

# Iran's nuclear programme: A briefing



Quaker Peace & Social Witness  
Peace & Disarmament Programme

*The purpose of this briefing paper is to outline the current situation with regards to Iran's nuclear programme, in the context of possible military action by the US or Israel. In particular, the paper looks at how UK civil society can support a fair and peaceful resolution.*

## Implications of an Iranian nuclear capability

Iran first began to develop a civil nuclear power programme in the 1950s with the help of the United States. In 2002, it became clear that Iran's programme had progressed further than had been thought. International attempts to limit the programme have followed, aimed at minimising Iran's potential for building nuclear weapons.

Since 2002, concerns over Iran's nuclear programme have intensified, with the international community calling on Iran to halt the enrichment of uranium.

Many states fear that a nuclear-armed Iran could destabilise the already fragile and war-torn Middle East. Even if Iran does not build nuclear weapons but develops the capability of doing so, other states in the region could start to do the same, leading to regional nuclear proliferation. Israel already has a large nuclear arsenal (about 200 warheads) and has indicated that it is not prepared to see Iran challenge its nuclear monopoly in the region. An Iranian nuclear

weapons programme would add a new and dangerous dimension to regional tensions.

A further risk is Iranian withdrawal from the Nuclear Non-Proliferation Treaty (NPT), which confines the spread of nuclear weapons. The treaty is already under severe strain, largely from the failure of the nuclear weapon states to abolish their arsenals. North Korea withdrew from the treaty in 2003; it could break up altogether if Iran were to do the same. The collapse of the NPT could lead to the rapid spread of nuclear weapons worldwide.



Iran's Bushehr nuclear reactor [Photo: Globalsecurity.org]

## Iran's right to civil nuclear power

The NPT is binding on all states in the world apart from India, Israel, Pakistan, which have never joined it, and North Korea. The treaty was agreed in 1968 as an attempt to slow down and reverse the nuclear arms race. To this end, it obligated the nuclear weapon states of the time (China, France, Soviet Union, UK, USA) to negotiate the abolition of their nuclear weapons, and it prohibited all other countries from obtaining them. The treaty also conferred on all parties a legal right to develop nuclear technology for non-military purposes, provided that they abided by the regulatory regime of the International Atomic Energy Agency (IAEA).

One of the International Atomic Energy Agency's (IAEA) core roles is: 'To provide credible assurance to the international community that nuclear materials and other items placed under safeguards are not diverted or misused...' The organisation monitors states with civil and/or military nuclear programmes, so is often called 'the United Nations nuclear watchdog'.

Iran denies that it aspires to build nuclear weapons and insists on its legal right to develop civil nuclear power technology. Many states, especially western states, have refused to accept this on face value. Iran has hidden aspects of its nuclear programme in the past, and questions remain that point to ambiguous intentions. Iran also aspires to develop its strategic influence in the region and might see nuclear weapons as a major advantage. No-one knows whether Iran is telling the truth, but equally there is no proof that it is lying. The lack of trust between the parties to the dispute is a major problem: in particular, there is very little trust between Iran and the US.

Many have questioned the need for a nuclear power programme in a country that possesses the second largest oil and gas reserves in the world. However, like China and India, Iran is currently experiencing a huge surge in its demand for energy — its population has doubled since the Revolution. This, coupled with its continuing industrialisation, has led to a fourfold

increase in energy consumption. As recent fuel rationing in the country has shown, Iran does not have enough oil refining capability to satisfy its demand for energy. Iran therefore wants to diversify its energy supply, and considerable national pride and dignity is invested in achieving nuclear power generation.

Given the current global drive towards nuclear power as an alternative to fossil fuels, attempts to stop Iran from pursuing a civil nuclear programme would be seen as hypocritical. Successive Iranian governments have promoted nuclear power and there is virtually universal support for it amongst the burgeoning population, partly because there has been no open public debate on the issue.



# Uranium enrichment

The main complicating factor is that technology for producing civil nuclear fuel can also be used to make nuclear weapons. In this light, western states have tried to dissuade or prevent Iran from developing a civil nuclear programme unless it agrees to import the nuclear fuel from elsewhere.

Much of the contention over Iran's nuclear programme focuses on the country's capacity for enriching uranium. This is the process by which uranium ore is improved so that it can be used as reactor fuel for nuclear power generation and/or as the explosive component in nuclear weapons.

Natural uranium ore contains less than 1% of Uranium-235 (U-235). In order to produce nuclear reactor fuel suitable for Iran's power stations, uranium needs to be enriched to about 4.5% U-235; to produce reliable weapons-grade fissile material, uranium needs enriching to 70% U-235 or more.

Uranium can be enriched using gas centrifuges. For practical purposes, producing reactor fuel for Iran's planned civil power programme would require several thousand centrifuges to be in constant operation. The same technology could also be used to make enough fissile material for a nuclear weapon.

Iran's uranium enrichment facilities are based at Natanz and operate under IAEA safeguards with regular inspections. They currently involve between 1,500 and 2,000 operating centrifuges. Iran is keen to give the impression that these are operating efficiently; however, most western nuclear analysts believe that Iran has yet to master the technology. Nevertheless, it will probably do so in time.



Gas centrifuge components surrendered when Libya dismantled its nuclear programme  
[Photo: US Department of Energy]

## Power politics

Western states in particular are alarmed at the prospect of Iran extending its power in the region, not least because of the Iranian leadership's public hostility to Israel and the instability of Iraq. In addition, the west, especially the United States, has its own interests in the region — securing long-term access to oil, for example — and does not want Iran to stand in its way.

According to the international security expert Paul Rogers, in 2003 US neoconservatives thought that 'the best way to deal with Iran was by installing a client administration in Iraq, secured by a substantial permanent American military presence at four large bases'. The deterioration of Iraq has overtaken that plan, but the US desire to contain Iran shows that global power politics are playing a major part in this dispute. Allegations that elements of the Iranian government have supplied weapons to insurgents in Iraq have further charged the situation.

At the same time, the nuclear weapon states continue to regard nuclear weapons as fundamentally important to their own security. The UK's recent decision to renew the Trident system is an example. Existing nuclear weapon states maintain that they would be insecure without nuclear weapons while attempting to persuade Iran of the very opposite.

# The possibility of military action and its consequences

## Why is military action a possibility?

A nuclear-armed Iran is a deeply unappealing prospect. To the Bush Administration, accustomed to taking a hard-line stance, the military option is seen as a potential solution. Because it cannot be known for certain exactly how far Iran's technical nuclear capabilities extend, proponents of military action argue the need to attack Iran as a precaution.

In addition, elements of the Administration believe that an attack on Iran would precipitate regime change by weakening the Iranian government and encouraging the Iranian people — already unhappy with the direction of domestic policy — to turn against it. For some US neoconservatives, who argue that there can be no settlement of the Iraq war without regime change in Iran, such a change would be a positive development. A focus on Iran might draw attention away from US failures in Iraq. Alleged Iranian support for the Iraqi insurgency potentially provides an additional motive for military action.

## Misinformation and misunderstanding

Much of this is based of a lack of understanding of Iranian politics and motives. The Iranian civil nuclear power programme is a source of national pride in Iran, and from this perspective, any bombing of Iranian nuclear research facilities by the US, would be unlikely to result in the Iranian people ousting its government - conversely, it could even result in the public rallying around their leadership.

The rhetoric of the United States administration has encouraged the view that Iran wishes to attack the West or Israel. In October 2005, President Ahmadinejad was reported as declaring that Israel should be 'wiped off the map'. A more accurate translation from the Persian would have read, 'The regime occupying Jerusalem should vanish from the pages of time.' Whilst still bellicose and unhelpful, the more faithful translation does not suggest an intention to attack Israel.

In addition, both sides have overstated the political power of President Ahmadinejad, who does not hold the position of greatest power in Iran. Within the Iranian constitution, ultimate

power resides with the Ayatollah Ali Khamenei. Khamenei has issued a 'fatwa' (religious decree) saying that the production, stockpiling and use of nuclear weapons is forbidden under Islamic law, although the practical significance of this is disputed.

## What military action is possible?

Over the past two years, the dispute over Iran's nuclear programme has on occasions looked like it might culminate in a resort to military action by the US or indeed Israel. However, opinions of the likelihood of military action differ. Some analysts believe that an attack is likely within months; others believe that it will not happen at all. In any case, speculation is difficult and unreliable.

US ground forces are extremely stretched in Iraq, so an attack involving US ground troops is very unlikely. However, this does not mean that an attack could not happen. With US air bases in 11 countries surrounding Iran and only limited navy and air force engagement in Iraq, military strikes against Iran may be within current US capability. As such, it is conceivable that US military strategists would opt for air strikes against Iranian nuclear facilities lasting a few days and with the aim of setting back Iran's nuclear programme by two to five years.

Those who believe that military action is likely point to the steady build-up of US forces in the



The nuclear facility at Natanz [Photo: Geoeye.com]

region, including the rare presence of two massive naval battle groups. The US administration has a track record of military interventions intended to protect its interests abroad, even when military action has seemed to be irrational and counterproductive. The prospect of a nuclear-armed Iran is so abhorrent to the US administration and the powerful Israeli lobby in the United States that any action, however desperate, could be considered.

Those who doubt that military action is likely point to the improbability of it succeeding in its objectives; Iran would probably recover and resume its nuclear programme quickly. The lack of support among the US public and Congress for a military strike, its illegality under international law and the lack of other states willing to support it, all suggest that US military action may be unlikely. Iran also has many options for retaliating: blocking and sabotaging oil supply to the west, thwarting western objectives in Iraq, support for Hizbollah in Lebanon, withdrawal from the Nuclear Non-Proliferation Treaty.

A smaller-scale attack by Israel, perhaps secretly supported by the US, is a possibility and has a precedent; Israel destroyed an Iraqi nuclear facility in 1981 in a surprise air strike. An Israeli strike on Iran could provoke a dangerous and possibly escalatory retaliation.

## The consequences of military action

Speaking at the World Economic Forum in January Mohamed ElBaradei, head of the IAEA, said an attack on Iran 'would be absolutely counter-productive, and it would be catastrophic'. A report by the Oxford Research Group and another by a coalition of 17 non-governmental organisations have detailed the harmful consequences of military action.

Military planners might also target nuclear scientists on the understanding that attacking the installations alone will have only limited effect, but by killing the people with the technological know-how, Iran's nuclear programme could be set back for longer. This means that military strikes could target offices and laboratories in civilian areas and cause many casualties.

Iran's nuclear facilities are located near densely populated towns; in addition, US military strategists are likely to target military support facilities in order to minimise Iranian retaliation

– both these actions would result in increased civilian casualties.

An attack on Iran would likely result in a hardening of the Iranian stance as hardliners predominated and the Iranian public supported their president. It is likely that following an attack, Iran would feel more compelled to defend itself and as a result would seek to build a nuclear weapon as soon as possible. Iran could withdraw from the NPT, which could prompt other states to do the same leading to the further spread of nuclear weapons to other states.

An attack would also complicate Israel's security problems, making the prospect of a settlement with the Palestinians ever more elusive. The Middle East and broader region would become more unstable, including Iraq and Afghanistan; UK forces in Iraq and Afghanistan could be particularly vulnerable from insurgents supported by Iran, especially if the UK supported a US attack on Iran politically.

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Anti-Western sentiment would be inflamed; the risks of terrorism against western states could increase.

Energy insecurity would be exacerbated: Iran is the world's fourth-largest oil exporter and holds 10% of the world's proven resources – a disruption to Iranian oil supply could cause problems in the global oil market (in April 2007, former UN Secretary-General Kofi Annan suggested that a broadening of the Middle East conflict to Iran risked sending oil prices to \$120 a barrel); 40% of the world's oil shipments pass through the Straits of Hormuz – even the threat of an Iranian attack on the oil transported through the straits could have a significant impact on oil prices.

A rise in oil prices would adversely affect the EU economy; it could also stop developing economies from growing, thus exacerbating poverty and undermining debt relief.

Military action against nuclear establishments could unleash severe radioactive contamination.

## Securing a diplomatic solution

The probable consequences of military action against Iran are so serious and counter-productive that governments have an urgent responsibility to ensure that diplomatic options succeed. The two main antagonists are the US and Iran, yet both have refused to discuss the issue face-to-face so far.

### Reframing the problem

Besides the political power game being played out, both Iran and the international community have genuine interests and concerns that have yet to be recognised by one another.

Iran also has legitimate concerns about its insecure neighbourhood. Besides Israel's political hostility, Iran is surrounded by the US military presence in the region. The international community has tended to punish Iran rather than offer incentives. Frequent talk of a 'carrot and stick' approach to Iran likens the country to a misbehaving donkey and is patronising. The international community could do more to recognise Iran's dignity as a sovereign nation and also to support its desire for long-term energy security, including through Iran's great potential for renewable energy.

The international community is understandably concerned about the possibility that Iran wants to build nuclear weapons in contravention of its obligations under the Nuclear Non-Proliferation Treaty. Previous secrecy in its nuclear programme arouses suspicion, not only among western states but among most of the international community. Iran's pugnacious rhetoric does not sit well with its insistence that it has no hostile intent. Iran could do more to reassure the international community that it does not want to acquire nuclear weapons.

If Iran could verifiably renounce any aspiration to build nuclear weapons, and if the international community could guarantee Iran's legal right to a civil nuclear power programme, then many of the concerns of all parties could be met. Iran and the US in particular are a long way from this, however. If Iran and the US are mainly concerned with who holds power in the Middle East, or if they are motivated by mutual distaste for each other's culture, then the impasse is likely to continue and the likelihood of a military conflict will grow.

The hypocrisy of the existing nuclear weapon states vis à vis their own arsenals undermines the negotiations. Threats of sanctions and military action, combined with apparently unreasonable demands, also sabotage the diplomatic initiative. This approach strengthens the position of hardliners in the Iranian government and marginalises moderate voices.

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Paul Ingram, analyst with the British American Security Information Council, argues that a simple reframing of the problem would help:

We need to inject a certain respect into negotiations rather than the threats we have been using up until now. How do we see Iran? Do we see Iran as a bunch of mad mullahs who are about to use any opportunity possible to get back at the west — images that are totally inappropriate to today's Iran — or do we see this as an opportunity, not as a threat?

He also suggests that rather than trying to persuade Iran to stop enriching uranium, Iran might be persuaded to forego a nuclear reprocessing programme. Reprocessing typically involves the extraction of plutonium from spent uranium reactor fuel; the extracted plutonium can then be used for nuclear weapons. It is a faster route to nuclear weapons than uranium enrichment and not essential for a civil power programme. If Iran were to agree not to develop a reprocessing capability — a promise they proposed back in 2005 — this would help to build trust internationally without undermining its civil power programme.

## Time to talk

The dispute needs to shift from the question of whether Iran will suspend uranium enrichment, to how each party can get its genuine needs met. If the West continues to see the suspension of uranium enrichment as the main objective, then it will remain at an impasse with Iran and the potential for productive diplomacy cannot be realised.

The first step is to identify what each party ultimately hopes to achieve and then to address a range of security, economic and energy-related questions, as part of a process of normalisation in US-Iranian relations in particular.

Flexibility is key. By limiting Iran's access to technologies that present the greatest threat of nuclear proliferation, while ensuring that the most sensitive activities (such as limited uranium enrichment) are closely monitored by the IAEA, a safe basis for dialogue could be agreed.

Iran will want to see its security needs met, and its involvement in discussions about broader regional security issues would be beneficial. Not only could security cooperation potentially reduce Iran's perceived need for a nuclear weapons programme, but it could also provide an opportunity to discuss the issue of Iranian support for radical groups in Iraq, Lebanon and Palestine.

Most experts, including those within the US Defense Intelligence Agency and the IAEA, believe that Iran can create a nuclear weapon no earlier than 2009 or 2010, so there is still time to talk.

According to *Time to Talk*, a report by a coalition of 17 non-governmental organisations:

This time should be used to build confidence between the negotiating partners, helping to break cycles of mutual hostility, and to develop Iranian interests in established and potential political and economic relationships with the international community.

## The role of the UK

The UK can help to soften hardline stances in Iran and the US in particular and to build trust between the antagonists. A resolute and ongoing commitment by the UK to the diplomatic process would indicate that we are willing to treat Iran fairly in negotiations. This would strengthen the hand of moderates within Iran and send an important signal to the Iranian people.

Were the US to launch an air strike, it could involve the B2 'Stealth' bombers and B52 bombers stationed at its bases in Gloucestershire and on the British Indian Ocean Territory island of Diego Garcia. The UK would expect the US to seek permission first, which would be highly contentious in Britain.



Iranians and Americans cheering together at the 2006 World Cup in Stuttgart, Germany [Photo: Michigan Tech]

## What we can do

Members of the public can help to promote diplomacy and alternatives to military action by encouraging MPs to read this briefing or the expert briefings listed below.

We can also highlight the damaging hypocrisy of the UK's own nuclear weapons policy in the context of the dispute over Iran's nuclear programme.

## Sources and further reading

### Sources

We are grateful to Paul Ingram and Gemma Mortensen for commenting in detail on an earlier draft of this briefing. We have also drawn extensively on the following:

'Time To Talk: The Case for Diplomatic Solutions on Iran', Oxford Research Group, Oxfam, Foreign Policy Centre, Medact et al, February 2007. [www.crisisiran.com](http://www.crisisiran.com)

'Would Air Strikes Work: Understanding Iran's nuclear programme and the possible consequences of a military strike', Frank Barnaby, Oxford Research Group, March 2007. [www.oxfordresearchgroup.org.uk](http://www.oxfordresearchgroup.org.uk)

'General, you have the advantage of time: Iran's Response to the US Military Option', BASIC Project on the Preventive Engagement with Iran Discussion Paper Series No.1 February 2007, Sam Gardiner, Colonel, US Air Force (Retired), British American Security and Information Council, February 2007. [www.basicint.org](http://www.basicint.org)

'The Iranian nuclear crisis: a risk assessment', BASIC Project on the Preventive Engagement with Iran Discussion Paper Series No.2 March 2007, Sir John Thompson, British American Security and Information Council, March 2007. [www.basicint.org](http://www.basicint.org)

'The Developing Conflict', Talk given by Paul Ingram of BASIC at a Ministry for Peace meeting in Portcullis House, March 2006. [www.negotiate-peace.org](http://www.negotiate-peace.org)

The British American Security Information Council publishes regular Iran updates, offering a summary of international news stories on the dispute over Iran's nuclear programme. See [www.basicint.org/update/iran.htm](http://www.basicint.org/update/iran.htm) for details.

### Organisations

Organisations in Britain working for a peaceful resolution of the dispute over Iran's nuclear programme include:

British American Security Information Council  
[www.basicint.org](http://www.basicint.org)

Oxford Research Group  
[www.oxfordresearchgroup.org.uk](http://www.oxfordresearchgroup.org.uk)

Crisis Action [www.crisisaction.org](http://www.crisisaction.org)

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## About the QPSW Peace & Disarmament Programme

The Peace & Disarmament Programme is one of a number of projects in QPSW working to further Quaker peace and social justice concerns.

We work to develop a deeper understanding of the Quaker peace testimony; campaign for sustainable global security through disarmament; support the peace movement; and lead the Quaker response to international military crises.

Our programme newsletter *Disarm... for Peace* is published three times a year. Please email us to be added to the distribution list, stating whether you prefer to receive the newsletter by email or by post.

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