An Iranian Shahab-3 missile test, 28 September 2009.

For the first time in the alliance's history,

NATO is pushing for a missile defence ca-

pability to cover the entire alliance. Build-

ing on the Active Layered Theatre Bal-

listic Missile Defence (ALTBMD) system

launched by NATO in March 2005 to pro-

tect deployed troops against short- and

medium-range ballistic missiles, the new system is intended to offer protection for

the entire territory of the alliance. Its ca-

pabilities are to be built up incrementally

beginning in 2011, with the primary focus

on protecting European NATO members.

The entire system is expected to be established by approximately 2018. In order to

prevent this project from jeopardising rela-

tions with Russia, Moscow was invited at

the NATO summit in Lisbon in November 2010 to participate (cf. CSS Analysis no. 85).

An action plan for the concrete design of

the intended missile defence architecture

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NATO AND MISSILE DEFENCE: **OPPORTUNITIES AND OPEN QUESTIONS**

In its Strategic Concept adopted at the Lisbon summit, NATO defines the establishment of a missile defence system to defend populations and territories against ballistic missile attack as a core element of its collective defence. The main goal is to secure a damagelimitation option for Europe. In order to prevent the missile defence system from jeopardising relations with Russia or obstructing further disarmament steps, NATO has invited Moscow to participate. The project offers a great deal of opportunities for the alliance. However, important questions remain to be resolved.

> tem, but has reassessed its priorities. First of all, Washington is now basing its plans on the more likely threat: Europe will be within reach of medium-range ballistic missiles from the Middle East before the US comes within range of intercontinental missiles. Secondly, since the entire territory of NATO is to come under the aegis of the new program, the alliance as such will accordingly be included in planning. It is hoped that this will strengthen coherence within the alliance. Third, the Obama administration is striving to build systems that offer greater flexibility as well as reliability. Therefore, the initial focus will be on sea-based defence missiles, which have already been partially introduced in the US armed forces. Land-based interceptor missiles would only be added at a later date. Fourth, attempts will be made from the start to involve Russia in building a missile defence architecture for the alliance.

No decision has been made yet on the concrete design of the NATO missile defence architecture. It is already clear, however, that the US will carry the main burden. Washington is contributing the largest share of military hardware such as radar arrays and interceptors. In this respect, it is using the missile defence project to assert its leadership claim within the alliance. Elements contributed by the US must be integrated with the capabilities currently being developed by NATO to protect deployed troops, such as Patriot missile defence systems. NATO itself would only have to supply limited financing, currently estimated at around €200 million over a ten-year period. But this would only cover

is to be presented at the NATO defence ministers' meeting in June 2011.

Of course, the US missile defence plans,

which are to be combined with the capa-

bilities of European allies, play a key role in

the build-up of the planned system. Under

former US president George W. Bush, the

US had still emphasised national missile

defence plans. Elements of the defence ar-

chitecture, which was mainly intended to

protect the US itself, were to be installed

in Poland and the Czech Republic on the

basis of bilateral treaties. Russia severely

criticised these plans with reference to its

own security interests. When the new US

President Barack Obama cancelled Bush's

plans, many believed the end of missile

defence had come. This assessment proved

to be wrong, however. The US remains in-

terested in building a missile defence sys-

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REUTERS/Stringer Iran

the cost of linking individual defence modules. In addition, the alliance members are invited to contribute national investment. In view of shrinking defence budgets, a number of states are reluctant to make such commitments.

Another issue that remains to be resolved is the question of command-and-control authority. In case of a missile attack, the interceptor system would have to be activated within minutes. There would be no time for consultations. NATO commanders would have to be authorised in advance to launch the missiles. Due to the possibility of false alarms, some allies are unhappy with this solution.

The main threat: Iran's missile programme

The necessity of the missile defence system is often justified with the increasing proliferation of offensive missiles and the technology associated with them. NATO Secretary General Anders Fogh Rasmussen points out that more than 30 countries have the technical capabilities to produce ballistic missiles. Therefore, NATO troops on deployment require protection against missile attacks in order to ensure their operability. For civilian populations, ballistic missiles mainly constitute a comprehensive threat if they are able to carry nuclear or chemical warheads. An opponent equipped with missiles and nuclear weapons is capable of causing a very great deal of damage within a very short time, even if the weapons used in an attack are not particularly accurate.

Even if, due to Turkish concerns, NATO's Strategic Concept does not name any names, Iran is currently the only country that could acquire the potential to threaten central Europe with nuclear-tipped missiles in the coming years. Already today, large parts of NATO's southern flank and of NATO partner states are within reach of the missiles developed by Tehran. Currently, however, this does not imply any nuclear threat.

The Shahab-3 missile, variants of which have been put into service with the Iranian armed forces, is believed to have a maximum range of about 2,000 km. It is still unclear whether this maximum range can also be achieved with a payload of about 1,000 kg, i.e., the estimated minimum weight of a nuclear warhead. The Shahab-3 is a single-stage liquidpropellant rocket based on the design of the North Korean Nodong, which is ultimately derived from Soviet Scud missile technology of the 1950s and 1960s. In November 2008, Iran conducted the first test of its new Sajil missile. Unlike the Shahab, this is a two-stage missile using a solid propellant. For a country like Iran, this constitutes a technological quantum leap, though the reliability of the system is questionable and its accuracy remains low. This has given Iran at least an entry to multi-stage technology, which is necessary for increasing operational range significantly beyond that of the Shahab programme. The most important advantage of the solid propellant is that the

rocket boosters do not require time-consuming fuelling before launch, but are available virtually whenever

"In the future, the point may be not whether the alliance can deter Iran, but whether Iran is capable of deterring NATO or the West in general."

needed. However, Iran still lacks the industrial capacity for mass production of such missiles.

Whether Iran will be able in the coming years to successfully continue its missile programme depends on factors that are difficult to assess, such as the effects of sanctions, the country's general economic development, and the scope and quality of the assistance from abroad that Iran apparently continues to receive. It also remains unclear whether Tehran will complete the entire path towards the production of a nuclear capability. If a verifiable and sustainable diplomatic solution were found in the crisis over the Iranian nuclear programme, NATO would probably not terminate its missile defence programme entirely, but continue developing it at a diminished intensity and pace.

Deficits in nuclear deterrence

Considering its nuclear deterrence, why is NATO even planning to build a missile defence system? On the one hand, an accidental launch by Iran or another country cannot be excluded. This alone would not, however, justify building a missile defence system for the protection of the civilian population. On the other hand, the NATO missile defence system is intended to provide a damagelimitation option and to protect the civilian population in the coming years against the only state threat for which there are no efficient military provisions yet. Such a damage-limitation option could have a de-escalating effect in case of a crisis. Hostile offensive capabilities would not necessarily have to be taken out through own offensive operations at an early stage. Also, retaliatory strikes could be conducted at a far lower level than if an attacker were to cause maximum harm against a completely unprotected civilian population. Finally, a missile defence system increases the attacker's uncertainty regarding the potential success of his actions.

Should Iran – or, subsequently, further states in the Near and Middle East – acquire the ability to reach Central Europe

> with nuclear missiles, the nuclear capabilities of NATO or the US would certainly suffice to deter Tehran

from any attack. However, in the future, the point may be not whether the alliance can deter Iran, but whether Iran is capable of deterring NATO or the West in general. This question may arise if a military intervention in the Middle East is considered in order to counter undesirable Iranian influence or aggression that is incompatible with international law. In such a crisis, a nuclear escalation could not be excluded altogether, considering possible time pressure and lack of information on all sides involved. NATO would be well advised to acquire a damage-limitation option for such a contingency.

Missile defence: A substitute for nuclear sharing in NATO?

In the run-up to the NATO summit, there was much speculation over a possible linkage between the build-up of a missile defence system and nuclear disarmament. However, France successfully resisted deliberations that were gaining traction especially in Germany to reconsider the alliance defence programme as a long-term replacement for nuclear deterrence. In its Strategic Concept, NATO does profess the vision of a world free of nuclear weapons. The alliance would contemplate the use of nuclear forces only under extremely remote circumstances. However, as in earlier NATO concepts, deterrence resting on an appropriate mix of conventional and nuclear capabilities remains the core of the alliance strategy. As long as nuclear weapons exist, NATO will remain a nuclear alliance - this is the quintessence of the Lisbon document. At the same time, however, the intention is to create the necessary conditions for further reduction of the remaining US nuclear weapons in Europe. The precondition for this is Russia's willingness to increase transparency regarding its non-strategic nuclear weapons stationed in Europe and to redeploy them away from NATO's borders.

Against this background, the debate over the future of nuclear sharing within NATO can be expected to continue (cf. CSS Analysis no. 74 ☑). Germany, the Netherlands, Belgium, and Italy maintain air forces that are designated for delivery of US nuclear weapons stationed in these countries. Furthermore, the US maintains aircraft of its own in Italy and Turkey - where US nuclear weapons are also stored - that can be used to deliver nuclear weapons. Germany, the Netherlands, and Belgium as well as some non-host nations such as Norway are advocating a rapid withdrawal of these armaments.

Italy and Turkey are more reserved in this matter. While Rome fears a loss of influence, Ankara does not wish to remain the sole host nation in case of a withdrawal of US weapons from other NATO states. The question also remains whether, in a scenario where Iran acquires nuclear arms, a withdrawal of US nuclear capabilities would not induce Turkey to develop atomic weapons of its own. Many new NATO partners are also opposed to a complete withdrawal of US nuclear weapons from Europe. They fear that this might herald the end of the US military presence in Europe altogether a development that they aim to prevent with a view to Russia, which they still perceive as problematic.

Bearing in mind the deterioration of aging nuclear-capable European delivery systems, NATO is under pressure to decide. In view of continuously shrinking defence budgets, it is questionable whether both nuclear sharing and a NATO missile defence system will be affordable in the future. There are many indicators suggesting that the scales might tip in favour of a NATO missile defence system in the coming years. This would mean that Washington would still be bound to Europe by a major military project. Such an outcome would accord with the interests of many new NATO countries that wish to prevent a weakening of the alliance. Construction of a NATO missile defence system would liberate nuclear sharing from the burden of its role as the most important military anchor of the transatlantic re-

lationship. Since it would be an alliance project, the partners of the US would also have a say in it. Fur-

thermore, effective protection against a possible Iranian nuclear threat could prevent Turkey from developing nuclear weapons of its own.

Cooperation with Russia

The main political challenge in the context of the planned missile defence shield consists in convincing Russia that the system is not directed against its interests. This is why NATO has invited Russia to participate. Russia's President Dmitry Medvedev gave a fundamentally positive reply on this matter at the Lisbon summit. This creates great opportunities for both sides. Successful cooperation on missile defence would be an important element of comprehensive rapprochement between NATO and Russia, which has been explicitly mentioned as a goal by the alliance in Lisbon.

In its Nuclear Posture Review, the Obama administration had already offered Russia a dialog on far-reaching cooperation in missile defence. The offer included integrating US and Russian sensors and conducting joint tests, manoeuvres, exercises, and simulations. This would make it possible to develop shared threat and situation analyses, possibly involving Russian radar installations. The US does not appear, however, to envisage joint command and control of the defence system. Rather, Washington wants the commander to be a NATO general – presumably, an American – as is already the case with the alliance's integrated air defence system.

The Russian position is an inconsistent one. On the one hand, Moscow wishes to go beyond the ideas proposed by the US and build a single integrated system rather than two conjoined defence arrays. On the other hand, there are fundamental reservations against cooperation. In particular, the Russian military still harbours suspicions that the US and NATO are still ultimately aiming to deprive Russia of its second-strike capability. President Medvedev expressed this concern at a press conference in Lisbon. He made clear that Russia demands full equality when it comes to missile defence. Moscow is aware that its own capabilities are lagging far behind those of the US. This runs

"The question of command and control could grow into a stumbling block."

contrary to its claim to be treated as an equal in cooperation with the US. The question of command and con-

trol could grow into a stumbling block in this connection. Moscow's vision of a joint command is still far removed from the alliance's plans, which rather envisage separate operational commands.

Outlook

The project of a missile defence system for the entire alliance provides a great opportunity for NATO to demonstrate renewed unity. Nevertheless, controversial internal debates within the alliance on this issue may be expected in the future as well. Concerns over both the cost and the efficiency of the missile shield will be raised. The problem of the future command structure for the defence system will also continue to preoccupy the alliance. Mainly, however, the future of the project will depend on whether Russia can be convinced to cooperate. If that succeeds, missile defence will also have made a significant contribution to rapprochement between the former opponents. Otherwise, those NATO members for whom good relations with Russia are extremely important will view the NATO missile defence project with scepticism.

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