



**EUROPEAN  
LEADERSHIP  
NETWORK**

Building better security for wider Europe

# **Russia-West Incidents in the Air and at Sea 2016-2017: Out of the Danger Zone?**

**EURO-ATLANTIC SECURITY  
REPORT**

Denitsa Raynova & Lukasz Kulesa  
October 2018

## About the Authors

**Denitsa Raynova** is Policy Fellow and Project Manager at the European Leadership Network. Denitsa's current research focuses on European defence with particular attention on NATO-EU collaboration and transatlantic burden-sharing. She also follows developments in Europe's eastern neighbourhood and writes on NATO-Russia military-to-military relations and confidence and security building measures. Denitsa holds a Masters in Conflict, Security and Development from King's College London.

**Lukasz Kulesa** is Research Director at the European Leadership Network. Previously, he worked as the Head of the Non-proliferation and Arms Control Project at the Polish Institute of International Affairs (PISM), and between 2010–2012 as Deputy Director of the Strategic Analyses Department at the National Security Bureau, a body providing aid and support to the President of the Republic of Poland in executing security and defence tasks. Email: [lukasz@europeanleadershipnetwork.org](mailto:lukasz@europeanleadershipnetwork.org)

**The European Leadership Network (ELN)** works to advance the idea of a cooperative and cohesive Europe and to develop collaborative European capacity to address the pressing foreign, defence and security policy challenges of our time. It does this through its active network of former and emerging European political, military, and diplomatic leaders, through its high-quality research, publications and events, and through its institutional partnerships across Europe, North America, Latin America and the Asia-Pacific region.

The opinions articulated in this report represent the views of the authors, and do not necessarily reflect the position of the European Leadership Network or any of its members. The ELN's aim is to encourage debates that will help develop Europe's capacity to address pressing foreign, defence, and security challenges.

# Russia-West Incidents in the Air and at Sea 2016-2017: Out of the Danger Zone?

## Summary and recommendations

One of the main concerns of security experts and policy makers across the Euro-Atlantic area in recent years has been the potential for casualties and dangerous escalation of tensions stemming from a military incident between the West and Russia.

The European Leadership Network (ELN) has collaborated with researchers at the Matthew B. Ridgway Center for International Security Studies at the University of Pittsburgh who have compiled a list of open-source encounters and incidents in 2016 and 2017, in order to look into this threat in detail.

Together with previous ELN research, the data collected for this report shows that many encounters between militaries, which would have previously generated broad and sensationalist media coverage, are now treated as routine and managed in a professional way.

The report suggests a closer examination of what constitutes a dangerous or hazardous incident in the context of an overall increase of military activities in Europe. This allows to focus attention on a small number of incidents that continue to show dangerous characteristics, that is to say, those with the inherent risk of loss of life and corresponding increase in tensions.

The report suggests the following recommendations to avoid or better manage such incidents:

- Continue to strive to minimise the danger of incidents while conducting military activities.
- Achieve maximum convergence across states in the Euro-Atlantic area regarding the types of hazardous/dangerous military incidents that require particular attention.
- Operationalise and update Chapter III of the Vienna Document and, more specifically, its mechanism for co-operation regarding hazardous incidents of a military nature.
- Work on a best practices guide or a handbook for preventing and managing dangerous military incidents, preferably at the OSCE level.
- Implement and update existing bilateral incident prevention agreements.
- Explore options for conducting additional bilateral incident prevention agreements.
- Explore options for additional bilateral or sub-regional confidence-building measures.

## 1. Background and rationale for the paper

Since 2014, there has been a documented increase in military activities across the Euro-Atlantic area. One of the main concerns of policy makers and experts across the continent, borne of this dynamic, has been the potential for casualties and escalation of a military confrontation, especially given the reduced levels of political-military and military-military communication between the West and Russia. Adversarial threat perceptions and high level of mistrust have further complicated efforts to address the dangers of this tense relationship.

In 2014, The European Leadership Network raised the issue of dangerous military-military and military-civilian encounters and incidents in the report *Dangerous Brinkmanship: Close Military Encounters between Russia and the West*.<sup>1</sup> This was the first attempt to address the scale of the problem and dangers of escalation stemming from incidents or accidents involving military aircraft and warships in the Euro-Atlantic area. The dangers highlighted in the paper, and the progress made in addressing them, have subsequently been analysed in several follow-up reports.

In November 2016, *Managing Hazardous Incidents in the Euro-Atlantic Area: A New Plan of Action* offered specific risk-reduction solutions that included:

- Reviving existing bilateral agreements on managing incidents (INCSEAs and DMAs);
- Concluding additional agreements at bilateral and multilateral level;
- Reactivating or adapting the Cooperative Airspace Initiative; and
- Stepping up expert-level dialogue on the safety of military-civilian encounters over the Baltic Sea.<sup>2</sup>

Later, the policy brief *Lessons Learned? Success and Failure in Managing Russia-West Military Incidents 2014-2018* evaluated notable developments and examined efforts made to better manage military-civilian incidents.<sup>3</sup> Yet the danger of such encounters with the potential to lead to incidents or accidents remain of concern; as recently as 21<sup>st</sup> September 2018, a UK Air Force jet intercepted two Russian Blackjack long-range bombers approaching British airspace without communicating with the air traffic control.<sup>4</sup>

***“Military encounters that once would have solicited broad media coverage are treated as routine.”***

To study this problem in finer detail, the ELN has collaborated with researchers at the Matthew B. Ridgway Center for International Security Studies at the University of Pittsburgh who have compiled a list of open-source encounters and incidents in 2016 and 2017, focusing on NATO - Russia interactions.<sup>5</sup> This has allowed for a closer examination of what constitutes a dangerous or hazardous incident, particularly against the backdrop of an overall increase of military activities in Europe. The rationale behind this work is a need to concentrate on, and to minimise, the most dangerous behaviours whilst accepting that close encounters and military brinkmanship have become part of a ‘new normal’ of confrontational security situation in Europe.<sup>6</sup>

As this paper will show, many encounters between militaries that once would have solicited broad and sensationalist media coverage pass without notice and are treated as routine. At the same time, a small number of these continue to show dangerous characteristics, carrying an inherent risk to loss of life and corresponding increase in tensions. This report will suggest ways to avoid and better manage such incidents.

## 2. Defining military incidents: The nature of the challenge

The list of “incidents” initially compiled by the European Leadership Network, included 66 events recorded between March 2014 and March 2015 across several regions including the Baltic Sea, Black Sea, Atlantic Ocean, and classified as “high risk”, “serious” or “near routine”.<sup>7</sup> We noted hazardous airspace violations; alleged near-collisions between civilian airliners and military aircraft; fighter jets flying in close vicinity of surveillance planes; warships harassed by aircraft; search operations for submarines suspected to be operating in territorial waters; and exercises simulating attacks against targets on another state’s territories. The list also included a number of encounters of shadowing of ships in international waters, as well as intercepts and identification of aircraft in international airspace. A similar compilation report, produced by the US think tank Global Zero, in January 2016 listed not only these types of encounters, but also major military exercises, deployments, and missile test launches.<sup>8</sup>

For the post-Cold War generation of decision-makers, experts and civilian and military operators, fast-paced and continuous military-to-military and military-to-civilian encounters on the ground, at sea and in air have been a relatively new phenomena; similarly unapprised of this new dynamic, media reports of unusual, dangerous or threatening “incidents” between states were on the rise. The availability of information on the number of intercepts of Russian aircraft - such as those conducted by NATO and its members, including the Baltic Air Policing Mission - and Russian reports about increased activity of NATO aircraft near the Russian borders may have helped reinforce the impression there has been an escalation in the number of military incidents.<sup>9</sup> A re-evaluation of the available data and increased precision of definitions are needed for properly understanding and addressing the challenge.

There is no comprehensive and universally accepted definition of “hazardous incidents of a military nature” in the only multilateral and politically binding confidence-building framework in the Euro-Atlantic space including both Russia and the US: the Vienna Document (VDOC).<sup>10</sup> It may be inferred, however, that “hazardous incidents”, mentioned in VDOC paragraph 17, could include non-routine events involving military or paramilitary units (at least on one side), not pre-planned or premeditated, that carry a risk of or result in loss of life, injury or material damage, and/or potentially lead to increased political or military tensions. Importantly, the Vienna Document paragraph 17 applies to and covers incidents across the domains: land, sea and air, and potentially cyber, so long as they take place in VDOC’s zone of application.

Bilateral agreements such as the Incidents at Sea of Agreements (INCSEAs), and the agreements on Preventing Dangerous Military Activities (DMAs), are limited in scope but may provide some clarity on defining ‘a hazardous/dangerous incident’ insofar as they list a range of activities from which parties are encouraged to refrain.<sup>11</sup> They also establish a number of operational protocols and include a general commitment to exercise greatest caution and prudence.

INCSEAs follow ‘the letter and spirit’ of the International Regulations for Preventing Collisions at Sea. They contain a number of commitments and prohibitions listing situations that may constitute examples of incidents:

- Collisions at sea or situations involving a risk of a collision;
- Manoeuvres which would hinder the evolutions of the formations of the other party;
- Surveillance ships failing to stay at a distance which avoids the risk of collision, or embarrasses or endangers the ships under surveillance;

- Simulating attacks by aiming guns, missile launchers, torpedo tubes;
- Launching objects toward, or illuminating the bridges of the other party's ships;
- Hindering operations of ships engaged in launching or landing aircraft as well as ships engaged in replenishment;
- Not exercising greatest caution and prudence in approaching aircraft and ships of the other party, simulating attacks against aircraft or ships, performing aerobatics over ships, or dropping hazardous objects near them;
- Using lasers in such a manner as to constitute a hazard to the health of the crew or cause damage to the equipment on board a ship or aircraft of the other Party; or
- Launching signal rockets in the direction of the ships or aircraft of the other Party.

Agreements on Preventing Dangerous Military Activities (DMAs) specify certain activities where the use of personnel and equipment is "dangerous":

- Entering by personnel and equipment of the armed forces of one Party into the national territory of the other Party owing to circumstances brought about by *force majeure*, or as a result of unintentional actions by such personnel;
- Using a laser in such a manner that its radiation could cause harm to personnel or damage to equipment of the armed forces of the other Party;
- Hampering the activities of the personnel and equipment of the armed forces of the other Party in a Special Caution Area in a manner which could cause harm to personnel or damage to equipment; and
- Interfering with command and control networks in a manner, which could cause harm to personnel or damage to equipment of the armed forces of the other Party.

### 3. Encounters vs. incidents

The combined details of these three types of incident-prevention instruments can also be of use in establishing what activities should not be categorised as dangerous incidents, even if they raise political or security concerns. These include:

- Actions and developments connected with the general increase of military activities in the Euro-Atlantic space, including additional military deployments, increased movement of forces, increased rate of maritime and airspace patrolling and operations, intensified national and multinational exercises;
- Increased surveillance and intelligence-gathering activities, including deployment of specialised ships or aircraft, if taking place in international airspace or beyond territorial waters and in accordance with international law and regulations;
- Emergency take-off of aircraft on alert, intercept and identification of aircraft or a group of aircraft even if flying near or approaching the national airspace (even if the aircraft is not transponding their positions), including those in the Air Defence Identification Zones<sup>12</sup> - as long as such encounters are not dangerous or involve unprofessional manoeuvres or interfering with civil aviation;
- Activities and encounters at sea, including observation of naval exercises, monitoring activities and accompanying warships of other states, operations in the vicinity of other states' territorial waters, innocent passage through territorial waters.

Identification of incidents and discussion of potential incidents should therefore instead focus on:

- Military actions in breach of international law (e.g. airspace and territorial water violations, actions endangering civilian aviation), albeit with the need to assess the actual level of danger involved;



- Actions which can be seen as violating specific commitments listed in the INCSEAs or DMAs, arguably even if the parties involved were not bound by bilateral INCSEAs or DMAs;
- Actions and manoeuvres in close proximity of ships and aircraft not covered by INCSEAs or DMAs, but which can be treated as dangerous, albeit with the need to assess the actual level of danger;
- Other military actions seen as unusually aggressive, provocative, or interfering with the lawful activities of other states. Examples to consider may include simulating attacks against targets on another state's territories even if their territorial waters or airspace were not violated, or interfering with commercial air transport, shipping or other activities.

Agreeing on a comprehensive definition of hazardous or dangerous incidents may not be possible. In each case, beyond establishing the facts and the relevant legal obligations and regulations, an assessment of the level of danger is also required. It is not possible to treat every airspace violation, for example, automatically as a military incident, particularly if it does not result in the immediate increase of military tensions (see the examples of such airspace violations in the Annex - see entries 4/2016, 101/2016, 102/2016 and 99/2017 in Annex 1). However, airspace violations can lead to increased concerns, elevated alert levels, and changes to rules of engagement, thus making an incident and escalation more likely. Similarly, events are often considered more dangerous when seen in a broader context rather than in isolation; for example, if repeated over a short period of time or during increased periods of tensions. Any general framework approach to incidents, therefore, should allow for assessment on case-by-case basis.

*“Events are often considered more dangerous when seen in a broader context.”*

#### **4. Military encounters and incidents: main trends**

With particular emphasis on the 2016-2017 period and of NATO-Russia dynamics, the data obtained allows us to make observations regarding developments and trends in encounters and incidents.<sup>13</sup>

- I. **The overall number of encounters in the air and on high seas has remained high, especially in areas of close proximity between NATO and Russian forces.**

Without taking into account naval activities, in 2014 and 2015, NATO forces recorded over 400 intercepts of Russian aircraft.<sup>14</sup> The following year, they recorded 800 intercepts; this sharp increase is explainable by the inclusion of previously unrecorded Turkish air force scrambles. In 2017, Allies' aircraft scrambled approximately 250 times in response to approaching Russian military aircraft close to their airspaces. However, a closer examination of the data shows that the number of scrambles in response to Russian activity close to sovereign airspace or territorial water of Allies remained consistent with previous years or slightly decreased.<sup>15</sup> We can explain the fluctuations above by connecting it with the intensified activities in common theatres of military operation.

- II. **There has been a surge in the number of intercepts during NATO and Russian exercises.**

Whilst there has been speculation regarding the resolve and deterrence signals each side would like to send (including through deliberate provocative behaviour), it appears that any temporary increases in encounters bear no direct correlation to the state of political relations. Higher number of scrambles and/or higher numbers of aircraft and vessels operating in the region where once side's exercises on troop movements are taking place will naturally result in a greater number of intercepts and closer

surveillance by the other. For example, the Annex confirms an increase of encounters and intercepts over the Baltic Sea in September 2017, likely due to Zapad 2017 exercises conducted by Russia and Belarus, which included operations in the Kaliningrad exclave.

As already highlighted, these types of encounters should not be treated as incidents, and exercises usually did not cause disruptions or lead to dangerous situations. In only two cases, recorded in 2016-17, were civilian vessels asked to change course due to their close proximity to on-going Russian exercises, (already qualified as incidents - see entries 9/2016 and 10/2016 in Annex 1).<sup>16</sup>

## 5. Military encounters and incidents: incidents

This report identifies 17 cases of potential incidents between 2016 and 2017, nine in 2016 and eight in 2017, detailed in Annex 1, including those whereby multiple occurrences, such as several intercepts, have happened in the same day. The majority of these have occurred in air (10); four on high seas; and the remaining three are sea/air incidents. Despite these numbers being low, especially in light of the total number of encounters, each remains highly worrisome due to the increased probability of casualties or material damage - in case of human or technical error- or their reported aggressive or provocative nature going beyond the established patterns of routine or near-routine interaction.

The vast majority of air incidents involved Russian fighters conducting manoeuvres in close proximity of reconnaissance or surveillance planes flying in international airspace, but often near its territory or areas of military activities. Listed as potential incidents, these cases included public reports indicating that pilots performed unsafe manoeuvres endangering both aircrafts during intercepts and, in some cases, forced

reconnaissance planes to take evasive actions or divert from their mission.

The list included some incidents that, at first glance, appear less threatening. However, potential for misinterpretation is ample. An alleged simulated air attack against radar targets in Norway in March 2017, with Russian aircraft approaching, but not violating, sovereign airspace is one such example. One could argue that the operation was a test of the country's air defence systems and served as an intelligence-gathering function, and there was no immediate Norwegian counter-action. However, if repeated, this type of provocative operation could lead to escalation and thus *should* be classed as an incident.

***"Some incidents appear less threatening at first glance. However, potential for misinterpretation is ample."***

Another case with the potential for misinterpretation occurred in June 2017, when an F-16 flying under the NATO Baltic air-policing mission intercepted a Russian transport aircraft and two Su-27 fighter jets. The F-16 flew close to the transport aircraft, prompting one of the Su-27s to manoeuvre to display its weaponry; one of the transport planes' passengers was later revealed to be Russian Defence Minister Sergei Shoigu.<sup>17</sup> In this case, an otherwise routine encounter could have been interpreted by the Russian side as a NATO show of force or attempt at intimidation, raising the level of risk.

Out of all analysed sea incidents, only one, in June 2016 - involving the US and Russian warships in the Eastern Mediterranean - was the type of interaction explicitly addressed by the provisions in the INCSEAs. A Russian frigate, shadowing the US formation, and a US destroyer escorting an aircraft carrier, passed in close proximity to one another with subsequent accusations made over not



abiding by the maritime ‘rules of the road’.<sup>18</sup>

The classification of another naval incident is less clear and may be open to dispute. In May 2017, the M/V Green Ridge (a vehicle-carrying freighter) received misleading messages on route to Lithuania by a ship identifying itself as Russian warship. This happened while the Green Ridge was operating under a United States contract to transport military equipment for training exercises in the Baltic States, and later described by the crew as “intense and threatening.”<sup>19</sup>

In all of the sea/air incidents identified, Russian aircraft and helicopters conducting manoeuvres in close proximity of warships from NATO countries in the Baltic region and Black Sea were involved. These passes, in the vicinity of NATO’s, predominantly US, warships close to sensitive areas such as Kaliningrad or occupied Crimea, have been linked by Russian authorities and media to a defence of Russian interests; specifically against the threat of cruise missile-carrying ships operating near Russian territory. Russian news coverage (see Annex 1) described these activities as defensive actions, a show of force for signalling purposes.

***“There is evidence of a greater awareness on all sides of how behaviours can be misinterpreted.”***

It should be highlighted that the specific sea/air incidents listed in the Annex include manoeuvres of aircraft or helicopters that were of unusually provocative nature (close passes, overflights, multiple passes over a short period of time), or involved behaviours prohibited by the INCSEA agreements (hindering launching or landing operations on ships, simulating attacks). However, it is also worth highlighting that not all recorded air or air/sea encounters in the Baltic and Black sea regions have been categorised as

potential or actual incidents.

There is evidence of a greater awareness on all sides of how behaviours can be misinterpreted and miscommunicated, and there has been an increase in attention paid to the mechanisms that govern these interactions. For example, NATO Allies and Russia have placed emphasis on how closely they adhere to codes of conduct to which they have subscribed. In 2017, on more than one occasion, NATO and Russian aircraft came within metres of each other in a situation which otherwise would previously have been viewed as inherently dangerous, but now described as ‘safe and professional’.<sup>20</sup> Where this should signal a positive trend in managing encounters, dangerous behaviour subsequently recorded has offset a number of these advances.<sup>21</sup> In all cases, however, different sides have referred to commitments made under the terms of their bilateral agreements for either arguing a violation or justification for their actions – itself an indication of progress.

## **6. Preventing and managing incidents: assessment and recommendations for further work**

Much of the ELN’s past analysis has focused on the patchwork of bilateral agreements between a number of NATO states and Russia aiming to manage military-military encounters in international airspace and on the high seas. As the overview of the trends in 2016 and 2017 seems to indicate, in most cases, professional management of close encounters have not resulted in incidents. Increased knowledge regarding the relevant provisions of international law and existing agreements, such as INCSEAs, has had a positive impact on developments on the ground. A relatively low number of incidents and significant improvement regarding military-civilian incidents may link to a raising level of understanding of ‘rules of the road’ for encounters by all sides.<sup>22</sup>

Change is also visible in the public communication and media handling of information concerning incidents. Official representatives have become cautious in the way they describe behaviour of other states, and frequently reiterate the importance of the commitments to maintain safety of encounters. The issue of incidents remains a feature of consultations at the NATO-Russia Council meetings, and introduced onto the agenda of the OSCE and its Structured Dialogue.

This relates to a broader point on the feasibility of raising the public profile of debate of incidents. The overarching goal for discussions between states and at the multilateral level should be to prevent similar situations from happening, and not to publicly embarrass or shame any country. States may choose not to reveal that an incident has taken place. They can also decide to discuss its details through bilateral channels only, or refrain from revealing the results of exchanges, clarifications, and/or understandings reached. This suggests caution be used when utilising data sets or lists of potential incidents compiled from public sources, as these may not provide or explain full details of particular incidents.

On an operational level, the most prominent and frequently used INCSEA agreement, that between the US and Russia, has continued to function well. The militaries of the two states use communication channels of the INCSEA to raise potential incidents, whilst annual INCSEA review meetings have continued.<sup>23</sup> The latest update of the UK-Russia INCSEA being agreed in late 2017 - this focused on regulations applied to the actions of aircraft as they approach aircraft or ships of the other party, as well as limiting the use of lasers to interfere with the operations of ships or aircraft.<sup>24</sup> These steps overcome some of the shortfalls that stem from the UK and Russia not having signed a Prevention of Dangerous Military Activities agreement. The Netherlands and Russia have also been

working on the update of their INCSEA agreement, and we are informed that a number of other signatories of the bilateral INCSEAs review their operationalisation and potential amendments.

In parallel, a number of OSCE participating states have submitted or support proposals to update existing VDOC provisions on risk reduction, particularly those in paragraph 17. Such updates are able to take account of the requirement for better and more comprehensive responses to hazardous incidents. However, this revision, as well as a more comprehensive update of the Vienna Document, remains hostage to political gridlock.

***“It is imperative to continue working towards reducing the number of hazardous incidents to zero.”***

As long as NATO Allies, other European states and Russia continue to operate their forces in close proximity, the ‘friction’ and the risk of miscalculation related to incidents remains. It is imperative to continue working towards reducing the number of hazardous incidents to zero, and improving crisis communication. Even in the absence of tensions, accidents, such as the recent launch of an air-to-air missile inside Estonia by a Spanish fighter, can happen.<sup>25</sup>

The following measures should be pursued in parallel to existing risk reduction efforts:

- **Continuously highlight the need to minimise the danger of incidents while conducting military activities**

It remains necessary to continuously draw the attention of governments, parliaments and the armed forces to the danger of incidents and promote cooperative measures to prevent them. We should expect responsible and restrained behaviour from military

personnel, and prompt investigation of cases and allegations of risky or irresponsible actions. Responsible and accurate reporting on incidents and encounters should keep public opinion informed.

- **Achieve maximum convergence across European states on the characteristics and types of hazardous / dangerous military incidents**

As shown in this report, there can be a number of questions related to identifying military incidents, and separating them from routine or near-routine encounters and interactions. It could be beneficial to discuss in general terms, bilaterally, and at the level of the OSCE and NATO-Russia Council whether particular occurrences should be treated as hazardous/dangerous incidents. Such discussions should also take place between non-governmental experts from Russia, NATO and other countries. This can also help to avoid needless politicisation in the allegations regarding hazardous or dangerous incidents.

- **Operationalise and, when possible, update the VDOC Chapter III mechanism for co-operation as regards hazardous incidents of a military nature**

As highlighted, the Vienna Document includes a procedure for clarifying potential hazardous incidents. The starting point should be the operationalisation of the existing mechanism. This includes regularly updating the list of designated national points to contact in case of hazardous incidents and utilizing the procedure for providing information and prompt response to requests for clarifications - so far, it has not been.

A clearer understanding of the effectiveness of the current procedure may also help to reach an agreement on VDOC Chapter III modification. One possibility, included in the proposals already submitted and supported by a number of OSCE participating states, would be to assign to the OSCE some

degree of responsibility for researching and reporting on an incident, for example through the establishment of a special fact-finding mission.

- **Initiate work on a best practices guide or a handbook for preventing and managing hazardous/dangerous military incidents**

While the knowledge and understating of the dangers of military incidents and rules of behaviour during routine and non-routine military encounters have significantly improved, it could be beneficial to provide governments, international organisations, and media with a consolidated yet comprehensive handbook describing incidents-related risk reduction norms and procedures. Such a document could present and clarify applicable principles of international law, maritime and air traffic regulations, specific obligations and prohibitions included on the INCSEAs and DMAs, and other relevant information. It could also specify the available procedures for dealing with incidents. It could provide a tool to communicate with media, ensuring reporting on incidents and encounters derive from a full knowledge of regulations and procedures.

- **Implement and, where possible, update the existing Incidents at Sea (INCSEAs) agreements**

INCSEA agreements remain in force between several states in the Euro-Atlantic area. Beyond full implementation of the letter and spirit of these agreements, states can increase their practical effectiveness through the following updates:

- Addressing the issue of air-to-air intercepts of aircraft in international airspace, by specifying prohibited behaviour in more details, for example: performing dangerous manoeuvres or aerobatics at a distance which increases the risk of mid-air collision;

- Addressing the issue of sea/air incidents, including by agreeing on fixed minimal distances to be observed in encounters between ships and aircraft;
  - Including in the scope of the agreement air and naval unmanned systems, and also submerged submarines;
  - Updating communication modes and provisions on signals, using the experience of the Pacific-focused Code for Unplanned Encounters at Sea adopted in 2014.<sup>26</sup>
- **Explore options for conducting additional INCSEA or DMA-type agreements**

Some of the countries most exposed to the danger of dangerous incidents currently do not have bilateral agreements with each other of this kind, including Poland-Russia and Romania-Russia. Their respective governments should be encouraged to look into the possibility of concluding them to increase military predictability and to avoid incidents. Given the context of increased tensions in some bilateral relationships, a promotion of such agreements could be a way to stabilise the situation.

In current circumstances, the potential utility in revisiting Dangerous Military Activities-type of agreements may be high. The provisions of DMAs relating to unintentional entering by personnel and equipment of the armed forces of one state into the territory or airspace of the other should be particularly useful in case of land incidents or potential border violations not covered by the INCSEAs.

- **Explore options for additional bilateral or sub-regional confidence-building measures**

Additional bilateral confidence-building measures may be useful for preventing or managing incidents, and more generally for increasing levels of trust and predictability. Bilateral and regional confidence-building measures can include establishing military-

to-military 'hot lines' between headquarters, additional exchange of information on military activities, increased intensity of contacts during major military exercises, or other non-routine activities, additional visits to military units, and observation of exercises below Vienna Document thresholds.

The decreasing numbers of incidents and the better management of military encounters should be highlighted as a positive development among the overall tensions in NATO-Russia relations. However, as this report shows, we are not yet out of the danger zone.

## Endnotes

- 1 Thomas Frear, Lukasz Kulesa, Ian Kearns, Dangerous Brinkmanship: Close Military Encounters Between Russia and the West in 2014, European Leadership Network, November 2014 <https://www.europeanleadershipnetwork.org/wp-content/uploads/2017/10/Dangerous-Brinkmanship.pdf>
- 2 Lukasz Kulesa, Denitsa Raynova, Thomas Frear, Managing Hazardous Incidents in the Euro-Atlantic Area: A New Plan of Actions, European Leadership Network, November 2016; <https://www.europeanleadershipnetwork.org/policy-brief/managing-hazardous-incident-in-the-euro-atlantic-area-a-new-plan-of-action/>
- 3 Thomas Frear, Lessons Learned? Success and Failure in Managing Russia-West Military Incidents 2014-2018, European Leadership Network, April 2018; <https://www.europeanleadershipnetwork.org/policy-brief/lessons-learned-success-and-failure-in-managing-russia-west-military-incident-2014-2018/>
- 4 Royal Airforce News, RAF TYPHOONS intercept Russian bombers approaching UK airspace, Available at: <https://www.raf.mod.uk/news/articles/raf-typhoons-intercept-russian-bombers-approaching-uk-airspace/>, Accessed 28 September 2018
- 5 The ELN would like to thank the following researchers who collected the data used in this paper: Paul W. Normolle, Sean T. Crowley and Matt Lynn from the Matthew B. Ridgway Center for International Security Studies at the University of Pittsburgh
- 6 Similar point is made in: Wolfgang Richter, The Implications of the State of Conventional Arms Control for European Security, Deep Cuts Paper no 12, August 2018; [http://deepcuts.org/images/PDF/DeepCuts\\_WP12\\_Richter.pdf](http://deepcuts.org/images/PDF/DeepCuts_WP12_Richter.pdf)
- 7 Thomas Frear, Lukasz Kulesa, Ian Kearns, Russia – West Brinkmanship Continues, [http://www.europeanleadershipnetwork.org/russia--west-dangerous-brinkmanship-continues-\\_2529.html](http://www.europeanleadershipnetwork.org/russia--west-dangerous-brinkmanship-continues-_2529.html). The full list of incidents is available at: <https://www.europeanleadershipnetwork.org/wp-content/uploads/2017/10/ELN-Russia-West-Full-List-of-Incidents.pdf>
- 8 Global Zero Military Incidents Study, compiled by Jessica Sleight, Global Zero; released in January 2016 and updated May 2017, [https://globalzero.org/files/mi\\_briefing\\_update\\_5.1.17.pdf](https://globalzero.org/files/mi_briefing_update_5.1.17.pdf)
- 9 For example, the 2016 NATO Secretary General's Annual report noted over 400 intercepts by NATO of Russian aircraft in 2015, of which 160 were conducted by the Baltic Air Policing Mission. The Secretary General's Annual Report 2015, NATO library: [http://www.nato.int/nato\\_static\\_fl2014/assets/pdf/pdf\\_2016\\_01/20160128\\_SG\\_AnnualReport\\_2015\\_en.pdf](http://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2016_01/20160128_SG_AnnualReport_2015_en.pdf)
- 10 Vienna Document 2011 on Confidence- and Security-Building Measures (2011), Organization for Security and Co-operation in Europe, Available online here: <https://www.osce.org/fsc/86597?download=true>, Accessed 28 September 2018
- 11 For more information please see previous ELN work available here: <https://www.europeanleadershipnetwork.org/policy-brief/managing-hazardous-incident-in-the-euro-atlantic-area-a-new-plan-of-action/> and here: <https://www.europeanleadershipnetwork.org/wp-content/uploads/2016/11/Avoiding-and-Managing-Hazardous-Incidents-in-the-Euro-Atlantic-Area-Annex.pdf>.
- 12 Air space zones, designated by particular countries beyond their national airspace, in which the identification and control of aircraft is performed.



- 13 Note that the conclusions drawn below do not include data on incidents in common theatres of operation in conflicts areas such as Syria or Ukraine.
- 14 Communication with NATO Press team, June 2018.
- 15 For more information of British airspace violations and air force deployments in response to Russian activity close to sovereign airspace, please see: <https://twitter.com/steffanwatkins/status/1003976213340319744>. It appears the number has gone down over the years. Similar conclusions were drawn by the Norwegian airforce with regards to Russian activity close to Norwegian sovereign airspace: <https://forsvaret.no/aktuelt/qra-scrambles-2016>.
- 16 "Data on interceptions of vessels and aircraft completed near the Baltic States' borders from March 7 to 13, 2016," Lithuanian Ministry of National Defense, March 14, 2016. [http://kam.lt/en/news\\_1098/news\\_archives/news\\_archive\\_2016/news\\_archive\\_2016\\_-\\_03/data\\_on\\_interceptions\\_of\\_vessels\\_and\\_aircraft\\_completed\\_near\\_the\\_baltic\\_states\\_borders\\_from\\_march\\_7\\_to\\_13\\_2016.html?pbck=20](http://kam.lt/en/news_1098/news_archives/news_archive_2016/news_archive_2016_-_03/data_on_interceptions_of_vessels_and_aircraft_completed_near_the_baltic_states_borders_from_march_7_to_13_2016.html?pbck=20)
- 17 Damien Sharkov, "Russian Military Plane Confronts NATO Aircraft Over Northern Europe: Reports," *Newsweek*, June 21, 2017. <http://www.newsweek.com/russian-military-plane-confronts-nato-aircraft-over-northern-europe-reports-627839>; Andrew Osborne and Robin Emmott, "Russian defense minister's plane buzzed by NATO jet over Baltic," *Reuters*, June 21, 2017. <https://www.reuters.com/article/us-russia-nato-intercept/russian-defense-ministers-plane-buzzed-by-nato-jet-over-baltic-idUSKBN19C12Y?il=0>.
- 18 Shouldering Incident Reminiscent of Sea of Japan Bumpings, Naval Historical Foundation, 30 June 2016, <http://www.navyhistory.org/2016/06/shouldering-incident-reminiscent-of-sea-of-japan-bumpings/>, Accessed October 2016
- 19 "Bullying In the Baltic Sea," *Atlantic Council Digital Forensic Research Lab*, July 20, 2017. <https://medium.com/dfrlab/bullying-in-the-baltic-sea-2842b9e39339>
- 20 Ryan Browne and Zachary Cohen, "Russian jet flies within 20 feet of US Navy plane," *CNN*, May 13, 2017, <http://www.cnn.com/2017/05/12/politics/russian-jet-us-navy-surveillance-plane-encounter/index.html>; Lucas Tomilson, "Russian jet 'buzzes' another US plane in Black Sea, second incident this week," *Fox News*, May 13, 2017, <http://www.foxnews.com/world/2017/05/13/russian-jet-buzzes-another-us-plane-in-black-sea-second-incident-this-week.html>; Mary Walsh, "Russian plane intercepts U.S. refueling aircraft," *CBS News*, June 9, 2017. <https://www.cbsnews.com/news/russian-plane-intercepts-u-s-refueling-aircraft/>
- 21 Oriana Pawlyk, "Russian Jets Buzz US Destroyer, Intercept NATO Planes," *Military.com*, March 3, 2017. <https://www.military.com/daily-news/2017/03/03/russian-jets-buzz-us-destroyer-intercept-nato-planes.html>; Ryan Browne, "Russian jet makes 'unsafe' intercept of US Navy aircraft," *CNN*, November 27, 2017. <https://www.cnn.com/2017/11/27/politics/russia-us-unsafe-intercept/index.html>
- 22 Work of technical experts and civil aviation specialists under the framework of the Baltic Sea Project Team has been particularly important in clarifying the existing regulations and improving air safety over the Baltic Sea.
- 23 INCSEA 2018 Statement, US Naval Forces Europe-Africa, 26 July 2018 [https://www.navy.mil/submit/display.asp?story\\_id=106488](https://www.navy.mil/submit/display.asp?story_id=106488); US Navy Statement on INCSEA, US Naval Forces Europe-Africa, 25 July 2017, <http://www.eucom.mil/media-library/pressrelease/35986/us-navy-statement-on-incsea>



24 Russia, UK to update agreement on prevention of incidents at sea, Tass, 14 August 2017, <http://tass.com/politics/960250>

25 <https://edition.cnn.com/2018/08/07/world/spanish-fighter-jet-accidentally-fires-missile-estonia/index.html>

26 See: [http://www.jag.navy.mil/distrib/instructions/CUES\\_2014.pdf](http://www.jag.navy.mil/distrib/instructions/CUES_2014.pdf). The authors are grateful to Professor David Winkler for suggesting this solution.