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NATO INDUSTRIAL ADVISORY GROUP (NIAG)

NIAG Strategy for 2023-2027 Note by the Coordinating Staff Officer

References: A – NIAG-DS(2022)0006 (INV), dated 17 January 2023

B - NIAG-D(2017)0035-REV1, dated 16 January 2018

C - NIAG-D(2023)0003-ADD2 (INV), dated 07 March 2023

- The strategy for NIAG covering the period 2023-2027 was discussed at the latest NIAG plenary session (Ref. A), with the aim to replace the previous document (Ref. B) which was valid until the end of 2022.
- 2. The document as presented at Enclosure 1 has been established during the 2nd 2022 Semester by a Tiger Team under the leadership of Italy and is taking into consideration all the comments received from the NIAG Heads of Delegations as well as additional comments provided by one nation (Ref. C).
- 3. If the NIAG Coordinating Staff Officer is not informed to the contrary by Friday, 31 March 2023 at 15:30, the document will be considered approved by NIAG.

(signed) Jean-Sébastien VAUTIER

Action Officer: JS VAUTIER (x3964)

1 Enclosure

Original: English



NATO Industrial Advisory Group Strategy

2023 - 2027

Enhance the partnership within NATO to strengthen its resilience and preserve its technological edge

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NATO Industrial Advisory Group Strategy

2023 - 2027

Enhance the partnership within NATO to strengthen its resilience and preserve its technological edge

Executive Summary

Significant changes in the political/military environment have influenced both the modus operandi and the need for swift consensual industrial advice since the previous NATO Industrial Advisory Group (NIAG) Strategy was conceived.

A new NATO Strategic Concept was adopted on 29 June 2022, at the Madrid Summit, outlining a number of priorities stemming from Russia's war on Ukraine, while putting forward relevant novelties. These concern China and the Indo-Pacific with an emphasis on the technological and industrial sectors, as well as critical infrastructure, strategic materials and supply chains. There is further emphasis on multi-domain operations, innovation and integrating climate change, human security and the Women, Peace and Security agenda across all Alliance core tasks.

In this scenario the NIAG 2023-2027 Strategy, stemming from its 2018-2022 Strategy, sets out a course to adapt and evolve the NIAG, responding to the new security context and NATO's recurring transformation.

This new Strategy aims to reaffirm the NIAG as the top-quality go-to forum of industrialists of NATO Member and partner Countries, and an internationally-recognised centre of industrial knowledge and expertise in support of the fulfillment of the Alliance's three core tasks: deterrence and defence; crisis prevention and management; and cooperative security, as reiterated in NATO's 2022 Strategic Concept.

It seeks to elevate, energise and modernise the NIAG, with the primary objective being to facilitate strategic dialogue, building on a growing portfolio of studies, outreach and new initiatives. While the NIAG studies constitute a key and fundamental instrument for the delivery of industrial advice, the NIAG will be proactive in responding and identifying strategic and technological challenges, striving to be agile, responsive and engaging, looking further into new domains, namely cyber and space.

The NIAG will further enhance coordination with relevant entities, to include, but not limited to, the Science and Technology Organization (STO), Allied Command Transformation (ACT), Allied Command Operations (ACO), and the NATO Parliamentary Assembly (NPA), while continuing to encourage support for innovation in strategic areas among the Allies to keep pace with technological change. A key objective for these efforts includes the contribution for the development of an Emerging and Disruptive Technologies (EDT)-focused agenda for research, development and innovation (R,D&I) within the Alliance, which shall also inform the Defence Innovation Accelerator for the North Atlantic (DIANA) and the NATO Innovation Fund initiatives.

The NIAG will increase dialogue with – and outreach to – the Conference of National Armaments Directors (CNAD) and other NATO bodies on new challenges, becoming a major contributor for Strategic Material Supply Chain Security and Resilience, and Climate.

This Strategy further recognises the importance of current developments in defence matters within the EU and the need to keep abreast of these developments in the context of NATO initiatives..

Furthermore, digital transformation will be an important adaptation in support of the NIAG's outreach to Small- and Medium-sized Enterprises (SMEs) and non-traditional defence companies, as well as academia and research centers, striving for the modernisation of working practices and extending the NIAG studies' participation. This will increase the NIAG's credibility, outreach and visibility.

The updated Strategy defines the vision and confirms the NIAG's mission¹, establishing five overarching Strategic Objectives (SO) to help ascertain the NIAG's mission, with Lines of Action (LOA) defined for each objective, which outline the way in which the NIAG proposes to achieve them.

Working within this **Strategy Map**, the NIAG shall contribute more effectively and efficiently to the Alliance's capability to fulfil its core tasks of deterrence and defence, crisis prevention and management and cooperative security.

¹ Extracted from the NIAG Terms of Reference (AC/259-D(2020)0003 (INV) dated 6 February 2020

NIAG STRATEGY MAP Enhance the partnership within NATO to strengthen its resilience and preserve its technological edge

NIAG VISION

To promote strategic dialogue between NATO and Industry towards the enhancement of deterrence and defence of the Euro-Atlantic area by providing Industry's premium and trusted advice to NATO's CNAD - and other NATO bodies as appropriate - in support of NATO's transformation, capability development and acquisition.

NIAG MISSION

The NIAG is a high level consultative and advisory body of senior industrialists of NATO member countries, acting under the Conference of National Armaments Directors (CNAD), with the aims of:

- providing a forum for free exchange of views on industrial, technical, economic, management and other relevant aspects of research, development and production of armaments equipment within the Alliance; based on current and updated information provided by relevant NATO bodies;
- providing Industry's advice to the CNAD, and other NATO bodies as appropriate, on how to foster government-to-industry and industry-to-industry armaments co-operation within the Alliance
- providing optimal use of the NIAG's resources to assist the Main Armaments Groups (MAGs) and their subordinate bodies, and other NATO bodies as appropriate, in exploring opportunities for international collaboration, and seeking timely and efficient ways to satisfy NATO military capability requirements

NIAG'S Strategic Objectives



SO1: Create and sustain effective strategic dialogue between NATO and Industry



SO2: Foster engagement with stakeholders



SO3: Modernise the NIAG format, processes, and practices



SO4: Contribute to NATO's initiatives



SO5: Enhance the NIAG's communication and outreach efforts

HOW THE NIAG WILL ACHIEVE THE OBJECTIVES

1

SO1: Create and sustain effective strategic dialogue between NATO and industry

LOA1.01

Proactively identify and advise on strategic technological and industrial challenges

LOA1.02

Increase engagement with NATO's Principal Officials, the CNAD community, and other senior international stakeholders

LOA1.03

Pursue greater alignment with CNAD and MAG priorities

LOA1.04

Grow the portfolio of studies and continue to deliver high quality and trusted recommendations



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SO2: Foster engagement with stakeholders LOA2.01

Enhance the level of engagement with NATO Defence Investment (DI)

LOA2.02

Nurture high-level contacts and dialogues with Allied Command Transformation (ACT)

LOA2.03

Put a Structured
Partnership in place with
the Science & Technology
Organization (STO)

LOA2.04

Continue and extend the dialogue with the NATO procurement agencies (NCIA, NSPA)

LOA2.05

Review and re-energize the NPA relationship

LOA2.06

Check the interest to create a CoI NIAG Emerging and Security Challenges Division (ESCD)

LOA2.07

Stay abreast and informed on the developments taking place in the EU with regards to Defence



3

SO3: Modernise NIAG format, processes, and practices

LOA3.01

Optimise the NIAG calendar year to make meetings more time- efficient

LOA3.02

Adapt the format of the NIAG Plenary meetings for more discussion-based topical sessions

LOA3.03

Adopt the use of digital tools across the NIAG

LOA3.04

Expand and diversify the NIAG membership



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SO4: Contribute to NATO's initiatives

L0A4.01

Actively contribute to the challenge formation for the Defence Innovation Accelerator for the North Atlantic (DIANA) through the CNAD, and contribute in any further manner as deemed relevant

LOA4.02

Stay abreast of the NATO Innovation Fund development

L0A4.03

Provide Industry insight on the green defence & climate change discussion

LOA4.04

Enhance NIAG participation and involvement in NATO demonstrations and exercises



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SO5: Enhance NIAG's communication and outreach efforts

LOA5.01

Enhance visibility of the NIAG and of its deliverables through the development of a communication and outreach plan

LOA5.02

Build a specific communication plan to foster SME and non-traditional defence companies' engagement

LOA5.03

Enhance the NIAG's outreach



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Introduction

Since the NIAG Strategy 2018-2022, there have been profound changes in security, as well as in peace and stability. From the threat posed by non-state actors, terrorism, cyber warfare, hybrid threats, the violation of the territorial integrity of a sovereign nation, the challenges of climate change, and EDTs, NATO has strived to adapt and respond to the ongoing changes in the security environment. On 24 February 2022, Russian President Vladimir Putin started an illegal and unprovoked war against Ukraine, triggering the gravest security crisis in Europe since World War II, reaffirming that it remains the main threat to Euro-Atlantic security in the short-medium term.

At the 2022 NATO Summit in Madrid, a new NATO Strategic Concept (SC) was adopted². The new Concept defined deterrence and collective defence as the main priority for the Alliance. Furthermore, for the first time, the SC mentioned China, making it clear that Chinese ambitions and policies challenge the interests, security and values of Western countries, carrying out actions in violation of international law in the maritime, space and cyber domains, and by perpetuating cyber attacks and disinformation campaigns against NATO members. Other global threats and challenges identified include climate change, the erosion of arms control, disarmament and non-proliferation, emphasising the importance of investing in technological innovation, particularly EDTs, in order to preserve NATO's technological edge and the Allies' interoperability.

The SC further ascertains that the Allies shall work together to adopt and integrate new technologies, cooperate with the private sector, protect the innovation ecosystem, shape standards and commit to principles of responsible use.

This age of disruption is not limited to major power competition. EDTs are changing the nature of global power competition and international conflicts. Many raw materials, processed and semi-finished materials are indispensable for the production of defence components and systems because of the high-performance requirements which, most of the time, cannot be ensured by the use of conventional substitutes. These materials have unique mechanical, physical, electronic, magnetic/electromagnetic and chemical properties, or superior resistance to corrosion, that make them essential for certain defence applications. The availability of these raw materials in Western countries is key for an

² https://www.nato.int/strategic-concept/

effective Euro-Atlantic defence technological and industrial base (DTIB) and is severely challenged by peer state competitors.

Digital transformations are upending the foundations of diplomacy and defence. The scale and complexity of critical economic, environmental, technological, and human flows, as well as the dependency of many societies on such flows, have increased dramatically.

Destructive capabilities unthinkable a few decades ago are now in the hands of big powers, smaller states, and non-state actors. Climate change and energy transitions pose new security dilemmas and amplify crises.

In line with this, the recently launched DIANA and NATO Innovation Fund have highlighted the importance of innovation from industries to contribute to NATO's transformation commitment. At the same time, the EU launched two iniatives: the Hub for Defence Innovation (HEDI), within the European Defence Agency (EDA), and the EU Defence Innovation Scheme (EUDIS), within the European Commission.

Considering the context of the current security environment, together with all the changes that have taken place which have put the Defence Industry in a primary position, it is important that the NIAG uptakes its role as Industry's premium and trusted advisor to NATO in support of NATO's and the Allies' capability development, e.g. the growing need to strengthen and accelerate procurement, innovation, and standardisation.

The NIAG has shown, through the completion of a large number of studies – through which detailed industrial advice has been provided to NATO and its entities – that it can contribute significantly to NATO initiatives (see more details in Annex – NIAG History). Notwithstanding, acknowledging this pivotal moment in history, the NIAG must take a more incisive approach, overcoming its reactive methodology in carrying out studies, reaping the benefits of past studies and accelerating the development of new ones which are of common interest across the Alliance.

Vision

To promote strategic dialogue between NATO and Industry towards the enhancement of deterrence and defence of the Euro-Atlantic area by providing Industry's premium and trusted advice to NATO's CNAD - and other NATO bodies as appropriate - in support of NATO's transformation, capability development and acquisition.

Mission

The NIAG is a high level consultative and advisory body of senior industrialists of NATO member countries, acting under the CNAD, with the aims of:

- providing a forum for free exchange of views on industrial, technical, economic, management and other relevant aspects of research, development and production of armaments equipment within the Alliance; based on current and updated information provided by relevant NATO entities;
- providing Industry's advice to the CNAD, and other NATO entities as appropriate, on how to foster government-to-industry and industry-to-industry armaments cooperation within the Alliance;
- providing optimal use of the NIAG's resources to assist the MAGs and their subordinate bodies, and other NATO entities as appropriate, in exploring opportunities for international collaboration, and seeking timely and efficient ways to satisfy NATO military capability requirements.

Strategic Objectives

The following strategic objectives (SO) and related lines of actions (LoA) were defined.

SO1: Create and sustain effective strategic dialogue between NATO and Industry

Since the NIAG Strategy 2018-2022, technology has further accelerated the expansion of conflict into the cyber and space domains, and the return of war in Europe has exposed constraints and stresses on industrial capacity which is required to replenish stockpiles, upgrade existing systems and develop next-generation capabilities. With this backdrop, the declaration at the 2022 Madrid Summit cites the emergence of technology as a strategic influence on battlefield success. An active and substantive mechanism for strategic dialogue between NATO and Industry is therefore more important than ever.

Within the current NATO-Industry interface, the NIAG facilitates technical discussions in the development and delivery of studies and Plenary sessions, and the NATO-Industry Forum (NIF) provides a periodical venue for executive interaction. These interfaces remain highly valuable, but the new security context exposes a wide gap between these channels. The NIAG therefore commits to expand, elevate and energise its role in strategic dialogue.

LOA1.01: Proactively identify and advise on strategic technological and industrial challenges

The NIAG will consider more strategic and transformative issues in order to better serve, inform and advise NATO. The NIAG will be proactive, more expansive and sharper in responding to the evolving security agenda, to long-term challenges such as climate change, and to topical issues such as access to the private and public financial sectors for the Defence Industry. The NIAG will assert advice and recommendations, stimulate discussion, and continually strengthen its membership. With strengthened communication, transparency and mutual understanding, NATO will benefit from high-level interaction with the private sector and more effective policy formulation and implementation.

Given the growing innovation challenge and the number of lines of innovation underway across NATO, the NIAG will look to develop a coordinating innovation cell of experts, the full scope of which will be determined to coordinate and interface on this vital activity.

To better support these objectives, the NIAG will work on the description of the current NATO-Industry Interface landscape and governance landscape.

The engament tool to be used is the EM 1 (see Annex NIAG Engagement Mechanisms (EM))

LOA1.02: Increase engagement with NATO's Principal Officials, the CNAD community, and other senior international stakeholders

Better equipped to engage in strategic dialogue, the NIAG will elevate the level of engagement with external stakeholders. The format of Plenary meetings will be reviewed to attract NATO's Principal Officials and senior Industry leaders with greater frequency. Efforts to attract senior military and civilian representatives from national delegations and the CNAD community for dialogue on topical issues, high profile capabilities, and key programmes will also be strengthened.

The engament tool to be used is the EM 1 (see Annex NIAG Engagement Mechanisms (EM))

LOA1.03: Pursue greater alignment with CNAD and MAG priorities

Building on progress in expanding interactions with the CNAD structure, the NIAG will continue to increase participation in CNAD and sub-committee meetings seeking to more closely understand capability and armaments priorities and wider topical issues. The NIAG's representatives participating in these meetings will provide more structured and regular feedback to the NIAG members.

The engament tools to be used are the EM 1 e EM 2 (see Annex NIAG Engagement Mechanisms (EM))

LOA1.04: Grow the portfolio of studies and continue to deliver high quality and trusted recommendations

Based on a track record of high quality deliverables, the NIAG aims to attract additional funding and grow its portfolio of studies. These are expected to expand in scope to include cyber, space and emerging security challenges. The structure, procedures and schedules for the NIAG studies are optimised for the annual planning cycles of the CNAD structure. The NIAG recognises that as NATO expands its innovation initiatives, including the establishment of DIANA and the NATO Innovation Fund, this system is not appropriate for all stakeholders. Strategic Objective 4 therefore describes how the NIAG will now offer sprints, in addition to studies, to better connect to the innovation ecosystem.

The engament tools to be used are the EM 1 and EM 2 and a new additional tool, named EM8 Sprint could be defined (see Annex NIAG Engagement Mechanisms (EM))

SO2: Foster engagement with stakeholders

The war in Ukraine has demonstrated the importance for the Allies to have access to new technologies (AI, Quantum, hyper velocity, etc.) and to speed up the implementation of these new capabilities. The defence ecosystem, which includes major integrators, SMEs, start-ups, and academia, plays a major role in this adaptation. A transparent, fair and fluid communication between Industry and NATO stakeholders is essential to define, acquire and use cutting-edge technologies and military products. Through the NIAG, Industry was used to support the NATO stakeholders by providing technical advice and study reports. For mutual benefit and in accordance with the Terms of Reference, the NIAG aims at energising the relationship with other NATO stakeholders in order to not only answer to solicitations from NATO sponsors but also to be proactive in suggesting change, modification or

improvement in regards to communication, organisation and other various domains beyond those of a technical nature.

LOA2.01: Enhance the level of engagement with the NATO Defence Investment (DI) Division

The NIAG must energise the relationship with DI by proposing active reflection on industry trends, technology maturity levels, roadmaps, business models, production timelines, standards, required skills and potential Industry partnering opportunities that can be a food for thought for NATO in various fields (technology, strategy, etc.).

It is suggested that the DI shares a long-term vision from which the NIAG can understand the context of future studies. Furthermore, the NIAG Liasion Officers (NLOs), as well as the NIAG study sponsors' representatives, shall explain how the sponsors (CNAD, ACT, MGs, C3B, ESCD) follow up on the NIAG study reports delivered in the recent years, during the NIAG Plenary sessions.

The engament tools to be used are the EM 1 and EM 2 (see Annex NIAG Engagement Mechanisms (EM))

LOA2.02: Nurture high-level contacts and dialogues with Allied Command Transformation (ACT)

It is crucial to maintain and develop a close relationship between the NIAG and ACT, with mutual benefits. This interaction should enable the smooth transfer of knowledge – year after year – with ACT, which swaps 1/3 of its staff every year.

Thus, under the leadership of the Chair of the ACT-NIAG CoI, the NIAG shall nurture high-level contacts and dialogue with ACT, keeping ACT updated on the NIAG activities and proposing, on a yearly basis, a discussion with the NIAG on the main challenges and priorities of ACT. This will provide an opportunity for Industry to address their technical subjects of interest and feed the subsequent road map of the relevant sub-CoIs.

With a mission to lead warfare development and the transformation of military capabilities, it is essential that ACT has a vibrant and open exchange of views with innovators and industrialists across the Alliance. This interaction should include, for example, exchanges

on strategic trends, new concepts, technological developments, multi-domain operations, interoperability and sustainability.

Through the ACT-NIAG CoI, the NIAG seeks to energise this relationship, constructed around high-level contacts and an annual exchange of views on strategic and topical priorities. The NIAG looks forward to a reciprocal dialogue, including with the Capability Development Directorate, that more substantively addresses the wide range of mutual interests and continues to provide opportunities for technical work through studies and events.

As an agent of innovation within the Alliance, ACT can also benefit from increased exposure to the large number of SMEs represented by the NIAG, alongside system integrators, to address future capability challenges.

The engament tools to be used are the EM 1 and EM 5 (see Annex NIAG Engagement Mechanisms (EM))

LOA2.03 Put a Structured Partnership in place with the Science & Technology Organization (STO)

A Structured Partnership (SP) between the NATO STO and the NIAG, defining a precise framework to better engage and coordinate the two parties, is under analysis by each body.

Similar to the in-force NIAG & ACT SP and STO & ACT SP, the objectives of the STO & NIAG SP are to provide opportunities to:

- Strengthen the strategic dialogue
- Empower NATO's technological edge and multiply the value of National S&T investments and the NIAG's contributions through knowledge and resource sharing
- Exchange views on topics of common interest
- Identify areas of potential cooperation
- Maintain and nurture effective and efficient cooperation
- Foster synergies between the respective programmes of work while respecting their individual responsibilities and authorities.

The NIAG Chair, as NLO to the S&T board, will make sure that the document agreed by the parties is signed by 2023.

The engament tools to be used is the EM 2 (see Annex NIAG Engagement Mechanisms (EM))

LOA2.04: Continue and extend the dialogue with the NATO procurement agencies (NCIA, NSPA)

The NATO Communications and Information Agency (NCIA) & NATO Support and Procurement Organisation (NSPA) are the two major NATO procurement agencies. The capability to deliver quality, timely and cost effective solutions to NATO depends not only on fair competition rules but also on the efficiency of the NATO procurement process followed by these two agencies (business forecast, approval process, etc.). This is crucial in order to strengthen and accelerate (common) procurement.

- Future NCIA-NIAG engagements have to focus on potential pre-procurement activities. This could also include regular exchanges with the NCI Industry Relations Office on topics like acquisition reform or NATO common funded acquisition perspectives in relation to EDTs.
- The NIAG also maintains regular engagements with the NSPA at various levels, especially in the context of the NSPA's responsibility as NATO's 'procurement' agency. Future NSPA-NIAG engagements have to focus on potential preprocurement activities. In that regard, the importance to maintain regular exchanges with the Acquisition Planning and Development Office (APDO) and the NSPA's Support Partnerships (SPs) should be recognised, especially for pre-competition Industry engagement.

In accordance with its terms of reference, the NIAG will continue to provide guidance to procurement agencies to contribute to any procurement reform, new procurement models (e.g. Agile Procurement) or further procurement improvement process that these agencies may implement. It will also be important for the NIAG to continue working with the NCIA and NSPA on sustainment and lifecycle planning earlier in the process.

To do so, the NIAG will define a specific structure and a dedicated process to lead and energise the relationship with the procurement agencies.

The engament tools to be used are the EM 1 and EM 2 (see Annex NIAG Engagement Mechanisms (EM))

LOA2.05: Review and re-energise the NPA relationship

The purposes and missions of the NATO Parliamentary Assembly (NPA) and its Committees and Sub-Committees, in particular the Science and Technology Committee, the Economics and Security Committee, and the Defence and Security Committee, and that of the NIAG can lead to mutually beneficial synergies.

Having signed a letter of intent (LoI) on 23 June 2017 aiming at energising the dialogue between the NPA and the NIAG, an analysis must be made on the operational implementation of the LoI, proposing an appropriate adaptation to make the relationship more productive and relevant for both parties. Proposals could include an NPA activity report at a NIAG Plenary session, cross-participation in meetings/events, among others.

The engament tools to be used are the EM 1, EM 2 and EM 3 (see Annex NIAG Engagement Mechanisms (EM))

LOA2.06: Check the interest to create a Col NIAG Emerging and Security Challenges Division (ESCD)

The Emerging Security Challenges Division (ESCD) provides a coordinated approach for NATO to the emerging security challenges of the 21st Century such as counter-terrorism, cyber, hybrid, energy, and data science. The ESCD is also involved in security cooperation with partner Nations and with other International Organisations through a number of programmes in NATO. The NIAG proposes to engage in a more structured dialogue with the ESCD, including the possibility to create an ESCD-NIAG Community of Interest (CoI), which will aim to rationalise, intensify and thus better take advantage of the contribution of Industry to the work of the ESCD. This would further expand the liason activities already in place with DAT POW (Defence Against Terrorism Programme Of Work) activity.

The engament tools to be used are the EM 1 and EM 2 (see Annex NIAG Engagement Mechanisms (EM))

LOA2.07: Stay abreast and informed on the developments taking place in the EU with regards to Defence

The European Union (EU) has been following a strategy of strengthening the European Defence Technological and Industrial Base (EDTIB) and introduced several instruments so

far. A stronger and more capable framework for Transatlantic Defence Technological and Industrial Cooperation (TADIC) is a key enabler in supporting the Allies in achieving their objectives.

Closer transatlantic defence cooperation is a way to address urgent capacity needs while ensuring maximum standardisation and interoperability between Allies.

The NIAG will be informed on developments of EU defence initiatives .

The engament tools to be used is the EM 1 (see Annex NIAG Engagement Mechanisms (EM))

SO3: Modernise the NIAG's format, processes, and practices

Since its inception, the NIAG has suffered little to no changes in what concerns its format, processes and practices. Thus, considering the practices of other NATO entities with similar processes, the emergence of digital tools, and the interlinkages of themes across various stakeholders make it imperative that the NIAG transforms itself and adapts to current times. Hence, this SO aims to modernise the NIAG by optimising its calendar year, the format of its meetings, adopting digital tools, and expand and diversify its members.

LOA3.01: Optimise the NIAG calendar year to make meetings more time- efficient

The NIAG meets three times per year for Plenary meetings (twice in Belgium and once outside Belgium), once for a Roundtable meeting, and a few times for topical discussions. Other NATO entities like the CNAD, the MAGs, the Science & Technology Board, and the STO Panels and Group, meet in a Plenary format only twice a year. Thus, the NIAG shall meet two or three times a year, as required, optimising the NIAG Plenary meetings with an effective timetable, further optimising the Roundtable meeting for any other necessary business that could be lost with this reduction.

LOA3.02: Adapt the format of the NIAG Plenary meetings for more discussion-based topical sessions

The NIAG Plenary meetings have had its current format since its inception. In past Plenary meetings, the NIAG Delegations have expressed their dissatisfaction with the reporting format that has been taking place, pushing for a more discussion-based approach for the Plenary meetings. Thus, it is important to effectively assess the relevance of the current

topics and the adopted format during the NIAG Plenary meetings with all the NIAG Delegations.

LOA3.03: Adopt the use of digital tools across the NIAG

The Covid-19 pandemic has accelerated the NIAG's use of digital tools, which has, in turn, allowed people, who were not able to travel to Brussels before, to participate in the NIAG's Exploratory Group Meetings (EGMs). With the end of confinement and the lifting of movement restrictions, the NIAG has seized, to some extent, the opportunity to make use of digital tools, thereby returning to a business-as-usual setting, restricting the possibility of some people to attend the EGMs. As Industry advisors, the NIAG shall lead by example. Thus, in a progressive manner, the NIAG shall promote the adoption of digital tools as much as possible, and whenever possible, promote the use of video conferencing tools.

As a first step, EGMs shall become fully virtual according to the security technology availability and legal compliance requirements. This transition will support the participation of companies on both sides of the Atlantic and SMEs that are interested in the NIAG studies but are not able to travel for these initial meetings, allowing them to clarify their doubts regarding the scope of the NIAG study and to properly assess their interest in pursuing them.

The engament tools to be used is the EM 7 (see Annex NIAG Engagement Mechanisms (EM))

LOA3.04: Expand and diversify the NIAG membership

The NIAG will continue to evolve its membership to remain aligned to strategic and technological trends and to maintain access to relevant technical expertise and experience.

To achieve this the NIAG will expand its membership in cyber and space domains, attract a dynamic membership that is more representative of demographics in Industry and government, and open-up studies for engagement with academic, reserach and policy institutions.

The engament tool to be used is the EM 1 (see Annex NIAG Engagement Mechanisms (EM))

SO4: Contribute to NATO's initiatives

In line with previous SOs and LoAs, the NIAG shall stay at the forefront of industrial advice, anticipating potential issues of relevance to NATO and the Defence Industry. In line with this, SO4 aims to define key NATO initiatives as well as topics where the NIAG must ascertain its presence and industrial leadership, to include DIANA, the NATO Innovation Fund, green defence and climate change, and NATO exercises and demonstrations.

LOA4.01: Actively contribute to the challenge formation for the Defence Innovation Accelerator for the North Atlantic (DIANA) through the CNAD, and contribute in any further manner as deemed relevant

The NIAG can be considered as one of the primary pre-competitive interfaces between NATO and Industry, providing Industry perspectives on transformation, capability development and acquisition. The NIAG, as an important cornerstone of NATO-Industry relations, provides a unique platform for NATO to reach out to Industry across the Alliance in a fair, inclusive and transparent manner, and to receive a neutral consensus-based Industry response. Therefore, the involvement of Industry in all phases of DIANA is a condition *sine qua non*, not only as an integrator of new technologies, but also in addressing the risk of designing and developing a technology that ultimately cannot be produced or integrated at scale across the Alliance. Under the auspices of the CNAD, the NIAG has a crucial role to play in supporting this initiative both in the development of its strategic direction and in the consideration and development phase of proposals for DIANA challenge programmes. The NIAG can provide industrial advice for solution development phase-related and scaled adoption phase-related issues, as well as assume a match-maker role.

Whilst this program is in its infancy, the NIAG can support all phases of DIANA and will provide further structured advice to the CNAD as to how the NIAG could do this as DIANA matures.

In this respect, on 30 September 2022, under the silence procedure, the NIAG approved the proposal related to a possible involvement of the NIAG in DIANA.

The engament tools to be used are the EM 1, EM 2, EM 5 and EM 7 (see Annex NIAG Engagement Mechanisms (EM))

LOA4.02: Stay abreast of the NATO Innovation Fund development

As a recently launched initiative, the NIAG shall follow the development of the NATO Innovation Fund, and report in Plenary meetings the NATO Innovation Fund's status. This will give the opportunity to the concerned National Delegations to NIAG to report to their national industry members the relevant information.

The engament tools to be used are the EM 1 and EM 5 (see Annex NIAG Engagement Mechanisms (EM))

LOA4.03: Provide Industry insight on the green defence & climate change discussion

There has been a heightened interest and push from NATO towards a discussion and investment on green defence and climate change. At the NATO 2021 Summit, Heads of State and Government agreed on the "Climate Change and Security Action Plan" which identified a number of areas for the CNAD to explore. Leaders committed to significantly reduce greenhouse gas emissions from military activities and installations.

Furthermore, NATO and its Allies already identified the perspective of Industry as being an essential part of the climate change and security discussion within the Alliance. This included understanding what challenges, opportunities, and solutions Industry sees as increasing the operational effectiveness and sustainable mobility of Allied capabilities, while mitigating those capabilities' impact on climate change without compromising mission security.

Considering the priority NATO has given to these topics, the NIAG has the opportunity of decisively contributing to this discussion, namely by conducting the study "Ensuring Allied Capabilities' and Defence Industrial Base's Adaptation in the context of Climate Change". Further efforts on this topic could include an assessment on the potential impact of climate change and an assessment on the potential impact of growing Environmental, Social and Governance (ESG) considerations on NATO's High Visibility Projects (HVPs).

The engament tool to be used is the EM 7 (see Annex NIAG Engagement Mechanisms (EM))

LOA4.04: Enhance the NIAG's participation and involvement in NATO demonstrations and exercises

NATO, and in particular ACT, promote various events where Industry participation is important. These include the Alliance Warfare Development Conference, the International Concept Development & Experimentation Conference (ICD&E), Cyber Coalition Exercise, NATO Operations Research and Analysis (OR&A) Conference, Coalition Warrior Interoperability Exercise (CWIX), Think-Tank for Information Decision and Execution (TIDE) Sprint and Hackathon, Robotic Experimentation and Prototyping Exercise Augmented by Maritime Unmanned Systems (REPMUS), Dynamic Messenger (DYMS), among others. It is important that the NIAG continues to inform the Delegations about these events and the possibility of Industry participation, and if so, how to engage and participate.

The engament tools to be used is the EM 5 (see Annex NIAG Engagement Mechanisms (EM))

SO5: Enhance the NIAG's communication and outreach efforts

It is increasingly important that the NIAG communicates in an appropriate and accurate manner on its role, objectives and activities. The NIAG must use various channels, including the internet-based media and public engagement to build awareness, understanding, and support for its activities. This requires a coherent institutional approach, coordination of effort with nations and industries and between all relevant actors, and consistency with agreed NIAG policies, procedures and principles.

The overall goal of enhancing the NIAG's communication and outreach efforts is to create awareness about the importance of the NIAG's studies in supporting NATO, while increasing visibility and understanding of the value of the NIAG's work by showcasing how outputs positively impact key stakeholders. It further aims at increasing audience participation in the implementation of the NIAG workplan by highlighting the value of collaboration and engagement, positioning the NIAG as an effective convening platform that can mobilise stakeholders to share information and expertise on the areas of its study programme, and enhance international cooperation and coordination.

LOA5.01: Enhance visibility of the NIAG and of its deliverables through the development of all forms of communication and an outreach plan

Defining a communication and outreach plan will benefit both the NIAG as a NATO entity as well as those who participate in the NIAG, by being recognised for their efforts, potentiating the implementation of their recommendations. A process shall be considered to enable the

promotion of the NIAG reports within the Alliance, beyond the CNAD, its Main Groups and ACT. This would entail producing digital content and launching a NIAG page on professional social media to spread the information and assess, with monitoring tools, the level of interest on the content released of the NIAG heads of Delegation (HoDs), companies, experts and general public to the NIAG.

The engament tools to be used is the EM 10 (new additional tool, named EM10 could be defined see Annex NIAG Engagement Mechanisms (EM))

LOA5.02: Build a specific communication plan to foster Small- and Medium-sized Enterprises (SMEs) and non-traditional defence companies' engagement

SMEs constitute a key pillar of the Euro-Atlantic economy and are key players in Euro-Atlantic and global value chains. Defence-related SMEs are key enablers of innovation and growth and the NIAG should be fully able to draw upon the innovations coming from them. The engagement of SMEs in the NIAG's study programme is a process that involves diligent planning within a strategic context, as SMEs need dedicated, proportionate and convergent initiatives to remove possible factors that hinder these companies from participating, like improving to information and facilitating bridge their access the between innovation/technologies and industrialisation/commercialisation.

A major communication effort should also be undertaken to encourage non-traditional defence companies, academia and research centres, which can employ their unique capabilities to provide added-value and quality insight to the NIAG studies, to be involved and participate.

The engament tools to be used is the EM 11 (new additional tool, named EM11 could be defined see Annex NIAG Engagement Mechanisms (EM))

LOA5.03: Enhance the NIAG's outreach

Support the organisation of a range of events inside the NIAG ecosystem (i.e. webinars, workshops) to raise awareness with diverse stakeholders and audiences. A good practice to implement could be the institution of "NIAG Days" in the NATO HQ premises and in the NATO Members and Partners, as well as online, in order to bring the activities and results of several studies to the attention of the industrial community and other relevant communities. Dedicated events (in hybrid format) to specific topics with the support of

renowned speakers would offer invaluable opportunities for the NIAG community to share their findings, network with their peers working in the field and explore new areas of studies to improve cross fertilisation.

The engament tools to be used is the EM 11 (new additional tool, named EM11 could be defined see Annex NIAG Engagement Mechanisms (EM))

Way Ahead

The Industry has been acknowledged as a *sine qua non* for defence recognising mutual dependencies between international organizations and the private sector/Industry.

It shall be highlighted that, as the supplier of systems and services to NATO and the Allies, the Industry has a key part to play in capability development, innovation, standardisation, and acquisition modernisation. Thus, by investing in defence, NATO Allies continue to develop, acquire, and maintain the forces and capabilities required to ensure the Alliance's security in this challenging and unpredictable environment.

The NIAG, in aggregating Industry representatives from across the Allied and partner Nations, is ready to facilitate government and Industry interchanges, offering a platform that contributes with informed advice, and recommendations, supporting the identification of ways to generate economies of scale, reduce costs, and deliver interoperability by design.

This Strategy is the NIAG's response to the ongoing changing security environment and to the growing importance given to Industry's advice.

With this in mind, the NIAG Strategy 2023-2027 shall be taken as a guiding document for the next five years. An implementation plan will be prepared after the approval of the Strategy document. It will also assign a role and responsibility to assess and monitor the completion of the defined actions. A dedicated working group will be established as a mechanism to define the plan and to support its implementation. The Terms of Reference of the Strategy Implementation Plan will be drafted after the Strategy approval.

Annex- NIAG History

The NIAG was established in 1968 as a high-level consultative and advisory body of senior Industry representatives of NATO member countries to support the work of the Conference of the National Armaments Directors (CNAD). Since then, the original terms of reference³ were revised in 1986⁴, 2008⁵ and 2020⁶, and the latest NIAG Strategy covering the period 2018-2022 was approved in January 2018⁷.

The NIAG has shown over time, through the delivery of studies and other activities, that it delivers – in the best interest of NATO as a whole – consensual, pre-competitive advice to the CNAD, the Main Armaments Groups (MAGs), with other NATO bodies and organisations addressing capabilities, including the NATO Military Authorities (NMA), Allied Command Transformation (ACT), the Science and Technology Organization (STO), the Consultation, Command and Control Organization (C3O), the Aviation Committee (AVC) and other NATO entities. Its advice covers the development of technologies, business models, industrial cooperation and investment, access to skills, and standardisation. And it is also the role of the NIAG to provide the expertise for exchanges of information when, and at whatever level, it is requested.

Throughout the years, the NIAG has sought to enhance and increase responsiveness and inclusiveness of the Industry's contribution to NATO's transformation, capability development, interoperability, standardisation and innovation, both in the depth and in the breadth of the work carried for all relevant stakeholders.

More specifically, in the past five years, the NIAG has:

- Launched 58 new studies for the MAGs and other study sponsors including 18 studies for ACT.
- Enhanced its engagement in support of the CNAD and is substructure, as well as with other NATO entities, namely:

³ NIAG(68)D/1 dated 31 October 1968

⁴ AC/259-D/1167; NIAG-D(86)5 dated 12 August 1986

⁵ AC/259-D(2008)0043; NIAG-D(2008)0018 dated 26 August 2008

⁶ AC/259-D(2020)0003 (INV) dated 6 February 2020

NIAG-D(2017)0035-REV1 dated 19 December 2017

- With the MAGs and their sub-structures, through the designation of NIAG Liaison Officers (NLOs), the NIAG Industrial Interface Group (NIIG) that supports the CNAD Life Cycle Management Group (LCMG), the the launch of a new Interface Group for the GBAD Domain (NIIGBAD),
- With ACT, with whom the NIAG has two sub-Communities of Interest (CoI) –
 1) Logistics and Sustainment (L&S); 2) Command Control Communications,
 Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) –
 launched 18 ACT-sponsored NIAG studies, and a joint ACT-NIAG meeting
 was held in Norfolk on 28 April 2022, with a view to extending and fostering
 this relationship;
- With the STO, having drafted a potential NIAG-STO Structured Partnership, and nominated NLOs to the AVT, HFM, NMSG, and SET Panels/Group;
- With the NATO Parliamentary Assembly (NPA), to support the efforts of Parliamentarians to understand Industry perspectives, under the auspices of the letter of intent co-signed in June 2017 by the Secretary General of the NATO Parliamentary Assembly (NPA) and the NIAG Chair, there is an established channel of communication for the exchange of information on the respective programmes of work and the opportunity to offer the NIAG comments on NPA draft reports.
- With Defence Investment and the Emerging Security Challenges division towards understanding DIANA and the Innovation Fund and defining the NIAG's role in it.

Annex- NIAG Engagement Mechanisms (EM)

NATO and Industry interactions through the NIAG have proven to work effectively and efficiently since the NIAG's inception in 1968, respecting the key principles of trust, transparency, inclusiveness, independence, integrity and clarity of purpose.

While the NIAG studies still constitute a key and fundamental instrument for delivering industrial advice, the NIAG has recognised that in certain instances and for certain areas, such advice would be best provided **through different and additional tools** with different characteristics in terms of agility, responsiveness or engagement sustainability.

Existing

EM 1. Informal dialogue and engagement

EM 2. NIAG Liaison Officer

EM 3. Letter of Intent

EM 4. NIAG Industry Liaison Team (NILT)

EM 5. NIAG Community of Interest

EM 6. NIAG Industrial Interface Group (NIIG)

EM 7. NIAG Studies

For details, please see:

The NATO Industrial Advisory Group (NIAG) HANDBOOK – 2022, April 2022, Chapter 10. "NIAG Engagement Mechanisms"

New engagement mechanisms could be included in the NIAG handbook as part of its next revision:

EM 8. SPRINTS – see LOA1.4

EM 9. Position papers – see LOA4.05

EM 10. Social media – NIAG communication – see LOA5.01

EM 11. Communication plan – see LOA5.02