ADVANCING NATO CIMIC ANALYSIS AND ASSESSMENT CAPABILITY:

INSIGHTS FROM TACTICAL AND STRATEGIC LEVEL EXERCISES

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Authors:

Eleonora De Martin, NATO Civil-Military Cooperation Centre of Excellence

Saurav Narain, Leiden University

Dr. Silvia D'Amato, James Madison University

Contributors:

Kathleen Porath, NATO Civil-Military Cooperation Centre of Excellence

Sonja Gruenbauer, NATO Civil-Military Cooperation Centre of Excellence

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Mission

Centres of Excellence provide a broad scope of work along four main pillars: Doctrine Development and Standards, Concept Development and Experimentation, Training and Education, and Analysis and Lessons Learned. We, the Civil-Military Cooperation Centre of Excellence (CCOE), are a multinational-sponsored, NATO-accredited knowledge hub and Education and Training Facility for NATO approved CIMIC courses to accelerate the evolution of CIMIC. Our mission is to assist the Alliance and its partners with effective and interoperable civil-military cooperation through unique expertise, responsive education and training, cohered concepts, valuable lessons learned and future-oriented experimentation. We are the catalyst working towards a contemporary and future environment where military and non-military actors are seamlessly integrated into military activities, enabling a comprehensive approach to address complex challenges in peacetime, crisis, and conflict.

Acknowledgement

We extend our sincere appreciation to Supreme Headquarters Allied Powers Europe (SHAPE), in particular the J9 Branch, and the Multinational Civil-Military Co-Operation Command (MNCIMIC CMD) in Germany for enabling our participation in exercises and for their steadfast support throughout the research process.

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Finally, we thank all participants who generously shared their time, perspectives, and experiences; their contributions were indispensable to the completion of this study.

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List of Acronyms

7BLRs	Seven Baseline Requirements (for Resilience)
ACAPS	Assessment Capacities Project
ACO	Allied Command Operations
AI	Artificial Intelligence
AJP 3.19	Allied Joint Publication 3.19 (CIMIC Doctrine)
ART 4	NATO Treaty Article 4 (Consultations/Deterrence)
ART 5	NATO Treaty Article 5 (Collective Defence)
C4ISR	Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance
CCOE	Civil-Military Cooperation Centre of Excellence
CFI	Civil Factor Integration
CMI	Civil-Military Interaction
CIMIC	Civil-Military Cooperation
CPP	Cultural Property Protection
CUOE	Comprehensive Understanding of the Operating Environment
DDA	Deterrence and Defence in the Euro-Atlantic Area
EU	European Union
USEUCOM	United States European Command
G9	Staff branch number for CIMIC at Division level and Corps level
ICRC	International Committee of the Red Cross
ICP	Intelligence Collection Plan
IR	Intelligence Requirement
J35	Operations planning (Phase 4) staff function
J5	Plans (Phase 3) staff function
J9	Staff branch number for CIMIC (civil-military cooperation) within NATO structures
JFCs	Joint Forces Commands
JOCO25	Joint Cooperation Exercise 2025
MAVEN	Palantir Maven Smart System NATO
MDSOC	Multi-Domain Strategic Operations Centre
MNCIMIC CMD	Multinational Civil-Military Co-Operation Command
NCAA	NATO CIMIC Analysis and Assessment
NCAAC	NATO CIMIC Analysis and Assessment Capability
NATO	North Atlantic Treaty Organization
PMESII	Political, Military, Economic, Social, Information, Infrastructure (analytical framework)
RFIs	Requests for Information
S9	Staff branch number for CIMIC at Brigade level
SATs	Structured Analytical Techniques
SHAPE	Supreme Headquarters Allied Powers Europe
SOPGs	Strategic Operations Planning Groups
SOPs	Standard Operating Procedures
STDC25	Steadfast Deterrence 2025
TCTs	Tactical CIMIC Teams
TOPFAS	Tool for Operational Planning, Force Activation and Simulation

EXECUTIVE SUMMARY

In an era of rising hybrid threats, the urbanisation of conflict, and the increasing involvement of civilian populations and infrastructure in operational theatres, Civil-Military Cooperation (CIMIC) has become a critical function for integrating civil considerations into military activities.

Given the growing complexity of the civil environment, a standardized, structured approach is essential to achieve a comprehensive understanding of that environment. In 2020, Supreme Headquarters Allied Power Europe (SHAPE) J9-CIMIC advanced the requirement to develop an Allied Command Operations (ACO)-wide NATO CIMIC Analysis and Assessment (NCAA) Capability (NCAAC). The NCAA Concept, developed by the Centre of Excellence for Civil-Military Cooperation(CCOE), provides clear guidelines and a standardized workflow to support systematic analysis of the civil environment. Assessing how the concept is implemented across command levels is necessary to refine it and identify capability gaps.

This report evaluates NCAAC implementation at the tactical and strategic levels, drawing on observations, survey data, and interviews from two exercises: Steadfast Deterrence 2025 (strategic) and Joint Cooperation Exercise 2025 (tactical). With 28 survey responses and 27 interviews from both CIMIC and non-CIMIC personnel, the report captures perspectives from those producing the analysis and those using it, focusing on current practices and perceived effectiveness.

The analysis highlighted the main challenges in the implementation of the NCAAC, including but not limited to:
1) lack of specialised personnel,
2) inadequate training on the NCAAC,
3) insufficient data and data collection methods,
4) limited (perceived) applicability of the NCAAC at the tactical and strategic level due to different structures and priorities. In addition, both exercises were conducted under Deterrence (Article 4) and Defence (Article 5) scenarios, characterized by high operational tempo and rapidly shifting priorities.

This underscored the need for CIMIC to remain flexible while operating within clear structures—especially at the tactical level, where staff rotation is frequent.

Despite these challenges, efforts to apply the NCAAC improved the relevance and actionability of CIMIC advice to decision-makers. Reliability and objectivity remain areas for improvement and can be strengthened through deeper institutionalization and better integration of the NCAAC.

The following are the key recommendations emerging from the report:

- Maintain and regularly update the NCAA Concept, SOPs, and training curriculum, including modules on data literacy, geospatial analysis, and responsible use of Artificial Intelligence (model fundamentals, limitations, bias, uncertainty, and human-in-the-loop practices).
- Establish a living lessons-learned repository and sustain a practitioner network to capture, share, and iterate best practices.
- Develop level-specific implementation guidelines for NCAAC at both strategic and tactical echelons.
- Explore, pilot, and evaluate technology and AI capabilities that enable NCAAC implementation at the speed of relevance.

INTRODUCTION & PROBLEM OVERVIEW

The modern security landscape has evolved considerably in the past decade, with the emergence of hybrid threats, the urbanisation of conflict zones, and the increasing involvement of civilian populations and infrastructure in operational theatres[1]. The increasing complexity of modern warfare that blurs the line between civilian and military demands an adaptive and integrated approach to military planning. In response, CIMIC has emerged as a crucial function, enabling armed forces to integrate civil factors into planning and operations and interact effectively with civilian actors. CIMIC is no longer a peripheral support function; it plays a pivotal role in contributing to a comprehensive understanding of the operating environment, ensuring mission success in multi-domains operational environments[2].

Yet, despite the doctrinal emphasis on CIMIC, the integration of civil considerations into military planning has often lacked endurance and consistency. Traditionally, this integration has relied heavily on the individual experience of CIMIC practitioners, resulting in ad hoc methods and varied outcomes[3]. In order to enhance the CIMIC functions' contribution to comprehensive understanding of the operating environment within a headquarter, SHAPE J9 (CIMIC)[4] is currently developing two key capabilities aimed at improving the understanding of the civil environment. These capabilities focus on 1) collecting information; and 2) assessing the impact of strategic shocks in specific regions[5]. The NATO CIMIC Analysis and Assessment Capability (NCAAC) was introduced in 2020 with the purpose of standardizing workflows, applying Structured Analytical Techniques (SATs), and providing clear product guidelines to provide timely, actionable, and relevant insights into the Operating Environment. The NCAAC is defined as:

"the capability performing NATO CIMIC Analysis and Assessment activities in order to generate the Understanding of the Civil Factors of the Operating Environment (Civil Factors) for the purpose of Civil Factor Integration."[6]

While the concept is still not officially adopted by NATO, its implementation is in the process of coming into effect, and it is indeed already taught through the NCAA Course at the Civil-Military Cooperation Centre of Excellence (CCOE). Nonetheless, little is known about how widely it is understood, or applied across NATO operations and exercises. What is then the added value of NCAAC into the operational planning process?

This report addresses this question presenting and discussing data on expectations and experiences of NATO CIMIC and non-CIMIC personnel at different levels commands, participating in two military exercises, i.e. the Steadfast Deterrence 2025 (STDC25), and the Joint Cooperation Exercise 2025 (JOCO 25). The purpose of this report is to fill a clear evidence gap in the validation of existing concepts, so as to contribute to the evolving understanding of the NCAAC as both a doctrinal concept and a practical capability. Overall, the findings that we present in this report support the development of standardized, evidence-based approaches to CIMIC analysis, and provide guidance for further refinement of the capability and its implementation.

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1 International Committee of the Red Cross, "International Humanitarian Law and the Challenges of Contemporary Armed Conflicts" (2025).

2 Harig, "The future of civil-military cooperation in NATO", (2024).

3 CCOE Concepts, Interoperability, Capabilities Branch, "The Evolution of Civil-Military Cooperation," (2025).

4 According to NATO standards, CIMIC units within the military staff structure are indicated with the number 9 (J9, G9, S9).

5 Brigadier General Bernard Lebrun, "Foreword" in CCOE, "NATO Civil-Military Cooperation Analysis and Assessment Concept", (2020).

6 CCOE, "Civil-Military Cooperation Analysis and Assessment Concept", (2025).

RESEARCH DESIGN

This report provides insights into the current implementation of the NCAAC, by considering how CIMIC and non-CIMIC staff perceive its adoption and effectiveness in improving the Understanding of the Civil Factors of the Operating Environment at the Tactical and Strategic Levels of Command.

Specifically, this project is guided by two central objectives:

1. **Assessment of Expectations**: To gather insights into the expectations of institutions and actors who receive CIMIC analytical products for decision-making.
2. **Evaluation of Awareness and Effectiveness**: To explore the experiences of CIMIC personnel engaged in Analysis and Assessment activities during exercises, with particular focus on their familiarity with the NCAA workflow and its perceived contribution to operational planning.

WORKING CONCEPTS

Table 1 provides an overview of the working concepts and their official definition relevant to understand the collected data and the following analysis[7]. For the doctrinal basis of NATO CIMIC, please refer to the most recent AJP 3.19 Doctrine.[8]

Table 1. Summary of key working concepts and definitions.

Concept	Definition
CIMIC	A military joint function that integrates the understanding of the civil factors of the operating environment and that enables, facilitates and conducts civil-military interaction to support the accomplishment of missions and military strategic objectives in peacetime, crisis and conflict."[9]
Civil Environment	The Civil Environment is described as "the non-military part of the comprehensive operating environment."[10]
Operating Environment	The Operating Environment is defined as "a composite of the conditions, circumstances, and influences that affect the employment of capabilities and bear on the decisions of the commander."[11]
CIMIC Analysis	CIMIC Analysis is the result of a group of collected data and information subjected to review - in which all parts and their interactions have been methodically examined in order to identify significant facts for subsequent interpretation.[12]
CIMIC Assessment	CIMIC Assessments are generated deductions based on CIMIC Analysis. CIMIC Assessment provides insight and foresight to decision-makers.[13]

7 For a complete guide on relevant concepts and definitions for CIMIC activities, see CCOE, Civil-Military Cooperation Analysis and Assessment Concept, 2025.

8 AJP-3.19 ALLIED JOINT DOCTRINE FOR CIVIL MILITARY COOPERATION, Edition B, Version 1, June 2025. https://www.cimic-coe.org/publications/ajp-3-19/

CIMIC Advice	CIMIC Advice is a detailed suggested way ahead to inform decision-making based on NCAA.[14]
NATO CIMIC Analysis and Assessment Workflow	The NATO CIMIC Analysis and Assessment workflow describes a set of activities whereby data and information are obtained, assembled, converted into NCAA, and made available for users. It builds upon the intelligence cycle adopting the non-linear set of activities: • Direction is the determination of Intelligence Requirements (IR), planning the analytic response, and match IR to collection; • Collection is the validation and prioritization of collection assets to acquire relevant data and information; • Processing is the conversion of information into intelligence through collation, evaluation, analysis, integration, and interpretation. • Dissemination is the timely submission of CIMIC advice in an appropriate form and by any suitable means, to those who need it.[15]
Tactical Level	The tactical (or component) level consists of what is called Single Service Commands (SSCs): land, maritime and air commands. These service-specific commands provide expertise and support to the Joint Force Commands at the operational level in Brunssum or Naples (NATO SHAPE, 2021).[16]
Strategic Level	Supreme Headquarters Allied Powers Europe (SHAPE) is a strategic headquarters. Its role is to prepare, plan, conduct and execute NATO military operations, missions and tasks in order to achieve the strategic objectives of the Alliance. As such it contributes to the deterrence of aggression and the preservation of peace, security and the territorial integrity of Alliance. [17]

Source: Authors' elaboration.

9 MC 0411/3 SD 5 NATO Military Policy on Civil-Military Cooperation (CIMIC) and Civil-Military Interaction (CMI)

10 MC 0411/3 SD 5 NATO Military Policy on Civil-Military Cooperation (CIMIC) and Civil-Military Interaction (CMI)

11 CCOE, Civil-Military Cooperation Analysis and Assessment Concept (2020), p. 160.

12 Ibid.

13 Ibid.

14 Ibid.

15 Ibid., pp. 163-165.

16 Ibid., p. 161.

17 Ibid.

CASE STUDIES: STEADFAST DETERRENCE 2025 (STDC25) & JOINT COOPERATION EXERCISE 2025 (JOCO 25)

Data were collected during two military exercises, both held in 2025: the NATO Steadfast Deterrence 2025 (STDC25), which mostly focused on the strategic level, and the Joint Cooperation Exercise 2025 (JOCO 25), which instead focused on the tactical level.

Steadfast Deterrence 2025

The STDC25 exercise (19-28 May, 2025) represents an opportunity to train and evaluate NATO's Strategic Warfighting HQ, having as a primary audience SHAPE and U.S. European Command (USEUCOM). The focus is on operationalizing NATO's Deterrence and Defence, validating plans in Multi-Domain Operations together with American partners.[18]

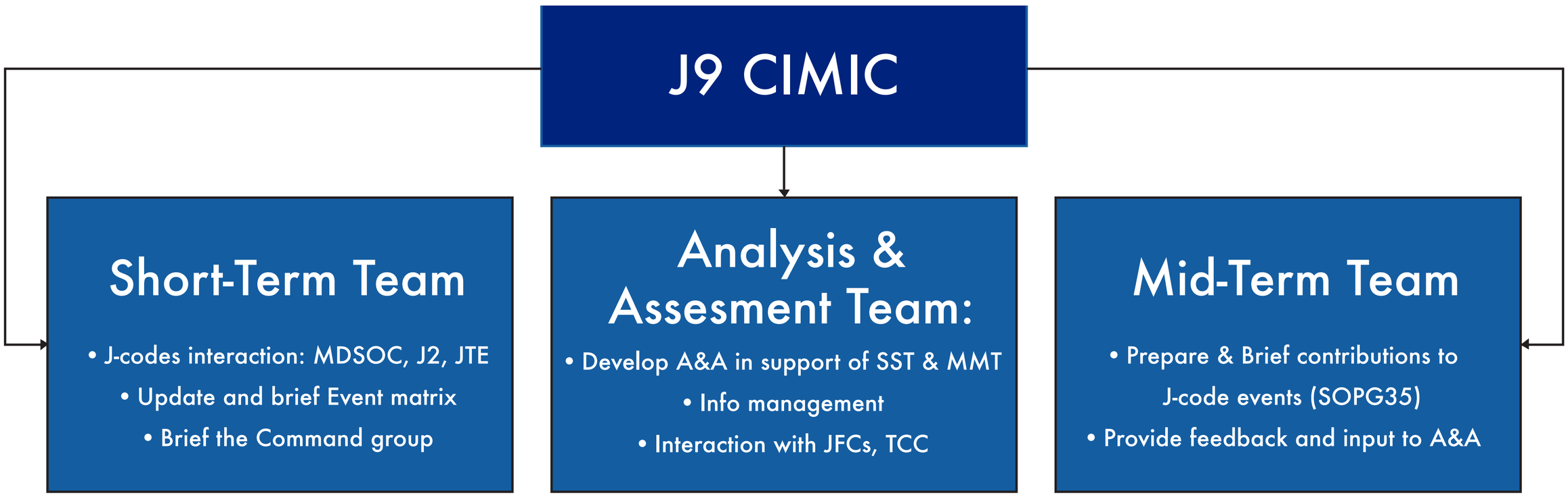
In this context, the main objectives for SHAPE J9, the responsible branch for Civil-Military Cooperation were:

1. Demonstrate the Capability of conducting Civil Factor Integration (CFI) through the NCAAC to contribute to the Comprehensive Understanding of the Operating Environment (CUOE).

2. Demonstrate the Capability to enable, facilitate and conduct Civil-Military Interaction (CMI) with relevant non-military actors.

To fulfil these objectives, J9 Branch has tested a trial structure to implement the NCAAC through an Analysis and Assessment Team (Figure 1). For the purpose of the exercise, the personnel from Liaison team were shifted to Analysis team due to lack of available personnel.

Figure 1. Trial Structure SHAPE J9 CIMIC - STDC25



Source: SHAPE J9

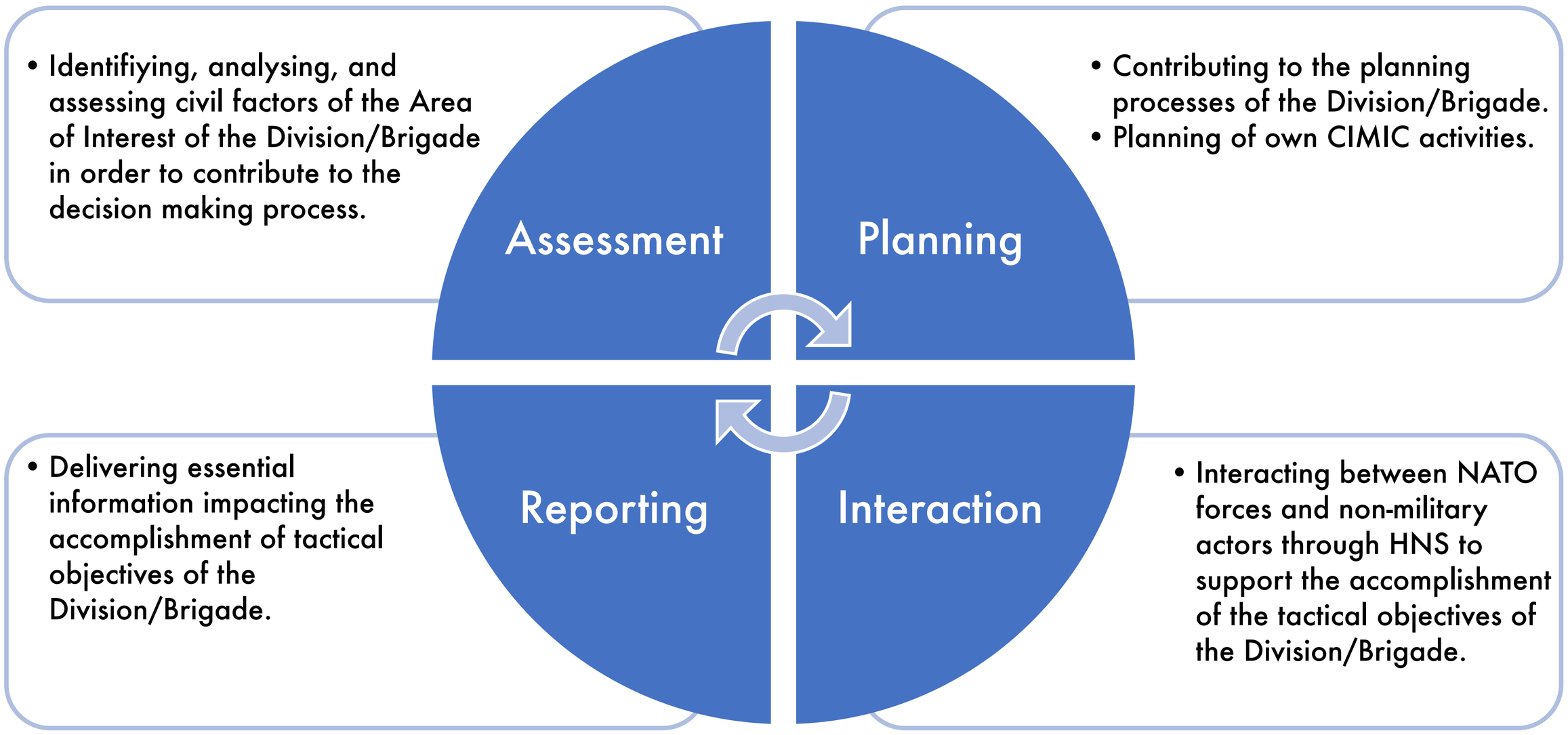
18 Maj. Gen. von Butler, "Exercise STEADFAST DETERRENCE 2025 Certifies SHAPE as Warfighting HQ, Enables Operational Convergence with USEUCOM", (2025).

Joint Cooperation Exercise 2025

JOCO 25 was hosted by the MNCIMIC CMD, in Nienburg Germany to train planning and leadership processes at the staff level in an Article 4 (Deterrence) to Article 5 (Defence) fictional scenario. With around 300 CIMIC and civilian emergency personnel from 22 nations, it represented the largest tactical exercise in Civil-Military Cooperation in a NATO environment. However, the exercise's participants were provided by national force providers and therefore operated in accordance with their respective national guidelines for analysis and assessment.

The Primary Exercise Objectives were developed based on the latest version of doctrine AJP 3.19, which outlines the two main activities of Civil Factor Integration (CFI) and Civil Military Interaction (CMI). The training objectives detailed in Figure 2 are: assessment, planning, interaction and reporting.

Figure 2. JOCO25 Training Objectives



Source: Multi-National CIMIC Command, Nienburg

DATA, METHODS & RESEARCH PHASES

The data collection has divided the sample size into two, collecting data from 'analysts' and 'receivers':

- **'Analysts' include all the personnel that are involved, even partially, in the analytical workflow.[19]**
- **'Receivers', in other words, the audience of CIMIC analytical products, include decision-makers, CIMIC staff, headquarter staff, higher and lower headquarters, and non-military actors.[20]**

Data collection has been carried out during the exercises, through a detailed questionnaire survey, interviews and direct participant observation. Data gathering strategy for receivers has been designed in two research phases (pre-exercise survey and post-exercise survey). The main purpose of research phase 1 is to evaluate expectations, institutions and actors receiving analysis and assessment capabilities for the decision-making process. The focus of research phase 2 is to evaluate the effectiveness of the NCAAC in enhancing the understanding of the Civil Factors of the operating environment. However, due to the structure of the exercises and limited personnel availability at both the tactical and strategic levels, many of those categorized as 'analysts' were not analysts by training or profession, but were temporarily involved in the analytical process, which may influence the validity and interpretation of the findings.

In total, we gathered data through 28 sets of survey responses (8 from STDC25 and 20 from JOCO25). In order to explore some key questions in more detail, 27 interviews were conducted with the participants. All responses were anonymized and cleaned of any classified content to ensure confidentiality and compliance with security protocols.

19 CCOE, Civil-Military Cooperation Analysis and Assessment Concept (2025), p. 165

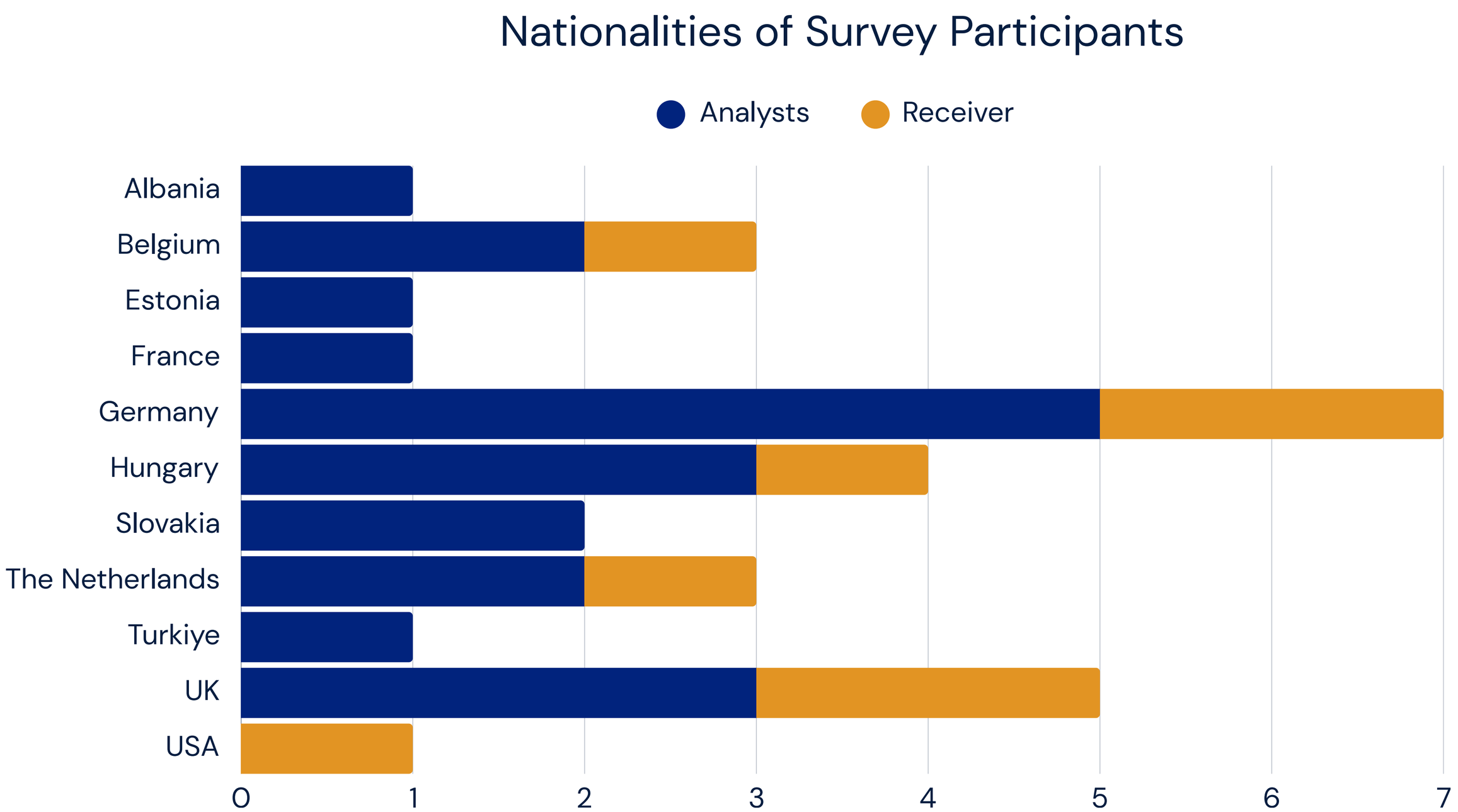
20 Ibid., p. 28

OVERVIEW OF RESULTS

DEMOGRAPHICS

The survey results from both exercises reveal a diverse demographic composition among the respondents, comprising 18 military personnel and 10 civilians. Notably, 6 out of the 8 respondents from SHAPE are civilians, and all of them are part of the J9 workforce. It is important to highlight that there were no civilians among the category "Receivers". As shown in Figure 3, the respondents represent a variety of nationalities working for the Alliance.

Figure 3. Nationality of Survey Participants



Source: Authors' elaboration

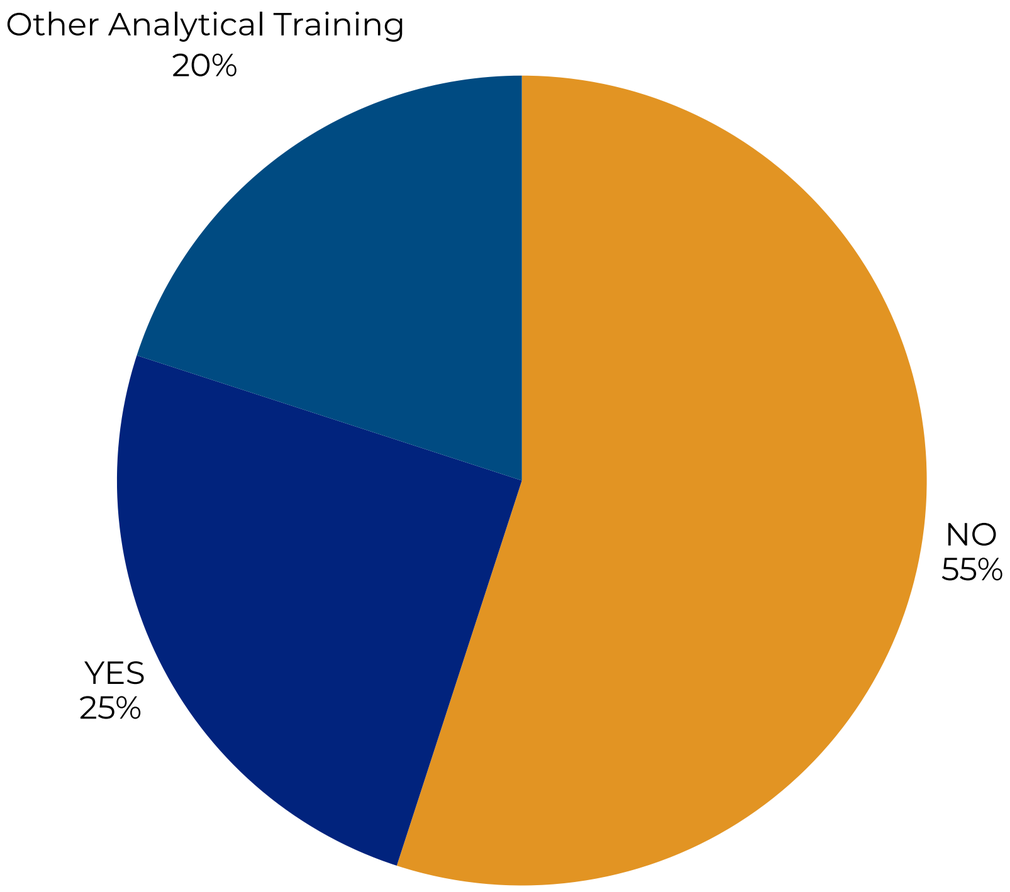
Training and field experience

One of the goals of the research is to understand the factors influencing the implementation of the NCAAC. Previous field experience plays a significant role, as it determines the level of expertise as well as potential biases of the respondents. The survey indicates that all Receivers were deployed between 1 to 15 times. Among the Analysts, 10 out of 20 reported being deployed between 1 and 15 times. Generally, the respondents were deployed primarily in out-of-area operations, which differs from the scenario trained in the exercise in the context of Deterrence and Defence in the Euro-Atlantic Area (DDA). As reported in Figure 3, the majority of CIMIC Analysts does not have any analytical training.

Only 5 out of 20 respondents have participated in the NCAA Course at the CCOE, while 4 respondents mentioned other analytical training such as CIMIC Analysis at the MNCIMIC CMD or intelligence training. Notably, none of the Receivers have participated in the NCAA Course.

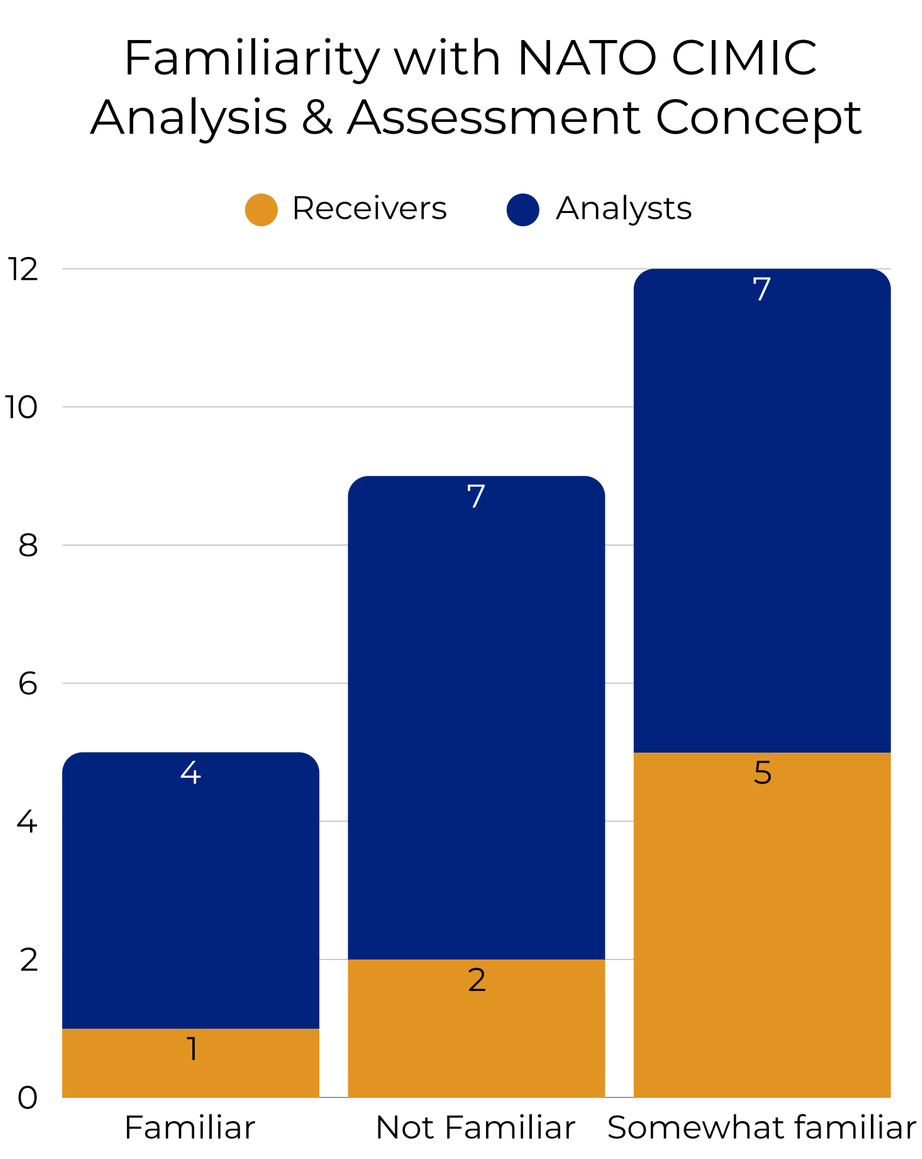
These findings raise concerns about preparedness and points to a structural training gap that may warrant attention from military leadership and training institutions.

Figure 4. Percentage of Survey participants who attended NCAA Course or other Analytical Training.



Source: Authors' elaboration

Figure 5. Level of Familiarity with the NCAA Concept



Source: Authors' elaboration.

General Awareness of the NCAAC

Evidence indicates that the implementation of NCAAC at both strategic and tactical level are at a very elementary stage. Only 19% of respondents are familiar with the Concept, 46% are aware but not familiar in practice, and 35% are not familiar at all (Figure 5).

Survey results also showed that 8 out of 20 Analysts attempted to implement the NCAA Workflow. 5 Analysts reported adopting a different approach, for instance, the Assessment Capacities Projects (ACAPS) Analysis Workflow (Design, Acquire, Analyse and Communicate) or various impact assessments based on qualitative methods. As mentioned by one survey respondent during the STDC25, the "analysis and assessment approach is yet to be properly developed and standardised."[21]

21 Survey responder #2, Mons, May 29, 2025.

STRATEGIC LEVEL – STEADFAST DETERRENCE

Receivers' perception and implementation[22]

Evolving requirements at the Strategic Warfighting HQ demands continuous validation of CIMIC Assessments' relevance and value for decisions-makers. SHAPE J9 is expected to:

- deliver and integrate a comprehensive civil environment picture within the Multi-Domain Strategic Operations Centre (MDSOC), a cross-functional centre which ensures operational readiness 24/7;

- provide the Civil Environment Picture to two Strategic Operations Planning Groups (SOPGs).

- Contribute with Civil factor considerations to the Battle Rhythm events.

The Receivers of CIMIC assessment highlight that, while the Factor Analysis is in line with CIMIC Doctrine, it does not directly address strategic issues[23]. Key gaps include how to model the impact on civilian networks and infrastructure and the mapping critical dependencies when planning for future operations. Decision-makers require clear indicators, established early warning signals, and impact assessments to justify the activation of response measures. They expect CIMIC staff to provide advice grounded in objective, quantifiable risk analysis rather than subjective judgement. For example, recent J9 briefings applied colour-coded severity scales without objectively defined thresholds for transitions (e.g., from green to yellow), undermining the consistency and credibility of the assessment.[24]

Receivers reported a problem with "over-templating", meaning the too rigid adoption of standardized templates which are less responsive to the specific context or user needs.[25] This reflects the challenges related to the Deterrence and Defence Scenario, which requires CIMIC to focus on different priorities compared to stabilisation operations. They highlighted that, as Resilience and emergency response falls within national responsibilities, it is necessary to understand how NATO can plug in in the different national architectures. As with Intelligence (J2), it is still a national authority that requests assistance and decides the level of information sharing.[26] Considering that todays' crises might have a cross-border impact, decision-makers expect J9 to have an overview of the civil response mechanisms, including the European Union's tool set, and of the available Response Measures.[27] Overall, decision-makers' perception of J9 reflects the need to incorporate the civil factors in planning but requires a better granularity of data in support of decision-making.

Analysts' perception and implementation

J9 staff participated in 30 out of 45 Battle Rhythm events[28] and conducted the Civil Environment Working Group & Coordination Board to provide:

1. an assessment of CIMIC strategic objectives and effects,
2. a coherent and synchronised Civil Environment Picture and
3. a risk matrix concerning the impact on the Civil Environment.

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22 Due to accessibility constraints, the information presented in this paragraph result solely from 3 interviews and direct observation of the exercise.

23 Interview #18, Mons, May 19, 2025.

24 Interview #26, Mons, May 27, 2025.

25 Ibid.

26 Interview #20, Mons, May 22, 2025.

27 Interview #18 , Mons, May, 19, 2025.

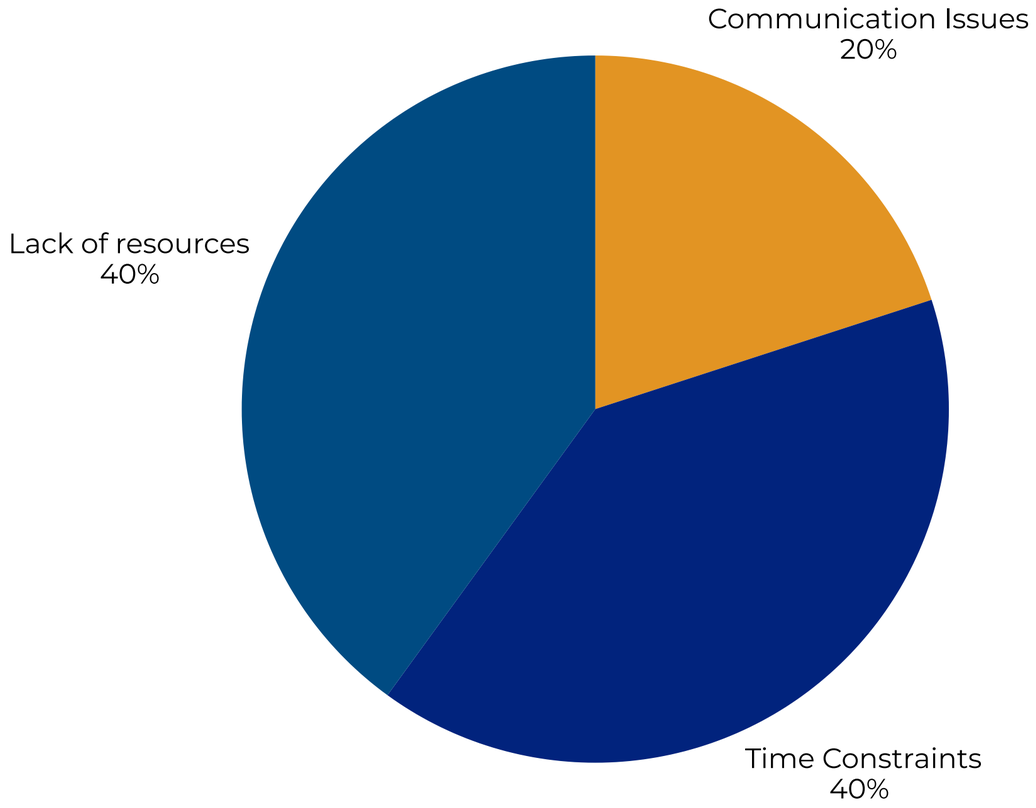
28 Battle rhythm is the military name for the maintenance of an ordered routine. As defined by the US Department of War it is "A deliberate daily cycle of command, staff, and unit activities intended to synchronize current and future operations" (Field Manual 6-0, Commander and Staff Organization and Operations (Washington, DC: Headquarters Department of the Army, May 2014), 1–12, available at https://www.milsci.ucsb.edu/sites/default/files/sitefiles/fm6_0.pdf)

Although J9 was required in Operational Planning Process for Phase 2 (Operational Appreciation of the Strategic Environment) and Phase 3 (Operational Estimate: Mission Analysis & Courses of Action Development), the lack of personnel allowed participation in planning for Phase 2 only. The team members highlighted that existing resources and personnel are not sufficient to effectively contribute to the Battle Rhythm with thorough CIMIC assessments.[29] While J9 collects and consolidates operational level assessments from Joint Force Commands (JFCs), it offers limited knowledge production for developing strategic-level assessments.[30] MDSOC change frequently, requiring flexibility in aligning the analytical plan with changing requirements.[31] Thus, respondents argue the focus should be on opportunities-based assessment that proof CIMIC's relevance to the operational needs.[32]

The "Collection" phase of the NCAA Workflow suffers from inadequate data collection and management. Respondents reported insufficient data availability and a lack of centralisation.[33] The Tool for Operational Planning, Force Activation and Simulation (TOPFAS)—an official NATO IT application suite for information sharing and managing Requests for Information (RFIs)—is underutilized by SHAPE J9 due to inadequate training and the need for rapid responses.[34] The transition to Palantir Maven Smart System NATO (MAVEN), an Artificial Intelligence-enabled system enhancing intelligence fusion and battlespace awareness and planning, highlights the need for better interoperability and training.[35] Additionally, J9 lacks comprehensive databases to consolidate data on Civil Factors for analysis and assessment, with the only existing item being the Cultural Property Protection (CPP) database.[36]

In relation to processing, respondents noted limited application of SATs, with only 2 out of 8 attempting to implement them, albeit informally.[37] Observations revealed that the use of SATs largely depends on individual analysts' experiences, with techniques being adopted based on familiarity rather than suitability.

Figure 6. Obstacles in the implementation of the NCAAC



Source: Authors' elaboration

The main SATs employed was the Factor Analysis based on PMESII (Political, Military, Economic, Social, Information, and Infrastructure) methodology, delivering Factor/Deductions/Conclusions for the operations planning process.[38] The main limitations to the effective implementation of the NCAA Workflow are to be found on lack of time due to the high operational tempo and lack of resources, mainly in terms of trained personnel and tools (Figure 6). Issues in communication refers to the difficulties in establishing fast communication channels with lower echelons and aligning priorities

Figure 7 shows the results of the survey respondents' assessment of current analytical products' quality based on the criteria described in the NCAA Concept:[39]

29 Interview #19, Mons, May 21, 2025.

30 Interview #21, Mons, May 22, 2025.

31 Interview #22, Mons, May 27, 2025

32 Ibid.

33 Ibid,. / Interview #25, Mons, May 27, 2025.

34 Thuve, "TOPFAS (Tool for Operational Planning, Force Activation and Simulation)," n.d.,

35 Thuve, "TOPFAS (Tool for Operational Planning, Force Activation and Simulation)," n.d.,

36 Interviee #24, Mons, May 26, (2025).

37 For more informatiom: Pherson, Randolph H., and Richards J. Heuer Jr. "Structured analytic techniques for intelligence analysis". Cq Press, (2011).

38 For more information: Annex E in CCOE, "Civil-Military Cooperation Analysis and Assessment Concept", (2025).

39 CCOE, "Civil-Military Cooperation Analysis and Assessment Concept", (2025), p. 28

- Relevancy: NCAA products typically respond to established Intelligence Requirements (IRs) but can also offer context, insight, and/or foresight on civil factors impacting friendly forces or adversaries.

- Timeliness: NCAA products are delivered before intelligence loses operational value, aligned with operations' tempo and planning needs.

- Validity: NCAA products use appropriate methods to meet IRs, ensuring data aligns with the intended purpose.

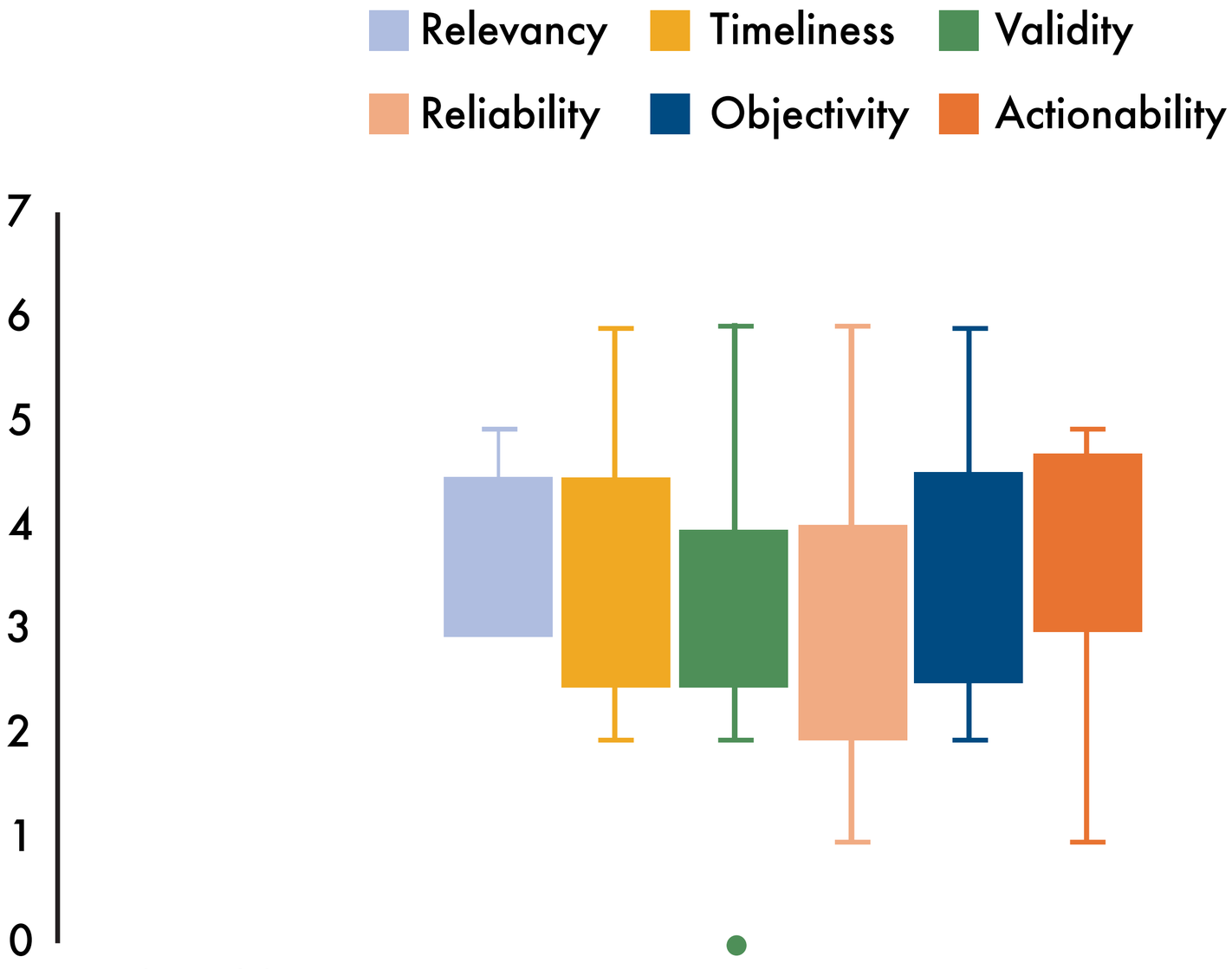
- Reliability: NCAA products remain consistent when reproduced by different staff under the same conditions and methods.

- Objectivity: NCAA products offer intelligence that is as free of biases as possible (using SAT and/or through review in the processing phase).

- Actionability: NCAA products directly support commanders' planning and operations by meeting immediate information needs

For each of these criteria, the respondents have provided a rating or score, represented by the vertical bars in the graph. The ratings range from 1 to 7, with higher values indicating better performance. Relevancy emerged as the strongest aspect of NCAA analytical products, while Reliability represents the primary concern area. This reflects the consistent concern about the reproducibility of analysis across different staff members. The lack of standardised indicators and criteria hinders the objectivity and reliability of the assessment. Interviewees further validated concerns regarding relevance, stating that "while current reports are good for situational awareness, they lack Analysis and Assessment in order to get the trends and do forecast."[40]

Figure 7. SHAPE J9 CIMIC - Analysts' Assessment of Analytical Products (1= Low; 7=High).



Source: Authors' elaboration.

40 Interview #22, Mons, May 27, 2025.

TACTICAL LEVEL - JOCO25

Receivers' perception and implementation[41]

None of the receivers at the tactical level was extensively familiar with the NCAAC. However, they reported clear expectations on what they need from CIMIC Staff: "Commander needs good reports, with factor, deduction, and conclusion, to give the right advice".[42] CIMIC analysts are expected to provide concise and relevant deductions regarding the civil factors of the operating environment. Overall, the CIMIC advise needs to be based on robust analysis which is mission-oriented and provide the most updated information.

The main concerns include the reliability and timeliness of information, as relevant data often arrives too late and may be too narrow in scope. One of the interviewees mentioned "the closer you get to an Article 5 scenario, the faster the process needs to be" because of the direct threat behind the border.[43] Receivers reported that, while it is evident that NATO CIMIC is increasingly necessary before an operation to understand the civil environment, and build a network with the non-military actors, its role in a tactical-level ART 4 to ART 5 operation is still to be clarified.

Concerning the information flow, the lack of a standardised reporting format hindered the rapid detection of relevant information. For example, the Division would receive three different templates from the brigades making the division-level assessment more time-consuming. However, one of the receivers also mention that the "lack of standardisation allow to have a broader view, experimenting different tools and methods for continuous improvement".[44] The main issue was that reporting format were still based on out-of-area/stabilisation operations, thus, inappropriate to the address the priorities of Deterrence and Defence.

Analysts' perception and implementation

The multi-national nature of the JOCO25 Exercise highlighted that, within international Brigades and Divisions, there are notable national divergences in Analysis and Assessment at the tactical level. While countries such as the Netherlands, Canada, the United States, and the United Kingdom actively support and implement analytical capabilities, most other nations do not prioritize or systematically apply them.

Overall, respondents highlighted the absence of reporting guidelines and an initial civil environment assessment, which could provide direction for analysis. This led also to the adoption of different workflows among the Brigades, with Brigade 2 attempting to implement the NCAA workflow and establishing an Analyst in direct contact with the Tactical CIMIC Teams (TCTs) deployed in the exercise. The two analysts in Brigade 2 had relevant experience in analysis thanks to the daily work and the NCAA Course. They noted that: "The concept is too broad and needs translation to be operationalised at the tactical level", however "the workflow is important to map what you know and what you do not know"[45]. Using the NCAA workflow as a guideline, they developed their own CIMIC Intelligence Collection Plan (ICP), consisting of 250 questions derived from the seven baseline requirements (7BLRs), from which they developed the questions for the TCTs' engagement.[46] This document provided direction and guidance for both the staff and the CIMIC platoon.

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41 Due to the structure of the exercise, CIMIC Staff was the primary training audience, and the other functions were represented by fictional role players.

42 Interview #6, Nienburg, June 19, 2025.

43 Interview #9, Nienburg, June 18, 2025

44 Ibid.

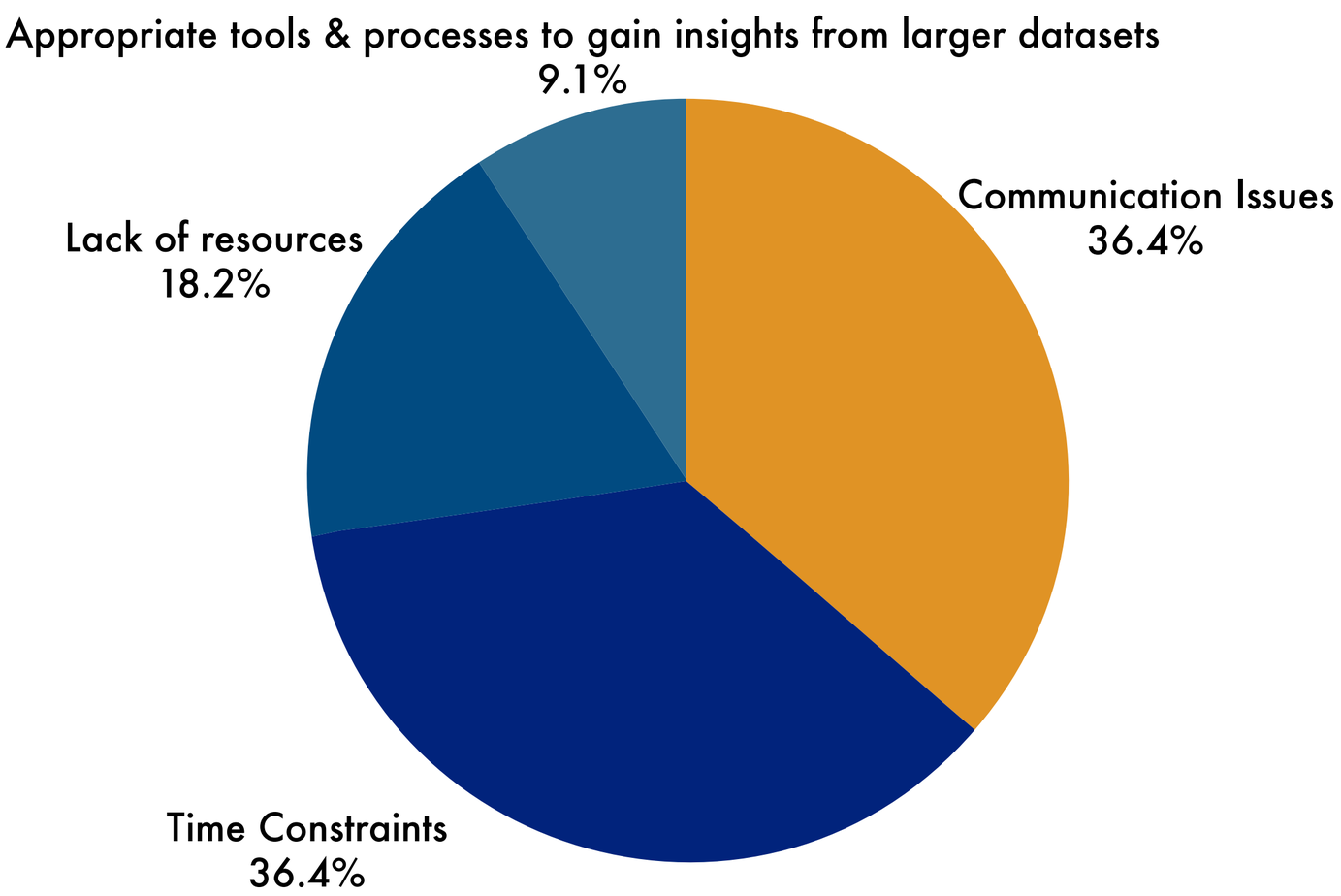
45 Interview #2, Nienburg, June 13, 2025.

46 Interview #10, Nienburg June 18, 2025.

Regarding the collection phase, TCTs' engagement served as the primary source of data, which must be structured in a way that facilitates analysis. Analysts highlighted that the current TCTs' reporting format based on Factor-Deduction-Conclusion is misleading: it should function as an analytical tool rather than a reporting mechanism, as it risks introducing bias into data collection by leading analysts to frame questions with predetermined conclusions.[47] Moreover, analysts identified a key challenge in collating the different information and validating information coming from the civil sources, as these can be intentionally or unintentionally compromised.[48] In response to these issues, Brigade 2 and Brigade 3 developed a "CIMIC Dashboard", an experimental database structured according to the 7 BLRs for Resilience and PMESII in Excel. However, they highlighted the need for more advanced database solutions, enabling querying, AI-supported assessment, and knowledge transfer.

Brigades employed various data-processing approaches influenced by analysts' backgrounds and familiarity with SATs, leading to inconsistent application. According to the survey results, only 4 out of 12 respondents declared they use SATs, such as Actor Diagrams, Star-Bursting, and Issue Redefinition. For instance, Actor Diagrams effectively visualized actors' attitudes toward NATO and their operational influence, illustrating relationships as positive, negative, or neutral. Some respondents highlighted the importance of implementing SATs, noting that "analysis is still based on personal experiences" and that "the risk of bias arises from relying only on a single analyst rather than a team".[49] They indicated that high operational tempo and resource constraints at the tactical level limited the systematic use of SATs, although trained analysts were often able to apply them more intuitively. Overall the main obstacles in the implementation of the NCAAC are represented by time constraints and communication issues, mainly referring to the lack of standardised reporting format and language barriers (Figure 8).

Figure 8. Obstacles in the implementation of NCAAC during JOCO25



Source: Authors' elaboration.

Analysts also underscored the lack of standardisation and clear CIMIC indicators. For instance, one respondent mentioned: "The biggest question is how to define and measure indicators, considering the variability and flexibility of data gathered and understanding how much these affects the 7 BLRs. It's very challenging to define precise, universal indicators for moving from green, yellow, red colour coding categories in each of NATO's 7BRs due to civil complexity, context sensitivity, and the interdependent nature of resilience systems."[50] In short, the CIMIC advice should be based on standardised impact criteria (i.e., how a fact/ event improves, deteriorates, or does not affect a situation), and provide concrete guidance to the commander.[51] Concerning dissemination, SITAWARE, a software-based C4ISR (Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance) suite that provides battle management solutions, was effective for geospatial information sharing but inadequate for comprehensive data sharing or database functions.

47 Interview #5, Nienburg, June 17, 2025. / Interview #12, Nienburg June 19, 2025.

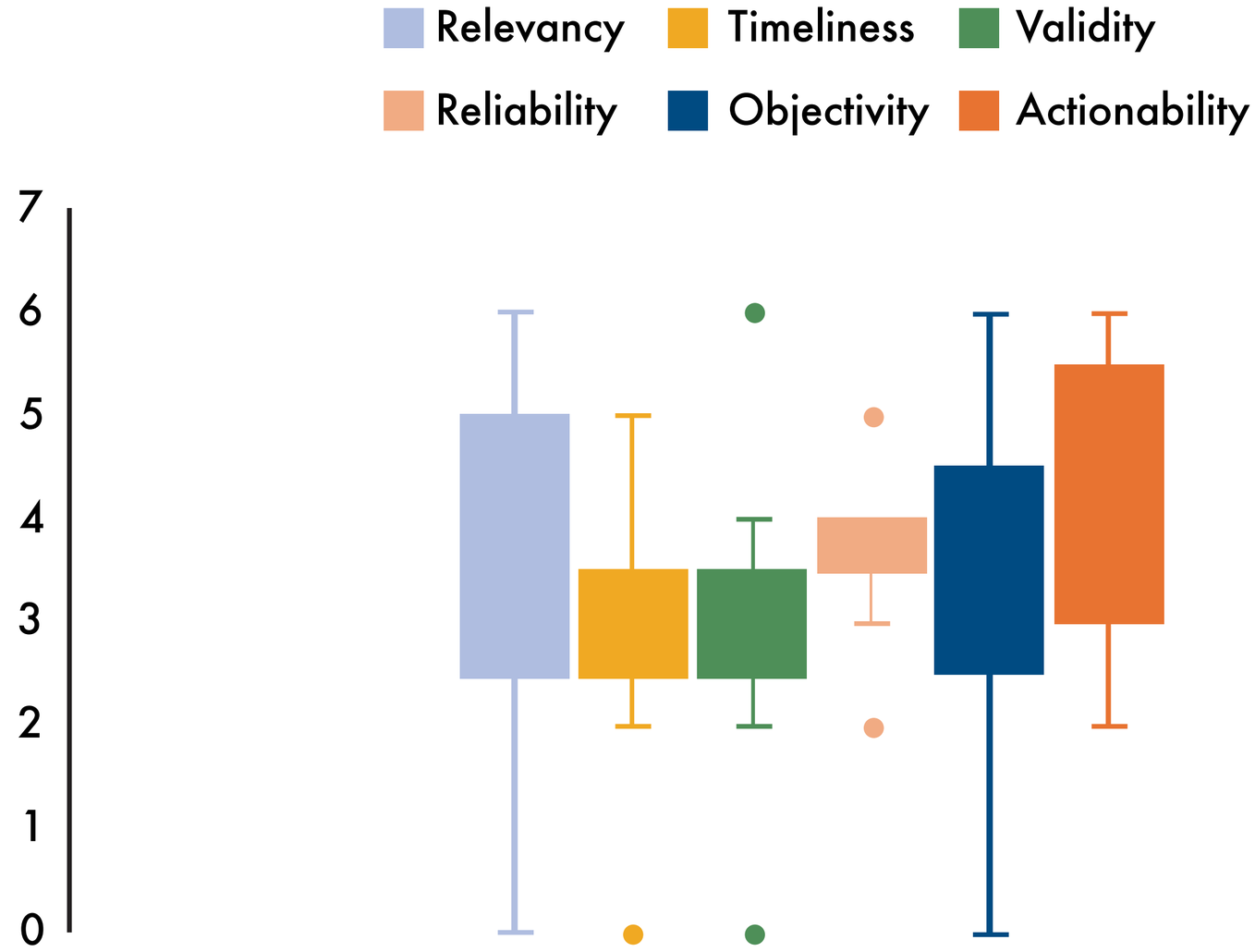
48 Interview #2, Nienburg, June 13, 2025.

49 Ibid. / Interview #11, Nienburg, June 18, 2025.

50 Survey respondent #16, Nienburg, May 19, 2025.

51 Interview #12, Nienburg, May 20, 2025.

Figure 9. JOCO25 Analysts' assessment of Analytical Products (1=low, 7=high)



Source: Authors' elaboration.

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Overall, the participants' self-evaluation (Figure 9) shows that "Validity" and "Actionability" scored the highest, with scores around 5-6. On the other hand, "Reliability" and "Objectivity" received the lowest scores (around 2-3 out of 7), indicating that the analysts may be concerned about the consistency, dependability, and impartiality of their analysis. Especially at the tactical level, were there might be frequent rotation of staff, it is necessary to established standardised workflow and transparent analysis.

CONCLUSION

The data and analysis in this report reflects the perspectives of CIMIC staff, and other NATO personnel who participated in the strategic-level and tactical-level exercises. These insights offer valuable insights over the adoption of the NCAAC at both levels, considering the expectations and challenges faced by both Receivers and Analysts throughout the analytical process. Nevertheless, these findings present certain limitations, as many of those acting as 'analysts' in the exercise were not analysts by profession, and the JOCO Exercise does not represent NATO Tactical level which is typically exercised by the Single Service Commands. Additionally, the absence of the operational level within the exercises constitutes a further limitation, restricting the ability to fully assess NCAAC implementation across the entire command spectrum.

The adoption of the NCAAC is considered a necessary step towards the professionalization and standardisation of CIMIC analysis; however, its implementation is hampered by multiple factors. Overall, the analysis has identified five key take-aways that can guide further refinement of the NCAAC and enhances overall CIMIC performance:

1. The current shift in NATO priorities towards the Deterrence and Defence framework requires CIMIC staff to adopt a flexible and responsive approach to meet changing operational demands at both strategic and tactical levels.

2. The NCAA Concept represents the starting point for the establishment of standard analytical process to enhance CFI in supportof decision-making. Nonetheless, its implementation needs to be tailored to the different priorities and structures at both tactical and strategic level. In particular, strategic-level analysis focuses not only on situational awareness but also long- to mid-term strategic foresight, considering for example second/third-order effects on governance, societal resilience, critical infrastructure, regional spill over, disinformation environments. At the tactical level, analysis has faster cycles (24-hours collection-analysis-dissemination loops) and has immediate effects on the ground, for example, through real-time civil incident reporting, local population sentiment shifts, misinformation spikes affecting operations.

3. The J9 Trial structure and the experimental approaches at the tactical level represent significant progress towards the implementation of the NCAAC. However, inadequate training and limited relevant experience among the analysts, coupled with time constraints, have limited the effective application of the NCAA Workflow.

4. The information flow across echelons and among CIMIC staff is hindered by diverging priorities, lack of standardised frameworks and reporting formats.

5. The reliability and granularity of CIMIC data represent significant challenges, underscoring the need to develop standardised criteria and indicators, particularly with respect to the Resilience assessment.

To conclude, we found that the implementation of the NCAAC is a critical step toward the standardisation, interoperability and professionalisation of CIMIC capabilities. In fact, it can ensure CIMIC staff's ability and flexibility to respond to changing operational demands. By addressing the gaps related to NCAAC awareness, training, and resources, NATO will enhance its understanding of the civil factors of the operating environment in complex Multi-Domain Operations at all levels of command. In particular, the following recommendations are proposed for the CCOE, in close cooperation with partners:

- Maintain and regularly update the NCAA Concept, SOPs, and training curriculum, including modules on data literacy, geospatial analysis, and responsible use of Artificial Intelligence (model fundamentals, limitations, bias, uncertainty, and human-in-the-loop practices).
- Establish a living lessons-learned repository and sustain a practitioner network to capture, share, and iterate best practices.
- Develop level-specific implementation guidelines for NCAAC at both strategic and tactical echelons.
- Explore, pilot, and evaluate technology and AI capabilities that enable NCAAC implementation at the speed of relevance.

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