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## **RISKS TO CRITICAL ENERGY INFRASTRUCTURE AND OTHER EMERGING CHALLENGES: NATO’S APPROACH**

Ladies and Gentlemen,

Several months ago, at the Lisbon Summit, NATO leaders adopted a new Strategic Concept that will serve as the Alliance's roadmap for the next 10 years. It will help the Alliance to be effective in the modern security environment, which contains a wide and evolving set of challenges to the security of NATO countries. Such challenges include the proliferation of nuclear weapons and other weapons of mass destruction, terrorism, cyber attacks, key environmental and resource constraints.

Energy security risks are part of these challenges. According to the new Strategic Concept, “all countries are increasingly reliant on the vital communication, transport and transit routes on which international trade, energy security and prosperity depend. They require greater international efforts to ensure their resilience against attack or disruption. (...) As a larger share of world consumption is transported across the globe, energy supplies are increasingly exposed to disruption.”

Despite considerable efforts to increase energy efficiency, the world is still very reliant on energy resources, in particular fossil fuels. In 2010, oil consumption in the world increased around 1.9% in 2010 (OPEC data), global natural gas consumption grew by around 4.1% (Economist Intelligence Unit data).

Global primary energy consumption grew by 45 percent over the past 20 years, and is likely to grow by 39 percent over the next 20 years (BP data). The International Energy Agency (IEA) suggests that 90% of the growth in global energy demand over the next two decades will come from non-OECD countries, mainly Asia. The IEA also estimates that a global energy-supply system will need investment of about \$26 trillion between now and 2030.

An increasingly large share of this investment will be needed to ensure the security of critical energy infrastructure, which enables international energy trade and transportation. Already now security costs can reach up to 15% of operational energy costs in certain regions.

Critical energy infrastructure is constantly threatened by terrorism, piracy, cyber attacks or environmental disasters, despite increased measures to protect vital energy objects. Terrorists adapt to critical energy infrastructure protection systems and target smaller, but nevertheless important energy facilities. Pirates change their tactics, moving further out into the Indian Ocean, away from NATO Operation Shield protected areas around Somalia. Cyber criminals find new ways to penetrate IT networks, including energy infrastructure control systems. Moreover, the world is experiencing an increasing trend of unpredictable natural disasters that affect the environment, and lead to unexpected energy infrastructure failures.

Adaptation, therefore, is essential to NATO’s evolution, so that it continues to be relevant and effective in a changing world, against new threats and challenges.

To this end, NATO, according to its new Strategic Concept, will “develop the capacity to contribute to energy security, including protection of critical energy infrastructure and transit areas and lines, cooperation with partners, and consultations among Allies on the basis of strategic assessments and contingency planning.”

NATO can, on request, support the protection of Allies’ critical energy infrastructure, this can come as support to national communication and intelligence networks or aerial and maritime patrols, NATO could also play a preventive role in the security of critical energy infrastructure in its respective operational theatres.

The inclusion of “transit areas and lines” into the Strategic Concept was no accident: today about one-half of energy resources is moved by tankers on fixed maritime routes. Although maritime routes do not fall within the classical definition of energy infrastructure, ensuring secure access to these maritime routes is as important as protecting critical energy infrastructure. Tankers have made global transport of oil possible, as they are low-cost, efficient, safe and extremely flexible. Maritime energy security therefore is of

major importance in securing the maritime supply chain of tankers from the world’s oil and gas fields to major refineries, pipelines and ports.

Due to the characteristics of the oil industry, oil prices are very sensitive and relatively inelastic to disturbances. A good example is the recent unrest in Egypt and the concern about access to the Suez Canal. As an immediate consequence of these developments, the Brent crude oil price has twice risen above \$100 hitting a two-year high.

NATO’s current operations in the maritime environment (Ocean Shield and Active Endeavour) have already demonstrated the potential to deter or disrupt actions that could indirectly undermine energy supplies.

Moreover, NATO’s cooperation with partners and consultations with Allies play an important role in contributing to energy security, including the protection of critical energy infrastructure. As Lisbon Summit Declaration states, “in advancing our work, we will enhance consultations and cooperation with partners and other international actors, as agreed, and integrate, as appropriate, energy security considerations in NATO’s policies and activities”.

Consultations, exchanges of information contribute to the Alliance’s awareness of critical energy infrastructure risks and vulnerabilities and increase its preparedness to react to critical energy security developments.

The OSCE is an important international actor in this field, and cooperation between NATO and the OSCE provides significant value in countering emerging risks and challenges to energy security.

In my personal view, the OSCE could take into account the following areas of activity, where it could further develop its role together with other international organisations.

### **Stronger Public-Private Partnership and Good Governance**

Over 80% of energy sector assets and installations are privately owned or operated. Ensuring the reliability and resilience of critical infrastructures against terrorist threats, natural disasters, and operational emergencies is a priority for owners, operators, and leaders from industry and government.

Promoting public-private partnerships in this field could contribute to better awareness of critical energy infrastructure vulnerabilities.

In addition, the OSCE could promote good governance in the field of critical energy infrastructure management, which would lead to better use of investments into energy infrastructure facilities and their protection.

### **Energy Efficiency and Diversification**

Efficiency is the best source of new energy resources and is often a more affordable and environmentally responsible option to meet the growing energy demand. Efforts to improve energy efficiency and energy saving contribute greatly to lowering the energy intensity of economic development thus strengthening global energy security.

There is a strong link between energy efficiency and energy infrastructure protection. Increased energy efficiency reduces stress on infrastructure and saves efforts needed to protect overloaded energy infrastructure installations.

Another way to ease the protection of critical energy infrastructure is to diversify – not only energy routes and suppliers, but also sources. Energy infrastructures of renewable energy sources are much more dispersed, they do not need so many complex and critical connections, such as oil and gas pipelines, and therefore they are less vulnerable to attacks.

To sum up, I would like to stress again that one of the main features of emerging threats and challenges to energy security and critical energy infrastructure is the ability of threat-sources to quickly adapt to our security measures and to change the ways they act. The only way to win this war is to be even more flexible, creative, adaptive and prepared. NATO and the OSCE could both work towards this direction and cooperation here is essential.

Thank you.