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Iran's Nuclear
Programme as a
Challenge to NATO's
Defence and Deterrence
Posture

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Iran's Nuclear Challenge

Since 2003, diplomatic efforts are underway to prevent Iran from "going nuclear". Despite numerous UN Security Council resolutions that include sanctions directed against the Iranian nuclear and missile programme, Tehran is not changing course. International coalition building against Iran has been quite successful: I doubt that five years ago the Iranian ruling elite would have imagined to be confronted with a sanction regime supported not only by Western countries but also by Russia and China. Nevertheless, Iran apparently comes closer to the bomb every day. Currently, there are few hopes that Iran could be stopped with diplomatic efforts.

It is true that the Iranian nuclear programme does have a civilian element. The Bushehr reactor is scheduled to begin producing electricity in August of this year. But the secret nature of other parts of the nuclear project, as well as its economic inefficiency led the overwhelming majority of international experts to conclude that the programme also has a nuclear weapons dimension. This seems to be the view of IAEA Director General Amano as well. In his most recent report of 24 May 2011, he is using very clear language by stating that

"...the Agency remains concerned about the possible existence in Iran of past or current undisclosed nuclear related activities involving military related organizations, including activities related to the development of a nuclear payload for a missile."

As of May 2011, Iran is running 5.860 centrifuges to enrich uranium, with additional 3.000 centrifuges installed but not used for enrichment. Currently, Iran uses these centrifuges to produce low-enriched uranium at a level of about 3-4%. But according to nuclear expert Mark Fitzpatrick of the IISS in London, this capacity of centrifuges could - if reconfigured - be used to produce highly enriched uranium for one nuclear weapon each year. Moreover, Iran already enriches uranium up to 19.75% supposedly for the production of fuel for its Tehran Research Reactor. But Iran does not have the capability to produce the respective fuel rods. Furthermore, Iran builds-up a 40 MWt heavy-water reactor at Arak. Similarly sized reactors ostensibly built for research have been employed by India, Pakistan, and North Korea to produce plutonium for weapons.

Finally, Iran is pursuing an advanced ballistic missile programme. The single-stage, liquid-propellant *Shahab-3* which is based on the North Korean *No dong*,

which itself seems to be based on a Soviet missile design of the 1950s that never entered production, has a range of 800 to 1.000 kilometres. This type of missile could be effectively used as a carrier for a nuclear warhead. The *Shahab-3* underwent massive design changes and was developed into the *Ghadr-1* with an estimated range of possibly up to 2.000 km. In addition, the two-stage solid-propellant *Sajjil-2* apparently has a range of even more than 2.000 kilometres.

Taking all this into consideration, I share the view of many other analysts that the religious elite in Tehran may not have decided yet to build the bomb, but I am pretty sure that Iran is on its way to become a virtual nuclear power.

Consequences for NATO's Defence and Deterrence Posture: a Shift to the Middle East

We do not know yet whether the E-3 + 3's two-track approach - combining sanctions as well as incentives will be successful in stopping Iran from developing a nuclear weapons option. Nor do we know whether military action will be taken to end Iran's controversial nuclear projects, or what the result of such military operations would be. What we know is that an Iranian nuclear capability - even if Tehran would not withdraw from the NPT and openly test nuclear weapons - would definitely change NATO's security environment. This change may be below the level of the threat the Soviet Union imposed during the Cold War, but it will still be significant. Many do expect a nuclear Iran to become much more assertive. NATO partners at its Southern flank would not be the only ones to feel less secure. In case Iran develops nuclear weapons and ballistic missiles that could reach Berlin or Brussels within this decade, Central European NATO countries would also need to be reassured and protected. The Alliance could hardly be indifferent in case Israel or one of those Arab countries that participate in NATO's Mediterranean Dialogue or the Istanbul Cooperation Initiative became the victim of Iranian military pressure. In sum, as a consequence of a possible nuclear Iran, the Middle East would gain significance for NATO's deterrence posture.

The Prominence of Missile Defence for NATO

Deterrence optimists often take the view, that a nuclear Iran could be successfully deterred just like the Soviet Union during the Cold War. In fact, why should Iran attack what still is the most powerful military alliance in the world, namely NATO? To do so would

SWP-Berlin Iran's Nuclear Programme as a Challenge to NATO's Defence and Deterrence Posture July 2011 clearly be tantamount to committing suicide for the ruling Iranian elite as the US would have no choice but to retaliate with an overwhelming nuclear response.

Deterrence pessimists argue that Iran (and other socalled rogue states, such as North Korea) cannot be deterred because these regimes are irrational. While religious beliefs and even a cult of martyrdom play a prominent role in Iran, one can hardly argue that Iran's objective to become a nuclear power is simply irrational. Nor did the regime act irrational since it began pursuing its nuclear course. Although I also belong to the group of deterrence sceptics, in my view the danger is not that Iran or other nuclear newcomers are less rationale than established nuclear powers. The problem is that it is questionable whether new nuclear players would engage in a nuclear learning process like the US and the Soviet Union did after the experience of the Cuban Missile Crisis. Such learning processes entail the establishment of effective command and control procedures within once own forces as well as communication lines with the adversary. Due to their geography or because their nuclear delivery systems would be vulnerable, nuclear newcomers may not enjoy a nuclear second strike capability. As a result, crisis instability is highly likely.

Most importantly, the strategic context today looks completely different as compared to the Cold War. In his famous debate with Kenneth N. Waltz on possible threats associated with the spread of nuclear weapons, Scott Sagan argues that further nuclear proliferation could result in aggressive behaviour of nuclear weapons states. They could easily invade small (neighbouring) states assuming that their new weapons will deter intervention by outside powers. This is exactly the situation we might face if Iran goes nuclear. Already today many states in the Middle East fear that a nuclear Iran might turn more assertive and provide a cover for proxies like Hezbollah and other terrorist organizations. Leaders in Tehran may calculate that foreign invasion to counter their aggressive acts becomes less and less likely the more Iran's nuclear and missile capacities advance. In any event, many observers believe that for Iran, nuclear weapons are weapons of deterrence and power projection. Against this background, the question is not whether the U.S., NATO, or the international community could deter Iran from a nuclear attack. At stake is, whether a nuclear Iran could deter international intervention aiming at re-establishing regional order against Iranian aggression or assertiveness.

SWP-Berlin Iran's Nuclear Programme as a Challenge to NATO's Defence and Deterrence Posture July 2011 Observing recent history of Middle Eastern affairs, we might also ask: Would a US-led international coalition, mandated by the UN Security Council, have freed Kuwait from Iraqi invasion in 1991, if Saddam Hussein had already had nuclear-tipped missiles capable of reaching Europe or the US?

During the Cold War period, the main idea of deterrence was not to use military force in a relatively stable situation. In the future and in a world with more nuclear powers equipped with long-range ballistic missiles, countries and alliances, such as NATO, will have to decide whether the protection of international order necessitates the use of their forces against aggressions in a contingency that might result in severe damage caused by the use of nuclear weapons by the aggressor.

Deliberately accepting one's own vulnerability, as the West did during the Cold War, does not seem the appropriate strategic approach in such a context. Instead, defensive options in addition to offensive capabilities are needed. Missile defences can work as a damage-limitation option and can help to maintain some room of manoeuvre. With its New Strategic Concept, NATO made an important step by declaring that it intends to "...develop the capability to defend our populations and territories against ballistic missile attack as a core element of our collective defence...".

Moving from "deterrence by punishment" to "deterrence by denial"

A step-by-step build-up of missile defences as planned by NATO could help to reduce the salience of nuclear weapons for NATO's deterrence posture. In particular, the Alliance in five to ten years from now could afford to end the deployment of US nuclear weapons in Europe and thereby the practice of nuclear-sharing. It's still very important political functions could be replaced by more modern, defensive oriented force structures that would be more appropriate to confront the security challenges of the twenty-first century. The planned NATO missile defence does keep the US committed to European security. Allies providing visible missile defence contributions could find new opportunities to actively participate in NATO force planning through arrangements similar to the Nuclear Planning Group. Finally, missile defences could continue to convince allies that they do not need to build up their own nuclear capabilities.

Deterrence by punishment and deterrence by denial have never mutually excluded each other. But in the years to come, NATO can be expected to increas-

ingly shift from the former to the latter. This process certainly will take time. And elements of punishment will not entirely go away. As long as nuclear weapons exist, the Alliance will maintain its nuclear options; moreover, more effective conventional strike capabilities will gain prominence. But taking all this into consideration, missile defences will become more important, while offensive capabilities will lose significance.