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Addressing Emerging Security Risks for Energy Flows over South Caucasus

„Energy Security and Stability in Black Sea Region: Implications from Crimea Conflict “

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Comprehensive approach in NATO ENSEC COE framework

- Study on Hybrid Warfare and CEIP in Ukraine
- What does mean annexation of Crimea in terms of EnSec?
- Complexity of „Energy in Conflict“
- Doctrines (why? and what?)

Study and main outcomes

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Informative Notes on Energy Security

SARDINES 2016/4

Post Crimea's Annexation: Offshore Natural Gas Fields and Geopolitical Implications

Jaroslav Hajek & Kateryna Dubrova
NATO Energy Security Centre of Excellence
15 September 2016

Introduction

The Black Sea region is as strategic as but not limited to free access to the Black Sea. The access to the Black Sea's natural resources, particularly energy, is particularly important since Russian Federation's annexation of Crimea. Since Russian Federation's influence to the Caucasus and the Black Sea region is strategic.

for strategic objectives for its coastal countries, such as access to natural resources, and security. The Black Sea region's strategic advantage, but also provides access to the Black Sea's natural resources, particularly energy, is particularly important since Russian Federation's annexation of Crimea. Since Russian Federation's influence to the Caucasus and the Black Sea region is strategic.



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Informative Notes on Energy Security
SARDINES 2016/3

The integration of Crimea into the Russian electricity system

Jaroslav Hajek & Kateryna Dubrova
NATO Energy Security Centre of Excellence
15 September 2016

Introduction

The 2014 Ukrainian crisis was a convenient opportunity for the Kremlin to use energy as a political tool to increase pressure on Kiev, since Ukraine's gas and oil dependencies make it vulnerable to Russian threats. However, Ukraine was also able to use Crimea's energy dependency as a political tool in order to demonstrate its resistance to Russian aggression. An electricity blockade of Crimea took place on 27 November 2015, when an as-yet unidentified group of apparently anti-Russian activists blew up a number of electricity pylons in the Kakhovka-Titan grid (in the Kherson region of southern Ukraine) which supplied Crimea with electricity from Ukraine, blocking out the peninsula as well as a number of Ukrainian villages (Drent; Hendriks & Zandee, 2015). The situation was complicated by anti-Russian activists and Tatar groups preventing crews from repairing the grid (Nechepurenko, & Macfarquhar, 2015). In January 2016, Petr Poroshenko, Ukrainian president, said: "We are ready to supply electricity to Crimea that is Ukrainian. You can have it if you want. If not, we'll wait until Ukrainian sovereignty over Crimea is restored" (refLorg, 2016). Russia refused to comply to Ukrainian condition for electricity supply, and claimed that outrageous sabotage and energy blockade

Energy in Conventional Warfare



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Ukraine cyber-attack targets electricity supplier

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25 January 2016

On 23 December 2015, a number of Ukrainian electricity suppliers were subject to a seemingly coordinated cyber-attack which disrupted electricity supply across western part of the country, including the central part of Ivano-Frankivsk, Horodenka, Kalush, Kosiv, Tysmenytsia, Nadvirna districts, and the Yaremche zone. Within a few hours, power was restored. The disruption has been traced to the unexpected disconnection of electricity supply by the apparent automated opening of high-voltage control signals sent from the electricity-providers' SCADA (Supervisory Control and Data Acquisition) systems. While this can be done by an operator, it can also be done by software installed on the SCADA systems. This second disconnection if certain conditions arise [1]. This second disconnection of large networks if the operators are busy with other work [2], that allows an adversary to perform a cyber-attack on the electricity system.

2016 Energy in Conflict Series

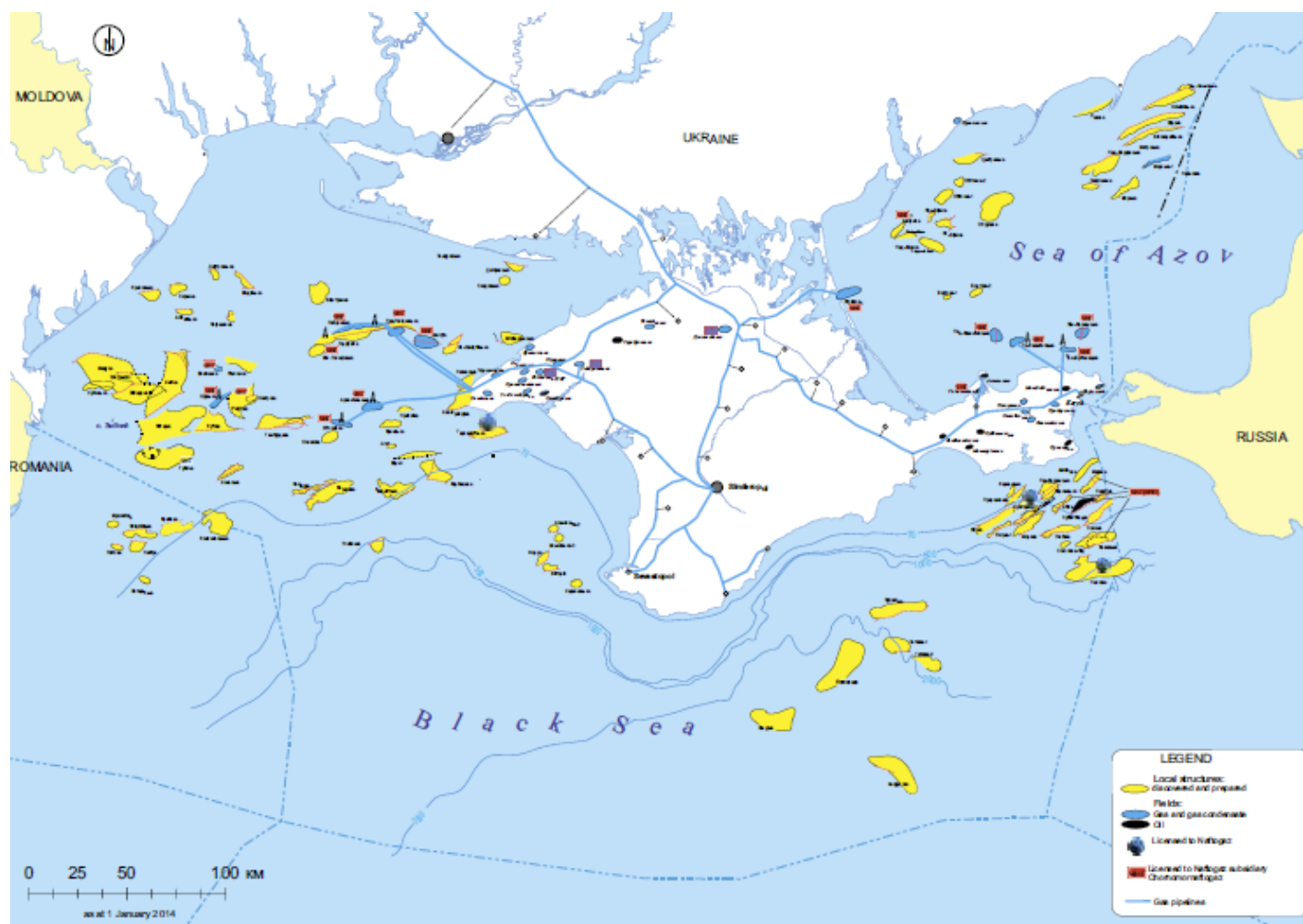
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Crimean gas production (2011-2014)

2011	2012	2013	2014
1.056 Bcm	1.174 Bcm	1.649 Bcm	2 Bcm

Source: Chernomorneftegaz (2015)

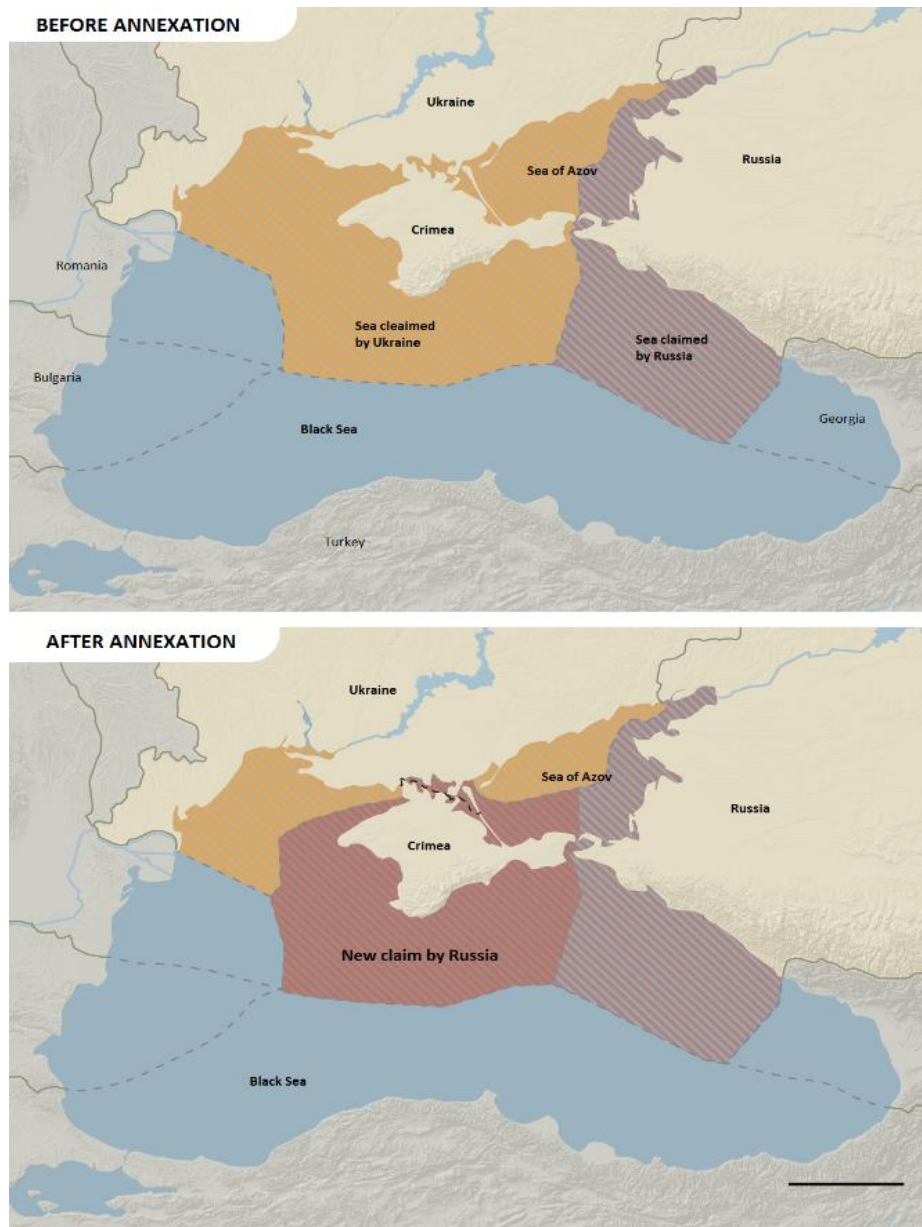




The role/importance of Crimean off-shore gas fields in conflict:

- ✓ Primary?
- ✓ Secondary?
- ✓ Tertiary?

And to whom?





Some thoughts on geopolitical implications

- Goals and present results of the policy/actions taken by Russia
- Regional security and stability
- Reaction to trade in gas extracted around Crimea and sold by Russia



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<http://enseccoe.org>



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