plane the ASDF will buy, and under what conditions. Japanese trading companies have been linking up with US and European manufacturers as domestic promoters. Itochu has acquired agent rights for Boeing's F/A-18 fighters, and Sojitz is promoting Boeing's aging but still developing F-15. Sumitomo has stepped outside the US ring to become the Japanese agent for the Eurofighter - though the ASDF has never bought European fighters. Mitsubishi Corporation is the Japanese representative for Lockheed Martin's attempts to sell its F-22 Raptor to the ASDF. Lockheed Martin is anxious for foreign sales following a USA Air Force decision to halve its original F-22 order.

Restrictions on giving allies full access to the capacities of imported aircraft

However, while Lockheed is anxious to sell the fighter to the ASDF, and may be willing to provide the plane at a unit cost comparable to its USAF price, Congress and the US military may well balk at transferring key technology to Japan. As in many other examples in Japan and elsewhere, the case against foreign imports is bolstered by the reluctance of the United States to allow the militaries of even its closest allies to have full access to the potential of US-produced weapons systems. In the case of the F-22, there is hesitation in allowing full transfer to Japan of large parts of the electronic architecture, and the algorithms that make it fully usable; its advanced data links; and parts of the technology that lower its electronic visibility.

Figure 41

Defence research expenditure percentage of defence budget, by country



Source: JDA, CLSA Asia-Pacific Markets

Comparatively low military research budget

One key to military industry growth, the size of the defence budget as a whole apart, is the defence research budget. Generally the Japanese military technology research budget is about 3% of defence-related funding – compared with the US at more than 13% and France not far behind. Germany, which is most comparable to Japan in most other respects, funds military research at about double the Japanese rate. Since there are important dual function R&D activities not covered under the defence label, the data underestimate the real level of spending, especially in the aerospace industry. But the pattern is clear, and lobbying organisations such as Keidanren and the Japan Association of Defence Industry have been pressing the government on the research budget issue.

The financial logic of exports

One solution to the fundamental problem of high unit costs of Japanese-produced defence equipment is to increase production runs and spread development costs by exports. Basically this has been a closed option for more than four decades, which is now beginning to open. Under what are known as the Three Principles of Arms Exports, the Sato cabinet banned arms exports to: communist countries; countries under UN arms embargoes; and countries involved in armed conflict. In 1976, the Miki cabinet extended the ban to all countries: it was not possible to export arms from Japan.

Slow opening to arms export possibilities

Figure 42

History of the three principles on arms exports

Dec 1949	Foreign Exchange and Trade Control Law
Sep 1952	Japan joins COCOM
Apr 1967	Eisaku Sato cabinet prohibits arms exports to: communist states; states subject to UN arms sanctions; and states involved in or likely to be involved in international conflicts
Feb 1976	Takeo Miki cabinet extends ban to all other countries
Jan 1983	Yasuhiro Nakasone cabinet exempts United States from ban
Aug 1999	Japan provides missile technology to US under joint missile-defence research
Dec 2003	Decision to deploy theatre missile defence induces calls for arms export ban to be lifted
Jul 2004	Keidanren Defence Production Committee proposes Japanese companies be permitted to take part in international weapons development
Jul 2005	JDA announces possibility of export of interceptor missiles jointly developed with United States to third countries.

Source: MOFA

Missile technology transfer as the key

In 1983, Prime Minister Nakasone exempted the United States from the ban, and since then, considerable Japanese technology has flowed into US defence equipment programs. This flow received a considerable boost with the joint Japan-US theatre missile-defence technology development program in the 1990s, mainly because the US was anxious to gain access to certain technologies in which Japan was a clear world leader. In Japan, this was seen as a mixed blessing, and there was considerable debate as to whether the net transfer of technologies was in Japan's best interests.

The road to arms exports

The case for collaboration in missile-defence research and development won out, and ultimately opened the way for the first major breach of the export ban proper: in 2005 the JDA announced that the new interceptor missiles Japan is jointly developing with the United States could be sold to third countries. The peak business organisation Keidanren has been lobbying strongly on defence issues for some time, arguing for a relaxation of the arms

export ban, along with a revision of the “peaceful uses of space” Diet resolution, and changes in JDA acquisitions processes. This process of gradual erosion of the prohibition on arms exports will continue, and with it, the growth of the Japanese defence industry.

**Dual-use technologies
and WMD proliferation**

One complicating factor is the global rise of concern about exports to inappropriate state- and non-state recipients of dual-use technologies. While the precise makeup of the list of what constitutes a technology that can be used for both peaceful purposes and for the manufacture of nuclear or biological or chemical weapons can be disputed, there is a broad agreement on certain items. In Japan the industry-funded Centre for Information on Security Trade Control (CISTEC) is at the centre of industry and government efforts to regulate potentially dangerous technology flows. The most difficult area is that of the most advanced technologies, just nanotechnology, where research is moving faster than the capacity of regulators to perceive dangers.

The fading taboo: The nuclear option

Three Non-Nuclear Principles: Japan will not possess, manufacture or allow the deployment or transit of nuclear weapons.

Until very recently, the question of Japan acquiring nuclear weapons was not a matter of public discussion in Japan. Those very few far-right nationalists who proposed the matter were rapidly consigned to the political wilderness. Successive Japanese governments up to the present have confirmed the position first set forward in the 1960s by Prime Minister Eisaku Sato as the Three Non-Nuclear Principles: Japan will not possess nuclear weapons; will not manufacture nuclear weapons; and will not allow the deployment or transit of nuclear weapons within or across its territory.

Non-nuclear principles and nuclear allergy

The principles have endured as the basis of Japanese policy even after revelations that Sato and his successors had colluded in the continuing violation of the third principle by agreeing to US nuclear weapons in Japan until the 1980s. The Japanese public and neighbouring countries accepted that Japan was not and would not become a member of the nuclear-weapons club. The political bottom line was certainty that the great majority of the Japanese public would never tolerate any public movement to nuclear weapons: even among conservatives, the nuclear allergy as its opponents called it was deep and binding.

A discreetly advertised virtual nuclear deterrent

After careful scrutiny of Japan's scientific, technological and economic resources, nuclear-weapons specialists around the world concluded from at least the 1980s that Japan possessed the capacity to make a nuclear weapon. But such specialists on the watch for any sign of "nuclear breakout" from the Non-Proliferation Treaty also confirmed the government position – the capacity was undoubtedly present, but the intention was definitely both absent and unlikely to emerge. Yet these same specialists also noted that the Japanese government was not shy in letting neighbouring countries know the general extent of its technological capacity in the nuclear field. This discreetly advertised latent nuclear capacity amounted to a "virtual nuclear deterrent": in a troubled region, Japan was indirectly making sure all states knew that in the unlikely event that the strategic and political landscape changed unpredictably, Japan could acquire usable nuclear weapons rapidly. The usual estimate was of the time required was about a year. But a virtual deterrent was very different from an actual one: that was unthinkable in the reality of Japanese politics.

Once shocking, now commonplace

In the second half of 2006, all these certainties began to unravel. Where public calls for nuclear armaments were once deeply shocking to the great majority of Japanese citizens, they are now almost commonplace. The North Korean missile tests in July 2006 and the nuclear device test on 9 October precipitated a dramatic shift in approach among the Japanese political elite. Several of the most senior members of the government and the ruling party announced that in the light of the perceived threat of North Korean nuclear weapons, Japan must ask the question of whether to produce nuclear weapons of its own. Although the new Prime Minister, Shinzo Abe, immediately repudiated such suggestions, the LDP seniors' comments ruptured the first powerful nuclear taboo in Japan - they made the nuclear-weapons issue a matter for debate by respectable mainstream politicians and media. By late 2006, this announcement of a new item on the defence agenda - once an unspeakable option - transformed the landscape of Japanese defence policy.

'Debate on nuclear weapons is only natural'

Within days of the North Korean nuclear test, both the Foreign Minister, Taro Aso, and the chairman of the Liberal Democratic Party's Policy Research Council, Shoichi Nakagawa, called for debate on the question of Japanese nuclear weapons. While maintaining his support for the three non-nuclear principles, Nakagawa reiterated the longstanding government view that 'possessing nuclear weapons is not prohibited under the Constitution', and went on to say that in the circumstances, discussion of nuclear weapons is 'only natural'. The Prime Minister immediately moved to reassure both Japan's allies and neighbours and the Japanese public by reaffirming the Three Non-Nuclear Principles. Abe then tried to put paid to the nuclear breakout in his own party and government by declaring the debate over before it had really begun. But to no avail. Both Abe's nationalist colleague Aso and Nakagawa publicly repeated their calls.

UN Secretary-General-elect called on Japan to completely turn its back on the nuclear option

In his few weeks in office to that point, Abe had won kudos in the region for his apparently effective attempts to at least begin to repair strained relations with both China and South Korea. Yet the speed and depth of the transformation of the security-policy landscape was such that within three weeks of the Prime Minister's public attempt to close off the nuclear debate that the United Nations Secretary-General-elect Ban Ki-moon publicly called on Japan to completely turn its back on the nuclear option. The fact that Ban was the Foreign Minister of South Korea amplified the significance of his unprecedented intervention.

Policy unchanged, but a weakening of previously firm barriers

We should be careful to not overstate the case - Japan's official policy remains unchanged, and there were strong statements from the upper levels of the government and the LDP critical of Nakagawa and Aso. There is no evidence of an official change of policy, and defence doctrine remains resolutely non-nuclear. But we need to ask how it possible for the two North Korean tests, both failures and both far from unexpected, to precipitate such a shift in a policy locked into Japanese political culture for more than half a century? In fact, almost every factor generally thought to be relevant to Japan acquiring nuclear weapons has undergone considerable change, mostly resulting in a reduction or weakening of previously firm barriers and exacerbation of incentives to Japan going nuclear.

Strategic clouds

The end of the Cold War did not lessen the sense of nuclear threat in Japan for long. The proliferation of nuclear weapons in India and Pakistan and North Korea acquiring at least a nuclear device, the modernisation and expansion of the Chinese nuclear missile suite, and the general Japanese sense of vulnerability from terrorism and Middle Eastern war all amplified a sense of unease in Japan. Most important of all, there was doubt about the United States – not so much about the promise of extended nuclear deterrence, because that was almost untestable and hence impossible to assess.

Rather, what mattered most was on the one hand the inability or unwillingness of the US to stop the North Korean drive towards nuclear weapons, and its acceptance in the name of great power realism of nuclear weapons in the hands of its Middle Eastern and South Asian allies and strategic partners, Israel, India and Pakistan. And on the other hand, there was a generalised sense of unease about the clearly catastrophic direction of the American wars in Iraq and Afghanistan. These might not bear on Japan directly, but they augured ill for those who wanted to believe in the commitment of unchallenged American power as it had been in the immediate aftermath of 9/11.

Weakening domestic opposition

For decades, anyone suggesting that Japan could turn to nuclear weapons was assured from every political direction that the Japanese public would never permit such a development. The core of Article 9 culture was what its critics described as the Japanese nuclear allergy - a deep aversion to any association with nuclear weapons, summed up in policy terms in the three non-nuclear principles. Yet powerful domestic Japanese institutional and cultural constraints on Japanese militarisation in general and nuclear weapons acquisition in particular have weakened dramatically since the end of the Cold War. The parliamentary core, the Socialist Party, has all but collapsed. The once highly organised peace movement backed by cross-generational public opinion has all but disappeared. It may be that a move to constitutional revision or acquisition of nuclear weapons would reactivate latent public opinion, but it would require a huge effort of political mobilisation. The liberal reliance on Japanese public opinion may turn out to be misplaced.

The three Non-Nuclear Principles are not legally binding

And law provides little comfort. The three Non-Nuclear Principles are not a matter of law: rather they are just an expression of opinion by the cabinet and the parliament, and in no way legally bind future government actions. Moreover the 2006 move by the LDP to rescind another long-standing security-related Diet resolution, the 1969 resolution on the peaceful uses of space, implicitly raised the question of whether the Diet resolution underpinning the Three Non-Nuclear Principles provides would be any more resistant to change. Equally, Article 2 in the Atomic Energy Basic Law also abjures Japanese nuclear proliferation, but is not legally binding without further concrete legislation, and that has never been forthcoming.

Three requirements: Nuclear device, targeting and delivery

At the same time as these threat perceptions have arisen and public opposition diminished, the technical preconditions for nuclear weapons acquisition have been maturing. There are three core requirements for a usable nuclear weapon: a weaponised nuclear device, a sufficiently accurate targeting system, and at least one adequate delivery system. Japan now has the undoubted capacity to satisfy all three requirements.

Japan could produce at the very least, a tritium-boosted plutonium fission weapon, and quite possibly a thermonuclear weapon

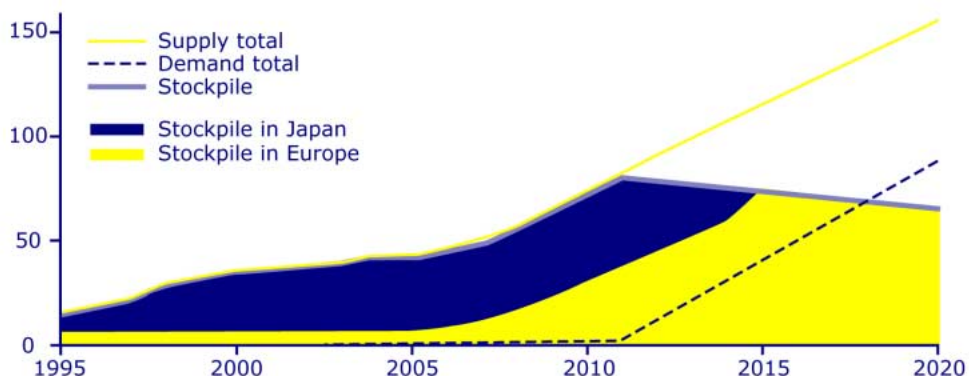
The time required to build a weapon depends largely on the amount of prior preparation and planning, and the degree of secrecy (from allied governments and the Japanese public) under which development/production takes place. But most technically informed analysts regard one year as adequate for Japan to produce at the very least, a tritium-boosted plutonium fission weapon, and quite possibly a thermonuclear weapon. It would enter the nuclear stakes at a higher level than countries like India or Israel. Compared to such countries, Japan has much more advanced nuclear-power production and research capacities: fission and breeder reactors, a small but adequate enrichment capacity, and a massive reprocessing facility just opening at Rokkasho.

Japan's plutonium mountain stands at 47 tonnes and is about to rise by 8 tonnes a year

Japan's efforts to remove the doubts of its neighbours are always undermined by the size of its plutonium mountain, which now stands at 47 tonnes, and will increase by more than eight tonnes a year when Rokkasho comes on line. At about 6kg of plutonium per tritium-boosted bomb, Japan has enough plutonium for more than 7,000 bombs. Japan presently operates more than 50 nuclear power plants, mainly of the light water variety. Government claims that reprocessing and mixed plutonium-uranium (MOX) fuel use and fast breeder reactors will ultimately remove the spent fuel problem and the still growing plutonium stock are implausible on the basis of recent experience and foreseeable technology. Both on economic and safety grounds, the difficulties of explaining the purpose of the economically non-rational plutonium economy will be exacerbated by Rokkasho.

Figure 43

Japan's plutonium stockpile



Note: Assuming that the Rokkasho reprocessing plant operates as planned and Plutonium stockpile in Europe is consumed first. Source: T. Katsuta, T. Suzuki, "Japan's Civilian Nuclear Fuel Cycle and Nuclear Spent Fuel Management Issue," International Panel on Fissile Material Report (Draft), August 2006, CLSA Asia-Pacific Markets

Military-grade satellites and expanded imagery intelligence

A capacity to locate and monitor potential military targets - especially targets smaller than cities, such as weapons factories or missile sites - is the second requirement for an effective nuclear capacity. In the past decade, Japan has dramatically expanded and modernised its imagery intelligence (IMINT) capacities - both technical and analytical. The national space agency, JAXA, has launched series of military-grade optical and radar satellites orbiting East Asia frequently each day. And the Cabinet Information Office and Defence Intelligence Headquarters have greatly imagery intelligence interpretation capacity. Even without relying on imaging intelligence supplied by the United States, Japan has the most advanced imagery intelligence capacity in Asia after that of China.

The H-IIA liquid-fuelled rocket, 17 stories high

The third technical requirement is an adequate delivery system. Depending on the expected target - North Korea or China - Japan already has at least two alternatives already in place. The acquisition of Boeing 767 refuelling aircraft overcame the problem that ASDF fighter-bombers did not have the range to reach their targets and return safely. A much more effective and less vulnerable delivery system became available in the late 1990s in the form of the giant H-IIA liquid-fuelled rocket, with a payload of 10 tonnes - more than enough for any nuclear weapon. More robust alternatives may be available in the future, but these two are sufficient to the task of minimal nuclear deterrence.

Heisei militarisation - with or without the nuclear option

Heisei militarisation is compatible with both a nuclear and non-nuclear Japan. Both options are consistent with the "normality" that Japanese governments are intent on achieving. The nuclear path still far from a reality, but it is now more open and more attractive than ever before. Moreover, there is a real possibility that a nuclear-armed Japan could not only take place *within* the US alliance, but even with US assistance.

With eyes wide shut

The future of Heisei militarisation

Throwing off restraints

Japan is proceeding towards full normalisation, moving closer to throwing off all the externally and self-imposed restraints which for half a century produced a gap between its economic status as the world's second-largest national economy and its restricted status in global security activities. In the existing world system, normalisation of this kind necessarily means militarisation, and that is precisely what Japan has undertaken, a process accelerated, but not caused, by the demands of the current US administration.

An autonomous foreign policy?

All of the political, legal and military-technical processes of Heisei militarisation that have developed within the US alliance also greatly increase the basis of an autonomous foreign and security policy beyond that alliance. The chances of Japan soon becoming involved in further militarisation on the basis of meeting its own perceived security needs, irrespective of the consequences of further demands from the US empire, are now very high, as with all such normal states, especially when they are economic superpowers.

What "normal states" do

Like France and Britain, this will very likely involve Japan in military interventions abroad - to protect its citizens and crucial economic interests. The Malacca Straits, Japan's lifeline to the Middle East, Aceh at the top of the straits on whose gas refinery is part owned by the city of Osaka and the Philippines where Japanese businessmen have been kidnapped for ransom come to mind as possibilities under certain circumstances. None of this could happen without the agreement of the "host" countries, and this would be no easy development. Yet if Indonesia and the Philippines fail to join the solidly developing democracies of Southeast Asia and move back to their militarised pasts, scenarios for intervention by a democratic Japan are conceivable.

Nationalists and realists applaud Heisei militarisation

A new breed of great power realists and nationalists in Japan, and many outside are applauding and encouraging this historic shift in Japanese security policy. Nationalists of different stripes feel that half a century of semi-sovereign status is ending, and a new era of national glory is beginning. Realists worried about a defenceless and dysfunctional Japan in an increasingly threatening world take heart from Japan moving into the international mainstream with the capacity to defend its interests and match its economic power with political muscle. Foreign supporters of the new muscular turn see new opportunities for alliance, collaboration, and strategic balancing of China.

Misreading Article 9 culture

Many outside Japan misread the depth of commitment to what we have labelled Article 9 culture or regard it as a rather difficult to explain international oddity that no sensible person would take seriously. The dispatch of GSDF forces to Iraq was rightly seen as a turning point. One of the dominant figures of Japanese conservatism in the 1980s and 1990s, former Chief Cabinet Secretary Hiromu Nonaka, responded by commenting on what he felt to be an ominous quality of the almost daily release of new military-related policies and initiatives, and criticized what he called Prime Minister Koizumi's "politics of dread":

"The people are drunk on words - like 1941"

This recent business of '[abandoning] the three principles of arms exports,' or again, '[s]end the SDF overseas to guard our embassies,' it's the same tempo as in the time when the war broke out, when one incredible story after another came tumbling out.

The people, Nonaka said, are 'drunk on these words':

Isn't this just like 1941? While I don't think anything like war is about to break out, what I'm really becoming afraid of is that it is like that same feeling of a portent that Japan is again taking a mistaken path.

Sources of anxiety with the intoxication with Heisei militarisation

Old men, perhaps yesterday's men, Nonaka and a number of eminent conservatives with long records of government service were warning of dangers that lie in the path so confidently recommended by the newly dominant realists and nationalists. One source of their anxiety was the enthusiastic association with the American crusade in Iraq, from which Prime Minister Koizumi pulled back before the inevitable crash. But Nonaka was hinting at another set of difficulties – not an inevitable return to militarism as many suggest, but rather some internal limitation in the capacity of the Japanese democratic political system to steady itself and make prudent choices in the faces of the siren calls of a muscular foreign policy.

Democratic deficits and the difficulties of restraint

Political scientists, noting that all existing democracies fall well short of their own ideals, would note that Japan has a particular set of democratic deficits that will impair the ability of the Japanese public to act as an effective restraint on a democratically elected government with a taste for international adventure. There has only been one substantive change of government party since 1948. There is no effective and coherent parliamentary opposition. Elected politicians and ministers have incomparably less actual power than descriptions of their legal authority imply. Japanese democracy is characterised by a lack of policy transmission belts from the community level to national party level and into the national policy arena. The judiciary has not been notable for its fierce independence from government, especially at the higher levels. The post-war extra-parliamentary opposition founded on strong trade-unions and a community-based peace movement has dissolved, but has yet to be replaced by a nationally coherent new structure. These are not problems unique to Japan, and in time may well be ameliorated. But in the meantime, Nonaka's warning should be taken seriously.

With eyes wide shut?

Like the characters in director Stanley Kubrick's final film, Japan may well be proceeding, waking but dream-like, into its chosen future with its eyes wide shut. Both nationalist and realist variants of a post-Yoshida doctrine tend to be confident about their ability to manage the inevitable vicissitudes of a new muscular foreign policy. Yet that confidence may prove misplaced, with serious consequences for both Japan and its neighbours.



Notes



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Operational hubs

Hong Kong

CLSA Hong Kong
18/F, One Pacific Place
88 Queensway
Hong Kong
Tel : (852) 2600 8888
Fax : (852) 2868 0189

Singapore

CLSA Singapore
9 Raffles Place, No.19-20/21
Republic Plaza II
Singapore 048619
Tel : (65) 6416 7888
Fax : (65) 6533 8922

USA

Calyon Securities (USA)
Calyon Building
1301 Avenue of The Americas
New York, New York 10019
Tel : (1) 212 408 5888
Fax : (1) 212 261 2502

United Kingdom

CLSA (UK)
7/F, 122 Leadenhall Street
London EC3V 4QH
Tel : (44) 207 398 6486
Fax : (44) 207 398 6592

Asia-Pacific Markets

China – Beijing

CLSA Beijing
Unit 10-12, Level 25
China World Trade Centre Tower 2
1 Jian Guo Men Wai Ave
Beijing 100004
Tel : (86) 10 6505 0248
Fax : (86) 10 6505 2209

India

CLSA India
8/F, Dalamal House
Nariman Point
Mumbai 400 021
Tel : (91) 22 5650 5050
Fax : (91) 22 2284 0271

Korea

CLSA Korea
15/F Sean Building
116, 1-Ka, Shinmun-Ro
Chongro-Ku
Seoul, 110-061
Tel : (82) 2 397 8400
Fax : (82) 2 771 8583

Taiwan

CLSA Taiwan
27/F,
95, Tun Hwa South Road
Section 2
Taipei
Tel : (886) 2 2326 8188
Fax : (886) 2 2326 8166

China – Shanghai

CLSA Shanghai
3/F, Suites 305-310
One Corporate Avenue
No.222 Hubin Road
Luwan District, Shanghai 200021
Tel : (86) 21 2306 6000
Fax : (86) 21 6340 6640

Indonesia

CLSA Indonesia
WISMA GKBI Suite 1501
Jl Jendral Sudirman No.28
Jakarta 10210
Tel : (62) 21 574 2626/2323
Fax : (62) 21 574 6920

Malaysia

CLSA Securities Malaysia
Menara Dion, No.20-01
27 Jalan Sultan Ismail
50250 Kuala Lumpur
Tel : (60) 3 2056 7888
Fax : (60) 3 2056 7988

Thailand

CLSA Securities (Thailand)
16/F, M. Thai Tower
All Seasons Place
87 Wireless Road, Lumpini
Pathumwan, Bangkok 10330
Tel : (66) 2 257 4600
Fax : (66) 2 253 0532

China – Shenzhen

CLSA Shenzhen
Room 3111, Shun Hing Square
Di Wang Commercial Centre
333 Shennan Road East
Shenzhen 518008
Tel : (86) 755 8246 1755
Fax : (86) 755 8246 1754

Japan

Calyon Securities
15/F, Shiodome Sumitomo Building
1-9-2, Higashi-Shimbashi
Minato-ku, Tokyo 105-0021
Tel : (81) 3 4580 5533 (General)
(81) 3 4580 8722 (Trading)
Fax : (81) 3 4580 5896

Philippines

CLSA Philippines
18/F, Tower One
The Enterprise Center
6766 Ayala Avenue
Makati City
Tel : (63) 2 860 4000
Fax : (63) 2 860 4051



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