



JOINT ANALYSIS AND LESSONS LEARNED CENTRE

NATO's Lead Agent for Joint Analysis



Introduction from the Commanding Officer



In 2012, we commemorate the Joint Analysis and Lessons Learned Centre's (JALLC) tenth anniversary as NATO's preeminent Lessons Learned organization and lead agent for Joint Analysis. From our roots as an organization steeped in maritime exercise analysis, the JALLC has transformed to support NATO's expanding role in global crisis response operations.

With the success of Operation UNIFIED PROTECTOR (OUP) in Libya and the continued commitment to security and reconstruction efforts in Afghanistan, 2011 was a momentous year for NATO. I am proud of the JALLC's direct contributions to these efforts. JALLC provided over 9,000 man-hours of support to OUP: providing

personnel to assist the Lessons Learned processes of NATO HQ and Allied Command Operations commands and conducting high-level reviews of the lessons that NATO and the Nations need to act on. Furthermore, in 2011 we provided direct analytical support to the Defence Planning and Policy Committee in the development of Defence Outputs Metrics and began a joint study with Harvard Medical School on military health care engagement in the civilian health sector.

In addition to our growing operational commitments, we remain focused on further development of the Lessons Learned Capability by expanding our Lessons Learned outreach activities to NATO Commands, and NATO and Partner Nations and by continued delivery of the quarterly NATO Lessons Learned Staff Officer Course in Sweden.

JALLC's primary effort continues to go into producing high quality joint analysis of NATO issues that will inform decision-making at operational, strategic, and even political level. Our commitment to the customer enables us to deliver analysis reports that provide the insight necessary to enable NATO to address issues effectively and propagate best practices.

As we reflect back on ten years of success, we also look forward to our onward journey of being recognized as NATO's lead agent for joint analysis!

Peter SONNEBY
Brigadier General, Danish Air Force
Commander

OVERVIEW

The Joint Analysis and Lesson Learned Centre (JALLC) is NATO's centre for performing joint analysis of operations, training, exercises, and experimentation. JALLC also maintains the interactive NATO Lessons Learned Database and undertakes Lessons Learned Outreach. The JALLC, in operation since 2002, is located in Monsanto, on the outskirts of Lisbon, Portugal, and has a permanent staff of 50 military and civilian personnel from 18 NATO countries, under the command of a brigadier general. In addition, one Partnership for Peace staff officer and eight civilian contractors support the analysis teams in their projects. JALLC's work spans the entire spectrum of NATO operations, exercises and activities.



The Tower of Belém, dating from the 16th century, was built to defend Lisbon harbour.

HISTORY

The precursor body to the JALLC was the Permanent Maritime Analysis Team (PAT) based at Northwood, United Kingdom. Established in 1978, the PAT conducted operational analysis of NATO maritime exercises using a staff composed predominantly of naval officers. During NATO's operations in the former Yugoslavia in the 1990's, the PAT was used to form the core of a joint analysis team.



JALLC's first Director, Brigadier General Jean-Pierre Roman, Belgian Army, stands with the Portuguese Minister of Defence, Mr Paulo de Sacadura Cabral Porta, Allied Command Atlantic Chief of Staff Vice Admiral "Dusty" Miller and SHAPE Deputy Chief of Staff Vice Admiral Roberto Cesaretti at the Opening of the JALLC on 06 December 2002.

In their final report, the Implementation Force (IFOR) Joint Analysis Team¹ recognized the lack of a standing NATO joint analysis capability, leading to the formation of a NATO Working Group tasked with developing the concept for what was to become the JALLC.

The operational requirement for the JALLC² was approved by the NATO Military Committee (MC) in June 1997³. The detailed JALLC implementation concept, which also recommended that the JALLC be located in Portugal, was submitted to the International Military Staff (IMS) in January 2000⁴ and approved by the NATO MC⁵, with the associated capability package⁶ approved by the North Atlantic Council

(NAC) on 07 December 2001. Finally, the NAC approved on 02 May 2002 the activation of the JALLC as a NATO Military Body from 02 September 2002 and the simultaneous de-activation of the PAT⁷. The JALLC formally opened on 06 December 2002 and declared full operational capability on 28 March 2006⁸.



General Luís Esteves de Araújo, Portuguese Chief of Defence, visiting the JALLC in July 2011

MISSION

The JALLC reports directly to the Supreme Allied Commander Transformation (SACT). Functionally, the JALLC is part of the Capability Development pillar in Allied Command Transformation (ACT). This pillar is functionally grouped to form five divisions, which, together with the JALLC, have responsibility for the entire Capability Development Process from Identifying Capability Needs through to Implementation. The Terms of Reference for Commander JALLC⁹ define the mission, roles, and command relationships of the JALLC, and the responsibility and authority of the Commander. The mission of the JALLC is:

“The Joint Analysis and Lessons Learned Centre is NATO’s centre for performing joint analysis of operations, training, exercises and Concept Development and Experimentation collective experiments, including establishing and maintaining an interactive managed Lessons Learned Database.”

Given the breadth of NATO’s current activities, the JALLC is increasingly tasked with analysis and lessons learned projects requiring direct contact with national Ministers of Defence, Partnership for Peace (PfP) Nations, the United Nations, and non-NATO military partners. Additionally, JALLC supports SACT with Lessons Learned Outreach.

The JALLC’s vision is:

“The JALLC will be recognized as NATO’s lead agent for joint analysis with our efforts and products respected, thereby enabling our contribution to improve the capabilities of the Alliance.”

ORGANIZATION

The approved JALLC peacetime establishment is 50 posts. The 1-star post of Commander JALLC is permanently filled by Denmark and the chief of staff is a Portuguese colonel or navy captain. A Partnership Staff Element position, currently filled by Austria, was integrated into the JALLC organization in July 2009. The JALLC organization is shown in Figure 1.

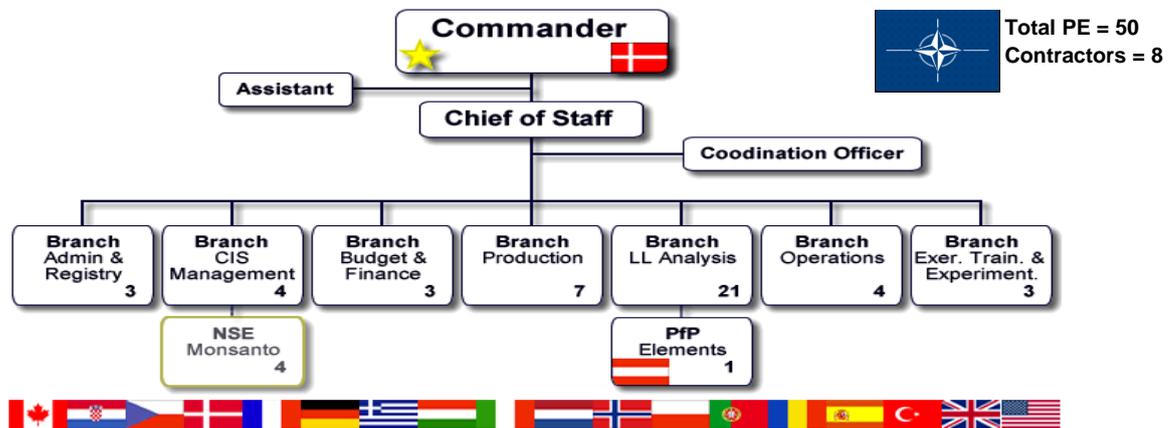


Figure 1: JALLC Organization (numbers show the total staff in each branch)

The Admin & Registry, CIS Management, and the Budget & Finance branches provide the support functions for the centre. A NATO Communication and Information Systems Services Agency (NCSA) Support Element (NSE-Monsanto) with four posts was established and co-located with JALLC in 2010.

The JALLC operates a matrix management system. The Operations Branch and the Exercise, Training and Experimentation Branch manage the analysis projects within their respective functional areas, while the Lessons Learned Analyst Branch provides the majority of the manpower resources for the projects. The role of the Production Branch is to provide scientific operational analysis support, to manage the NATO Lessons Learned Database (LLDb), and to provide editorial support to JALLC activities. Contractors are used as required to support the analysis projects and the LLDb. Experience demonstrates that a balance between scientific expertise and operational experience provided by a mix of military (credibility), civilian (continuity) and contractor (flexibility) analysts is essential to ensuring high-quality, insightful JALLC products.

LESSONS LEARNED IN NATO

The Lessons Learned Framework

In September 2011, the North Atlantic Council approved the updated NATO Lessons Learned Policy¹⁰ which provides the overarching policy for lessons learned in NATO.

The two Strategic Commands' (Bi-SC) Lessons Learned Directive¹¹ provides guidance to all levels of the NATO Command Structure within Allied Command Operations (ACO) and ACT, as well as national and multi-national headquarters from the NATO Force Structure participating in NATO exercises and operations. Since July 2007 this directive has provided an effective framework for the management of the NATO lessons learned process, to which the JALLC is a key contributor.

The Lessons Learned Process

The NATO Lessons Learned Policy and the Bi-SC Lessons Learned Directive describe the lessons learned process applicable to all NATO commands and bodies as illustrated in Figure 2.

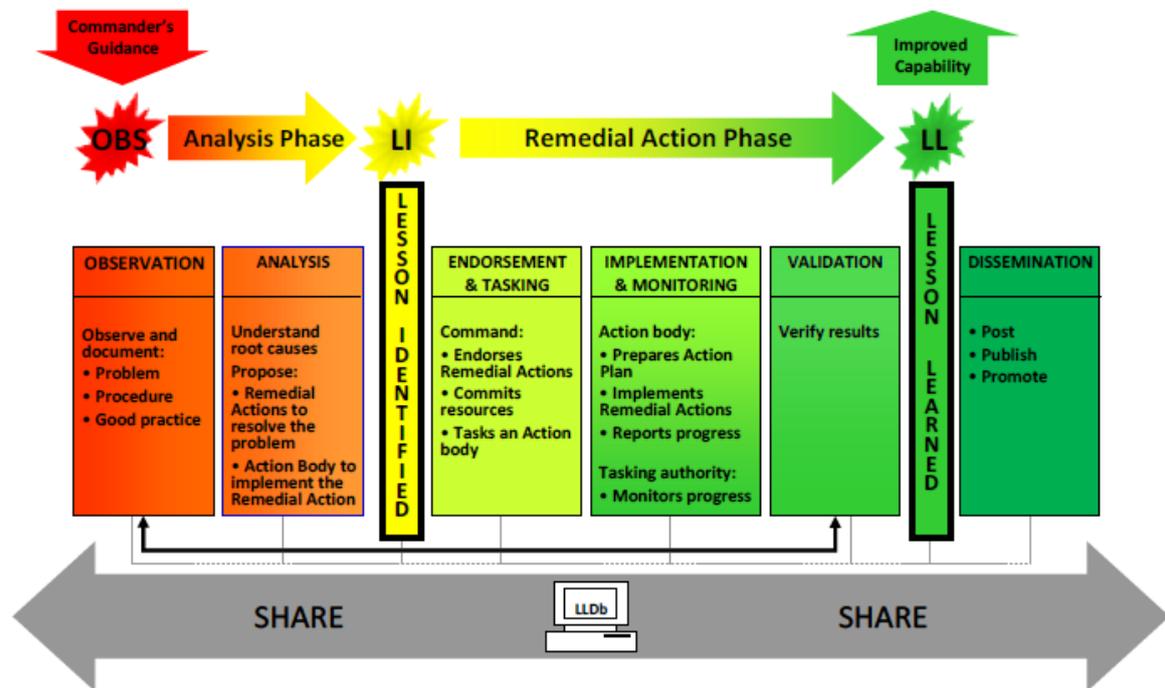


Figure 2: The Bi-SC lessons learned process

The overall process is divided into two phases; an Analysis Phase and a Remedial Action Phase. During the Analysis Phase, observations are documented when a given outcome does not meet or, conversely, exceeds expectations. The Analysis step allows for discovery of the root cause of the observed problem, and the creation of a Lesson Identified (LI).

The first step in the Remedial Action Phase is Endorsement and Tasking. During this step, mature LIs are presented to the organization's leadership for determination on how to best progress the LI through the LL process by endorsing the recommendations and assigning an appropriate Action Body. The leadership also commits to providing the resources needed to implement the Remedial Action. In the Implementation and Monitoring step, the Action Body prepares and implements their Remedial Action through the use of an Action Plan. The Lessons Learned Staff Officer (LLSO) supports leadership in monitoring its implementation. The Validation step ensures that the originally observed issue has been successfully corrected by the implemented remedial action. Following validation of a successful implementation of the Remedial Action, the LI is deemed a Lesson Learned, the formal LL process concludes, and dissemination and publication of the information occurs.

Within the overall NATO lessons learned process, JALLC's primary focus is the conduct of joint analysis projects, in which assigned analysis requirements are executed as part of JALLC's Programme of Work, as well as maintaining the interactive NATO LLDb.

It is important to note that despite its name, JALLC does not exist to learn lessons for NATO; per the NATO LL Policy and Bi-SC Directive, the responsibility to identify and record lessons, and to conduct remedial action lies with every NATO commander. The JALLC maintains the expertise in setting up LL processes to help commands prepare to collect their own lessons and the JALLC maintains the LLDb as a repository of lessons from commands to make them available to others.

When a problem seems to be bigger than a single command, however, the Joint Analysis portion of the JALLC name comes into play in that an analysis requirement can be submitted for inclusion in the JALLC Programme of Work as part of its analysis tasking process.

PERFORMING JOINT ANALYSIS

The Analysis Tasking Process

SACT tasks the JALLC directly¹² in the form of a JALLC Programme of Work, which is revised twice yearly to reflect the operational and transformational needs of NATO. Figure 3 illustrates the key organizations and the process involved in generating the JALLC Programme of Work.

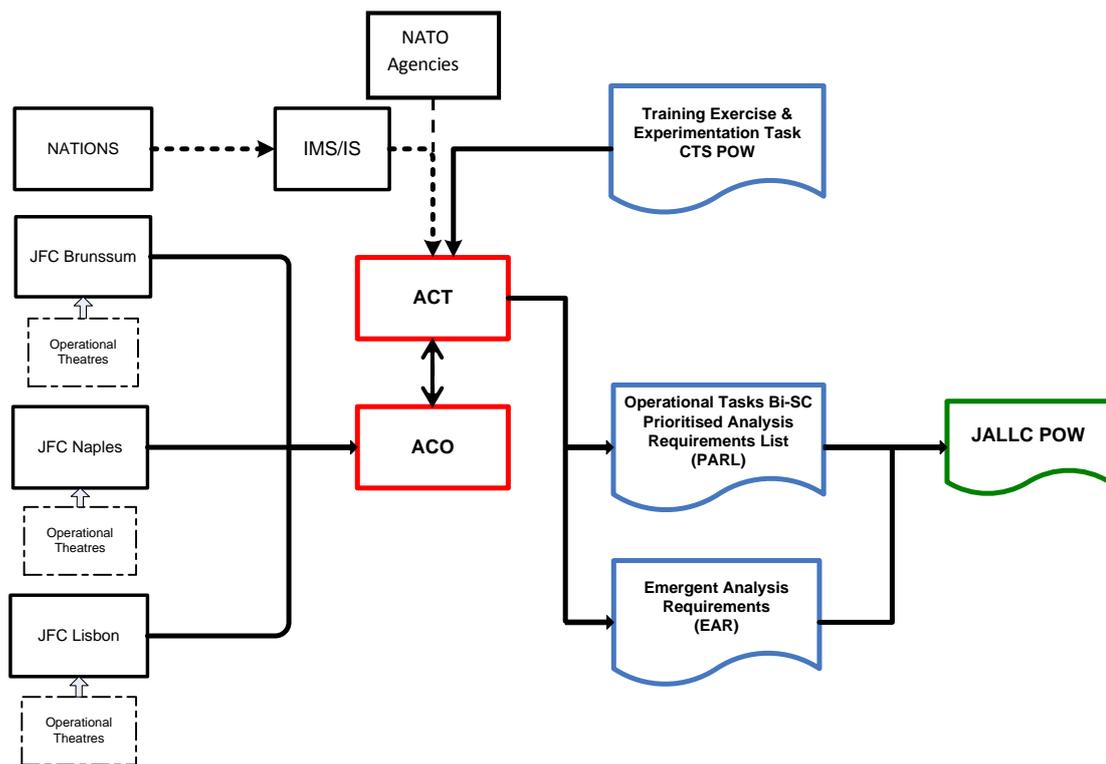


Figure 3: JALLC Tasking Process

Issues affecting NATO that need to be taken forward into an analysis project are termed Analysis Requirements (AR). ARs can be proposed by any NATO command within ACO via SHAPE. ACO's ARs for operations and exercises are prioritized by SHAPE and forwarded to HQ SACT where they are merged with ACT analysis requirements for exercises, training, experimentation and capability development.

Additionally, the NATO Nations, the IMS and International Staff (IS), and NATO Agencies can submit proposals for analysis to HQ SACT.

HQ SACT and SHAPE cooperatively prioritize all the ARs and develop the Prioritized Analysis Requirements List (PARL). The PARL is then used to design a responsive and balanced JALLC Programme of Work. As new issues arise, they may be inserted into the JALLC Programme of Work as Emergent Analysis Requirements.

JALLC Project Approach

When JALLC receives an analysis requirement, a seven-step analysis process is initiated as illustrated in Figure 4. The steps are: Starting Up, Initiating Project, Data Collection, Data Analysis, Coordinating Draft, Final Report, and Closing Project.

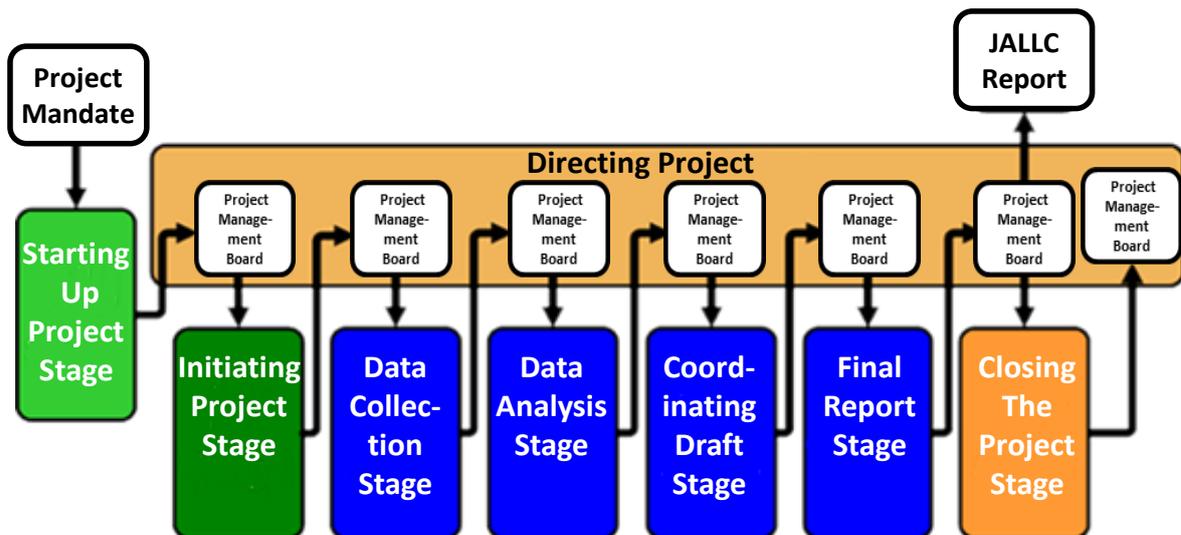


Figure 4: JALLC Project Approach

Project direction is achieved through the use of Project Management Boards occurring between stages. The Project Management Boards is the key decision-making forum for reviewing project performance, and for giving direction and guidance for the subsequent stage. Commander JALLC is the Project Management Executive and retains ultimate decision authority.

An analysis project starts with the issuance of a Project Mandate. The main focus during the Starting Up Stage is the development of the Project Brief which is used by the Project Board to validate the business case for committing JALLC resources to a project.

The Initiating Project stage lays the foundations for a successful project. Most of the project planning is conducted during this stage. The key product of this stage is the Project Initiation Document, the documented mandate for the entire project, which also serves as the contract with the customer.

In the following Data Collection stage, the data collection plan is executed by the project team, which usually deploys from the JALLC. Data is typically collected through a combination of interviews, observations and research of key documentation.

With data collection complete, the Data Analysis stage begins. The analysis project team, with the support of one of the Operational Research Analysts, conducts a detailed analysis of the collected data. The team then develops the outline structure of the analysis report. Most analysis report draft work occurs during the Coordinating Draft stage. At the end of this stage, external stakeholders from across NATO are provided a copy of the draft and asked for feedback.



JALLC personnel frequently deploy to collect data for analysis projects. Here a JALLC analyst interviews a course director for ISAF pre-deployment training for Police Operational Mentoring and Liaison Teams.

In the Final Report stage, external stakeholder comments to the Coordinating Draft are reviewed, and the analysis report is finalized in preparation for formal release by the JALLC Commander. The project team produces an End Project Report as the project is brought to a controlled close in the Closing Project stage. Throughout the process, the customer is continuously engaged.

JALLC Reports

The final product of an analysis project is a customer-focused report with actionable recommendations for improvements to NATO. The report recommendations are entered into the NATO LLDdb as Lessons Identified. JALLC analysis reports are distributed across NATO, including to National Liaison Representatives to HQ SACT and National Military Representatives to SHAPE, and when possible to partner and Troop Contributing Nations. Reports are also posted on the JALLC NATO Secret (NS) WAN portal (<http://workspace.jallc.nato.int>). When JALLC reports are received at SHAPE and HQ SACT, they undergo an endorsement process whereby SHAPE and HQ SACT staffs identify which of the recommendations made in the report they endorse for implementation within their respective commands. Additionally, a Bi-SC Lessons Learned Working Group considers each report with a view to identifying actions that may be necessary at the SC level or external to the SC structure. Once an action item has been endorsed, its status in the NATO LLDdb is updated to show the body responsible for implementing the action and any associated milestones.

The JALLC has carried out a wide range of projects since its activation in September 2002. Although originally conceived to carry out predominantly exercise analysis, changes to the NATO environment, including the formation of ACT, the development of the NATO Response Force, and the growing NATO involvement in operations, have resulted in an increasingly diverse range of tasks.



JALLC analysis supports NATO operations around the world.

Over the course of its history, JALLC has provided analysis support to every NATO operation since 2003 and to a wide variety of Alliance activities, including:

- Operations ACTIVE ENDEAVOUR, DISTINGUISHED GAMES, ISAF, KFOR, OCEAN SHIELD, UNIFIED PROTECTOR,
- Operational level NATO Response Force Exercises (STEADFAST Series)
- NATO Disaster Relief to Pakistan
- The NATO missions in support of African Union Mission in Sudan and NATO Training Mission – Iraq

JALLC reports have analysed a breadth of topics and their recommendations have translated into improvements NATO. Significant examples include:

- OUP – Lessons from National Military Perspectives
- OUP – Lessons for the Alliance
- Operation ALTHEA – EUFOR C2 Architecture
- Fratricide Prevention for Air-to-Ground operations
- ISAF Pre-Deployment Training for Police Operational Mentoring and Liaison Teams
- External Information Sharing in Support of NATO Counter-Piracy Operations
- Allied Command Operations Intelligence Structures and Processes
- Motivating Improved Contributions to the Alliance: Output Measurements
- Information Flow and Command and Control in Joint Headquarters
- The Crisis Response Operations Urgent Requirements Approval Process
- The Lessons Learned Process and Lessons Learned Sharing in NATO and Nations
- ISAF Command and Control
- Medical Civil-Military Interaction

JALLC SUPPORT TO THE NATO LESSONS LEARNED PROCESS

The JALLC plays a very active role in supporting the NATO Lessons Learned Process. In addition to our MC mandated task of providing a managed, interactive LLDb—the functionality of which has been vastly improved since 2010 by the LL Portal—JALLC is actively involved in the development of the LL concepts that have gone into both the NATO-wide LL Policy and the Bi-SC Directive on Lessons Learned, and in providing LL training and outreach to other NATO and Partner entities.

Furthermore, when tasked by SACT, JALLC can augment NATO bodies' LL personnel and assist them in the direct capture and preliminary analysis of lessons. As just one example of this kind of augmentation, during the early phase of OUP, JALLC deployed personnel to NATO HQ, SHAPE, and JFC Naples to assist staff there in the capture and recording of lessons. Similarly, JALLC maintains a deployed Permanent Representative in HQ ISAF in Kabul, who provides LL support and advice to ISAF LL Branch and assists those JALLC analysis teams deploying to Afghanistan.

The NATO Lessons Learned Database

The JALLC maintains two LLDbs on behalf of NATO; the classified LLDb on the NS WAN (<http://jallc-lldb.jallc.nato.int/>) since April 2005; and the unclassified LLDb on the internet (<https://lldb.jallc.nato.int/>) since June 2006.

The NS WAN LLDb currently stores over 1200 observations and lessons from NATO operations, exercises and training worldwide, submitted by JALLC and NATO commands. The LLDb has functions to support the staffing of observations and lessons in accordance with the Bi-SC lessons learned process as illustrated in Figure 2.

The database allows users to subscribe to automatic e-mails to alert them when staffing changes take place or when milestones are approaching. Observations can be tagged with relevant staffing criteria such as the NATO Task List (NTL), which allows for trend analysis and gives NATO insight into recurring themes observed on during operations and exercises.

Lessons Learned Portal

In January 2010, a proposal was submitted to ACT leadership to improve NATO Lessons Learned Database information sharing capacity. The JALLC developed a Lessons Learned Portal (NLLP) prototype on both NATO Secret and NATO Unclassified networks, which went live in October 2010.

The intent of the JALLC NLLP is to offer fast and reliable access to Lessons Learned products, and to act as a powerful tool to share and disseminate information within the LL community, including Centres of Excellence. The NLLP provides a repository for all LL Publications, such as the NATO LL Policy and the Bi-SC Directive. Authorized users are able to upload their own LL related information, participate in different forums, and make suggestions to improve the system.

Since sharing of information is one of the most vital elements of being a learning organization, JALLC is continually engaged in improving the performance and functionality of the tools that provide for that sharing. Both the LLDb and the NLLP undergo a constant and iterative process of spiral development to implement improvements, particularly with regard to usability.

Outreach and Training Activities

In 2010, the JALLC established the JALLC Advisory and Training Team (JATT), with the aim of providing support to NATO HQs and bodies, NATO Nations and Partner Nations in order to assist them in improving or establishing their lessons learned capabilities.

Additionally, JALLC conducts a biannual Analyst Training Course which is primarily designed to train JALLC staff officers, but is open on a space available basis to staff officers from across NATO. In the summer of 2011, the JALLC assumed responsibility for the quarterly NATO Lessons Learned Staff Officer Course in Sweden. The Lessons Learned Staff Officer Course is open to all NATO and Partner bodies and Nations. Lastly, JALLC convenes an annual NATO Lessons Learned Conference which allows the NATO Lessons Learned community to strengthen their working practices and relationships. The 2011 conference was attended by 271 persons from 30 NATO and Partner nations, representing over 90 NATO and national commands and agencies.

RECENT ACHIEVEMENTS

JALLC has taken a number of initiatives aimed at assisting NATO as a learning organization, improving the quality of the JALLC's products, and enhancing the outreach to NATO nations, partner nations and Troop Contributing Nations by:

- Supporting International Military Staff and International Staff with implementation of NATO Lessons Learned practices;
- Implementing a PRINCE2-based internal project management methodology;
- Improved training programme for new JALLC staff officers;
- Fostering relationships with TCNs, the Organization for Security and Co-operation in Europe, UN and the Military Staff of the European Union;
- Introduction of the JALLC Explorer newsletter and project factsheets to keep the NATO community updated on JALLC activities in the areas of analysis, lessons learned, and outreach.
- The JALLC published the Joint Analysis Handbook¹³ in 2007 and the NATO Lessons Learned Handbook 2nd Edition¹⁴ in September 2011.



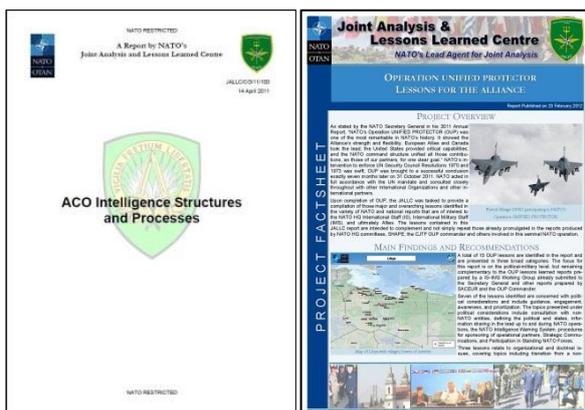
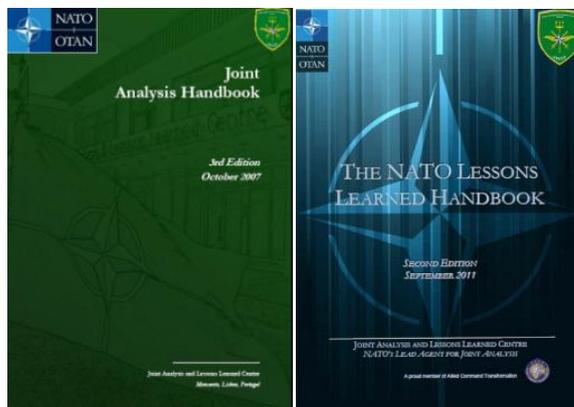
A number of Staff Colleges and other military training institutions visit JALLC every year. Here, General Sonneby briefs visitors from the Baltic Defence College.

JALLC PRODUCTS

JALLC products are available via our NATO Secret WAN and, for non-classified products, on our Internet site.

JALLC Handbooks – The Joint Analysis Handbook and the NATO Lessons Learned Handbook

These two handbooks guide NATO personnel assigned to either analysis tasks or to Lessons Learned posts in NATO or national bodies. The Joint Analysis Handbook provides an overview of the joint analysis process followed by a detailed “How-to” describing specific steps and tools for conducting operational analysis. The NATO Lessons Learned Handbook provides a philosophical description of a Lessons Learned Capability as well as detailed information on how Lesson Learned personnel can best execute their duties.



JALLC Reports and Project FactSheets

All JALLC Reports are published on our NS WAN Website. For every report, JALLC produces a two page summary, called a Project FactSheet, designed to alert potentially interested parties to the existence of a JALLC report. The Project FactSheets provide a summary of the project, its methodology and the main findings

JALLC Newsletter – The Explorer

The JALLC Explorer, whose name honours the traditions of our host nation and the spirit of discovery that today drives JALLC’s ceaseless quest for objective insight to champion improvement in NATO, is published quarterly. It aims to highlight JALLC activities and engagement in the variety of arenas in which we are active, giving our readers an appreciation for our contribution to Alliance transformation.



SUMMARY

JALLC analysis reports provide the necessary insight to enable NATO to address issues and propagate best practices. As a result, the JALLC is instrumental for the successful implementation of the NATO Lessons Learned Policy and Bi-SC Lessons Learned Directive. Through the Lessons Learned Database and the Lessons Learned Portal, the capability to communicate and staff lessons within NATO has improved immeasurably since the establishment of the JALLC in 2002. Now entering its second decade of service, the JALLC's focus on real world operations and outreach helps propagate best practices to all stakeholders within the NATO community.



Located in Belém, along the banks of the Tagus River, the Monument to the Discoveries commemorates the Portuguese explorers of the 15th and 16th centuries. Today, JALLC upholds the spirit of discovery and exploration championed by Prince Henry the Navigator, at the head of the explorers depicted, who established the Sagres School for Navigators, the most advanced study and research centre of its time—arguably Europe's first LL Centre.

If you need to know more about the JALLC or any of our activities, please do not hesitate to contact us at:

<http://www.jallc.nato.int>

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NOTES

- ¹ Joint Analysis Team (JAT) Final Report, 26 March 1997, CEL 3109/69E, NATO CONFIDENTIAL.
- ² SACLANT SACEUR Draft Concept for a Bi-MNC Joint Analysis and Lessons Learned Centre JALLC, 21 March 1997, C-361/Ser NR0030, NATO RESTRICTED.
- ³ MCM-0059-1997 Joint Analysis and Lessons Learned Centre (JALLC), 03 June 1997, NATO RESTRICTED.
- ⁴ SACLANT SACEUR Bi-SC Detailed Implementation Concept for the Joint Analysis and Lessons Learned Centre (JALLC), 13 January 2000, 3500 HC-3302/Ser: NU, NATO RESTRICTED.
- ⁵ MCM-0036-2000 Detailed Implementation Concept for the Joint Analysis and Lessons Learned Centre (JALLC), 08 March 2000, NATO RESTRICTED.
- ⁶ SHAPE/SACLANT Capability Package 5A0045/9B9051 Provide Joint Analysis and Lessons Learned Centre (JALLC), 21 December 2001, Action Sheet to C-M (2001)91, NATO UNCLASSIFIED.
- ⁷ Joint Analysis Lessons Learned Centre (JALLC) Activation, 18 April 2002, C-M (2002)43, NATO UNCLASSIFIED.
- ⁸ JALLC Declaration of Full Operational Capability, 27 March 2006, 3050.01/JALLCCG/20.06, NATO RESTRICTED.
- ⁹ MC 0510 Terms of Reference for Directors JWC, JFTC and JALLC, 30 April 2004, NATO RESTRICTED.
- ¹⁰ SG (2008)0806 (INV) NATO Lessons Learned Policy, 31 October 2008, NATO UNCLASSIFIED.
- ¹¹ Bi-SC Directive 80-6 Lessons Learned, 06 July 2011, NATO UNCLASSIFIED releasable to PfP.
- ¹² MC 0510 Terms of Reference for Directors JWC, JFTC and JALLC, 30 April 2004, NATO RESTRICTED.
- ¹³ JALLC, Joint Analysis Handbook 3rd Edition, October 2007, JALLC Monsanto Lisbon Portugal.
- ¹⁴ JALLC, NATO Lessons Learned Handbook 2nd Edition, September 2011, JALLC Monsanto Lisbon Portugal.



...IN SUPPORT OF INTELLIGENT CHANGE

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