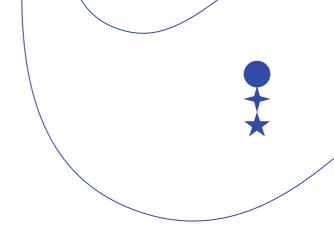
pražský studentský summit



BACKGROUND REPORT

# NATO Intelligence Capabilities

Anna Zipfel anna.zipfel@amo.cz



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### 1 Preface

This background report was written for the purposes of simulation of the North Atlantic Council at the Prague Student Summit. It will introduce key concepts of intelligence in general and intelligence capabilities of NATO. Mechanisms, functionality and liabilities of current systems are covered. As this document provides an

overview of the material and it is by no means exhaustive nor comprehensive, the readers are encouraged to follow-up with their own research. The closing chapters contain a list of resources and leading questions as a basis for further research.

### 2 Introduction

Maintaining a functional and cohesive international organization, even more so a military alliance is an ordeal. Intelligence is an important component that gives the alliance a perspective on current and future events and has an essential function in operation planning. Thus, it is crucial that intelligence collection, sharing and processing is timely and accurate. To understand what functional intelligence section demands, one needs to consider intelligence theory, NATO's structure, technological security, trust, national interest and field application.<sup>1</sup>

#### 2.1 Key concepts

Intelligence, Surveillance and Reconnaissance (ISR) are the central terms of discourse on intelligence. ISR provides a basis of understanding for decision makers, maps adversaries and the public sector and even the alliance members. Purpose of ISR is to alert, predict and provide recommendations on how to tackle and counter threats and how to conduct operations. <sup>23</sup> ISR supports the thesis of Article 3 of the Washington Treaty; the principle of resilience.<sup>4</sup>

Intelligence is a final, holistic product derived from surveillance, reconnaissance and other sources.

Surveillance is deliberate, persistent and prolonged monitoring of a target.

Reconnaissance is rapid and targeted technique of information gathering to fulfil need for particular information

Intelligence is the final, holistic product derived from surveillance, reconnaissance and other sources. Information sharing differentiates between concepts. First is 'need to know' sharing; meaning only strictly necessary information for a particular happenstance will be shared voluntarily or following an approved request. All other related and even deeper knowledge will be omitted. The Alliance is promoting the second concept of 'need to share', where the Alliance chooses to provide safe sharing platforms and framework to encourage exchange of information. 5 6 7 8

The Alliance is promoting the second concept of 'need to share', where the Alliance chooses to provide safe sharing platforms and framework to encourage exchange of information.

# 2. 2 Intelligence cycle and types of intelligence

Intelligence cycle is the process of generating and utilizing intelligence. It has five stages: planning, collection, processing, analysis and dissemination. Mechanisms of intelligence collection are divided into categories by their character and means of collection.

Human-Source Intelligence (HUMINT) – Collected from human resources. This can be done openly or through clandestine means. Examples are reconnaissance operations, espionage, diplomatic reporting, and person of interest interviews, e.g. a suspect or a refugee.

Signals Intelligence (SIGINT) – Intelligence from electronic transmission, between people, machines or both. This can be collected by satellites, ships, planes or ground satellites.

Geospatial intelligence (GEOINT) – Identifies geographic location and characteristics of natural or

constructed features on earth. It relies on geodetic data, mapping and surveying technologies, statistical data, remote sensing and other imagery and geospatial data. It often uses processed IMINT data. 9

Imagery Intelligence (IMINT) – Is information drawn from analysis and interpretation of objects reproduced by electronic and optical means, such as all imagery (satellite or unmanned aerial vehicle imagery) and collateral information (every medium containing information e.g. flyer, case study).

Measurement and Signature Intelligence (MASINT) – Is scientific and technical intelligence

information concerning industrial and weapons capabilities and activities. It is used to locate, identify and describe targets. Specifically, it can help to identify chemical weapons, pinpoint features of unknown weapons systems and can often include forensic work. It is often assembled from SIGINT and IMINT sources.

Open source Intelligence (OSINT) – Is information collected from all generally available sources, be it public data (statistics and material from governmental and commercial databases), media and professional or academic records.  $^{10\,11}$ 

"National intelligence capabilities are the backbone of majority of intelligence collection and the 'primary source' of intelligence as intelligence alliances seldom have the capabilities and interests to conduct own operations. "

## 3 Role of national capabilities

National intelligence is the central 'primary source' of intelligence; alliances seldom have the capabilities and interests to conduct own operations. There are offensive and defensive, civil and military intelligence agencies and intelligence sections within other state institutions. All together they are called a country's intelligence community. These agencies should all have legal basis that

outlines their purpose and establishes operational boundaries. There is a lot to be learned from the establishing law and 'founding documents' of these agencies, about their nature and rights and even priority in terms of budget allocations. Each country has different needs for intelligence based on their political and cultural foundations and foreign policy. 12 13 14

## 4 NATO's Intelligence

The biggest block preventing complex and coherent intelligence production in NATO was disorganized and disconnected structure of NATO's intelligence capabilities. Full potential of shared national intelligence was lacking due to absence of a sharing platform. Intelligence processing never was holistic, as parts of NATO intelligence structure did not collaborate always and had access to different sources on need to know basis. Testimonies of 'hoarding and competition' between NATO intelligence structures exist, and even on corps level NATO reportedly lacks intelligence officers. Additional layer of

the issue are non-NATO entities that are exchange S&R information. NATO has strict but efficient system for sharing with them but needs to establish better exchange for efficient operation support.  $^{15}$   $^{16}$ 

#### 4.1 Structure

NATO intelligence structures have been streamlined in recent years. Prior to these, a CIA analysis claimed NATO had no capability to detect and analyze any situation, its intelligence capabilities were either not in place, inefficient or solely dependent on American intelligence. First changes in NATO intelligence structure happened after 9/11 and operations in the Balkans.  $_{17\,18\,19}$ 

In 2016, NATO intelligence has been restructured so that civil and military branches communicate, while security of systems and information is maintained. New agencies and initiatives were created and are still being implemented, aiming to boost the intelligence system's functionality. Chapters below will introduce major NATO intelligence structures.

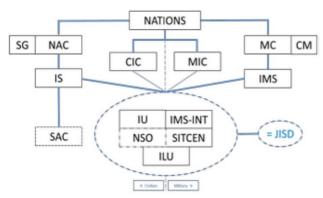


Figure 1 NATO HQ intelligence post-201639

# 4. 2 Joint Intelligence and Security division (JISD)

Joint Intelligence and Security Division is led by the Assistant Secretary General for Intelligence and Security (ASG-I&S), who is effectively NATO's intelligence chief. ASG-I&S helped to set up the JISD, integrate civilian and military intelligence capabilities and create intelligence output to support the North Atlantic Council, Military Command and the Secretary General. JISD uses classified and open sources and produce operational and warning intelligence. It falls under the International Military Staff of NATO. <sup>20</sup> <sup>21</sup> <sup>22</sup>

### 4.3 Federated Mission Networking

Is a multi-tier capability for exchange of information within NATO, with NATO members and non-members. It was adapted from experiences with mission networks during ISAF in Afghanistan. Its main function is effective mission communication. The system can be adopted on a national level. <sup>23</sup> <sup>24</sup>

# **4.4 NATO Communication and Information Agency (NCI)**

NCI focuses on technological and cyber sectors, providing infrastructure to share information safely. NCI integrates Alliance and national ISR capabilities, policies, procedures and systems. They also develop new strategies and policies to support steps of the intelligence cycle; namely acquiring, implementing and testing solutions. Outputs of NCI are mainly Intelligence Application Services, Operational Support Services, Electronic warfare and Sensor Services and Geospatial Services used by NATO forces. They can be adopted by member's national ventures as well. <sup>25</sup>

# 4. 5 Joint Intelligence Response Force (JISR)

JISR is a system that gathers data from soldiers, ground and air surveillance and other sources. The combined data is consumed by NATO Response Force (NRF), the Alliance's multinational ready force that operates on land, sea and air. JISR currently explores technologies like AI, autonomous systems and big data. Just like RF, JISR has frequent exercises to make sure everything works in the operational environment.<sup>26</sup>

# 4. 6 NATO Intelligence Fusion Centre (NIFC)

NIFC is a military body that provides intelligence analysis for Supreme Allied Commander Europe and Allied Command Operations. NIFTC focuses on threats to Euro-Atlantic area, NATO RF, and out-of-area operations (all NATO operations outside its territory). <sup>27</sup>

# 4. 7 Centres of Excellence and Allied Command Transformation

Centres of Excellence are NATO's multi-nationally funded improvement incubators. There are currently 27 accredited ones, spread out across member states. Each focuses on a strategic area. Two focus solely on intelligence, HUMINT and civil intelligence. Though all the Centres are relevant for intelligence development. <sup>28</sup> <sup>29</sup>

## **5** Future and Issues

Most glaring issue of intelligence is its absence. Low priority areas have little to no intelligence coverage. In case of crisis in one the breadth and flexibility of the intelligence might be insufficient in supporting of both war and non-war missions. Particularly HUMINT can require linguistic expertise and long-term personal engagement, which takes time. Another practical problem is the information filtering mechanism. The amount of information and metadata is increasing due to the fact that we are better at creating and collecting information. Though not all of it is relevant, reliable nor useful, we need to figure out what is. Filtering is an intensive process; it requires a lot of manpower and nobody has capabilities that are proportional to the amount of intelligence traffic. A technological solution is hypothesized using improved automatic target recognition or employing data mining techniques, which would alleviate pressure from human personnel. Automation of parts of the intelligence cycle, specifically processing, analysis, production and storage of both raw and processed intelligence would go a long way for efficiency of intelligence. Such innovation could also make for a solution of the ideological conflict between independence of each intelligence agency and pressure to share or not to share material among agencies and on the alliance level. Raw data

would be shared on a broader scale, an analysis would be done by and for a specific organization, copying its demand and focus. <sup>30</sup>

No country is the same, so here we encounter a similar dilemma of unequal contribution. What should state's intelligence agencies contribute so that the input is valuable? Another recurring issue are software and hardware procured from private companies, which can still be used as tool by adversarial actors. Should alliances members' national intelligence agencies not procure such material even if its most cost-quality efficient, at the risk of compromising their and the alliance's intelligence?

Other structures that have or are developing intelligence capabilities exist outside of NATO. Some like the EU and Five Eyes <sup>31</sup> (Anglosphere intelligence alliance) overlap with NATO membership, which is a possible concern.

Crises often erupt in previously lowpriority regions, and so intelligence support for war and non-war missions needs to be very adaptable.

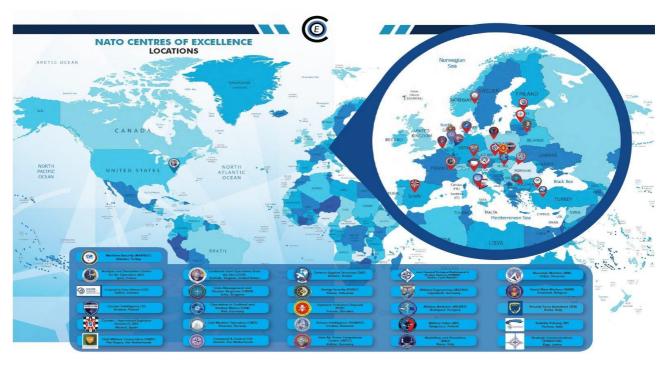


Figure 2. 26 Centres of Excellence (July, 2020), Integrated Air and Missile Defence (IAMD) COE in Greece has since been accredited.40

### 5. 1 EU's Intelligence Capabilities

European Union's intelligence capabilities all fall under the European External Action Service (EEAS), EU's foreign and defense ministry along with its diplomatic service. EEAS is headed by the High Representative.

Civilian intelligence capabilities are concentrated under EU Intelligence and Situation Centre (EU INTCEN), established in the wake of major terrorist attacks in the transatlantic theatre. Along with EU's military intelligence capability, the Intelligence Division of the EU Military Staff, INTCEN provides information on counter terrorism and common foreign & security policy. Sourcing of their information relies mainly on member states' intelligence and security services along with diplomatic reporting, OSINT, international organizations, NGOs and EU Satellite Centre. INTCEN only analyses information. All operational function and collection is executed by national agencies. Areas of interest for European intelligence are terrorism, proliferation of weapons of mass destruction and sensitive geographic

areas.<sup>3233</sup> INTCEN has been criticized for insufficient transparency and lack of legal basis; a 'founding document', which would outline its structure, function and purpose. A vision of more CIA-like EU intelligence agency was propagated by Austria, Belgium and the Netherlands, but was dashed in 2015 by bigger countries, who thought this breached state sovereignty <sup>34</sup> <sup>35</sup> <sup>36</sup>

#### 5. 2 Adversaries

Since the collapse of the Soviet military power, NATO no longer has a stable monolithic enemy. Crises often erupt in previously low-priority regions, thus intelligence support for war and non-war missions needs to be very adaptable. Hybrid warfare provides new threats and attacks; often occurring in cyberspace, e.g. distributed denial of service attack on Estonian governmental websites in 2007 <sup>37</sup> or the Colonial Pipeline ransomware attack in USA in 2021. <sup>38</sup> Intelligence community needs to learn how to reliably protect data and systems and identify perpetrators.

### 6 Conclusion

Intelligence is an existential element of any enterprise, but a very complex one. Intelligence structures have many branches with many functional and not-so-functional mechanisms. Within NATO, there is additional particularity of a nexus between national interests, trust and sharing capability. Needed developments stem both from structural reforms and technological advancement; neither are easy to implement. Established structures within organizations such as NATO, with multiple contributing nations tend to be resistant to change, as it

is a tremendous effort to adapt to, within the organization itself and in nation's domestic counterparts. Some changes in NATO structure are enacted; a question of their effectiveness remains. Can they bolster trust and promote sharing of more information? Additional concern is rapid technological advancement. It is probable intelligence community will need to adapt rapidly to stay functional. It remains a question whether current structures are resilient enough to face the future

## **Fundamental questions**

- What should NATO ISR doctrine look like?
- What does your country's intelligence community look like?
- How should countries navigate between their intelligence sharing commitments?
- Should international organizations have own intelligence communities?
- In what direction should NATO intelligence capabilities develop?
- What are the ethical boundaries of ISR, foreign and domestic?

## **Recommended sources**

#### **NATO Structure**

• <a href="https://www.nato.int/cps/en/natohq/structure.htm">https://www.nato.int/cps/en/natohq/structure.htm</a>

#### Article on cognitive warfare

• <a href="https://www.nato.int/docu/review/articles/2021/05/20/">https://www.nato.int/docu/review/articles/2021/05/20/</a> countering-cognitive-warfare-awareness-and-resilience/index.html

#### Opinionated article on NATO's evolution and weak points

• <a href="https://www.nato.int/docu/review/articles/2018/07/06/the-alliances-evolving-posture-towards-a-theory-of-everything/index.html">https://www.nato.int/docu/review/articles/2018/07/06/the-alliances-evolving-posture-towards-a-theory-of-everything/index.html</a>

#### Interview with NSA whistleblower Edward Snowden on privacy and surveillance

• <a href="https://www.youtube.com/watch?v=o">https://www.youtube.com/watch?v=o</a> <a href="https://www.youtube.com/watch?v=o">Srg6TFQQE</a>

## Pražský studentský summit

Pražský studentský summit je unikátní vzdělávací projekt existující od roku 1995. Každoročně vzdělává přes 300 studentů středních i vysokých škol o současných globálních tématech, a to především prostřednictvím simulace jednání tří klíčových mezinárodních – OSN, NATO a EU.

### Asociace pro mezinárodní otázky

AMO je nevládní nezisková organizace založená v roce 1997 za účelem výzkumu a vzdělávání v oblasti mezinárodních vztahů. Tento přední český zahraničně politický think-tank není spjat s žádnou politickou stranou ani ideologií. Svou činností podporuje aktivní přístup k zahraniční politice, poskytuje nestrannou analýzu mezinárodního dění a otevírá prostor k fundované diskusi.

### Anna Zipfel

Autor je spolupracovníkem Asociace pro mezinárodní otázky a členem přípravného týmu Pražského studentského summitu.

**Autor:** Anna Zipfel

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Asociace pro mezinárodní otázky (AMO) Žitná 27, 110 00 Praha 1

Tel.: +420 224 813 460 e-mail: summit@amo.cz

IČ: 65 99 95 33

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#### Resources

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