BRATISLAVA ENERGY CHARTER FORUM

"Securing Energy Supply – How to better protect energy networks from disruptions"

organized by the

Energy Charter Secretariat

Ministry of Foreign and European Affairs of the Slovak Republic

with the support of the

Organization for Security and Co-operation in Europe

And

CESys,s.r.o

Historical Building of the National Council of the Slovak Republic

Župné námestie, Bratislava

Slovakia

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DRAFT CONCEPT NOTE

(as of 30 July 2014)

Background

Energy is a backbone of the economy. The Energy sector is critical to other sectors such as transportation, health, businesses and households. The risk of natural disasters such as floods, droughts, earthquakes, tsunami, as well as intentional and unintentional human actions make this so called energy "critical infrastructure" extremely vulnerable. Disruption or damage to energy networks, especially today when it has become complex and interconnected, may affect millions of people, causing loss of life, multiple environmental impacts and a cascade of interlinked economic losses.

The importance of the protection of energy infrastructure cannot be underestimated. Recent examples of accidents caused by natural disasters and human actions in the energy sector clearly indicate that the scale and long-term consequences go far

beyond national borders. Earthquakes and related tsunami as well as climate-related disasters such as hurricanes, floods, landslides or hail storms, most of the time, result in a serious physical damage to the critical infrastructure making it almost impossible for a single country to cope. Examples of man-made disasters include not only errors leading to major technological accidents but large-scale blackouts as well. California electricity crisis of 2000-01, US-Canada Northeast blackout of 2003, Italy blackouts of 2003, West-European of 2006 and Indian crisis in 2012 affected millions of people and resulted in enormous economic losses.

Today, keeping the operation of the interconnected energy system is a challenge by itself, even without major disaster taking place. As an example, extreme weather conditions of February 2012 in continental Europe revealed that there are other threats to energy networks. Growing share of intermittent energy sources throughout the European Union creates significant challenges for the transmission system operators of the interconnected systems. These risks associated with the large-scale integration of renewables along with physical risks from natural and man-made disasters impose major threats to the security of energy supply which has become a concern worldwide.

There is a variety of regional and global efforts to improve the protection of energy networks and energy security in general. Today, the failure of energy networks often becomes a trans-boundary issue, therefore, any effort in this area needs to be of an international nature. Taking into account current state of energy interdependence and interconnection, the biggest challenge to recover and restore requires coordinated efforts from the international community. Therefore, the contribution of international organisations is essential in promoting cooperation, public-private partnerships, information sharing and exchange of best practices with a view to strengthening security and stability.

Scope of the Forum

The Energy Charter Secretariat (ECS) in cooperation with the Ministry of Foreign and European Affairs of the Slovak Republic (Slovak Ministry) and with the support of the Organization for Security and Co-operation in Europe (OSCE) will organise a **Bratislava Energy Charter Forum on 10 October 2014**.

This event will provide a platform to promote security and safety of non-nuclear critical energy infrastructure against natural disasters and man-made disruptions. The Forum will follow up to the Expert Workshop organised by the OSCE on 2 July 2014 on “Sharing Best Practices to Protect Electricity Networks from Natural Disasters”. The OSCE has also initiated a Best Practices Handbook on a related topic.

The panel of the Forum that the **OSCE** will organise will focus on protecting energy networks from natural disasters, including the following sub-topics:

- Risk assessment and identification of vulnerabilities;
- Risk mitigation and resilience of electricity network systems;
- Climate change adaptation policy process in relation to electricity networks.

The **Slovak Ministry** will cover a panel on risks emanating from human actions, including the following:

- Operational (technological) risks (failures and accidents caused by people, equipment or systems):
    - Emergency preparedness and operations;
    - Interconnection reliability operations and coordination;
    - Planning, modelling and data analysis;
    - Internal control;
    - Training and qualifications of personnel.

And the **ECS** will organise a panel focusing on international dimension of potential threats to energy security:

- Business (regulatory) risks (uncertainty of demand, new technologies, legal actions, laws and regulations):
    - Resource and demand balancing;
    - Grid integration of renewable energy;
    - Capacity allocation and congestion management;
    - Interoperability of emerging technologies.

Objectives and outputs of the Forum

Objectives of the proposed forum include:

1. Facilitate the dialogue among the stakeholders on the energy security and protection of energy networks;
2. Discuss various risks, including natural disasters, man-made actions and market risks, associated with the energy networks and security of supply;
3. Provide platform for cooperation through exchange of information, sharing best practices, technological innovations and lessons learnt. Presentation of V4 Center of Excellence on protection of Critical Energy Infrastructure.

Outputs include:

1. Provide input for the OSCE-ECS Handbook on Protection of Critical Energy Infrastructure;
2. Draft, publish and disseminate a post-event publication of the Forum.

Target audience

This forum will bring together representatives of governments, energy regulators, industry, academia and international organisations to discuss the concept of risk management applicable for the critical energy infrastructure.

- International organisations who might be able to contribute to the topic of discussion;
- Governments – members of OSCE and the Energy Charter;
- Power sector representatives;
- Insurance companies;
- Academic institutions.