JOINT LOGISTICS MODERNIZATION CAMPAIGN PLAN

Achieving Speed and Advantage at the Pace of Operations through an Integrated and Interoperable Logistics Network



VICE CHIEF OF THE DEFENCE STAFF FOREWORD



The Canadian Armed Forces (CAF) are at a pivotal intersection of technological advances and a seismic shift in geopolitics. *Our North, Strong and Free* describes three powerful and connected trends reshaping our world: climate change; challenges to the international order by autocracies and disruptive states; and emerging disruptive technologies. Given this context, the CAF is now faced with new and daunting challenges, including contested logistics threats. The existing Joint Logistics Network (JLN) processes, structures, and tools lack the depth, speed, and visibility required in the modern battlespace, and potentially restrain the operational effectiveness of the CAF. In concert with our closest allies and partners, Joint Logistics must be modernized to meet the threats of today and tomorrow.

As directed by the Chief of the Defence Staff, the Operational Sustainment Modernization (OSM) Strategy establishes expected outcomes for modernizing Joint Logistics, which will result in a JLN that is data-driven, resilient, agile, and horizontally integrated. As the CAF increasingly operates in a contested logistics environment and the potential threats to our Strategic Lines of Communications grow, it is more critical than ever that Joint Logistics considerations are integrated in military planning, threat assessments, and force protection. They will also enable logisticians and other key Department of National Defence/CAF leaders to achieve enhanced interoperability and systems integration as they contribute directly or indirectly to CAF operational advantage around the globe.

Joint Logistics will be modernized and transformed through the OSM framework of: People, Processes, Technology and Systems, and Governance. Strengthening Joint Logistics and the overall JLN, will increase CAF readiness, resilience, and support relevant combat forces. Ultimately, investments in Joint Logistics are investments in the CAF's operational success.

Lieutenant-General Frances Allen
Vice Chief of the Defence Staff

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EXECUTIVE SUMMARY

The following Joint Logistics Modernization Campaign Plan (JLMCP) is the first campaign plan to be released under the Chief of the Defence Staff's Operational Sustainment Modernization Strategy (OSM). Further, it sets the conditions implementing significant for investments described in Our North, Strong and Free. Specifically, the JLMCP is intended to transform the currently disjointed and analog 20th century CAF Joint Logistics community into a digitally integrated, agile, and resilient Joint Logistics Network (JLN). The JLMCP provides the detailed analysis necessary to both acknowledge the existing operational deficiencies of the status quo and to provide the requisite framework to better inform CAF leadership on how the JLN will, through investments in governance. infrastructure, culture change management, and digitalization, achieve Joint Logistics modernization and support informational, decisional, and operational advantage.

The CAF has already initiated systemic advances towards the goal of Joint Logistics modernization via projects such as DEFENCE^x and other beneficial investments in the Chief Joint Logistics (CJLog)/Strat J4-Spiral 2 initiative. The JLMCP builds on these advances through the application of the OSM Strategy framework; identifying eleven cardinal modernization objectives across the four key Lines of Effort (LOE): People, Process, Technology and Systems, and Governance.

The JLMCP is structured in two mutually supportive parts; the first part aims to identify and communicate the Joint Logistics strategic context and operational imperatives that shape modernization. Part One clarifies the Joint Logistics framework and outlines where and in what functional areas the JLN presently resides and contributes relative to the Sustainment Enterprise and Defence Supply Chain.

It then proceeds to introduce and explain the role of the Chief of Joint Logistics and the JLN within the Pan-Domain Command and Control (PDC2) concept; all of which then serves to underpin the Chief of the Defence Staff's rationale for the Pan-Domain Force Employment Concept. Part Two expands the comprehensive analysis along the four LOEs through an examination of all supporting objectives, effects, and key tasks related to each. These key tasks are critical to the overall modernization of the JLN and are central to the: *Guidance to JLN Leaders and Practitioners*, which is provided in Annex A.

The success of the JLMCP will require shared holistic and collaborative support across DND/CAF. Defence Team leadership engagement within both the JLN and DND/CAF will be required to demonstrably lead and support these specified modernization initiatives through a variety of activities including: the conduct of projects and programs; transformation of authority, responsibility, and accountability (ARA) documents; strategic planning activities; and follow-on implementation directives.

The JLMCP articulates key Joint Logistics modernization initiatives within a single strategic document. It provides the CAF, and importantly all stakeholders within the JLN, with a vision and path for modernizing. Once realized, the JLN will be strategically led and governed through digitally enabled processes and decision-making, fully integrating into CAF readiness and operational PDC2 systems. Similarly, the appointment of a CJLog, enabled with distinctively defined Authorities, Responsibilities, and Accountabilities (ARAs), will facilitate the practical cohesion of these initiatives. Aligning with the CAF modernization mandate of Our North, Strong and Free, the CJLog will provide the higher direction needed for logistics readiness and resiliency.



PART 1

JOINT LOGISTICS MODERNIZATION CONTEXT AND IMPERATIVES

Introduction

Logistics is the science of planning and carrying out the movement and maintenance of forces. Joint Logistics is foundational to ready and resilient forces. Logistic capacity and capability are inextricably linked, and they are the critical components in the generation of credible combat power and deterrence.

Joint Logistics is fundamental for any armed forces to project power, gain operational advantage, and sustain combat effectiveness. It can influence the cadence and shape of military operations. The Canadian Armed Forces (CAF) have reached a critical juncture where traditional logistics structures, processes, and tools are negatively challenged in their ability to integrate with the requirements of Pan Domain Command and Control (PDC2) decision cycles and contested logistics environments.

CAF logistics support is delivered by the Joint Logistics Network (JLN)¹, which is nested within and reliant upon the larger Sustainment Enterprise and the Defence Supply Chain (DSC). The potency and sustainability of military responses are underpinned by the synchronization of the JLN and the broader activities of the Enablement Ecosystems² and the Global Supply Chain. Subsequently, the JLN needs to deliver logistics support, with sufficient strategic depth and mobility. The JLN subsequently orchestrates the synchronization

of multiple interdependent processes, structures, and governance. It also remains dependent upon digital and physical infrastructure to realize outcomes. This "system of systems" approach must be able to simultaneously execute multiple logistics functions and deliver persistent support to concurrent operations within complex, austere, and contested environments, while working with Other Government Departments and Agencies (OGDAs), allies, and partners.

Consequently, the CAF must modernize Joint Logistics to integrate with key allies while ensuring resilience against potential disruptions to the DSC. Faced by a dynamic and complex operating environment, JLN decisions must be made at the Speed of Relevance. As such, the modernization of Joint Logistics is focused on achieving both operational advantage and military resilience.³

The JLMCP is the first campaign plan released under the OSM Strategy. By applying the framework established in the OSM Strategy, the JLMCP serves as a road map for JLN modernization priorities. It aligns closely with other CAF transformation initiatives and aims to modernize through the lines of effort of: People, Process, Technologies, and Governance. The strategic imperative is clear; the CAF must modernize and digitally integrate Joint Logistics to advance CAF readiness and military resilience.

¹ The JLN is the network of CAF personnel and organizations, that delivers logistics effects in support of CAF missions. It is joint and includes all CAF Services and Branches engaged in logistics effects delivery. The JLN is inclusive of Defence Team members employed within the CAF who deliver logistics effects. The JLN is also inclusive of industry partners, under contract with the CAF, who deliver logistics effects.

² Enablement Ecosystem represents the NATO concept that includes the integrated whole-of-government activities that support the projection of forces and materiel, as well as their reinforcement or resupply.

³ Military Resilience is defined by NATO as the "ability to resist and recover from a major shock such as a natural disaster, failure of critical infrastructure, or a hybrid or armed attack". NATO takes a comprehensive approach to resilience, combining both civil preparedness and military capacity, Ref AF.



Strategic Context

The geo-strategic context for Canada has shifted significantly in recent years and it now affects the global balance of power and security. Adversaries increasingly engage in a variety of disruptions below the threshold of conflict, which can pose threats to the DSC and CAF Strategic Lines of Communication (SLOCs). Importantly, these threats also include non-military global events, such as climate change and global pandemics. Disruptions to global supply chains can create associated challenges to Canada's DSC and limit CAF capacities to project and sustain forces.

<u>Canada's New Defence Policy</u>. Canada's new defence policy, *Our North, Strong and Free* (ONSAF), adds to the previously released *Strong, Secure, Engaged*. Both policies clearly articulate the strategic imperative for change in an increasingly complex and unpredictable security environment. ONSAF reflects a significant investment in the modernization of the CAF and its members. This includes a focus on readiness, resiliency, and relevancy, which is a key component of the Sustainment Enterprise.

OSM Strategy. The OSM Strategy, as authorized by the Chief of the Defence Staff (CDS), is the key driver in delivering sustainment effects that meet operational demands, by outlining the critical need to modernize the CAF's joint enabling capabilities. This strategy necessitates the strengthening of linkages within the Sustainment Enterprise and between the pillars of Operational Support and Institutional Sustainment. This is envisioned through the alignment of people, processes, technology, and governance to enhance readiness and resilience. The OSM Strategy envisions the CAF being sustained by a fully integrated and modernized Operational Sustainment function, that can drive capability development. generate decisive military advantages, and maintain operational readiness across all domains of warfare. For Joint Logistics, the next sequential step was the development of this campaign plan.

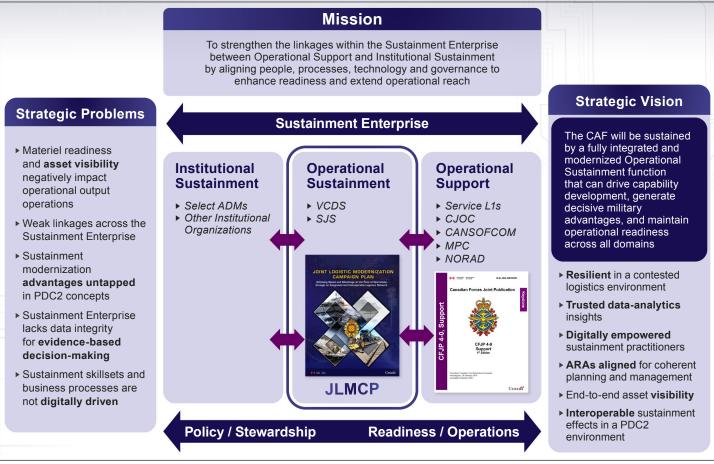


Figure 1: Sustainment Enterprise⁴

4 OSM Strategy, Ref D. For clarification on all acronyms and abbreviations refer to Annex B.



MAKE SENSE - JLN Characteristics and **Tools Effects** ▶ Problem identification ▶ Situational understanding ▶ Analytics ▶ Digitalized Capabilities & **Components** ▶ DND/CAF ERPs – ML and AI ▶ NATO and Allied Systems

NFORMATION ADVANTAGE

(LOGFAS)

▶ Open-Source Systems

▶ Knowledge Practitioners -

Training and Experience

► Knowledge Management

(e.g. Lessons Learned)

(COTS) Technologies

▶ Directives and Policies

▶ Doctrine - CAF, NATO

and Allies

Systems and Processes

► Commercial Off The Shelf

PDC2. The PDC2 concept provides the intellectual foundation for the C2 of operations in a pan-domain environment as described within the Pan Domain Force Employment Concept (PFEC). The PDC2 concept is about gaining advantage over our adversaries through the optimization of the Sense, Make Sense, Decide, Act (SMDA) decision cycle. This concept requires empowered People, agile Processes, resilient Structures, and diverse decision-support Technology; of which will enable the rapid leveraging of Data. Collectively, these components support allied interoperability and integrated effects across all domains. The evolution of these

five components are foundational to the PDC2 concept. Figure 2 shows the role of the Chief Joint Logistics (CJLog) and the JLN Role in the PDC2 SMDA decision cycle.

PDC2 is mission-driven and threat-informed to ensure the CAF remains relevant to our Allies and capable of protecting Canadian national security and interests. PDC2 applies to all eight core CAF missions, across continental, expeditionary, and cyber defence contingencies, in all domains, as well as the information environment, and throughout the full spectrum of conflict (including subthreshold warfare).

DECISION ADVANTAGE

DECIDE - Chief Joint Logistics and JLN Role

Effects

- ▶ Speed of Relevance/ Timely
- ▶ Coherence
- ▶ Aligned
- ▶ Simplified
- ▶ Flexible
- ▶ Agile

► Clarity

Sources & Activities

- ▶ ARAs
- ▶ Orders, Directives and Policies
- ▶ Governance
- ► Liaison and Communication up and down the chain



SENSE - Logistics Data

- ► Requirements Understood
- ► Digitalized Data
- ▶ Visibility
- ▶ Real-Time
- ► Lead Times Understood
- ▶ Simplified Data
- ► Scales min/max defined

Sources

- ▶ ERPs
- ► AIT
- ▶ Demands UORs
- ▶ Inspections
- ▶ Digitalized Data
- ► Material Lifecycle
- ▶ Scales min/max defined

ACT - Logistics Effects and Activities

Effects

- ▶ Aaile
- ▶ Resilient
- ▶ Depth/Redundancy
- ► Interoperable
- ▶ Effective
- ▶ Digitalized
- ▶ Efficient as possible
- ▶ Enabling Readiness and Ops
- ▶ Empowered through Technologies

Activities

- ▶ Often CAF Level 1 Led
- Supplying
- ▶ Warehousing
- ▶ Distribution
- ▶ Movement
- ▶ ISS ▶ Liaising
- ▶ Collaboration and Interfaces
- ▶ Integration

SENSOR AND SOURCE INTEGRATION

Figure 2: Chief Joint Logistics and JLN Role in the PDC2 SMDA Decision Cycle

Joint Logistics Context

Beyond this emergent strategic context, there are also significant challenges internal to DND/CAF. As evidenced by repeated observations made by the Office of the Auditor General, National Defence is challenged to effectively conduct and report on materiel management. This includes knowing what materiel DND/CAF has, where the materiel is located, and what condition the materiel is in. These systemic demands have created vulnerabilities within the conduct of CAF operations, especially when operating in contested logistics environments.

With the DND/CAF's adoption of industry-leading supply chain methodologies, such as just-in-time delivery, elements of resiliency have been lost within the DSC; and our adversaries now seek to exploit that misalignment across the spectrum of international competition, crisis, and conflict. There is a common and shared understanding within Five Eyes (FVEYs) that

these vulnerabilities are magnified, in-part, due to effectiveness being sacrificed for efficiency. DND/CAF must seek an effective balance between institutional supply chain stewardship and operational logistic effects.

Complicating matters further, disparate command and managerial authorities across the JLN ultimately limit operational options for the CAF and thereby negatively impact operational deterrence and readiness. Currently, Joint Logistics activities are neither horizontally, nor vertically integrated.

Beyond simply being increasingly vulnerable to disruption, the Joint Logistics status quo is simultaneously ineffective and inefficient. This overall struggle to either effectively conduct and report on materiel management or deliver timely logistics effects has negatively impacted on CAF readiness, resiliency, and relevancy.

Joint Logistics Framework

The key to Joint Logistics modernization is in defining the JLN and its linkages to the Sustainment Enterprise and the DSC, as it resides within both constructs. As such, on a macro-level, the JLN is reliant upon the greater Enablement Ecosystem and the Global Supply Chain. Specifically, the Enablement Ecosystem supports the projection of forces and materiel through whole-of-government

efforts, including customs legislation, while it is the Global Supply Chain that produces, stores, transports, and disposes of materiel. The JLN is therefore a complex system of interacting and interconnected people, functions and capabilities that deliver logistics effects in support of CAF missions. Figure 3 is a graphic representation of the JLN and its relationship with this *system of systems*.

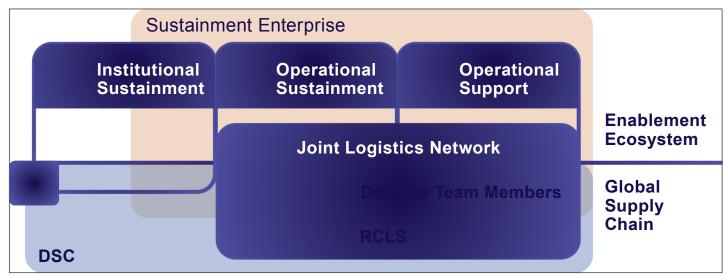


Figure 3: Joint Logistics Framework

<u>JLN</u>. The JLN is the network of CAF personnel and organizations, that delivers logistics effects in support of CAF missions. It is joint and includes all CAF Services and Branches engaged in logistics effects delivery. The JLN is inclusive of those Defence Team members and industry partners who are managed directly by the CAF and deliver logistics effects.

<u>Sustainment Enterprise</u>. The Sustainment Enterprise encompasses all the DND/CAF organizations, people, and data management agencies engaged in the provision of the sustainment effects that enable defence readiness and operations, which are broadly grouped and defined as Institutional Sustainment, Operational Sustainment, and Operational Support. The JLN functions within the pillars of Operational Sustainment and Operational Support and works closely with Institutional Sustainment organizations.

- ▶ <u>Institutional Sustainment (Update)</u>. Institutional sustainment is a component of the Sustainment Enterprise and the doctrinal Function of Sustain. These integrated strategic sustainment activities function horizontally and are housed within DND L1 organizations, other government departments, and industries which support the readiness requirements of the CAF. These strategic activities generally include, but are not limited to, the exercise of Departmental functional authority for policy and process, which enables the execution of Operational Sustainment and Operational Support.
- ▶ <u>Operational Sustainment</u>. Operational Sustainment is a component of the Sustainment Enterprise and the doctrinal Function of Sustain. It exists as a communicating and alignment function between Operational Support and Institutional Sustainment, encompassing the full spectrum of Joint Enabling Capabilities.
- <u>Operational Support</u>. Operational Support is defined as the action of a force, or portion thereof, which directly aids, protects, complements, or sustains the operations of another force. Operational support is provided by a supporting command either within a theatre of operations or along a SLOC.



DSC. The DSC is the end-to-end system of interdependent activities that function horizontally, and are housed within National Defence organizations, industry, and other government departments, which deliver the materiel requirements of the CAF both domestically and overseas. The DSC works from the beginning to the end of the supply function to deliver materiel sustainment. Critical to the DSC are the infrastructure support elements, such as airfields and warehouses, that enable readiness and the flow of materiel from "factory to foxhole." Consequently, the JLN is key for: identifying CAF requirements, managing, and reporting on materiel, materiel custody and warehousing, repair, and overhaul and maintenance. The DSC also relies upon both the Global Supply Chain and the Enablement Ecosystem in providing support to CAF mission requirements.

- ▶ <u>DSC Accountabilities</u>. Joint accountability for the effective management of the DSC has been assigned to both DND and the CAF. More specifically, the Assistant Deputy Minister (Materiel) (ADM(Mat)) and the Strategic Joint Staff (SJS) have joint DSC accountability to the Deputy Minister (DM) and the CDS for the end-to-end integration and performance of the DSC, while maintaining a balance between the readiness requirements of the CAF and DND corporate accountability. The intended goal is to develop common solutions, have a unified voice, and consolidate efforts.
- DSC Key Activities. The key activities of the DSC are outlined as follows: identify requirements for acquisition; support to capability and materiel planning; acquire, manage and report on materiel. Within those responsibilities the DSC maintains materiel custody and warehousing, in addition to effecting repair, overhaul, maintenance, and disposal. Importantly, the DSC includes both physical materiel and data, both of which are critically required to meet government mandates and achieve operational effects.

Enablement Ecosystem. The Enablement Ecosystem is a North Atlantic Treaty Organization (NATO) concept that includes the integrated whole-of-government activities that support the projection of forces and materiel, as well as their reinforcement or resupply. The Enablement Ecosystem supports the JLN and the wider Sustainment Enterprise. It includes OGDAs that fall outside of the Sustainment Enterprise, such as the Canadian Border Services Agency, who support CAF SLOCs.

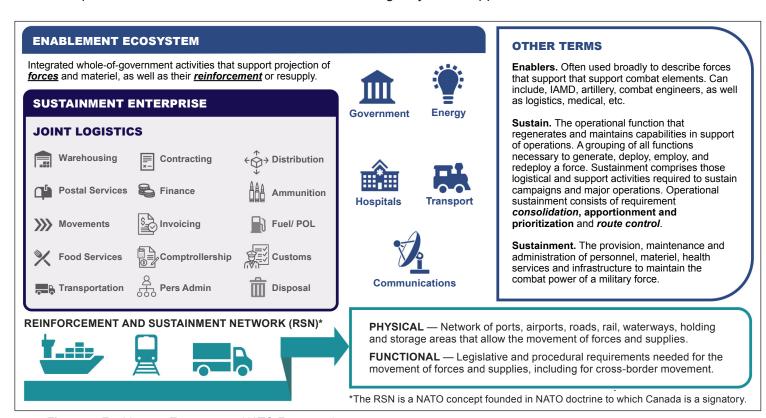


Figure 4: Enablement Ecosystem – NATO Framework

Global Supply Chain. The Global Supply Chain covers all the steps involved in manufacturing and delivering a product or service when those steps take place in more than one country. The DSC is dependent on the Global Supply Chain, which is relied upon by DND/CAF for the delivery of materiel requirements both domestically and overseas. The Global Supply Chain includes DND/CAF industry partners, OGDA industry partners and industry sources in Canada and other countries. Disruptions to the Global Supply Chain affect DSC key activities, especially capability and material planning, acquisition, and delivery.

Royal Canadian Logistics Service (RCLS). The RCLS is an integral component of the JLN. It is comprised of personnel from all three Environmental Commands and as such is considered a Joint Service. Within the highly federated sustainment enterprise, the RCLS plays a critical role for all JLN logisticians, regardless of where and how they are employed. The RCLS is also mandated to enhance member well-being and commitment, integrating members into a community that fosters the development of responsive, agile, and interoperable logisticians and logistic teams. The core responsibilities of the RCLS include human capital development and investment as well as the provision of strategic-level advice, direction, and guidance. Guidance to JLN leaders and practitioners is included at Annex A.

- Senior Serving Logistics Officer (SSLogO). The SSLogO is an appointed title, granted by the CDS. The SSLogO is responsible for all ceremonial aspects of the RCLS and serves as a senior logistics advisor to the DND/CAF senior leadership.
- ▶ <u>CJLog</u>. The CJLog is the CAF Joint Logistics Authority. As such, the CJLog is a special advisor to the CDS for matters related to Joint Logistics. The CJLog is also the *Occupation Requirements Authority* (ORA) for the training curriculum and training outcomes in support of Canadian Forces Logistics Training Centre's activities. This includes Service member succession planning and the stewardship of the various RCLS occupations. Additionally, they are the representative of the CDS at DSC governance, including for ammunition requirements and programme management. Additionally, the CJLog has the powers and jurisdiction of an officer commanding a Command, with pending authorities, responsibilities, and accountabilities (ARAs). Importantly, the CJLog may also be designated as the Strategic Joint Staff Strategic J4 (Strat J4). There are parallel modernization initiatives in the fields of human resources and finance that are outside of the scope of OSM, the JLMCP, and the CJLog. These activities will be synchronized by CJLog and mutually supporting, as the RCLS and logisticians are significantly implicated.

The volatile character of the operating environment coupled with an increasing chance of no-notice escalation to conflict will not allow the Joint Logistics Network sufficient time to build capacity to support Canada's ability to use all its elements of National Power as it chooses to do so. The resurgence of modern industrial warfare carries commensurate risks of attrition and exponential consumption rates of key classes of supply such as ammunition, fuel, and spare parts not seen since World War II. Combined with extended SLOCs this potent dynamic would cause the CAF to culminate too quickly in crisis and conflict. Proof of this stark reality, where Logistics limits options, is demonstrated daily in how we struggle in this era of heightened competition. This is a call to action. The JLMCP stresses the need for immediate changes to the ways and means of the CAF.

— Brigadier-General L.J. Girouard Chief of Joint Logistics (Strategic J4) / Director General Support

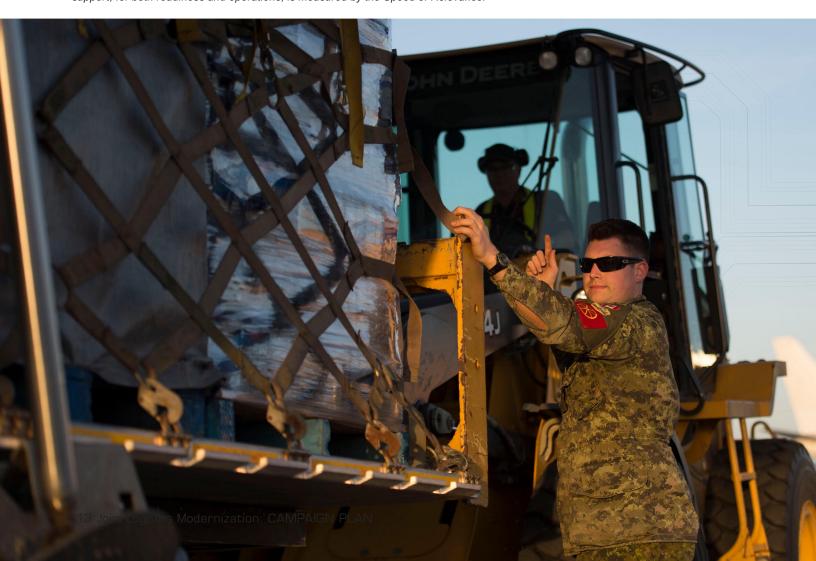
⁶ Government of Canada Business Development Bank of Canada, Articles and Tools, Entrepreneur's toolkit, Glossary What is a Global Supply Chain | BDC.ca

Joint Logistics Modernization - Central Idea

Speed of Relevance. The delivery of logistics support for both readiness and operations is measured by the Speed of Relevance.7 Correspondingly, the JLN must enable decisions through the alignment of data, systems, and procedures to ensure that commanders from the strategic to the tactical levels have the requisite time, the information, and the context to conduct and enable decision-making. Unity of effort and a complementary decisionmaking environment across DND/CAF are also critical to achieving Speed of Relevance. Future conflicts involving near-peer states could see the CAF capabilities severely degraded or the DND/CAF strategic credibility eroded for failing to achieve Speed of Relevance.

The Speed of Relevance is realized through the application of PDC2 decision and actions. The CAF must be capable of transforming data into actionable information that will allow for rapid decision-making and near real-time responses. Joint Logistics is a key contributor to Pan-Domain Situational Awareness and the PDC2 SMDA decision cycle. Joint Logistics modernization must enable the JLN to deliver fidelity on CAF resources and capability readiness, as well as recommendations on what is operationally supportable. It must also strive for real-time and trusted data, and enable the application of military force and its assessment. Given these critical contributions, Joint Logistics must support the Pan-Doman Decision Action Cycle with the key effects outlined in Figure 2.

⁷ Speed of Relevance is realized through the application of decision and actions. The CAF must be capable of transforming data into actionable information that will allow for rapid decision-making and near real-time responses. The delivery of logistics support, for both readiness and operations, is measured by the Speed of Relevance.





PART 2

JOINT LOGISTICS MODERNIZATION STRATEGIC DESIGN

Joint Logistics Modernization Vision

The Joint Logistics modernization vision and the associated vision details have been distilled from the OSM Strategy and they are synthesized below in Figure 5.

JOINT LOGISTICS MODERNIZATION VISION

Joint Logistics will provide trusted, resilient, operationally responsive and visible logistics effects in order to better generate decisive military advantages and maintain operational readiness across all domains.

Vision

DIGITALLY EMPOWERED PRACTITIONERS

DND/CAF generates and retains digitally empowered practitioners with relevant competencies and tools.

INTEGRATION

The CAF has the ability to digitally integrate the sustainment of joint forces on operations.

INTEROPERABLE

The CAF has the ability to participate in the sustainment of a multi-national coalition and digitally exchange Joint Logistics data.

REAL-TIME

The CAF has the ability to plan, position and predict materiel readiness requirements in real-time.

TRUSTED DATA INSIGHTS

DND/CAF leadership obtains trusted data-analytics and insights from across the Sustainment Enterprise.

OSM COHERENCE

Joint Logistics ARAs and activities have coherence and enable successful outcomes for the sustainment enterprise, including integration with DND/CAF digital transformation.



VISIBILITY

Enhanced supply chain visibility improves CAF readiness and trust. This will be supported by a number of on-going DSC modernization projects including: Materiel Identification; Automated Identification Technology; and DEFENCEX.



DIGITALLY TRANSFORMED

DND/CAF has a digitally transformed CAF supply chain that leverages warehouse automation to increase operational efficiency and effectiveness.

Figure 5: Joint Logistics Modernization Vision



Strategic Lines of Effort and Outcomes

To structure Joint Logistics modernization activities, four Lines of Effort (LOEs) were established based upon the OSM Strategy. The LOE titles and their outcomes are updated in this JLMCP as follows:

- ▶ **LOE 1** *People*. Modernized training and education sustaining a culture of inclusiveness and continuous modernization.
- ▶ **LOE 2 Process**. Increased operational readiness through end-to-end process standardization and digitization.
- ▶ <u>LOE 3</u> <u>Technology and Systems</u>. Trusted data and system confidence, enabling evidence-based decision-making and risk management.
- ▶ **LOE 4 Governance**. ARAs aligned and integrated, achieving unity of modernization effort.

LOE 1 — People

This LOE relates to the professionalization of logisticians, who are empowered with relevant competencies, operating in an inclusive JLN, and a connected digital workplace. This LOE will be achieved through the creation of new partnerships and programs that focus on continuous improvements and the integration of industry best practices.

Objective 1A — Joint Logistics Education and Training Modernized

Effects Empowered Logisticians with modernized tools and competencies that deliver critical logistics effects at home and abroad. Professionalization will be enhanced through modernized training and education that align with industry best practices.

Tasks — Underway

- **1A.1** Expand logistics-focussed post graduate opportunities as well as leveraging professional training institutions for all Logisticians.
- **1A.2** Incentivize and provide opportunities for professional designations.
- 1A.3 Modernize the Advanced Logistics Officers' Course, while conducting an expanded review of all Non-Commissioned Member and Non-Commissioned Officer training through iterative Occupational Analysis by specialty.
- **1A.4** Restructure and align Logistics Officer Training through the Logistics Officer Occupational Analysis.
- **1A.5** Update the CAF Fuels & Lubricants Training Program.
- **1A.6** Develop Concept of Feeding, and the Food Security and Defence Program, including evolving considerations of diversity and inclusion.
- **1A.7** Modernize the National Combat Rations Program, including evolving considerations of diversity and inclusion.

Tasks — Future

- **1A.8** Examine program options with industry, academia, allies, or other sources for professionalization opportunities.
- **1A.9** Establish a program to continuously improve training and education, ensuring that training leverages new technologies (e.g. advanced manufacturing, artificial intelligence (AI), and quantum computing).
- **1A.10** Contribute to overall CAF digital transformation efforts through a digital literacy program for logisticians.
- Working with CJOC and the CAF Services, the CJLog will establish logistics-specific exercise objectives in CAF exercises and, where possible, those of key allies to annually test and experiment with logistics processes, tactics, and strategies as well as the combat readiness of logistics forces.

Objective 1B — Joint Logistics Culture and Leadership Modernized

Effects An enhanced sense of belonging for logisticians to a more inclusive RCLS, in concert with the CAF culture transformation and well-being initiatives. In addition, leaders and logisticians are empowered with intuitive digital tools that embrace modernization and digital literacy.

Tasks — Underway

- **1B.1** Develop a strategy to evolve the RCLS culture that aligns and complements overall CAF cultural transformation efforts.
- **1B.2** Develop a history and heritage program for the RCLS that will strengthen sense of belonging to RCLS and pride in being a Logistician by leveraging existing and new resources through multi-media.
- **1B.3** Develop a program at Canadian Forces Logistics Training Center to examine RCLS culture.
- **1B.4** Formalize the RCLS mentorship and talent management network.

Tasks — Future

- **1B.5** Advocate for the transformation of workplace culture, everywhere logisticians are employed, to promote data-driven decision-making that mirrors industry best practices.
- **1B.6** Reform the career management and succession planning of logisticians, granting members increased career control and flexibility.
- **1B.7** Conduct a study and provide recommendations on RCLS Chief Warrant Officers/Chief Petty Officers 1st Class to improve mentorship and retention.



LOE 2 — Processes

This LOE describes the modernization of Joint Logistics processes to ensure standardization, interoperability, and alignment with best practices.

<u>Objective 2A</u> — Enterprise Resource Planning (ERP) Systems Modernized and Enterprise Resource Planning System Accelerators Implemented

Effects Industry best practices and standardization incorporated by the CAF.

Tasks — Underway

- **2A.1** Support the Modernization and Integration of Sustainment and Logistics (MISL) and DEFENCE^x business transformation and organizational change management implementation.
- **2A.2** Support Automatic Information Technology (AIT) Major Capital Project implementation across DND/CAF to maximize automation.

Tasks — Future

- **2A.3** Leverage ERP process mining to review compliance and standardization to support continuous improvement across all joint log activities.
- **2A.4** Support the modernization of the CAF ammunition and explosives requirements acquisition plan and the establishment of the new artillery production capacity in Canada.
- **2A.5** Establish a greater strategic reserve of battle-decisive munitions.

Objective 2B — Joint Logistics Processes and Tools Enhanced

Effects Enabled CAF and joint logisticians with the modernized tools and processes to be more effective and efficient and to work across the enterprise.

<u>Tasks — Underway</u>

- **2B.1** Conduct DND 404 Driver's License Modernization.
- **<u>2B.2</u>** Integrated and digitalized dangerous goods program across DND/CAF domestically and overseas.
- **2B.3** Support Distribution Military Inventory Network Optimization (DMINO) implementation to enable domestic time-definite delivery across domestic SLOC to support increase operational readiness.
- **2B.4** Align transportation, movements, dangerous goods and postal service processes and policy to DND/CAF new digitalized ERPs.

Task — Future

- **2B.5** Implement a DSC Resilience Risk Management Conceptual Framework into DND/CAF best practices.
- **2B.6** Support the development of a Joint Logistics Intelligence Operating Picture to integrate the intelligence analysis into Joint Logistics decision-making.
- **2B.7** Investigate and oversee foreign supplier relationships and materiel with DND/CAF stakeholders to inform strategic risk-based framework.
- **2B.8** Digitalize and automate the production and governance of the annual Material Accountability Action Plan through a risk-based framework.
- **2B.9** Modernize all logistics training provided by CFLTC, leveraging digital tools to provide an experiential foundation for domestic and overseas deployments that highlight the generation, projection, and sustainment of CAF forces as well as key inputs from logistics' occupations.

LOE 3 — Technology and Systems

This LOE addresses excellence in Pan-Domain operations via transparent information, as well as secure, trusted, and curated data, enabling evidence-based decision-making and risk management.

Objective 3A — Business Intelligence and Performance Management Modernized

Effects A modern management system implemented and the adoption of trusted analytics to improve decision-making. Trusted data and system confidence, enabling evidence-based decision-making and risk management.

Tasks — Underway

- **3A.1** Support Government of Canada (GoC) climate change initiatives for vehicles.
- **3A.2** Conduct alternate fuels analysis with allies and partners.
- **3A.3** Participate in the development of DSC analytics, representing CAF interests.
- **3A.4** Develop a Joint Logistics strategic dashboard to measure, assess, and deliver improved results in all areas of Joint Logistics.

Tasks — Future

- **3A.5** Modernize and automate the Transportation reporting (mandatory/proactive) system.
- **3A.6** Leverage Business Intelligence tools to automate the development of future ammunition & explosive requirements.
- **3A.7** Adopt business intelligence tools and assessment in all aspects of through-life ammunition management in coordination with stakeholders to formalize a cradle-to-grave process for ammunition.
- **3A.8** Conduct data curating of all Joint Logistics data to ensure system confidence and trust.

Objective 3B — Defence Supply Chain Modernized

Effects Simplified user experience at the transaction layer and minimized back-end system customization. Trusted data system confidence by way of transparent information to enable evidence-based decision-making and risk management. Artificial Intelligence and Machine Learning tools leveraged to automate and modernize Joint Logistics. Joint logistics support to DSC technology projects strengthened to improve DSC resiliency and performance.

Tasks — Underway

- **3B.1** Complete the delivery of MISL.
- **3B.2** Lead and coordinate the Joint Logistics inputs into the DEFENCE^x project.
- **3B.3** Establish a modernized and digitalized Ground Distribution Network as part of the Distribution Military Inventory Network Optimization (DMINO) initiative.
- **3B.4** Lead and coordinate the Joint Logistics inputs into the Materiel Planning & Forecasting project.
- **3B.5** Lead and coordinate the Joint Logistics inputs into the AIT project.
- **3B.6** Lead and coordinate the Joint Logistics inputs into the Smart Pump Project.
- **3B.7** Lead and coordinate the Joint Logistics inputs into a National Control Point of Sale System across all Bases and Wings.

Tasks — Future

- <u>3B.8</u> Deliver optimized supply and maintenance functions using business best practices (Supply -Demand Integration).
- **3B.9** Integrate Artificial Intelligence and Machine Learning tools into Joint Logistics activities.
- **3B.10** Conduct a review of CAF strategic warehousing requirements to develop a modernization plan.
- **3B.11** Conduct a study of permanent and deployable/temporary joint logistics infrastructure requirements.
- **3B.12** Lead and sponsor a Food Services Management modernization project, that is integrated into the DSC ERP.
- 3B.13 Lead and sponsor a Fuel Management modernization project, that is integrated into the DSC ERP.
- **3B.14** Advance DSC data integration of key partner data through bespoke instances of Electronic Information Exchange or full integration into DSC ERPs.
- **3B.15** Develop a DSC Resiliency Strategy.

Objective 3C - Joint Logistics Requirements and Interoperability Enhanced

Effect Enhanced understanding of Joint Logistics requirements and alignment with pre-existing technologies and projects. Data sharing systems established that allow for increased digital enablement of logistics planning across the DSC.

<u>Tasks — Underway</u>

- **3C.1** Develop a Logistics Functional Area System Implementation Directive for adoption across DND/CAF.
- **3C.2** Finalize the establishment of the DSC Joint Requirements Office to align and communicate DND/CAF DSC digital requirements.

Tasks — Future

- <u>3C.3</u> Digitalize reporting tools to enable the creation of standardized and joint log common operating picture from strategic to tactical levels.
- 3C.4 Create a central point of contact and center of excellence within DND to assist with NATO and UN logistics software training and mission readiness.



LOE 4 — Governance

This LOE focuses on the modernization of Joint Logistics ARAs; CAF participation in DSC, Ammunition and Explosives, and Capability Development Governance; and DSC data stewardship.

Objective 4A — Joint Logistics ARAs Realigned (CJLog/Strat J4 - Spiral 2)

Effects Aligned CAF Logistics capabilities under JLN with clarified and formalized ARAs (CJLog/Strat J4 - Spiral 2). Modernized ARAs for warehousing and distribution, training of logisticians, and relationships within the DSC.

<u>Tasks — Underway</u>

- **4A.1** Establish CJLog as the ORA related to the training of logisticians at the Canadian Forces Logistics Training Center.
- **4A.2** Complete the transfer command and control of the Canadian Military Support Group to SJS, leading to the establishment of the CJLog.
- **4A.3** Update Inter Compartmental Capability Transfer, Designation Order, and Canadian Forces Organization Order for CJLog/Strat J4 Spiral 2.

Tasks — Future

- **4A.4** Assess the state, progress and implementation of CJLog/Strat J4 Spiral 2 ARAs changes for alignment.
- **4A.5** Assess the requirement for future ARAs and organizational changes for briefing to Armed Forces Management Board.

Objective 4B — Governance Modernized

Effects Institutional sustainment compliance requirements are balanced against operational support requirements. Modernized CAF role and participation in DSC governance. Increased DSC automation and the adoption of a risk-based framework for compliance, which includes integrated and aligned ammunition and explosives ARAs.

Tasks — Underway

4B.1 Establish a DSC resilience framework to bridge the global threat environment analytical gaps providing synchronized and real-time analysis of key strategic sustainment factors and emerging risks that may impact support to CAF operations and how these vulnerabilities can be mitigated.

<u>Tasks — Future</u>

- **4B.2** Establish a network of key stakeholders with select industrial partners related to the DSC and its resilience.
- **4B.3** Establish a network of key stakeholders within the GoC related to the DSC and its resilience.
- **4B.4** Rationalize Ammunition Programme governance and associated Ammunition Programme elements with definition of ammunition and explosives governance reporting chains.

Objective 4C — DSC Data Domain Stewardship Established

Effects DSC data domain that provides trusted, near-real time, accessible data to enable evidence-based decision-making. Strengthened central strategic governance of DSC data to promote data accessibility and usability to increase operational value and outcomes. Data is secure and protected from unauthorized access, misuse, or theft.

Objectives — Underway

4C.1 Establish DSC data domain governance.

<u>Objectives — Future</u>

- **4C.2** Assess the state, progress, and implementation of DSC data domain stewardship.
- **4C.3** Establish a governance program for continuous data cleansing within the DSC data domain.

Objective 4D — Joint Logistics Capability Development Governance Modernized

Effects Logistics requirements are integrated into all CAF projects. The integration and inclusion of Joint Logistics considerations into all CAF capability development through active participation in CAF governance to ensure readiness, combat capabilities, and sustainment interoperability.

Tasks — Underway

- **4D.1** Support force development project planning, experimentation, and prioritization through the provision of logistics expertise.
- **4D.2** Support the design and concept development of CAF future forces through the provision of logistics expertise.
- **4D.3** Support the development of CAF Sustainment and Logistics Doctrine, and NATO Logistics Doctrine.
- **4D.4** Represent CAF logistics in international and allied logistics governance and capability development.
- **4D.5** Refresh and modernize the Force Generation baseline ammunition and explosives annual requirements.

Tasks — Future

- **4D.7** Support Pan-Domain Joint Logistics interoperability through capability development by design (United States, FVEYs, NATO).
- **4D.8** Support and validate Force Development and Doctrine governance though the provision of logistics expertise.
- **4D.9** Formalize a relationship with Defence Research and Development Canada for advancement in Joint Logistics science and technology.
- **4D.10** Develop a concept of operations for ammunition innovation, research and development, and resilience.
- **4D.11** Represent and align the JLN capabilities and integration with key allies.
- **4D.12** Develop a framework to coordinate and oversee representation in Joint Logistics global engagements, including with NATO.
- **4D.13** Support the establishment of Northern Operational Support Hubs.
- **4D.14** Support the improvement of sustainment to the Royal Canadian Navy fleets.



Strategic LOE Summary

The following figure is an LOE summary outlining key LOE details and outcomes, and their relationship to both underway and future objectives and tasks that have been outlined above. It also shows that the centre of gravity

for *underway activities* is Joint Logistics Governance modernization; with key activities identified such as CJLog/Strat J4 — Spiral 2 implementation.

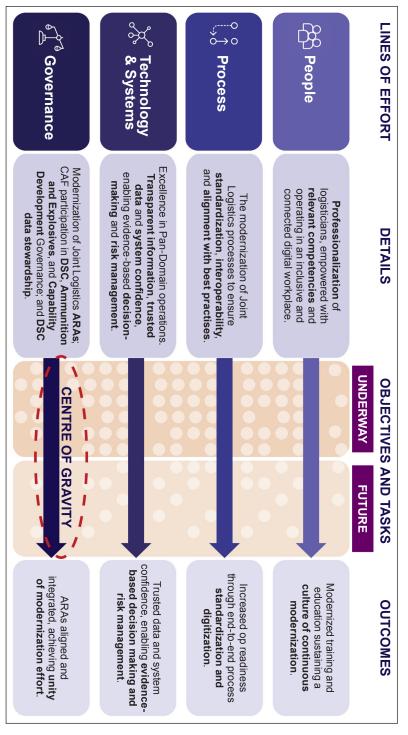


Figure 6: Joint Logistics Modernization — Strategic LOE Summary



CONCLUSION

Joint Logistics must strive to enable ready, resilient, and relevant forces. To support this, the JLMCP has identified key modernization objectives. articulated along the Strategy's four LOEs: People, Process. Technology and Systems, and Governance. Correspondingly, the codification of these critical and complementary modernization initiatives within a single strategic document provides a common route and destination for Joint Logistics modernization. The JLMCP establishes a focused roadmap to achieve tangible and transformative progress in both the requisite operational culture-change and its supportive governance restructure.

The JLMCP provides the operational focus for the CAF to apply the strategic planning, coordination, and responsive analytics that can move the JLMCP from theory to praxis. Furthermore, the formal appointment of a Chief Joint Logistics, enabled with distinctively defined ARAs, serves to facilitate the practical modernization of the JLN and improve CAF operational effectiveness.

The Speed of Relevance in a PDC2 context is the critical central idea within the JLMCP, against which the accomplishment of all Joint Logistics activities must be measured. If decisions are not taken or services and materiel are not delivered at the pace of operations, the CAF may risk information, decision, and operational advantage, compromising both CAF effectiveness and national credibility.

Governance modernization is the centre of gravity of the JLMCP *underway* activities, in support to the CAF readiness and operations functioning within a hybrid, contested, and allied-interoperable environment. Modern governance and governance restructure are paramount to Spiral 2 implementation and DSC data management. Only a reconstituted JLN governance regime can realize the requisite ability to achieve: a better balance between

operational effectiveness and materiel stewardship as well as joint strategic decision-making at the Speed of Relevance.

The JLMCP places significant emphasis on RCLS practitioners as the JLN's key assets. As such, the JLMCP directs investment in specialist education and training, inclusive culture-change management, and the digital transformation that will provide CAF-wide value. The need for process modernization is also modestly underway, as reflected in significant ERP modernization projects such as DEFENCE^x and in their supportive business process development. Expected efficiencies in all functional areas will be realized through JLN digitalization, a data-driven cultural transformation, and the revitalization of an operationally focused and more unified governance re-structure.

While the JLMCP attempts to recognize the myriad of inherent challenges within the Joint Logistics community and the systemic inhibitors to integration and modernization, it was done with purpose. These strategic issues were identified to provide the 'why' behind the development of this key strategic document, and the associated strategic direction and guidance that will follow. A comprehensive strategic analysis of the JLN, which provides a coherent and comprehensive way forward within a shifting global environment, while working collaboratively with key CAF allies and DND/Level 1 stakeholders, will be the key enabler for the CAF to meet ONSAF expectations.

The JLMCP is the first campaign plan to be released under the CDS OSM Strategy. It provides a clear path to a digitally integrated, agile, and resilient JLN. Ultimately investments in the JLMCP are investments in CAF readiness and military resilience: Achieving Speed and Advantage at the Pace of Operations through an Integrated and Interoperable Logistics Network.



Annex A – Guidance to JLN Leaders and Practitioners

JLN culture is the unifying nexus for moving the Joint Logistics agenda forward. As codified within the JLMCP, there is an emergence of a distinctive JLN culture (how we do business). This reflects the need for a common ethos for all logistics practitioners in order for Joint Logistics modernization to be achieved. This includes embracing the tenets of Mission Command⁹ and its application. As guided by the CJLog and in support of this JLN culture, Mission Command is both a practical and essential driver in advancing the JLMCP goal of delivering integrated and harmonious logistics effects. Correspondingly, the following guidance is provided to ensure that the JLN leadership, at all levels, understand their role in this enculturation process and to clarify how this Joint Logistics transformative exercise can be well-positioned for systemic and operational success:

- ▶ <u>The JLN is a construct within a system of systems</u>. The JLN must rationalize and solidify its integral position within the Sustainment Enterprise. Correspondingly, the JLN must align itself within a whole-of government construct, which links naturally to the DSC and its numerous stakeholder partnerships within industry, academia, and allied agencies. This will allow for the advancement of a JLN capability agenda that features enhanced innovation, systemic resiliency, and operational scalability.
- ▶ <u>The JLN reflects an agile and highly focused effects-based culture</u>. In the continuous pursuit of stewardship, JLN activities will feature the prominence of operationally effective product-results, secured efficiently, over wasteful process-functions, which traditionally result in the loss of scarce resources and tend to generate nugatory staff effort. Correspondingly, JLN state-of-the-art design innovation will only feature the most cost-risk-effective options that contribute directly to an enhanced and operationally effective end state.
- ▶ <u>The JLN must systemically incorporate resilience</u>. Since the modernization of the JLN is inextricably linked to CAF operational effectiveness via the DSC and its associated SLOC engagements, the JLN needs to developmentally accept the demise of the permissive operating environment and embrace the current and future challenges of the contested operating environment, to ensure that it is not structuring to fight the last war. Since CAF readiness is wholly reliant of Joint Logistics preparedness, the JLN must deny any single point of failure and must reflect both a resiliency consciousness and the practical application of all aspects of systemic military resiliency: defined as the operational or sustainment capacity to withstand, recover, restore, and adaptively 'bounce back' and thereby minimize the negative effects of contested degradation of military performance and/or the materiel loss of combat effectiveness, cost and risk-effecting.
- Maximize interoperability through common systems. A modernized and interoperable JLN needs to be able to digitally communicate with the full spectrum of Sustainment Enterprise partnerships, inclusive of DND/CAF, the DSC, OGDAs and allied collaborators. To assure such a level of interoperable communications, the JLN requires the systemic adaptability to link to a same by default common systems approach when considering the introduction of technical systems or digitized processes. Therefore, the introduction of any new JLN technical systems or digitized processes must reject bespoke or niche systems in favour of those which prove to be compatible with the wider dominant partnership networks and which can evolve within the parameters of those prevailing networks. Similarly, the JLN must not introduce any constraining complexity of logistics support systems, which feature solely distinct supply chains, their own entry points into the network, or support arrangements that are entirely outsourced to original equipment manufacturers.

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⁸ Mission Command articulates the dynamic and decentralized execution of operations guided throughout by a clear articulation and understanding of the overriding commander's intent. This leadership concept demands the aggressive use of initiative at every level, a high degree of comfort in ambiguity, and a tolerance for honest failure, Ref K.

Annex B - Terms and Definitions

<u>Capability Domains</u>: The capability-based planning process uses a conceptual capability framework that categorizes specific capabilities within six capability domains (Command, Sense, Act, Shield, Sustain, and Generate), which are also identified as Operational Functions, less Generate. (Ref AG - CFJP 5.0)

<u>CJLog</u>: The CJLog is the CAF Joint Logistics Authority. As such, the CJLog is a special advisor to the CDS for matters related to Joint Logistics. The CJLog is also the ORA for the training curriculum and training outcomes in support of Canadian Forces Logistics Training Centre's activities. This includes Service member succession planning and the stewardship of the various RCLS occupations. The CJLog may also be designated as the SJS – Strat J4.

<u>Contested Logistics Environment</u>: The environment in which the armed forces engage in conflict with an adversary that presents challenges in all domains and directly targets logistics operations, facilities, and activities in Canada, abroad, or in transit from one location to the other. (Ref D - OSM Strategy)

DSC: The DSC represents the end-to-end system of interdependent activities that function horizontally across, and are housed within National Defence organizations, other government departments and industry; to deliver the materiel requirements of the CAF both domestically and overseas. (Ref D - OSM Strategy)

<u>DEFENCE</u>^x: Formerly known as Defence Resource Management Information System Modernization (DRMIS), the project was rebranded as DEFENCE^x as it was more than a technology upgrade for the DND/CAF but rather an organizational change management and business transformation initiative. (Ref D - OSM Strategy)

<u>Enablement Ecosystem</u>: Represents the NATO concept that includes the integrated whole-of-government activities that support the projection of forces and materiel, as well as their reinforcement or resupply. The Enablement Ecosystem supports the JLN and the wider Sustainment Enterprise. It includes other government departments and agencies that fall outside of the Sustainment Enterprise. The Enablement Ecosystem supports the projection of forces and materiel through whole-of-government efforts, while it is the Global Supply Chain that produces, stores, transports, and disposes of materiel.

<u>Global Supply Chain</u>: The Global Supply Chain covers all the steps involved in manufacturing and delivering a product or service when those steps take place in more than one country. (Ref AL) In commerce, the Global Supply Chain is defined as the distribution of goods and services throughout a trans-national global network to maximize profit and minimize waste (Ref AK).

<u>Institutional Sustainment</u>: Is a component of the Sustainment Enterprise and the doctrinal function of Sustain. The integrated strategic sustainment activities that function horizontally across and housed within DND Level 1 organizations (largely excluding CAF), other government departments and industry, to deliver the readiness requirements of the CAF.

Joint Enabling Capability: Represents a CAF organizational and pan-domain grouping, defined by distinct personnel, training, process, role, and governance that delivers military sustainment effects as a component of the Sustainment Enterprise. The joint enabling capabilities are: Joint Logistics; Health Services Support; Royal Canadian Electrical Mechanical Engineers; Communications Information Systems; Military Police; and Joint General Support Engineers. (Ref D - OSM Strategy)

<u>JLN</u>: The JLN is the network of CAF personnel and organizations, that delivers logistics effects in support of CAF missions. It is joint and includes all CAF Services and Branches engaged in logistics effects delivery. The JLN is inclusive of Defence Team members employed within the CAF who deliver logistics effects. The JLN is also inclusive of industry partners, under contract with the CAF, who deliver logistics effects.

<u>Military Resilience</u>: The ability to resist and recover from a major shock such as a natural disaster, failure of critical infrastructure, or a hybrid or armed attack. (Ref AF - NATO AJP 4.1)

National Movement Support: This provides the capabilities required to deploy, redeploy, and sustain CAF elements conducting operations, at home or abroad. (Ref AH - CFJP 4.1)

Operational Functions: The Operational Functions consist of the five functions (Command, Sense, Act, Shield, and Sustain) are integrated at all the operational and tactical levels of war. (Ref AG - CFJP 5.0)

<u>OSM Framework</u>: The OSM framework: "strengthens the linkages within the Sustainment Enterprise between the Operational Support and Institutional Sustainment by aligning people, processes, technology, and governance to enhance readiness and extend operational reach." (Ref D - OSM Strategy)

<u>PDC2</u>: The PDC2 concept is about gaining advantage over our adversaries through the optimization of the SMDA decision cycle. This concept requires empowered People, agile Processes, resilient Structures, and diverse decision-support Technology; all of which will enable the rapid leveraging of Data. Collectively, these components support allied interoperability and integrated effects across all domains. The evolution of these five (5) components are foundational to the PDC2 concept. (Ref AD - PDC2 Concept Paper, Draft)

Reconstitution: Measures taken to restore a formation or unit to an acceptable level of readiness. (Ref-DTB Record 35053). CAF reconstitution includes three operational levels: reorganization, rehabilitation, and regeneration (Ref L - CFJP 4.0)

Reinforcement: Is the process of relocating forces in accordance with the strategic concept to any area at risk within and beyond the Alliance's Area of Responsibility to strengthen military capabilities as a means of conflict prevention, crisis management or defence. (Ref AI – NATO Logistics Handbook and DTB Record 695078)

Speed of Relevance: Is realized through the application of decision and actions. The CAF must be capable of transforming data into actionable information that will allow for rapid decision-making and near real-time responses. Joint Logistics modernization will enable the JLN to deliver fidelity on CAF resources and provide real-time and trusted data in the application of military force. The delivery of logistics support, for both readiness and operations, is measured by the Speed of Relevance.

SLOC: All the land, water, and air routes that connect a deployed force with the home nation, and along which sustainment activities occur, as well as the activities themselves. The lines of communications include the transportation nodes. The associated activities include reception, staging, onward movement, and integration; third-location decompression, and medical evacuation. (Ref - DTB record 41456)

<u>Sustainment</u>: Is the ability to maintain effective military power to achieve the desired effects. It includes the planning for all administrative arrangements necessary for the successful implementation of the campaign plan, including logistic and personnel support. (Ref D - OSM Strategy and Ref L - CFJP 4.0)

<u>Sustainment Enterprise</u>: Represents all the DND/CAF organizations, people, equipment, and data engaged in the provision of sustainment effects to enable defence readiness and the conduct of operations; broadly grouped under Institutional Sustainment, Operational Sustainment and Operational Support. (Ref D - OSM Strategy)

<u>System of Systems</u>: Is defined as a collection of task-oriented or dedicated systems that pool their resources and capabilities together to create a new, more complex system which offers more functionality and performance than simply the sum of the constituent systems. The methodology for defining, abstracting, modeling, and analyzing system of systems problems is typically referred to as system of systems engineering. (Ref AJ)

Theatre Movement Support: This provides the capabilities to move and sustain a deployed military force within a theatre of operations. (Ref AH - CFJP 4.1)

Annex C - References

- **A.** Our North, Strong and Free: A Renewed Vision for Canada's Defence, 2024 Our North, Strong and Free: A Renewed Vision for Canada's Defence
- **B.** Strong Secure Engaged, Canada's Defence Policy, 2017 Strong, Secure, Engaged: Canada's Defence Policy Canada.ca
- **C.** CDS/DM Directive for CAF Reconstitution, 6 October 2022, CDS/DM Directive for CAF Reconstitution Canada.ca
- D. Operational Sustainment Modernization Strategy, January 2023
- E. Future Force Design, Departmental Results Report 2022-2023, Future Force Design Canada.ca
- **F.** Canada's Indo-Pacific Strategy, MDDN- Mandate and Priorities 28 September 2023 International Security Canada.ca
- G. The CAF Sustainment Enterprise, Draft, Jun 2021
- H. Defence Supply Chain Governance Charter Version 3.0, ADM(Mat) and SJS, 29 January 2020
- I. The Defence Supply Chain: One broken link of the broken Defence Sustainment Enterprise (Placemat) Canadian Armed Forces
- J. Pan-Domain Force Employment Concept Prevailing in an Uncertain World (Canadian Armed Forces Operational Sustainment Modernization Strategy)
- K. Canadian Forces Joint Publication CFJP 01 Canadian Military Doctrine
- L. Canadian Forces Joint Publication CFJP 4-0 Support 1st Edition
- **M.** Canadian Armed Forces Digital Campaign Plan, 28 February 2023, Canadian Armed Forces Digital Campaign Plan Canada.ca
- N. A-LM-007-100/AG-001, Supply Administration Manual, 1.4 Performance Measurement Framework
- O. Defence Supply Chain Current State Review Presentation, 14 Jan 2022
- P. Future Security Environment 2013-2040, 2014 CFD
- Q. CDS Planning Directive for CAF Reconstitution, July 2021
- R. The Joint Log Strategy 2032 Enhancing and Extending Operational Reach for the RCLS, Draft, Feb 2022
- **S.** DND/CAF Data Strategy The Department of National Defence and Canadian Armed Forces Data Strategy Canada.ca
- **T.** Business Case Analysis, Defence Resource Management Information System (DRMIS) Modernization C.001788, Version 0.5
- U. Defence Supply Chain (DSC) Annual Report to Programme Management Board, Sep 2019 Dec 2020
- V. Spring 2020 Report 3 Supplying the Canadian Armed Forces National Defence, Reports of the Auditor General of Canada to the Parliament of Canada
- W. CBP Handbook, 2019
- X. NATO Concept Proposal for Collective Logistics
- Y. US Joint Concept Contested Logistics & Assured Logistics
- **Z.** ADF Functional Concept Advantage 2023
- AA. NZ National Security Strategy and Defence Policy Review 2023 Publications | Ministry of Defence Website

- <u>В</u>В. UK Defence Support Strategy Overview 2022 Defence Support Strategy - GOV.UK (www.gov.uk)
- United Kingdom, Ministry of Defence, Digital Strategy for Defence Delivering the Digital Backbone Update_-_Final.pdf (publishing.service.gov.uk) and unleashing the power of Defence's data, April 2021 20210421_-_MOD_Digital_Strategy_
- Australian Defence Force, Future Concept of Logistics, Version 1.0
- ₽ D. Pan-Domain Command & Control (PDC2) Concept Paper, Decision Advantage in a Dangerous World, Draft Version 5.3
- Pan-Domain Force Employment Concept, Prevailing in an Uncertain World
- **AF.** NATO AJP 4.1-Allied Doctrine for Logistics
- Canadian Forces CFJP 5.0 The Canadian Forces Operational Planning Process (OPP)
- AH. Canadian Forces Joint Publication CFJP 4-1 Movement, 2nd Edition
- AI. NATO Logistics Handbook, Third Edition
- 2 Popper, S, System-of-Systems Symposium: Report on a Summer Conversation Archived, 2011-09-28, Potomac Institute for Policy Studies, Arlington, VA
- ₽ K Bhatnagar, K, Customer-Oriented Global Supply Chains: Concepts for Effective Management. 2012 Hershey, Pennsylvania
- ₽ L toolkit, Glossary What is a Global Supply Chain | BDC.ca Government of Canada Business Development Bank of Canada, Articles and Tools, Entrepreneur's
- AM. North Atlantic Treaty Organization (NATO). DRAFT NATO COLLECTIVE LOGISTICS CONCEPT: 14 CAPDEV/CAP/TT-8524/SER:NU:2279 (NOTAL) May 2024. Brussels: HQ Supreme Allied Commander Transformation Division of Capabilities, ACT/
- AN. North Atlantic Treaty Organization (NATO). LOGISTICS ACTION PLAN: 10 May 2024. Brussels: Private Office of the Secretary General, DOCUMENT PO(2024)0149 (NOTAL)
- AO. North Atlantic Treaty Organization (NATO). BI-SC MINIMUM CAPABILITY REQUIREMENTS 2024 (MCR24): 15 March 2024. Brussels: SH/PLANS/SDF/CFR/24-014397, ACT/SPP/DP/TT-7296/ SER:NS:780 (NOTAL)



Annex D – Acronyms and Abbreviations

ADF - Australian Defence Forces

ADM - Assistant Deputy Minister

Admin - Administration

AIT - Automatic Information Technology

ARAs - Authorities, Responsibilities, and

Accountabilities

C2 - Command and Control

CAF - Canadian Armed Forces

CANSOFCOM – Canadian Special Operations

Forces Command

CBP - Capability Based Planning

CCSI - Chief of Combat Systems Integration

CDS - Chief of the Defence Staff

CFD - Chief of Force Development

CFJP - Canadian Forces Joint Publication

CJLoa - Chief of Joint Logistics

CJOC - Canadian Joint Operations Command

COTS - Commercial Off The Shelf

DM - Deputy Minister

DND - Department of National Defence

DMINO - Distribution Military Inventory Network

DRMIS - Defence Resource Management

DSC - Defence Supply Chair

DTB - Defence Terminology Bank

ERP - Enterprise Resource Planning (System)

FVEYs - Five Eves

GoC - Government of Canada

IAMD - Integrated Air and Missile Defence

JLMCP - Joint Logistics Modernization Campaigr Plan

JLN - Joint Logistics Network

L1s - Level 1s

LOE - Line of Effort

Min - Minimum

Max - Maximum

MPC - Military Personnel Command

NATO - North Atlantic Treaty Organization

NORAD - North American Aerospace Defence (Command)

OGDAs - Other Government Department and

ONSAF - Our North, Strong and Free

ORA - Occupation Requirements Authority

OSM - Operational Sustainment Modernization

PDC2 - Pan Domain Command and Control

Pers - Personnel

PFEC - Pan Domain Force Employment Concept

POL - Petroleum, Oil and Lubrication

RCLS - Royal Canadian Logistics Service

RSN - Reinforcement and Sustainment Network

Ref - Reference

SJS - Strategic Joint Staff

SSLogO - Senior Serving Logistic Officer

SLOC - Strategic Line of Communication

SMDA - Sense, Make Sense, Decide, Act

Strat J4 - Strategic J4

UK - United Kingdom

UOR - Urgent Operational Requirement

US - United States

VCDS - Vice Chief of the Defence Staff