Knowledge Management Strategy 2019 - 2021
Knowledge is Power when shared
Executive Summary

NATO is in the midst of fundamentally transforming the way it performs its mission by more effectively exploring information technologies and reforming its business processes. This presents unique opportunities to the NCI Agency which mission is to “Lead NATO’s digital endeavour” but it also comes with challenges as the mission has to be accomplished while focusing on the “turnaround of the Agency’s performance and put in place the (...) business practices”. The NCI Agency Strategic Plan 2018-2023 emphasizes that “Strong Knowledge Management practices and strategy are essential to the Agency’s overall success”.

While the Mission of NCI Agency’s Knowledge Management is to offer our staff a modern, efficient and transparent knowledge management environment accelerating the internal decision making process and improving the conduct of Agency business the Vision is to become a knowledge centric NATO body, where access to data, information and expertise is made easy and the organizational culture promotes transparency, sharing and collaboration.

This third revision of the Knowledge Management Strategy aims at better addressing the findings of the Knowledge Management maturity assessments that the Agency has undertaken in the past years and at aligning to the recently revised NCI Agency 2018-2023 Strategic Plan.

The ambitions of the Knowledge Management Strategy continue to lie in three main areas:

- Sustain the Agency’s Information and Knowledge creation across segments and geographical locations;
- Help Agency staff organize, share and find already existing information and knowledge within the organization and;
- Increase collaboration and knowledge sharing inside the NCI Agency and with entities external to the Agency.

The refinements of this strategy revision are mainly to be found in the overarching Mission and Vision and in the content of the underpinning strategic goals:

1. **To recognize information and knowledge as a corporate asset**
   Recognize that peoples’ knowledge is our most valuable asset and that managing it requires highest level of commitment, appropriate investment in time and effort and strategic leadership commitment. As such, increased focus is required on knowledge retention and continuous growth in specific knowledge areas of strategic and technological interest.

2. **To ensure information and knowledge are accurately managed**
   Data, information and authoritative records are accurately managed through the knowledge flow process (create, identify, collect, review, share, access and use). This will allow structured management of essential and authoritative content, while enabling freer knowledge sharing practices to co-exist in support of the cultural change.

3. **To ensure information and knowledge are readily accessible within the NCI Agency**
   NCI Agency is changing its predominantly “need-to-know” culture to one underpinned by the “responsibility-to-share” balanced against the security principle of “need-to-know” allowing more effective use of limited corporate assets.

4. **To facilitate people-enabled knowledge sharing within the NCI Agency and towards external stakeholders**
   Enable engagement through real life interactions such as meetings, webinars etc., enhanced by the Internal Communication and Engagement efforts. Provide inputs to facilities’ planning of breakout areas, enabled by the space-use flexibility offered by the NCI Agency NWoW efforts. The geographically disperse reality of the Agency, promotes online solution to live events and remote connection and collaboration.

5. **To encourage and support the creation and nurture of new information and knowledge**
   Staff will be able to readily access all knowledge, collaborative tools and assets relevant to their work, past and present, internal and external to the organisation, and shall use these capabilities in their work, in compliance with relevant NATO security requirements and provided in a secure environment. Staff should be encouraged to propose new knowledge resources to be included in the Enterprise set of available knowledge resources.

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1 American Productivity and Quality Center (APQC) KM Glossary: “Knowledge = Information in action. In a business context, knowledge is what employees know about work-related disciplines, products, processes, their customers, one another, mistakes, and successes”
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1. Overview

1.1. Contextual forces driving Knowledge Management (KM)

The fundamentals of sharing and applying knowledge are not new and some contextual forces are listed below. However, the current NCI Agency 2018-2023 Strategic Plan emphasizes that “Strong knowledge management practices and strategy are essential to our overall success” and the important contextual factors identified in the Strategic Plan further legitimize the acceleration of KM in the Agency:

- Knowledge is any Industry’s most important competitive factor;
- The social age workforce also expects less hierarchical information and knowledge sharing possibilities to allow for open learning and democratized network value to be created;
- Sharing knowledge is to be seen as a cooperative way generating the Alliance's modern defence capabilities (NATO's Smart Defence);
- Collaboration is the encompassing word for Allies working together to develop, acquire, operate and maintain military capabilities to undertake the Alliance’s essential core tasks agreed in NATO’s Strategic Concept (NATO’s Smart Defence);
- NATO is in the midst of a fundamental transformation of the way it performs its mission by more effectively exploring information technology and reforming business processes;
- NCI Agency is to lead NATO’s digital endeavour and improve and lift the technological prowess of NATO, which will require the best use of decades of accumulated knowledge and experience;
- Financially challenging times require more effective use of what has already been done and leverage past experiences and Lessons Identified

The focus of this strategy will be on integrating KM process improvements into key technology but also on enabling areas such as Overall Service Management (ITIL), Managing Programmes and Projects (MSP, P2), Operations-and-Exercises processes (including Lessons Learned) and IT architecture and governance (TOGAF and COBIT).

The main assumptions for this strategy are that:

- The NCI Agency will facilitate re-use of information and expertise already residing in the Enterprise and avoid duplication of efforts by encouraging and fostering a culture of knowledge creation and sharing also through easier search and retrieval of information and expertise;
- The re-use of information will lead to increased Knowledge creation and sharing which in turn will increase the efficiency in managing and developing capabilities for NATO.
- The increased knowledge creation, sharing and re-use cycle will also improve the delivery of services, while accelerating and improving internal decision-making processes.
- The cultural shift towards a more transparent and knowledge sharing culture, accompanied by the development of staff autonomy and empowerment, will lead to a more productive, satisfied and engaged workforce and consequently increase value to our stakeholders.
- Staff and management satisfaction will ultimately lead to higher core spirit and hence develop the corporate culture of the Agency towards more transparency, collaboration and openness, while allowing the workforce, civilian and military, to gain rich knowledge experience that can be used for future opportunities, both inside as well as outside of the Agency.
- To our stakeholders, including our potential future employees, the Agency will be perceived as an attractive and transparent knowledge organisation that produces innovative capabilities and delivers first class services, while being an attractive organisation for National Military staff secondment and a professionally challenging work place for scientists, engineers and other professionals.

Under the mandate of the NATO Communication and Information Organization (NCIO), the Agency is positioned to lead NATO’s digital transformation by providing expertise in developing and managing NATO’s Information Communication Technology (ICT) capabilities and supporting for its services.

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2 “Our value proposition to NATO remains valid and strong: The NCI Agency strengthens the Alliance through our unique understanding of NATO, the nations and the power of technology. No private contractor can replace our role in NATO, no other NATO organization has our capabilities, know-how and experience to meet NATO’s needs, […]”
This will also support talent attraction and retention within the framework of the Agency’s new Workforce Planning process.

- To our industrial partners and academia, the Agency will be seen as a valuable and, where security and confidentiality allows it, transparent knowledge hub for fruitful technology innovation and collaboration.

The past years’ Information and KM focus has been to address the internal Information Management (IM) practices, aligning the Agency with the NIMA requirements while fostering a more “knowledge sharing” culture. The future aims at leveraging achieved internal information management progresses to further automate the information management lifecycle while investing in the procedural and cultural change. This cultural

The above assumptions are directly aimed at contributing to the goals of the NCI Agency 2018-2023 Strategic Plan to:

1. Hire, train, and retain a diverse world-class, tech-savvy workforce;
2. Provide and maintain the physical and digital workplace for the NCI Agency’s workforce;
3. Reform, rebuild and strengthen the NCI Agency’s project, programme and portfolio management and services delivery capabilities;
4. Champion customer funding, tailor it for the digital endeavour; strengthen our financial management model;
5. Organize as a flexible matrixed organization that can take on new programmes and lines of services as it completes others;
6. Streamline internal business processes and ensure timely decision-making while assuring proper internal controls and safeguards;
7. Increase NCI Agency customers’ satisfaction;
8. Strengthen NATO decision-making through better use of information, the exploration of ‘big data’, artificial intelligence and machine learning tools and techniques to the advantage of the alliance;
9. Prepare for timely and sustainable delivery of CIS support for crisis response and/or business continuity requirements;
10. In the spirit of “one NATO,” champion and maintain a coherent, harmonized enterprise architecture as NATO’s C3 technical design authority;
11. Develop and deliver world-class C4ISR education and training services, including cyber, across the NATO enterprise, and;
12. Optimize the NCI Agency’s acquisition business practices and work with governing bodies to reform acquisition policies for smarter procurement including software-intensive capabilities.

The assumptions are also directly aimed at complying with the NATO Information Management Authority (NIMA) guidance and policy, some revised in 2017 to also includes KM (under North Atlantic Council (NAC) approval).

A future assumption is that the coming years will see the Agency’s internally acquired knowledge sharing practices increasingly shared with its external stakeholders. Over time, they will benefit from a more, where possible, transparent capability development and service provision, while being able to better collaborate with the Agency on ‘open innovation’ and technology advancement. This transparency paradigm has to be managed against the NCI Agency’s acquisition and procurement role, which implies constraints on information sharing during certain requirements development and evaluation stages.
2. Purpose And Scope

This strategy aims at outlining an overall framework of principles (people and processes) and capabilities (technology) needed to facilitate a cultural shift whereby information and knowledge are routinely created, managed, shared and reused. It also seeks to ensure that the chance is given to a wide audience to access the information and knowledge in a variety of ways and through a variety of channels.

This document:
• Outlines the main drivers for developing an NCI Agency Knowledge Management Strategy;
• Defines the mission, vision, ambitions and goals;
• Identifies areas to be addressed and key stakeholders.

A related document - The Knowledge Management Plan for 2019-2021, outlines the main roadmap for the IKM Steering Group and details:
• Actions (products and activities), timelines and desired outcomes;
• Performance and evaluation measures;
• Staffing and budget requirements to achieve the goals.

The strategy shall be flexible enough to include new ideas, processes and advances in technology. To facilitate this goal the strategy and its related document - The Knowledge Management Plan for 2019-2021 - shall be reviewed every year, or as necessary. The revision is required to ensure that they remain relevant and appropriate, and reflect any new IKM relevant technology enabler that the NATO Enterprise efforts may bring or to comply with renewed strategic business requirements.

3. Mission, Vision And Ambitions

3.1. Mission and Vision

The Mission of the NCI Agency KM is to offer our staff a modern, efficient and transparent knowledge management environment accelerating the internal decision making process and improving the conduct of Agency business.

The Vision is to become a knowledge centric NATO body, where access to data, information and expertise is made easy and the organizational culture promotes transparency, sharing and collaboration.

Strategic Ambitions

The NCI Agency's KM strategic crosscutting ambitions in support of the Agency's mission are:

Strategic Ambition 1: Sustain the Agency's Information and Knowledge creation across segments and geographical locations.

Access to information and knowledge resources and expertise shall be assured regardless of geographical location or organizational belonging. All staff shall be equally enabled to develop their expertise, create new knowledge and make better decisions.

Strategic Ambition 2: Help Agency staff to find, organize and share information and knowledge already existing within the organization

Design the processes and identify the means needed to support seamless data, information and content management making it easier for people to find and use information and knowledge assets. This also means identifying the right knowledge management methodologies to enhance corporate and individual knowledge growth in areas of core interest for the Agency.

Strategic Ambition 3: Increase collaboration and knowledge sharing inside the NCI Agency and with entities external to the Agency

Embedding collaboration and knowledge sharing as an integral part of business processes to encourage the cultural change and increase learning from identified lessons or experts and creating new value of past and current experiences.

3.2. Key stakeholders

The initial step in the NCI Agency’s KM maturity journey was taken in 2015, focussing mainly on internal governance and framework and NIMA compliance. Steps were taken to consolidate some internal progresses and continue developing the capabilities, while increasing focus on collaboration and knowledge sharing and changing the culture by improving internal communication processes and enablers. The future will see further efficiencies in the Agency’s internal KM practices in areas of core interest for the Agency, while increasing our engagement with external stakeholders.

It is envisioned that the strategy will need to expand in line with IT Modernization (ITM) and will generate increased knowledge sharing value to the broader NATO Enterprise, Nations, Industry and Academia. This increased knowledge sharing value can only be achieved when the NCI Agency’s KM capabilities have reached Maturity Level 3 (three). The NCI Agency chosen framework for measuring its KM maturity is the American Productivity and Quality Center (APQC) KM Maturity Framework3.
The maturity will ideally be assessed annually through the APQC KM Capability Assessment Tool4.

4. Strategic Goals

The following five KM strategic goals will contribute to the NCI Agency-wide expected business results. These results are achieved through the development and delivery of a series of products and services at NCI Agency Enterprise level, and further detailed in The Knowledge Management Plan for 2019-2021:

1. Strategic Goal 1: To recognize information and knowledge as a corporate asset
   - Recognize that people’s knowledge is our most valuable asset and managing it requires commitment and investment, in time and effort.
   - Recognize the importance of the experience and expertise of staff as the most valuable knowledge asset and outline the necessary processes to ensure we capture and reuse that knowledge in our deliverables to customers and in our decision-making.
   - Recognize that retaining and growing our individual and corporate knowledge base, in areas of core value, is essential for fostering a knowledge centric and continuous learning environment in which people want to remain.
   - Ensure all managers are committed to maintaining and contributing to the KM plan and initiatives and endorse this message to their staff.
   - Respond to the changing knowledge needs of the organisation and link KM performance indicators to NCI Agency Business Strategy and Service Strategy goals.

2. Strategic Goal 2: To ensure information and knowledge are accurately managed
   - Ensure authoritative information is clearly labelled as such and allow seamless contribution to the authoritative information sets, balanced against the encouragement and enablement of freer, yet reliable, knowledge sharing in Communities of Practice, where peer-communities of subject-matter-experts are entrusted with assuring knowledge accuracy.
   - Ensure data, information and knowledge are handled in compliance with NATO and NCI Agency Directives and guidance.
   - Ensure data is clearly labelled to distinct, authoritative data from non-authoritative data.
   - Ensure, measures (also technical enforcements) are in place to allow marking of information artefacts to restrict access where required (ex. PERSONAL, MANAGEMENT marking).
   - Apply data standards and models to support coherency, also NATO wide.
   - To achieve IM level 4 as define in NATO IM strategic plan.

3. Strategic Goal 3: To ensure information and knowledge are readily accessible within the NCI Agency
   - The NCI Agency will, in line with NATO policy, continue to change its predominantly "need-to-know" behaviour to one underpinned by a "responsibility-to-share" balanced against the security "need-to-know" principle allowing for more effective utilisation of our corporate assets.
   - Improve the online user experience by technologies aimed at connecting content to people.
   - Increase and mandate the use of personal profiles that will become authoritative sources for personnel information including skills information to complement the 'Competency mapping' of the Agency.
   - Improve the Identity and Access Management Services (people, process, technology) that is the foundation for organising access to services and information based on user identity info.
   - Increase KM systems integration to allow replication of entries to other data storages/databases hence increase intelligent exchange of data between systems avoiding data entry and maintenance duplication labour and error.
   - Increase push of content to the users in a timely manner allowing increased awareness and efficiency on matters of professional or social concern to increase internal corporate cohesion.
   - Establish workable processes for storing, retrieving, sharing and releasing the NCI Agency knowledge and intellectual resources and products in an efficient yet secure and policy compliant way to our external stakeholders.

4. Strategic Goal 4: To facilitate people-enabled knowledge sharing within the NCI Agency and towards external stakeholders
   - Facilitate knowledge sharing in different forms and through different channels both on-and offline.
   - Balance the technology enablers with facilities and communication process enablers to also foster physical interaction and off-line exchange of knowledge. However, as the NCI Agency is geographically dispersed over several sites, technology, such as virtual meeting.

rooms, video chat and online connection capabilities may need to be used to facilitate virtual face-to-face meetings.

• Improve the online user experience by technologies aimed at connecting people to people.

• Recognize the importance of sharing information and knowledge throughout the NCI Agency.

• Facilitate information transfer between the NCI Agency and the customers.

• Encourage the sharing of tacit knowledge from person to person, while gradually investing in means to capture the tacit knowledge converting it into more tangible and explicit knowledge.

• Recognize and deal with the effect of NATO, national and industry policies and legislation on the sharing of information and knowledge.

• Ensure that explicit information and knowledge are shared legally and safely around the organisation and to customers.

• Ensure a range of processes and technologies are employed to realise efficient information and knowledge sharing within the Agency, and towards our external stakeholders, customers and end-users.

5. Strategic Goal 5: To encourage and support the creation and nurture of new information and knowledge

• Every member of staff will be able to readily access all knowledge, collaborative tools and assets relevant to their work, past and present, internal and external to the organization, and shall use these capabilities in their work. This shall be provided in a secure environment that encourages more effective use of data, information and knowledge, aimed at encouraging NCI Agency workforce to collaborate more effectively whilst undertaking innovative, challenging and complex projects.

• Recognize the importance of staff members as vehicles of knowledge.

• Provide easy access to knowledge to existing and on-boarded staff.

• Encourage creation and sharing of knowledge as a standard mode of operations, while working at the NCI Agency.

• Facilitate the creation, location and sharing of knowledge and expertise that is to be seen and perceived as a corporate asset.

• Retain the expertise when staff members leave and reorganisation occurs.

• Allow cross-pollination of knowledge across geographical locations and organisational business units, not only as a knowledge sharing exercise but also as a cultural evolution enabler in line with the Agency’s cultural initiative plans.

The NCI Agency’s KM mission and goals, through which the vision will be achieved, framed by the ambitions, form the basis for the NCI Agency KM strategy (Figure 1).
5. Revision

As stated earlier, this strategy needs to be flexible enough to include new ideas, processes and technological advancements and as such, the strategy and related NCI Agency KM Plan for 2019-2022 will be reviewed yearly, or as necessary, to ensure they remain relevant and appropriate.

While the first iteration of the strategy (2015) proposed generic goals to achieve the top level Mission and Vision in line with the Ambition statements, previous NCI Agency KM Strategy took the 2015 APQC KM assessment recommendations into account. This strategy leverages both the 2015 and 2017 APQC KM assessments while aligning to the NCI Agency overall new strategic direction. Future strategies will also take into account the knowledge gaps analysis aimed at identifying the knowledge areas that the Business Unit Leads and staff believe need to be improved.

At the latest, this Strategy will be revised in December 2021.