A Report by NATO's
Joint Analysis and Lessons Learned Centre

JALLC/CG/10/271

18 November 2010

The Lessons Learned Process and Lesson Sharing in NATO and Nations

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FOREWORD FROM THE COMMANDER

I am pleased to present this JALLC analysis report on the lessons learned process and sharing of lessons in NATO.

This JALLC study coincided with an emergent requirement to study the lessons learned process in ISAF. That report, published in February 2010, and a point paper on the KFOR LL process, published in May 2009, are reflected in this report because many of the operation-specific themes were also observed across the Alliance as a whole. The issue of an emergent analysis requirement, with its consequent reporting requirement, delayed this NATO-wide report. The analysis looked at the lessons learned process within the NATO Command Structure and NATO Force Structure, and the manner in which lessons were shared within these structures and with NATO member and non-member nations.
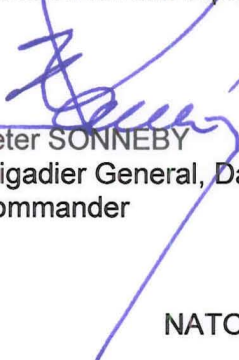
During the study, the JALLC team looked at the purview of lessons learned in NATO. The study was conducted through a questionnaire widely distributed throughout the LL communities within the Alliance, and with follow up interviews in KFOR, ISAF, numerous HQs throughout NATO as well as eight NATO nations and three partner nations.

The analysis finds many common problems in the lessons learned processes and many impediments to sharing, many of which can be overcome. A key finding is that there are three critical factors for a successful lessons learned process: Leadership, Stakeholder Involvement, and Information Assurance. Above all, the improvement of the NATO LL process must be championed by commanders.

The overarching recommendations of this report relate to lesson sharing and leadership oversight of the LL process. We recommend the provision of a STANAG to harmonise sharing efforts across the Alliance; the location of the Lessons Learned Branch in a position of influence and oversight in the organizational structure of headquarters; and the adoption of a Best Practice, observed among several Nations, of a high-level Lessons Learned review board to ensure leadership engagement throughout the lessons learned process.

Lessons must be shared early and shared widely for the benefit of others, on a basis of *'responsibility to share'* rather than *'need to know'*. Lessons should be shared with successive stakeholders, to minimise the loss of knowledge through rotations, but also with peers in other units who may encounter similar problems, and higher HQ who may act as the owners of knowledge continuity between rotations.

This report may help NATO and Troop Contributing Nations to learn and adapt more quickly from the experiences of current operations, and may inform the planned revisions of the NATO Lessons Learned Policy and the Bi-SC Directive 80-6 Lessons Learned. I hope that all NATO organizations, member and partner Nations are able to benefit from this report.

Peter SONNEBY
Brigadier General, Danish Air Force
Commander

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From April 2009 to March 2010 at various national and NATO HQ locations, KFOR, and ISAF, with the report prepared in Monsanto, Portugal.

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Executive Summary

MISSION

In the 2009 Joint Analysis and Lessons Learned Centre (JALLC) Programme of Work, the JALLC was tasked with undertaking a study on Lessons Learned (LL) processes and information sharing within NATO and among Troop Contributing Nations (TCN).

Analysis Requirement: On an opportunity basis, examine national, and NATO, lessons learned processes and mechanisms for sharing lessons learned among the TCNs and between TCNs and NATO, to improve timely employment of lessons and knowledge by NATO forces and/or NATO-led forces.

The agreed Analysis Objectives (AO) were:

AO-1. Examine the nations' LL processes to identify good practices.

Sub AO-1.1. Examine the nations' LL processes.

Sub AO-1.2. Examine the integration of lessons in the National Forces' pre-deployment training for NATO and/or NATO-led Operations.

Sub AO-1.3. Examine the integration of lessons after NATO Response Force rotations.

AO-2. Examine the mechanisms used to share lessons and knowledge between NATO and the TCNs, and among the TCNs, to identify possible barriers.

METHODOLOGY

Data was collected through questionnaires sent to NATO nations, Partner nations, NATO commands, HQs and Centres of Excellence, as well as through interviews of commanders, operational and LL staff in the International Security Assistance Force (ISAF), the Kosovo Force (KFOR), a sampling of NATO HQs and nations, both NATO and non-NATO.

MAJOR CONCLUSIONS

LL Process

The analysis found that most NATO HQs and most nations have functioning internal learning processes that permit experience, including operational experience, to be exploited to improve efficiency and effectiveness. National pre-deployment training can be positively influenced by operational experience within two rotation cycles. However, many NATO HQs and nations have ineffective processes for receiving and actioning lessons from external third parties.

Among NATO HQs and nations, lessons learned receive limited leadership engagement in terms of resourcing, endorsement and oversight. LL staff are frequently untrained for their role and double-hatted with other tasks. On operations, the rotation of staff seriously degrades the ability to manage knowledge and long-term lesson learning activities. Few analysis support resources are made available to LL Staff. Lessons receive sub-optimal leadership oversight and support during the endorsement, tasking and validation phases of the LL process.

Information Sharing

Information sharing is very limited. On operations, lessons are communicated from tactical units via national communication and information systems to national HQs, but

rarely via the NATO operational chain of command. NATO receives very little benefit from in-theatre experience. Sharing among nations is limited to small communities of interest, such as the America-Britain-Canada-Australia (ABCA) community, the Scandinavian community, or the community of Germany, Switzerland and Austria. Few lessons are shared systematically with NATO as a whole.

Information sharing depends upon adherence to the principles of information management. In terms of LL, information assurance is particularly important. The sharing externally of lessons is limited due to doubts over the quality, applicability and relevance of the lesson to others. The active learning of external lessons is limited due to doubts of relevance, currency and integrity. Few organizations actively learn from others.

Good Examples

There are good examples of LL processes that can be emulated. For example, counter Improvised Explosive Device (IED) organizations have features desired in LL processes. Each IED incident is carefully investigated and analysed for new developments, equipment or Tactics, Techniques and Procedures. This information is quickly processed and shared broadly within ISAF, passed to deployed troops, and incorporated into training. While all of this happens outside a "Lessons Learned Organization", it is a form of LL process within the C-IED community of interest. There is a clear leadership drive to use all information from all sources to improve rapidly the survivability of troops against the IED threat. Its emulation in other areas of NATO activity would bring significant benefit to the Alliance, and their troops.

CRITICAL SUCCESS FACTORS

The analysis team found that three *Critical Success Factors* have the greatest influence on the effectiveness of LL processes. These factors are:

Leadership

Leadership is the key element in ensuring the effectiveness of a LL process. LL processes are frequently personality driven, wherein the commander's personal belief and support of a LL process is clearly reflected in the outcome. Many tasks that a commander or Command Group are not personally reviewing from time to time invariably languish in the background. LL process tasks are frequently in this category. Commanders should exhibit sound leadership support for LL, by assigning priority to the LL process, both by direct order and by inference, by assigning the requisite resources, and by inspiring innovation and demanding results.

Stakeholder Responsibility

While leadership is a key factor in the LL process, the involvement of all stakeholders affected by a LL process is essential, be they observers, SMEs, related staff and command branches or LL staff. Involving those affected by a problem and/or its resolution early in the LL process pays considerable dividends in both ensuring the root problem is found and addressed, and in ensuring timely implementation of the solution. Omitting a key office, branch or unit in the analysis, and recommendations for RA, invariably leads to omissions and/or resistance to changes intended to advance the issue.

Information Assurance

Information Assurance underpins both the information that forms lessons (the quality of the analysis, for example), and also the process which leads to the creation of

observations and the resolution of LL (the process of appraisal). Stakeholders' trust in information is important: information must be managed carefully in accordance with the principles and procedures of Information Knowledge Management. Perceptions of poor quality quickly degrade the utility of information and knowledge, particularly when sharing between stakeholders. Information Assurance processes also apply to the creation of LL: honesty, openness and self-appraisal are essential to improve performance.

KEY RECOMMENDATIONS

Primary Recommendations

HQ SACT: JALLC recommends that HQ SACT initiate the preparation of a STANAG proposal[1] with the purpose of facilitating lesson sharing between nations through standardization of lesson data and format. The STANAG should address, as a minimum, factors for sharing such as:

- A standard template for the format of lessons[2]. A standard format would permit easier access, transfer and provision of lessons between lesson databases and with the NATO LLDb,

- A minimum content[3] to allow effective learning from, and staffing of, lessons,

- A common portal for posting lessons.

NATO HQ, HQ SACT and SHAPE. JALLC recommends that NATO HQ, HQ SACT and SHAPE revisit the NATO LL Policy[4], and the Bi-SC LL Directive[5] to ensure that several themes are clarified. These include:

- LL organizations are centrally located within HQs or unit organizations in order to act effectively across departments, branches and sections. To achieve this, a LL organization should be within the Knowledge Management Directorate for Joint Force Commands, or within the Commander's staff or COS for other HQs. LLSOs must have close coordination with the Business and Information Management cell to ensure rapid incorporation of lessons into the HQ endorsement and tasking process. HQ SACT and SHAPE should ensure that each HQ, unit or operation has a LL organization with the necessary capability (staff and equipment), process and tools to support the LL process.

- Analysis and good observation and lesson preparation should be within in-house capability of headquarters. Outside analysis support is usually only required for broad scope, high-level or unusually complex issues.

- LL guidance must concur with other IKM and related direction and guidance.

- All internal LL direction and guidance includes clear instruction on the process for staffing and sharing, where applicable, lessons outside headquarters, and also for incorporating lessons from outside the headquarters into the internal LL process. Instruction should include the appropriate communication tool

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[1] This proposal should be in accordance with AAP-3 *Directive for the Development and Production of NATO Standardization Agreements (STANAGs) and Allied Publications (APs).*

[2] For example: *Observation*, *Discussion*, *Conclusion*, *Recommendation*

[3] For example: *Observation*, *Analysis*, *Remedial Action* and recommended *Action Body*.

[4] NATO Lessons Learned Policy; SG(2008)0806(INV); 31 October 2008; NATO Unclassified Releasable To ALB/HRV

[5] Bi-SC Directive 80-6 Lessons Learned; 23 July 2007; NATO/PfP Unclassified

(preferably the NATO LLDb), the processes for endorsement and authority to share, and the roles and responsibilities of the relevant stakeholders.

- Members of HQ LL working groups should have adequate knowledge of and authority within their branches to be able to act on behalf of the branch chief, conduct analysis and manage Remedial Action tasks.

HQ SACT and SHAPE. JALLC recommends that HQ SACT and SHAPE establish a high-level review board for lessons in NATO Military Authorities, and direct that NATO commands and units do likewise. The review board should be chaired by a Command Group lead (COS or DCOM) and should actively review lessons for validity, resourcing, progress, and closure.

Additional Recommendations

HQ SACT and SHAPE: JALLC recommends that HQ SACT and SHAPE ensure that Job Descriptions for LLSOs include:

a. The requirement to have received training in the duties and responsibilities of LLSOs, the NATO LL process, and basic analysis, via the NATO LLSO Course provided by HQ SACT.

b. The requirement to conduct analysis in support of lessons, and to support unit SMEs with analysis capability.

c. Clear direction on the requirement for LLSOs and LL OPRs to understand requirements and standards for classification and release of documents, including lessons.

Distribution

Action:

External:

SHAPE

HQ SACT

Information:

External:

SACTREPEUR

SHAPE FOR RER FSL

SHAPE FOR RER FSL Lessons Learned

SHAPE J7/TTX

HQ SACT ACOS CAP REQ

HQ SACT DCOS SPP

HQ SACT CAPDEV PPM LLI

National Military Representatives to SACEUR

National Liaison Representatives to SACT

Bi-SC Military Cooperation Division

JWC

JFTC

JFC Brunssum

JFC Naples

JFC Lisbon

NSO

HQ ISAF

HQ KFOR

IJC

ISAF HQ AAG LESSONS LEARNED CHIEF IS

JCOA

Internal:

JALLC Operations Branch

JALLC Training, Exercise and Experimentation Branch

JALLC Production Branch

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Introduction

BACKGROUND

1.   In the 2009 Joint Analysis and Lessons Learned Centre (JALLC) Programme of Work[6] the JALLC was tasked with undertaking a study on Lessons Learned (LL) processes and information sharing within NATO and among Troop Contributing Nations (TCN). The principal customer was identified as Joint Force Command (JFC) Brunssum, and stakeholders include SHAPE, HQ Supreme Allied Commander Transformation (SACT), the JFCs, training establishments in ACT, and the nations. The project was initiated in March 2009 and data collection included visits to a selection of NATO and non-NATO nations, and to two NATO operations: Kosovo Force (KFOR) and the International Security Assistance Force (ISAF).

ANALYSIS REQUIREMENT AND ANALYSIS OBJECTIVES

2.   **Analysis Requirement**: On an opportunity basis, examine national, and NATO, LL processes and mechanisms for sharing LL among the Troop Contributing Nations and between TCNs and NATO, to improve timely employment of lessons and knowledge by NATO forces and / or NATO-led forces.

3.   The agreed Analysis Objectives (AO) were:

   AO-1. Examine the nations' LL processes to identify good practices.

   Sub AO-1.1. Examine the nations' LL processes.

   Sub AO-1.2. Examine the integration of lessons in the National Forces' pre-deployment training (PDT) for NATO and/or NATO-led Operations.

   Sub AO-1.3. Examine the integration of lessons after NATO Response Force (NRF) rotations.

   AO-2. Examine the mechanisms used to share lessons and knowledge between NATO and the TCNs, and among the TCNs, to identify possible barriers.

4.   Upon completion of the JALLC team's deployment to KFOR, the Chief of Staff (COS) KFOR requested an immediate product with which to be able to initiate change during the then current rotation in KFOR. To meet this request, the JALLC published a point paper on the immediate observations arising from the data collection in KFOR (Reference A). Annex F contains a transcript of Reference A.

5.   During the course of the ISAF pre-deployment period, an emergent analysis requirement (EAR) arose to focus on the "real problems in ISAF" (Reference B). The EAR that reached the JALLC was:

   "Following the ISAF Lessons Learned In-Progress Review with SACT on 19 March 2009, a recommendation was made to conduct and document, in co-ordination with ACO, an analysis of the real problems with Lessons Learned in ISAF. This recommended analysis has been proposed to ACO, via JFC HQ Brunssum, and HQ ISAF as an emergent analysis team, under the lead of the JALLC, to identify the ISAF LL challenges and recommend solutions."

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[6] SACT, 2009 JALLC Programme of Work, 08 October 2008, 5000 TI-3592/TT-3514/Ser: NU0585, NATO Unclassified

6.   Shortly after this EAR was received, the Commander (COM) JALLC and Director of US Joint Forces Command's (JFCOM) Joint Center for Operational Analysis (JCOA) were tasked by General James Mattis—at that time both SACT and COM US JFCOM—to conduct the ISAF project analysis together. The JALLC report, *The Lessons Learned Process in ISAF*, was published on 09 February 2010 (Reference C).

PURPOSE OF THE REPORT

7.   The purpose of this report is to analyse the current situation of the LL processes adopted in NATO, NATO nations and non-NATO TCN (NNTCN), in order to make recommendations for improvement where the processes are sub-optimal, and to identify Best Practices (BP). The main customers for this report are SHAPE and JFC Brunssum, but the stakeholders of this report include all NATO HQs, NATO nations and NNTCNs.

8.   The report presents findings on the LL process and LL sharing in NATO and among the nations. The report will conclude with a description of the Critical Success Factors for the LL process, followed by Recommendations arranged in Procedural, Cultural, Structural and Technological categories.

9.   The main outputs of the report, specified in the AR, include:

- Recommendations on improving timely adoption of lessons and knowledge by NATO and/or NATO-led forces;

- The identification of good practices in the LL process.; and

- The identification of possible barriers to the sharing of lessons.

10.   All recommendations will be cited in the final chapter, and the lessons and the guides to BP will be included in the Annexes B and C respectively.

11.   The report is structured in five chapters. The next (second) chapter provides an understanding to LL processes and documentation, *Lessons Learned – the Baseline*. The findings are presented in two chapters:

- <u>Lessons Learned in NATO and Nations.</u> This chapter describes the findings of the analysis categorized by the NCS, then a selection of NATO and non-NATO nations.

- <u>Themes in Lessons Learned.</u> This chapter highlights common themes that were observed across the NCS, in NATO, and in non-NATO nations. These themes are presented either as common problems or as BP.

12.   The final chapter outlines the conclusions of the analysis and identifies recommendations to improve both the LL process in NATO and LL sharing in NATO and with non-NATO nations. Leading the recommendations will be three *Critical Success Factors*. These factors have the greatest influence on the effectiveness of LL processes. For ease of reading, details of the analysis of NATO HQs below the SC level and that of national LL Processes were separated and included in Annex D and E. The key concerns that came from this review are contained in the main body of the report.

13.   The integration of lessons after NRF rotations (AO 1.3) was found to be very similar to the integration of lessons after KFOR and ISAF rotations. As such, this issue was not addressed separately, but is included within the body of the report as part of overall recommendations for LL processes.

METHODOLOGY

14.　The analysis project had a very wide scope, which required some prioritization of subject areas and also selection of a representative sample across the NATO and NNTCN communities. Operations were prioritised over exercises. Nations were selected based on their responses to requests for support for the analysis. The availability for, and readiness to engage in, discussion on the LL theme was broadly conducive to achieving the project aims.

15.　The Kosovo deployment in May 2009 acted as a useful preparation, in a relatively benign operational environment, for the later deployment to ISAF in October 2009. The two operations also allowed a comparison of lesson generation and management for high tempo/low tempo operations. The ISAF deployment was significantly delayed due to the Afghan Presidential elections and the transition to the ISAF Joint Command (IJC) structure.

16.　A questionnaire was circulated in April 2009 to the 28 NATO nations, ten non-NATO Partner nations, NATO HQs and Centres of Excellence: 119 in total. In many cases the data derived from questionnaire responses was consolidated with visits to Ministries of Defence (MOD) and training establishments. 50 per cent of canvassed NATO nations and 50 per cent of non-NATO TCNs responded. 49 per cent of NATO HQs responded, and 54 per cent of Centres of Excellence (COE) answered the questionnaire.

17.　To learn about national LL processes, representatives of the analysis team visited:

   a. MOD Germany,

   b. MOD Portugal,

   c. MOD United Kingdom,

   d. the UK Permanent Joint Headquarters,

   e. the Danish Defence Command,

   f. the Operational Command of Italy,

   g. the USA's:

     • Joint Chiefs of Staff, Joint Exercise and Training Division Joint Lessons Learned Branch,

     • the Center for Army Lessons Learned (CALL),

     • the Marine Corps Center for Lessons Learned (MCCLL)

     • the Air Force Headquarters Lessons Learned branch.

   h. the Spanish Army Centre for Lessons Learned,

   i. the Swedish Armed Forces Headquarters,

   j. the Finnish Defence Forces International Centre (FINCENT)

18.　The team conducted interviews at:

   a. NATO HQ,

   b. SHAPE,

   c. JFC Brunssum,

   d. JFC Naples,

   e. JFC Lisbon,

f. Allied Air Component Command (CC-Air) HQ Ramstein,

g. Allied Land Component Command (CC-Land) HQ Heidelberg,

h. Allied Maritime Component Command (CC-Mar) HQ Naples,

i. Allied Rapid Reaction Corps (ARRC),

j. NATO Rapid Deployable Corps (NRDC) Spain,

k. HQ European Rapid Reaction Corps (Eurocorps), and

l. the Civil-Military Cooperation (CIMIC) COE.

19.   Operational deployments were conducted between 04 and 16 May 2009 in KFOR and between 23 September and 22 October 2009 in ISAF. The KFOR visit included HQ KFOR, the HQs for all Multinational Task Forces, and the KFOR Tactical Reserve Manoeuvre Battalion and the Multinational Specialized Unit. In ISAF, the analysis team comprised two JALLC analysts supported by the in-country JALLC Permanent Presence in ISAF, and three JCOA analysts: a US-based analyst and two JCOA-Forward analysts. The team visited HQ ISAF, the IJC, all Regional Command (RC) headquarters, and a sample of Provincial Reconstruction Teams (PRT) and Operational Mentoring and Liaison Teams (OMLT). During all in-theatre interviews, both NATO and national LL processes were discussed, providing insights into both perspectives.

20.   Statistical analysis of the questionnaire answers was performed. The majority of the analysis was based upon qualitative analysis of the questionnaire and interview comments, focusing on common themes which were raised by multiple sources.

FACTORS AFFECTING THE ANALYSIS

21.   The deployment to ISAF, and the project as a whole, was delayed by the troop surge and the first Afghan Presidential election. The eventual deployment conflicted with the NATO LL Conference in October 2009.

22.   The IJC was in the process of being established, which resulted in considerable transition of both functions and personnel between HQ ISAF and the IJC. This affected the analysis because staff officers were unusually overburdened, and when interviewed were describing processes and procedures in a state of change. No LL capability was, at that time, planned for the IJC.

23.   There is no common understanding of what constitutes a LL process. Some units or nations understand data sharing as equivalent to a lessons learned process. While conducting interviews and processing questionnaires, analysts needed to interpret the conflicting lexicons used across the Alliance.

OTHER FACTORS OBSERVED

24.   The extensive NATO Education, Training, Exercises and Evaluation (ETEE) Study Part II Final Report was disseminated as an enclosure to an HQ SACT letter (Reference D) on 17 April 2009. This was immediately before this project began. The report highlighted, in some detail, areas of success and friction in the training, education and exercise environment in NATO. The ETEE study provided a useful source document for NATO as a 'learning organization' within which lessons are a part. The study served as a useful milestone in measuring progress. Some recommendations in the ETEE Report were in the process of being actioned while the JALLC's study was ongoing, and many of the observations in that study remain pertinent now. The report's recommendations on the over-arching approaches to NATO and national education, training and exercises, particularly in terms of the

division of responsibilities, are pertinent to this report in terms of the management of NATO-wide lessons and the incorporation of lessons into training.

2
Lessons Learned – The Baseline

INTRODUCTION

25.   This chapter examines what lessons are and how they can be used. The baseline needs to be examined in this analysis in order to look adequately into the root cause of issues. The project team developed a baseline of requirements against which the team would analyze LL processes. Following chapters will look at what is currently directed, what is actually happening, and common problems.

EFFECTIVE LESSONS LEARNED PROCESSES

The Elements of the LL Process

26.   LL Processes involve several steps that generally fall outside the normal tasks and deliverables tasked to a unit or HQ. This staffing process encompasses seven key phases; *Observation*, *Analysis*, *Endorsement*, *Tasking*, *Remedial Action Implementation*, *Validation* and *Sharing*. Table 1 below describes how each stage should ideally be executed.

Table 1: Key Stages of the LL Process

Stage	Effective process
Observation	A clear and simple method of documenting and staffing issues of concern that need improvement. In general, given staff capacity limitations, these are more effective if incorporating lesson gathering into existing Report and Return preparation rather than a separate reporting requirement.
Analysis	The key is to differentiate symptoms and indicators from the root cause of the issue, and determining changes (RA) that address the root cause. The reliance on external resources can significantly hamper the process; Exploiting in-house capability and expertise; using in-house familiarity with an issue for analysis where issues allow proves beneficial.
Endorsement	Effective command engagement is necessary to ensure that lessons (including externally sourced lessons) are impartially reviewed, prioritized and actioned.
Tasking	Effective command engagement is necessary to ensure that an appropriate approach is taken to remedy a lesson, the appropriate Action Body is adequately resourced, and the lesson is managed to completion without undue delay.
Remedial Action Implementation	Making a change actually happen is frequently the most difficult stage. It involves not just a change to a tactical publication or SOP for example, but in getting everyone to follow the new procedure rather than "doing what we've always done".
Validation	Adequate application of control measures in the management of a lesson to ensure that the issue is indeed remedied.
Sharing	Lessons should be shared widely for the benefit of others, on a

Stage	Effective process
	basis of *'responsibility to share'* rather than *'need to know'*. Lessons may be usefully shared at an early stage of the process, to inform other stakeholders of potential problems. Lessons should be shared with successive stakeholders, to minimise the loss of knowledge through rotations, but also with peers in other units who may encounter similar problems, and higher HQ who may act as continuity between rotations.

Roles in Lessons Learned

27.   Four key roles are essential to the staffing of lessons from observation through to Lesson Learned.

- The LLSO is the key orchestrator who manages each lesson through the various stages either himself, or with the assistance of others for specific stages;

- The LL Officer of Primary Responsibility (OPR) supports the LLSO for lessons within a particular branch or section. This is frequently a secondary duty added to one or more of a branch or sections billets;

- The analyst can be the LLSO, LL OPR or anyone so tasked within the military unit or command, or even an outside entity in support. His role is determining the root cause of the lesson and ensuring the RA will address the root cause; and

- Unit or command leadership is key to the LL process. It ensures that resources are allocated and prioritization is made across all branches, sections, units and sub-units as appropriate.

Experience and Knowledge

28.   A requirement for all staff officers occupying NATO billets is a good understanding of their organization, the roles and responsibilities involved, the resources available and the limitations imposed. This particularly applies to LLSOs, who are acting as information managers and managers of organizational change. LLSOs are required to capture observations, undertake or oversee analysis, identify the appropriate ABs within or outside their organization, develop RA and manage Endorsement and Tasking with leadership assistance. This requires considerable skills and broad experience. This is especially true in a Joint environment, where understanding single Service lessons unrelated to the LLSO's own Service background may be necessary in order to obtain adequate support and staff the lesson.

The Role of Analysis and Subject Matter Experts

29.   Analysis is closely associated with both LI and BP. Analysis is defined within NATO as *"the study of a whole by examining its parts and their interaction."*[7] The analysis of observations should allow discovery of the root cause of a problem or success and identification of the appropriate RA to correct the problem and the appropriate AB to achieve the correction, or to sustain the success. Without analysis, observations are likely to describe a symptom, rather than the root cause. Under certain circumstances (most tactical and operational level observations), analysis can be achieved with existing "in-house" experience using internal subject matter experts (SME), or exceptionally with external resources.

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[7] AAP-6; NATO Glossary of Terms and Definitions (English and French); 2010; Public Release

TYPES OF LESSONS

30.   The project team observed that all lessons are widely regarded as homogeneous, therefore requiring the same treatment in terms of staffing and sharing.   However lessons arise in a variety of forms which require different methods of management for solution and sharing. One size does not fit all – management processes must be adaptable to address the different needs of individual lessons.

Definitions

31.   The Strategic Commands' Bi-SC Directive 80-6 Lessons Learned (Reference E) provides the following definitions:

   a. Observation: An issue identified for improvement.

   • Raw Observation: an observation that requires further study or analysis to fully understand the root causes.

   • Mature Observation: an observation for which there is already sufficient data and/or understanding to identify the root causes and thus requires no further analysis.

   b. Lesson Identified: An observation for which a RA has been developed and an AB to carry out the RA has been proposed.

   c. Lesson Learned: Results from the implementation of a RA that produced an improved performance or increased capability.

32.   SHAPE has proposed, in a draft revision to Reference E, the following definition of a BP:

   "An activity or a series of activities proven effective through analysis that can be replicated by others in a similar situation. A proposed "best practice" is designated a NATO "best practice" when compared to other similar practices throughout NATO and proven to be the most effective and/or efficient."

33.   The Bi-SC Exercise Directive 75-3[8] Annex A has a different definition:

   "Best Practise [sic] is a management idea which asserts that there is a technique, method, process, activity, incentive or reward that is more effective at delivering a particular outcome than any other technique, method, process, etc. The idea is that with proper processes, checks, and testing, a project can be rolled out and completed with fewer problems and unforeseen complications. Best practises [sic] observed during NATO military exercise design, planning, execution and assessment, as well as those observed during real world operations should be entered into the NATO Lessons Identified/Learned system for incorporation into NATO doctrine, processes and/or procedures."

34.   Other sources have differing definitions, including whether or not a BP needs to be proven best or merely an improvement over existing conditions. BPs are often specific to an environment or situation and may have to be modified or adapted for similar circumstances in other environments. The Joint Warfare Centre initiated the BP Community on 10 September 2010, establishing a process for developing and sharing operational-level BPs via the JWC BP Database.

Positive and Negative Lessons

35.   The LL process is identified by many with the reporting of failure of common working practice, and carries negative connotations of failure, lack of competence, or lack of aptitude. Negative lessons are rarely shared. A solution to sharing these

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[8] Bi-SC Exercise Directive 75-3; 01 August 2007; NATO Unclassified Releasable to EU/PfP/MD

lessons may not simply be more frankness and openness, but to apply an assessment of the appropriateness of the staff for the task required. Where a leader perceives that poor practice reflects on his leadership or the skill-set of his command, rather than the situation as he receives it, the lesson is unlikely to be either shared or solved. The sharing of positive lessons, in tandem with BPs, should be encouraged to reinforce positive outcomes.

Lessons as Outputs and Inputs

36.   Lessons are frequently perceived to be outputs from operations, training, exercises and experiments: an administrative burden with no obvious or immediate benefit to the observer. The real value of lessons lies in their exploitation as inputs: informing and improving preparation for activities. The LL process is as relevant at the beginning of an activity as it is at the end. The emphasis should be on the application of lessons, rather than the collection of lessons.

LESSON SHARING

37.   Shared lessons are a force multiplier: to training staff they offer insights into the ground truth on operations, and to planners they offer insights into previous successes and failures. To leaders, shared lessons offer their organization the opportunity to improve efficiency and effectiveness by exploiting others' experience.

38.   Lesson sharing is distinct from the lesson learning process. Lesson sharing involves a wide community of interest engaging in multi-lateral exchange of information. Lesson learning involves the chain of command engaging in a change management process. Lessons identified and lessons shared are not lessons learned.

39.   Lesson sharing is based on two processes: publishing one's own lessons for others to exploit, and receiving others' lessons for one's own exploitation. Information sharing is based on trust: the assurance that the information is authentic, valid, and will be treated with the appropriate protection.[9] Information shared between NATO and nations is not assured, due to the variations in protection, validity, accuracy or relevance. Information shared informally and bi-laterally, based upon informal networks such as the LL COI, is generally trusted and assured, due to the personality-driven exchange. On a practical level, lessons stored as electronic information often cannot be shared easily due to classification and connectivity of national, mission and NATO networks.

A PROJECT MANAGEMENT APPROACH TO LL

40.   Many problems or practices are observed and reported, but remain unaddressed and/or unsolved. The application of and adherence to a project management approach is an important factor in ensuring that each necessary step undertaken will lead to the formal closure of a lesson as a lesson learned, or premature closure for agreed and recorded reasons (for example, the LI is overtaken by events).

41.   NATO currently endorses the use of the PRojects IN Controlled Environments (PRINCE2) for project management. The PRINCE2 *Components* of project management are also applicable to a LL process:

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[9] *"Information Assurance. Information shall be protected by applying the principle of Information Assurance, which is described as the set of measures to achieve a given level of confidence in the protection of communication, information and other electronic systems, non-electronic systems, and the information that is stored, processed or transmitted in these systems with respect to confidentiality, integrity, availability, non-repudiation and authentication."* NAC *NATO Information Management Policy;* 11 Dec 2007; C-M(2007)0118; NATO/PfP Unclassified.

b. <u>Business Case</u> Is the lesson adequately described and analysed? Is it worth solving? Are all the facts present?

c. <u>Organization</u> Are there sufficient staff resources available to solve the problem?

d. <u>Plans</u> What are the RA milestones? How does the Action Plan fit together? Are the RA milestones and progress communicated to stakeholders?

e. <u>Controls</u> Can the RA be verified to be on track? Are the milestones being achieved?

f. <u>Management of Risk</u> What are the risks of ignoring the problem? What are the risks during the RA process?

42.   It must be noted that PRINCE2 recommends leadership oversight of the process. In particular, many of the components described above are not within the scope of authority of an LLSO.

43.   The NATO LLDb and various electronic tracking software facilitate varying degrees of visibility of an RA process. The NATO LLDb permits stakeholders to observe the stage in the process that a lesson being learned has reached. This visibility permits stakeholders the opportunity not only to examine the issue but to see work in progress towards a solution. Lessons for which the RA has not been tracked through the NATO LLDb may appear to be unlearned but may well have been resolved locally. The sharing of successful completion is as important as the sharing of the issue.

SUMMARY

44.   The LL process is a key part of improving and adapting a force for the future. It takes involvement of the force leadership as well as knowledgeable and experienced staff. It is essentially a knowledge management process that must be tracked and driven in a deliberate manner, and must be an input to all aspects of future operations, including planning and training. *"Time spent exploiting lessons learned is seldom wasted"* is true.

3

Lessons Learned In NATO and the Nations

INTRODUCTION

45.   This chapter presents the outcome of an examination of LL in NATO and nations, starting with the LL process at NATO HQ; and moving on to consider LL processes in the NCS; LL processes on NATO operations, the NRF and PDT; and LL processes in a sample of nations. Only noteworthy issues and good examples are recorded here; some of these were observed more than once. Such repeated findings are presented under the relevant heading in this chapter and then re-addressed as "*Themes in LL*" in the next chapter. Annex D comprises details of observed NCS and NFS LL processes, and Annex E highlights specific details of nations' LL processes which may provide useful case-studies for nations developing their LL processes.

NATO LL Policy

46.   The NATO LL Policy (Reference F) provides the framework for the LL process in NATO. Although written after many of its subordinate documents, it is reasonably well coordinated with them. The NATO LL Policy is currently under its scheduled two-year review process. The document contains definitions of terms, the objectives and applicability of the Policy, implementation procedures and responsibilities in the process. It discusses the role of lessons in planning and decision-making, rather than lessons as solely an administrative output of operations, exercises or training.

47.   The Policy focuses however on the role of NATO HQ in higher political lessons and procedures therein while omitting meaningful guidance and direction on sharing of lessons below the NATO HQ level, both within the NATO chain of command and between NATO and Nations.

NATO HQ Internal LL Process

48.   An internal NATO HQ information memo (Reference G), circulated on 03 July 2009, describes how NATO HQ will action the NATO LL Policy. It specifies in detail the roles of stakeholders in the process and various sub-processes described by the policy, including details of the five stages of the NATO Defence Planning Process (DPP). This information memo's description of the relationship between the internal NATO HQ LL process and the NATO LL process is unclear.

49.   The NATO HQ LL Point of Contact (POC) Network meets as a forum for exchanging information on lessons within the HQ. It is co-chaired by the International Staff (IS) and the International Military Staff (IMS) representatives and comprises POCs from most NATO HQ divisions and agencies. The NATO HQ LL POC Network could maximize its support to the LL process within and beyond NATO HQ by actively staffing lessons. This could be achieved by ensuring that all extant LIs appear as agenda items. This would be facilitated if the POCs were restyled as OPR and empowered to make decisions and commitments within the forum on behalf of their division, department or agency.

50.   Reference G describes the NATO LLDb as being central to the NATO HQ LL process in terms of the management of both internal lessons and external lessons. However, in practice the LLDb is currently not routinely used to communicate NATO HQ lessons, either as a tool for staffing observations to lessons learned, or as a tool for

sharing finalized lessons learned. The IMS and IS currently work on different CIS, making even basic document sharing difficult. This should improve with the scheduled development of a common document handling system.

51.   The coordination of a NATO HQ LL process has not yielded positive results. Several case studies to test the process have not been successful. This can be ascribed to the lack of a timely and engaged business process within each Staff for participating in a coordinated HQ-wide LL process. The internal NATO HQ LL process would benefit from a clear definition of stakeholders in the HQ LL process, and their roles and responsibilities, particularly with reference to Tasking Authority, collective lesson Endorsement, Monitoring and Validation. In a large and busy HQ staffed by two distinct structures, the LL principles of Coordination, Communication and Cooperation are especially important.

NATO HQ LL Process Summary

52.   NATO LL Policy communicates a vision of lessons as an input to planning and training—a positive resource to help avoid problems—rather than an administrative output after the end of an activity. NATO LL Policy outlines the formal process for managing internal lessons but does not address adequately the issues surrounding sharing, or the mechanisms for sharing lessons outside NATO HQ. The NATO HQ LL process would function better if LL POCs were designated as OPRs rather than POCs to reflect the responsibility of their role, empowered with authority to represent the branch chief, and the NATO LLDb employed as described in the NATO LL Policy (Reference F).

PROCESSES IN THE NATO COMMAND STRUCTURE

Allied Joint Publication 3 (A)

53.   AJP 3 (A) *Allied Doctrine for Joint Operations*[10] describes in paragraph 0451 the intent of the LL process:

> *"The purpose of a Lessons Learned procedure is to learn efficiently from experience and to provide validated justifications for amending the existing way of doing things, in order to improve performance, both during the course of an operation and for subsequent operations. This requires lessons to be meaningful and for them to be brought to the attention of the appropriate authority able and responsible for dealing with them. It also requires the chain of command to have a clear understanding of how to prioritize lessons and how to staff them."*

54.   Once operations are concluded, AJP 3 (A) transfers the responsibility for the LL process to the SCs from the JFCs as the JFCs cease to have authority. This requires a formal lesson hand-over including RA management. AJP 3 (A) identifies the key problem area of lesson ownership and long-term lesson management: if lessons are transferred only as data points, the plan and progress of the RA may be lost.

Bi-SC Directive 80-6 *Lessons Learned*

55.   The specific guiding documents for the LL process in the NCS are the Bi-SC Directive 80-6 (Reference E) and ACO LL Directive 80-1 (Reference H). The strengths and weaknesses of these publications, and the Bi-SC LL process, are discussed here.

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[10] Allied Joint Publication 3 (A), Allied Doctrine for Joint Operations, July 2007, NATO/PfP Unclassified

56.   The LL process described in the Bi-SC LL Directive (Reference E) is generic and focussed on problem correction. Analysis is described as a critical component in the LL process but responsibilities are only briefly and generally described. The Bi-SC Directive on Information and Knowledge Management[11] and the Bi-SC Exercise Directive 75-3 are not cross-referenced with this LL directive, despite providing detail on related topics.

57.   By focussing on problem correction, the Directive does not provide clear guidance on sharing lessons for information only, on sharing good practice, or on formal information and knowledge management (IKM) specific to lessons as a preparatory phase to exercises or operations. The Directive, in essence, covers only a part of a broader LL environment. The lack of definition and a process for lessons other than internal problems for correction contributes to uncertainty regarding the appropriate management of all lessons. The Bi-SC Directive does not explicitly outline the method for sharing lessons, and specifically RA requirements, via the SC to NATO HQ and the nations. The document describes a generic process, but would benefit from a more detailed description and direction of inter-agency cooperation and coordination, with clear ownership of lessons. It would also be beneficial to incorporate a benchmark standard for an HQ LL capability, including tools to support the process, guidance on management of the LL process, and requirements for LLSO training and experience.

58.   The Directive also emphasises analysis, which is described predominantly in terms of the JALLC's Programme of Work, as a condition for LIs. This places considerable weight on the limited analysis resources available in NATO, and on operations. Since the Peacetime Establishment changes to the NCS in 2009 and 2010, analysis resources have been redistributed and are less available to support LLSOs with lessons analysis. On operations, analysts continue to be focussed on the campaign assessment and operational analysis (OA) support to the commander. A clear description of analysis, confirming the adequacy of military expertise and in-house resources for analysing the majority of lessons, as described later in this report, would greatly alleviate these misperceptions, allowing many lessons to be resolved locally.

59.   The planned revision to the Bi-SC LL Directive (Reference E) presents an opportunity to clarify several areas of guidance. Areas for adjustment include:

- The definition of a benchmark for LL capability,
- Internal and external information-sharing mechanisms, including use of the NATO LLDb,
- LL staffing mechanisms,
- Roles and responsibilities of stakeholders.

60.   This revision will allow the LL process to be described as a continuous management process with clear responsibilities and communication between stakeholders, supported by leadership oversight.

ACO Directive 80-1: *Lessons Learned*

61.   ACO Directive 80-1 *Lessons Learned* (Reference H) provides clear direction to subordinate commands in accordance with the overarching NATO LL Policy (Reference F) and the Bi-SC LL Directive (Reference E). Most HQs in ACO and the NFS have LL policy, directives or SOPs in accordance with these. Reporting lessons

[11] Bi-SC Directive 25-1; Bi-SC Information and Knowledge Management (IKM) Directive; 15 September 2008; TT 205137/3269; NATO Unclassified Releasable to PfP

outside a commander's own unit is to be carried out via the NATO LLDb and reported to SHAPE via an ACO LL Report, Annex C to ACO Directive 80-1 (Reference H). This document represents the strongest direction to share lessons, but limits its influence to reporting to higher HQs and to insertions in the NATO LLDb.

62.   ACO Directive 80-1 (Reference H) discusses analysis almost exclusively in terms of the JALLC and the development of the JALLC POW, and analysis as a key component of the LL process. Some LLSOs note that they do not undertake analysis because it does not form part of their job description. SHAPE should encourage the devolution of straightforward analysis, as described in the Joint Analysis Handbook[12], to LLSOs and unit SMEs, and request JALLC support only for strategic and operational, broad scope analysis taskings.

LESSONS LEARNED PROCESS IN THE NCS IN REALITY

The Bi-SC Lessons Learned Process

63.   The majority of lessons being staffed by the Strategic Commands (SC) are those identified in JALLC reports of analysis of ACO operations. SHAPE endorses JALLC reports within an average timescale of eight weeks, endorsing (or not) the Recommendations and establishing an Action Body (AB). HQ SACT also endorses reports at a later stage, most frequently agreeing closely with SHAPE comments[13]. To date, no combined Bi-SC endorsement letter has been produced. HQ SACT observed that there is some utility in circulating a report accompanied by the Bi-SC endorsement letters. Given the time delay in generating endorsements, the distribution of the lesson should not be delayed for the endorsement process.

64.   Each SC uses its internal Tasker Tracker (TT) system to task and monitor lessons. SHAPE LL staff notify RA and AB details via the NATO LLDb as per the Bi-SC LL Directive (Reference E). The use by SHAPE and HQ SACT, of separate TT systems reduces visibility of the progress of RAs unless separate updates are undertaken into a common medium, for instance the NATO LLDb. The NATO LLDb has an RA management functionality, which may be used for communicating the progress of RAs, since it provides visibility of the RA process outside the controlling HQ. The LLDb also has a functionality to notify automatically stakeholders when a milestone approaches, and when key stages of the LL process are completed. Currently SHAPE uses the tool to communicate the RA but the full staffing functionality of the tool is yet to be fully exploited. This is due to perceptions of user unfriendliness and low critical mass of users.

65.   Those HQs that use their TT system to manage lessons tend to have positive results and closure on issues. This was particularly effective when the tasker was initiated by the DOS/COS supported by tasker information compiled by the LL staff. Most branch or division staff are cautious about tasking, or requesting the tasking, of peer or senior branches or divisions, particularly in the context of the RA of a lesson. The DOS/COS-supported process represents the best method for overcoming this reluctance and actioning a LL process within an HQ. However, SHAPE and HQ SACT, and indeed most other HQs, operate separate TT systems, making it difficult to staff lessons that need staffing at other HQs operating separate TT systems. The NATO LLDb has a RA management functionality which should be used for this, since it provides visibility of the RA process outside the controlling HQ. While internal taskings

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[12] JALLC; Joint Analysis Handbook, Third Edition; October 2007; Non Sensitive Information Releasable to the Public

[13] Sample based on six endorsed reports published between December 2008 and November 2009.

will rely on internal TT systems, the principles of *Communication* and *Coordination* will only be achieved by a common system, currently represented by the NATO LLDb.

Business and Information Management[14]

66.   Business and Information Management (BIM) is a section of the JFC's Support of Staff (SOS) element. It serves as the JFC's main hub of information flow and management of CG tasking. The importance of the BIM for lessons lies in the fact that *information management* and *change management* fall under its auspices—two functions that are at the core of the LL process.

67.   Much of this occurs through the BIM/SOS management and tracking of official Command Group (CG) level tasks. The current IM processes identify four venues from which these tasks may originate:

- Official Correspondence
- Outputs of Battle Rhythm Meetings / Boards
- CG Direction and Guidance
- In-theatre Events (routed to the JFC from components through the Situation Cell and Situation Centre (SITCELL and SITCEN)

68.   Potential tasks from the above sources are captured and reviewed by the BIM/SOS/DOS whereupon recommendations for handling the tasks are developed (in conjunction with various JFC coordination officers). These initial recommendations are forwarded to the COS, and if approved, become *official* JFC tasks (usually via insertion into the HQ's TT).

69.   Although lessons may emerge as issues that require tasking during the course of the above processes, the handling of lessons at the CG level is not formalized, which raises the question of whether lessons should be treated as a fifth, additional origin for CG level tasking. Managing the *Endorsement*, *Tasking* and *Remedial Action* management processes of the LL process via the BIM allows existing business processes to be adopted in support of the LL process. The JPALL branch, in close liaison with the BIM, can manage lessons as information and can coordinate the preparation of applicable LIs with the LLWG for presentation to the BIM for endorsement and tasking. By incorporating the LL process into the official BIM tasking process, the lessons become more visible and accessible and since JFC official tasking is enforced by the authority of the COS, improvements to effectiveness and efficiency are more likely to be realized.

Generation of Analysis Requirements

70.   NATO wide Analysis Requirements (AR) are generated on operations and staffed via SHAPE and HQ SACT to form part of the JALLC POW. Themes range from specific tactical and operational problems to senior leaders' focus areas. The staffing process often continues after the original customer has rotated out of theatre, and the scope of the original AR often changes to respond to broader trends, resource issues and other developments.

71.   As a case in point, this study originated as a requirement from the Branch Chief of the LL cell in HQ ISAF to examine the C-IED LL process, and the sharing of C-IED information among nations. The resulting AR is described in paragraph 2.

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[14] The mechanisms of the BIM are described in the forthcoming JALLC report *Information Flow and C2 in the Joint Headquarters: in the context of the JFC Interim PE and DJSE structures from SFJE 10.*

72.   SMEs within HQ SACT are not routinely involved in the staffing of ARs prior to publication and tasking to the JALLC. This study, previous JALLC studies, and several national analysis organisations, have noted that the inclusion of stakeholders including SMEs in the AR stage has a very positive effect on both the analysis product and the success of the LL process. This conforms to project management principles of obtaining stakeholder buy-in during the project establishment. There is a risk that a lesson, generated by an overly complex staffing process developing ARs beyond the original customer's requirement, will not be learned because the requirement has not been met.

73.   The NATO LLDb has a functionality to allow users to submit ARs, and to cross-refer these ARs against observations and lessons in the LLDb using the NATO Task List (NTL). A benefit of using this tool to share ARs and the development of ARs during the staffing process would be to include the originating customer (and the original problem) and all stakeholders in communicating the AR development. In addition, by connecting the original problem to the endorsed RA and tasked AB in one database available on the NS WAN, the OODA loop is demonstrably closed.

RA Management

74.   The cross HQ functionality of the LLDb is important for managing RA for lessons that involve multiple HQs or levels of command. It was noted that lessons are rarely passed to a higher HQ through a common LLDb or even as lessons, but rather through a request letter from a Commander to his higher Commander. This results in the lesson being handled by the higher HQ as a routine issue rather than a lesson. While the issue is usually actioned and resolved, it is not seen by the higher HQs LLSO, and the completion of the RA requested by the originating HQ does not reach the LLSO, leaving the lesson unresolved in their database.[15] As an example of this; JFC Brunssum LLSOs reported that they had not received any lessons from ISAF, yet they had resolved numerous lessons, forwarded to them by SHAPE which originated from ISAF TCNs.

LL Staff Officers and their Training

75.   LLSO Training. 77% of NCS LLSOs polled had not received training for their duties as LLSOs; the need for which was described in Chapter 2. HQ SACT leads the NATO LLSO Course, which began in May 2009 and takes place several times per year. This provides an opportunity to promote the LL mindset, to provide LLSOs with practical tools for staffing and sharing lessons, and also to establish and maintain a LL community of interest (COI). LLSO training is also offered by JWC in the ISAF Mission Rehearsal Training events. This training includes ISAF LL Functional Area Training (FAT), which contains instruction for the incoming LLSOs that will deploy to ISAF HQ. Unfortunately, many LLSOs deploying to theatre do not attend this training.

76.   LLSO Support. LLSOs from both SCs, as well as subordinate commands, noted that LL OPRs within the HQ have varying degrees of understanding of and commitment to their role in the LL process. A characteristic shared among many HQs and their staff members is that LL OPRs are a more junior individual in a branch team, and frequently the least tasked, reflecting the branch or unit leadership's low priority for LL. In some cases, it was observed that the LL OPR was never the same person from one meeting or activity to the next, resulting in a lack of continuity of LL effort for the branch. LL staffing tasks were frequently overlooked or delayed, and completed poorly. The LL process can suffer drastically when manned inconsistently or with the wrong individual

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[15] This has been addressed in ACO LL Directive AD 80-1, but at the time of data collection, this directive had been recently issued, and many aspects, such as this, had yet to be realized.

and, correspondingly, can provide great utility when staffed by the right individual. Ideally, LL OPRs would have some training in the LL process and be familiar with their role in the NATO context. They should have oversight of all branch or division activities, broad experience of day-to-day running of the branch and headquarters, and the authority to represent the branch head. Most critically, they should have adequate experience to allow them to undertake or oversee the basic analysis of lessons to identify root causes, RAs and appropriate ABs.

The Role of the Joint Analysis and Lessons Learned Centre

77.   The JALLC's mission, stated in the MC 510 – *Terms of Reference for Directors JWC, JFTC and JALLC[16]* is:

> *"The JALLC 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."*

78.   The document continues, describing a JALLC role as follows:

> *"The JALLC reinforces the transformation process by continuous improvement of concepts, doctrine and capabilities, based on lessons learned from operations, training, exercises and experimentation."*

79.   The ACT Concept for the JALLC (Reference I), page A-2, places JALLC at the centre of the LL process:

> *"The JALLC is responsible for the overall co-ordination and further developments of LL efforts in NATO. For that purpose the JALLC will establish and maintain an interactive managed LLDb."*

80.   Both of these documents were issued when the JALLC was established in 2004. Over time, the role of the JALLC has developed somewhat differently than described in the source documents. The JALLC is NATO's centre for performing joint analysis of operations, training, exercises and experimentation. The JALLC is usually tasked with analysis of topics with a strategic impact, overarching in terms of bridging individual commanders' focus. The JALLC is working with NATO's LL process providing a high-level analysis capability; however, it has a limited role in the LL process. The JALLC manages the NATO LLDb, assists others with data insertion, and provides training and assistance for the formation or improvement of other organizations LL processes. This has been briefed by the Commander JALLC to all levels of NATO command over the past several years and has been accepted without question.

81.   Contrary to the direction in MC 510 and the ACT concept—other than through the process of managing the NATO LLDb, the designated NATO tool for sharing and managing the staffing of lessons—the JALLC does not:

- Act as a coordinating centre between the originator and the bodies participating in the RA process;

- Ascertain the applicability of the LI or observations to NATO and Partnership for Peace (PfP) commands and, through a clearing house activity, organize all available information with the overall objective of identifying lessons that are comprehensive, thorough, and valuable; and

- Facilitate the identification of associated RA.

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[16] MC 510, Terms of Reference for Directors JWC, JFTC and JALLC, 30 April 2004, NATO Restricted

82.   These misperceptions have generated some confusion within NATO regarding the JALLC's capabilities. Interviewees stated, with reference to difficult lessons, that *"if no solution is found, it will be sent to JALLC. JALLC is the last resort".* The JALLC is perceived, in some quarters, not solely as an analysis resource but as an alternative to internal or chain-of-command solution-finding. In one extreme example, a staff officer at an NCS HQ indicated that all the lessons from the previous mission were learned because they had forwarded copies of all SITREPs and post mission reports to the JALLC; the inference being that NATO, including his own HQ, was somehow more capable because these reports had been mailed to JALLC.

83.   Currently, HQ SACT coordinates with SHAPE the endorsement of RAs from JALLC reports and ABs are tasked by those HQs. The responsibility for updating the NATO LLDb with RA progress is unclear. The Bi-SC Directive notes "*…the appropriate SC will ensure the progress of the implementation. As appropriate, through Bi-SC agreement, one of the SCs will act as the sponsor to monitor the implementation of the RA and support the AB.*" The JALLC currently administers the technical requirements of running the NATO LLDb, and, where appropriate, changes observations to LIs in the LLDb. However, there is no clear guidance on staffing lessons through the NATO LLDb and therefore exploiting the tool to its maximum potential. Some reporting of the progress of lessons reaches the JALLC, particularly from SHAPE. However, there is a lack of visibility of the staffing process of lessons in the LLDb, as the LLDb staffing and communication functionality is not fully exploited. JALLC reports and some externally-sourced exercise reports are staffed through the LLDb, providing stakeholders the opportunity to monitor progress of RA implementation, but wider "work in progress" of many lessons not entered or tracked in the NATO LLDb is not visible outside most HQs.

The NATO LLDb

84.   The NATO LL Database (LLDb) was developed in 2005 as a tool for staffing lessons. The software is deployed as separate, air-gapped databases on both the NS and NATO Unclassified (NU) Wide Area Network (WAN). Since 2005, features such as a search engine and the ability to attach documents have allowed the LLDb to become more user-friendly as an archive of information.

85.   The NATO LLDb is described in the Bi-SC LL Directive (Reference E) as a tool for staffing and sharing observations and lessons to which NATO bodies should contribute. This directive states that "All Observations/LI/LL of NATO wide interest will be inserted in the NATO LLDb by the originating level and follow the template as explained in Reference A." A typical insertion into the LLDb is either a record of a completed RA for an internal issue or a request for assistance. Currently there seems to be little consideration of sharing lessons via the LLDb for the benefit of other users.

86.   The JALLC continues to be the largest contributor to the NATO NS LLDb as an output of JALLC analysis reports. Contributions from other commands tend to be episodic, for example, following major exercises. All JFC LL directives and most sub-command directives and SOPs require the insertion of lessons into the LLDb, in accordance with guidance provided in Reference E. However, this is rarely done, with relatively few active contributors to the NATO LLDb. The root cause for this is the perception of *Applicability*. The issue of applicability is discussed under *Common Features in Sharing Lessons*, in Chapter 4.

87.   The NATO LLDb entry form allows reference to Strategic, Operational and Tactical tasks. By their nature, strategic issues are generally widely applicable across the Alliance, but many observations of tactical issues should be considered by all similar units NATO-wide and their higher HQs. The NATO LLDb represents the best forum for sharing these ideas across the Alliance.

88.   The NATO Education, Training, Exercises and Evaluation (ETEE) study (Reference D, pages 2-57) recognized that lessons need to be shared better and the NATO LLDb represents the best hub for that knowledge sharing. The study identified the workload implications of pulling lessons from NATO-wide After Action Reports (AAR) or passively receiving lessons compatible with the NATO lesson format, describes below. The report suggested two options to facilitate this:

- Option A: increasing the JALLC PE to include analysts to extract lessons from all strategic and operational reports for inclusion into the LLDb; or

- Option B: harmonising LL reporting within normal AAR reporting to facilitate submission into the NATO LLDb by the source command.

89.   Option B presents the best short- and long-term solution. LL reporting is increasingly conforming to the *Observation, Discussion, Conclusion* and *Recommendation* format of the NATO LLDb. If unit AAR and lesson reporting requirements conform to this logical structure[17], the sharing of key information can be achieved with minimal extra effort. Commanders should therefore review their AAR reporting templates with the view to sharing the outputs widely beyond the target audience of the report itself. The JALLC should ensure that the NATO LLDb has adequate flexibility to accept observations in slightly varying formats.

90.   Until October 2009, the contents of the NATO LLDb could be browsed by any NS WAN user using a guest log-in feature. Since 2006, NS LLDb usage steadily increased until October 2009 when the guest access feature was disabled, at the behest of the NATO Communication and Information Systems Services Agency (NCSA) (see Figure 1), reverting to the original Username and Password log-in requirement. Prior to that date, average usage reached 100 separate users per week executing at least one visit to the LLDb, with spikes of up to 135 users. Following the password requirement change, average weekly usage dropped to 18 users. A significant proportion of the LLDb usage was thus curtailed through changes to accessibility.

Figure 1: NATO LLDb Usage
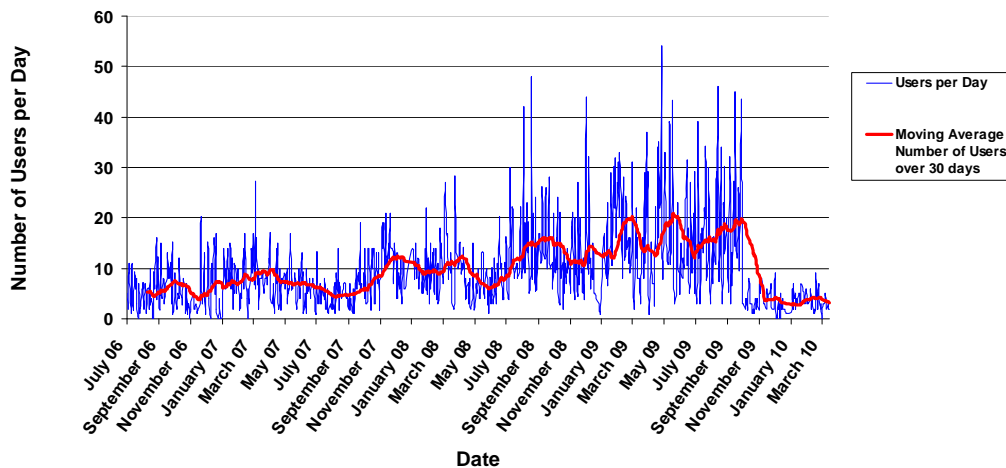
91.   The NU LLDb, available via the Internet to NATO and PfP nations, has a limited number of lessons. It cannot be assessed to be a useful resource with its current low number of users. This is being addressed by being more flexible as to the format of LL submissions. The education Partnership Real-Time Information Management and

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[17] For example as in Annex B to this report

Exchange System (e-PRIME) information sharing portal available to NATO and PfP nations presents an opportunity for sharing lessons which is yet to be fully exploited, as observed in the JALLC report *Managing Partnerships*[18]. The Bi-SC Military Cooperation Division (MCD) represents an opportunity to coordinate sharing efforts and to establish a systematic and regular communication of lessons between the Alliance and NNTCNs. NATO and NNTCNs would benefit from a concerted effort to coordinate the development and promotion of the NATO NU LLDb and e-PRIME.

The Joint Warfare Centre's Best Practice Database

92.   The JWC is developing a BP database to communicate current BPs applicable at the operational level. JWC envisages BPs to be positive, short-lived, bespoke, validated and easily incorporated into working practice. The JWC BP database should be promoted and interoperable, as far as possible, with the NATO LLDb. This report presents BP in the LL process in Chapter 4 and in Annex C, to be inserted in the JWC BP database.

The Lessons Learned Community of Interest

93.   The NATO LL Community of Interest (COI) meets annually at the NATO LL Conference hosted by the JALLC in Lisbon, Portugal. This community provides great value in establishing an informal network for information sharing in addition to the normal reporting procedures. The NATO LL Conference in Lisbon presents a good opportunity for the network to be consolidated and to establish new relationships.

94.   Information flow within the COI has been seen to be successful and should be sustained and promoted. A LL COI database should be managed and updated by the JALLC, in accordance with the Bi-SC LL Directive (Reference E), which requires that all NCS bodies forward LL POC information to the JALLC. HQ SACT has initiated development of a COI database, currently in progress. This duplication of effort could be avoided by either specific guidance from SACT to the JALLC, or amending the directive with respect to responsibility for the task.

95.   Other LL COIs within NATO use theme-specific LL conferences or meetings to support the sharing of lessons through a more focused discussion on specific issues, which may be of greater interest or value to a target group than a generic, process-focussed venue such as the NATO LL conference. Exercise ARRCADE CRICKET (for NFS units) and the ISAF LL Support Working Group (WG) are examples.

LL Processes in the NCS Summary

96.   The internal LL processes of NCS HQs operate, using in-house business processes, in accordance with the Bi-SC LL Directive (Reference E). LL direction and guidance is adequate at outlining the formal process for managing internal lessons but does not address adequately the issues of applicability for sharing, and the mechanisms for sharing lessons for information and assistance outside HQs. It also fails to emphasize the planning and training benefits of LL, instead focussing exclusively on their characteristic as an output from activity, rather than an input into activity planning and preparation.[19] Commanders at all levels should ensure that one of

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[18] JALLC; Managing Partnerships: the Euro-Atlantic Partnership Work Plan; 7 October 2008; 3050.01/JALLC/CG/062.08; NATO Unclassified Releasable to PfP

[19] SHAPE has indicated that the new ACO Comprehensive Operational Planning Directive (COPD) dated 25 Feb10 provides this guidance. They also note that the revised AD 80-1 will provide guidance for planners to look to LL as inputs for operation/exercise planning. It must be noted that the COPD is a trial version and the new ACO Directive 80-1 has not been issued.

the first questions asked in relation to any preparatory work is *"what has been done before?"*

97. The LL processes between HQs, and between superior and subordinate HQs, do not function adequately. Whereas *"The LL process is designed to support the operational chain of command and not replace normal command responsibilities for reporting experience"* (Reference E, page 2) the LL process requires a degree of sharing and liaison that cuts across command relationships. This includes the capability and authority to both pull and push information, supported by a lesson sharing tool such as the NATO LLDb. Coordination is needed between the superior HQ LLSO and the subordinate LLSO.

98. Few LLSOs in NATO are trained in LL processes. This is being addressed by recently initiated training courses. Informal sharing networks are being promoted by the NATO LL COI. The NATO LLDb exists as a sharing and staffing tool that has yet to be exploited to its potential. The JWC BP Database is at the early stage of development but presents an opportunity for sharing.

LESSONS IN NATO OPERATIONS, THE NRF AND PRE-DEPLOYMENT TRAINING

99. Major General Michael T. Flynn, ISAF Combined Joint Intelligence, stated "*the side which can learn and adapt faster, usually wins*."[20] Yet it does not appear that NATO is making the best use of available lessons to learn and adapt. The Bi-SC Priority Shortfall Areas report[21] noted that *"Lack of lessons learned and after action reports limit ability of future training to meet needs, also increasing risk to mission effectiveness."* The NATO ETEE Study (Reference D) concluded that:

> *"The MC LL Policy and the Bi-SC LL Directive are in place. Further Bi-SC Directives refer to the LL process and related requirements including establishing reporting requirements during and after operations and exercises. Most OPLANs contain an annex directing the LL process for the specific operation. Nevertheless, there are few lessons identified or LLs reported into the NATO-wide LL process. The high expenses of NRF exercises and current operations do not pay off in terms of LL. Commanders do not routinely use the LL process to share their lessons with others. NATO has not yet established a learning organization."*

100. Key issues regarding LL process approaches in KFOR and ISAF are noted below along with BPs for LL processes on operations. This section also discusses the lessons produced after NRF rotations and in PDT because these LL topics are relevant to injecting lessons into operations.

Lessons Learned In KFOR

101. The LL process in KFOR was observed during May 2009 and a point-paper (Reference A and Annex F to this report) was published on 13 July 2009 at the request of COS KFOR for a rapid appraisal of the LL process situation. The team observed an AAR process which operated adequately, sharing information with HQ KFOR from the

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While these documents address the observed shortfall, until they are issued as direction (not as trial versions), accepted, and widely implemented, the analysis comment remains valid.

[20] Major General Michael T. Flynn, ISAF CJ2 by VTC to Information Sharing in Afghanistan Workshop, NATO HQ, Brussels BE, 12 April, 2010.

[21] Bi-SC Priority Shortfall Areas; 29 May 2009; 1500/SHJCMD/09-206943 5000 TC-5/TT-4485/Ser: NR0016; NATO Restricted

MNTF exercises. However, the LLSO in HQ KFOR was unable to provide any evidence for effective lesson management for both the HQ and on behalf of the MNTFs. The LL database did not function, and the incumbent LLSO estimated that the database was last used in 2007. This is believed to have been caused by the background data to the Microsoft Access database being lost during routine server management. Information available on the Mission Secret (MS) portal was mostly obsolete.

102. Lessons were being actively collected by most nations in KFOR, either via visiting lesson observers, visits by representative from training and doctrine establishments, or simple reporting back to national headquarters. However, these lessons were not shared with other MNTFs either directly or via HQ KFOR. The LL process in KFOR is entirely nationally driven with no benefit to the Alliance. It can be said that there is currently no NATO LL sharing in KFOR. The root causes for this situation were identified as:

- The minimal resourcing for LL process both in terms of manpower and staff time.

- Minimal liaison between the MNTFs and HQ KFOR LL COI.

Lessons Learned In ISAF

103. The LL process and information sharing in ISAF has been discussed in the report *The Lessons Learned Process in ISAF* (Reference C). As in KFOR, in the ISAF LL process there is a prevalence of manoeuvre unit to nation flow of information and a failure of manoeuvre unit to operational HQ flow of information. Few manoeuvre units use the ISAF Mission Secret (MS) Local Area Network (LAN) and none were observed to use NS LAN.[22]

104. There are few examples of best, or even adequate, practice of the NATO LL process in ISAF. Most RCs do not submit lessons to HQ ISAF or, since its inception, the IJC. If lessons are generated, they are processed in-house or shared nationally; not within ISAF and NATO. NATO knowledge is shared via NATO PDT through in-theatre SMEs, but this practice is highly inefficient, benefiting only the immediate Target Audience (TA) of the PDT course, and requiring SMEs to leave the operational theatre to assist in training.

105. ISAF presents a good opportunity for lesson gathering, and for using organizational knowledge gained there to benefit future operations. However, this opportunity is rarely realized. In one example, a large number of lessons were generated following the Afghan elections in 2005. In 2009 these were circulated, somewhat unsystematically, among ISAF HQ, JFC Brunssum and JALLC, but were not effectively used in planning to avoid repeat situations. An example of a lesson from 2005 that was not used to inform 2009 election planning, was that polling stations remained open long after the planned closing time to allow late voters to participate in the election. However, the plan for air support during the polling station opening hours had little flexibility, leaving the polling stations, the voters and their protecting NATO and Afghan units without air support. This was observed in 2005 and highlighted in 2009, but the 2009 air plan once again considered only the planned polling station schedule.

106. A second example merits discussion. A manoeuvre unit experienced unexpected loss of radio communication on leaving base. This was due to the predictable

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[22] This problem may be alleviated by the introduction of the Afghanistan Mission Network (AMN) proposed for 1 July, 2010, which proposes to link several national systems (and it is hoped eventually to extend to all TCN national systems) allowing direct transmission of lessons prepared nationally to and from ISAF/NATO.

interference with other emitting equipment. However because the unit was not trained to expect this occurrence, the mission was delayed. This represents a gap in national training. The RC South Combined Joint Policy and Plans staff observed that they were frequently required, in their planning preparations for operations, to micro-manage units to ensure that manoeuvre units observed basic TTPs. While tactical training is a national responsibility, NATO bears a corporate responsibility to ensure that such information is available to ensure that basic training requirements are met.

107. These examples highlights poor information management and poor information integration into planning. The project team encountered other incidents where there was an almost exact repetition of events, with no institutional learning from either event. Useful information about most of these events existed somewhere, but was not shared and was not incorporated into planning, training or pre-deployment preparations.

Best Practices in Operations[23]

108. An example of BP may be drawn from operations in RC South. The LLSO in Task Force (TF) Helmand, based in Lashkar Gar, receives "learning accounts" from Battle Groups, usually after Killed in Action / Very Seriously Injured (KIA/VSI) incidents. A learning account comprises a detailed description of the conditions leading to the event and how the event developed and concluded, and ends with a series of recommendations for interim changes to tactics. The learning account is submitted to the TF HQ within 48 to 72 hours of the event. The TF LLSO augments it with basic analysis and contextual contributions; for instance the TF-level intelligence picture, and shares it with his nation and his higher ISAF command, HQ RC South.

109. The TF LLSO adds further contextualizing material; for instance, information about the intelligence picture, trends in enemy activity, and any subsequent forensic information. This comprises the final After Action Report (AAR) which is submitted, within four to five days of the event, both to the national MOD and to RC South Combined Joint Training and Evaluation (CJ7), via the national intranet and the ISAF MS network. In addition, the LLSO briefs LL updates to incoming rotations as part of their reception training. The key points about this example are the timely turnaround of the information, the comprehensive initial information to describe the event, the added-value of the LLSO's wider analysis, and the equitable sharing between the nation and NATO. The LLSO concerned cited several factors which ensured a successful LL process in TF Helmand:

- Honesty and openness, and an ability to admit mistakes;

- Robust intelligence support;

- Working on the ISAF MS system; and

- Good SME input.

110. The process above is effective and quick at turning data into useful information and knowledge which is shared with all stakeholders unconditionally. This can quickly add to commanders' and leaders' situational awareness to allow adaptation of friendly forces' TTPs to mitigate, counter or defeat developments in enemy tactics and is considered by the JALLC analysis team to be a BP.

111. Another example of BP is in the counter-IED area. A strong counter-IED LL capability has been set up in Afghanistan that is generally considered to be effective at collecting, analysing, and implementing counter-IED lessons. The capability is based

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[23] This section is drawn from the JALLC report *The Lessons Learned Process in ISAF*, Reference C

on a network of ISAF and national contributions. From the ISAF side it is coordinated by the HQ ISAF counter-IED Branch, which synchronizes and supports delivery of counter-IED training and maintains a common IED picture in the ISAF Area of Operations (AOO) in support of COMISAF in coordination with Afghan National Security Forces and United States Forces Afghanistan (USFOR-A). Counter-IED branches at the RC and TF level, supported by Explosive Ordnance Disposal teams under Tactical Control of the RCs, complete ISAF's counter-IED structure.

112. In RC South, the Joint Effects Assessment Cell has enjoyed success in observing trends in the incidence of IED employment in the AOO, and has therefore informed Counter-IED training and counter-measures. The synergy of trend analysis with results of technical investigations and evaluations of tactics are quickly passed on to trainers, planners and to those on the ground. Training programmes target new arrivals in theatre and updates are provided to tactical units already deployed.

113. The JALLC considers there to be three keys to the success of the counter-IED structure. First, it is supported at all levels by committed people who have both specialist knowledge in the topic and a stake in ensuring success. Second, it is supported by extensive technical support facilities and analysis. Third, the cost of success or failure in terms of lives lost is readily apparent to all involved and therefore full support and engagement is obtained from commanders. It should be noted that, although essentially a LL process, it operates independently of the ISAF LL process[24], which does not share equally enthusiastic support. These key factors listed above are largely missing from the ISAF LL process.

LL Process After NRF Rotations

114. The handover of lessons through NRF rotations does not happen consistently. Key staff from the respective NRF HQs will meet with their following/preceding HQ for a handover, but that handover has no consistent structure. One NRF HQ indicated that LL were an agenda item, another indicated that it was not. As with other handovers, officers will discuss their experiences and concerns with their counterpart. However, an issue that is neither recent nor important enough to be in the departing officer's mind at the time of handover will likely be overlooked, unless the topic is specifically mandated. Experience is frequently passed on by informal networking and transfer of tacit knowledge[25]. The reliance on tacit knowledge exchange could be negated through either better utilization of the NATO LLDb or through an "NRF Unit LLDb" either passed from unit to unit or held in a central location such as SHAPE.

115. The LL focus is primarily internal, on divisional or HQ improvements to practice. Few lessons other than requests for support from higher HQ are shared, and fewer still are accepted from external organizations for incorporation into internal practice. There are areas where NRF HQs share lessons. The division of responsibility across the JFCs for the development of DJSE SOPs, and the coordination efforts of events such as Exercise ARRCADE CRICKET, and the Joint Forces Air Component Command (JFACC) conferences are three positive examples. Additionally, NRF training exercises facilitated by JWC (through having trained earlier rotations of NRF) permit lessons captured in training by the JWC to be shared with subsequent TAs.

116. As part of the JALLC POW, JALLC analysts frequently attend NRF exercises to gather data for specific ARs. In addition to the provision of a formal analysis report, the JALLC analysis team frequently briefs successive HQs on the findings of the prior

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[24] HQ ISAF LL Branch does include IED attacks as an area of interest on the Quarterly LL Collection Plan, but Counter-IED activity in HQ ISAF is led by Counter-IED Branch.

[25] Tacit knowledge is internalized, individual experience while explicit knowledge is codified and stored, and thus a much more accessible, form of knowledge.

analysis. This has been well received by the staffs, and has yielded improvements to practices in the specific areas covered by the analyses. This demonstrates that the potential benefits for lesson sharing are significant, and should become a routine activity across all divisions and branches of the HQs during handover activities. Currently the sharing of experience is mostly JALLC facilitated as an output of JALLC analysis.

LL Process in Pre-Deployment Training

117. The JALLC has observed that the majority of lessons are shared as reports or in databases. Although these methods may be effective at communicating lessons to staff-level stakeholders using NATO communication and information systems (CIS), lesson-sharing at lower levels does not occur well. LLs from reports and databases need to be incorporated into routine training, unit orders, rehearsals and on–the–job training.

118. National lessons have provided some immediate impacts to national PDT for troops deploying to ISAF and KFOR within days. Adjustments to TTPs, particularly Counter-IED techniques, have been rapidly communicated from the observers to national training establishments via in-theatre LOs using national communication systems. Methods for collecting observations vary by nation according to operational tempo and resources. Methods include:

- Dedicated in-theatre staff officers;
- Regular visits from national training establishments to update training;
- Frequent national First Impression Reports (FIR), AARs and interim reporting procedures; and
- Senior leader post-tour interviews by national training establishments.

119. Many nations noted that their LL process could influence PDT within several weeks for urgent issues. Most nations could influence the PDT of a unit deploying two rotations after the operational observation was first made. Exceptionally, training could be influenced within a matter of days: for example, specialist medical teams from the United Kingdom, which have very short deployment periods and specialist PDT. In the case of routine PDT development, observers of lessons in theatre will rarely see the effects of their observations on training and TTPs: the link between submitted observation and up-to-date training is not apparent to the deploying personnel. This may encourage a "*what is in it for me?"* mindset when offered an opportunity to prepare observations. As described above, counter-IED trainers have created a strong association between quality training and quality observation, fostering a positive learning loop.

120. Operational experience is incorporated into NATO PDT for ISAF with the assistance of SMEs recruited from the operational theatre via JWC and JFC Brunssum. As noted in previous JALLC reports on NATO PDT (most recently in the JALLC Report, "*ISAF Intelligence Orientation Course*"[26]) it is estimated that in-theatre subject matter expertise remains current for approximately four months after an SME leaves the theatre, which presents an urgent corporate knowledge problem for NATO. This recent JALLC report states, *"SMEs are the most valuable assets to support ISAF PDT events, but also represent a critical resource that needs good management."*

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[26] JALLC, ISAF Intelligence Orientation Course (I2OC) 15-19 February 2010, 26 March 2010 JALLC/CG/10/072 NATO Unclassified Releasable to ISAF

121. Lessons may be used to help address the shortfall in PDT resources for current operations. The Bi-SC Priority Shortfall Areas report notes that:

"Untrained individuals require in-theatre operational resources to train them. This decreases overall mission effectiveness, risking lives and operational success. Lack of lessons learned and after action reports limit ability of future training to meet changing needs, also increasing risk to mission effectiveness. Bi-SC training plans are critical to effectively identifying and synchronising efforts to address them."

122. The Advanced Distributed Learning (ADL) resource presents a potential opportunity for up-to-date lessons to be communicated in a relatively secure environment to a wide TA of deploying staff. ADL is available via the ACT website on the NU WAN and provides a basic introduction to operations.

Summary of LL Process in NATO Operations, the NRF and Pre-Deployment Training

123. Lessons from operations reported and actioned within the NATO chain of command are few, unsystematically collected and poorly shared, when compared to lessons reported and actioned within national chains of command. The failure of NATO units to modify their SOPs and TTP stands in contrast, in ISAF, to the adaptability of the insurgents. The benefit of the LL process is most often unseen by the reporting units: the benefits are inherited by successive units. One exceptional situation is counter-IED training, where in-theatre training demonstrates to units the value of feedback into training and communicating observations.

124. Lessons are rarely exploited in operational planning. This is due to poor information assurance and accessibility. Situations which, in hindsight, have been experienced before and have not been avoided, reduce the credibility of the LL process. Between NRF rotations there is no formal exchange of explicit knowledge amongst NRF HQs.

LL PROCESSES IN NATIONS

125. Most nations (91 per cent of survey respondents, as well as nations interviewed either during visits or through in-theatre interviews) have functioning LL processes or, at the very least, a process for adapting PDT in response to in-theatre issues. Although it is recognized that the latter process represents an effective feedback mechanism rather than a tool for institutional change, most of these national processes are similar to the NATO process model. Many nations claim to share their lessons with NATO, and specifically with the JALLC. This, however, is not the case in practice, with relatively few nationally-sourced lessons reaching the NATO LLDb hosted by the JALLC. Annex E details findings of the analysis of LL processes and sharing conducted in a sampling of NATO and non-NATO nations. The following sections discuss key features found.

Coordination and Endorsement (Germany)

126. The German national LL process is particularly effective at staffing lessons, with most lessons being resolved within four to six weeks. This success can be ascribed to the application of the spirit of the three Cs of the NATO Bi-SC LL process: *Coordination*, *Cooperation* and *Communication*. Lessons are communicated via a LLDb which is accessible at the Joint and Service level. The German LLDb acts both as an archive and as a staffing tool.

127. The endorsement and tasking processes are achieved by two committees which work closely and meet every two months. The lower, working level committee

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comprises OF-4 staff and provides the relevant staffing; a decision-making and oversight level is provided by a committee of flag officers. The synergy is a result of:

- working level lesson preparation, analysis, deconfliction, prioritization and networking, and

- leadership engagement by the higher level committee, yields a highly effective national LL process.

Timely Updating of PDT (United Kingdom)

128. The GBR LL process has success in terms of a positive influence on PDT. PDT for medics, for example, has been updated with operationally-derived lessons within hours of reporting from theatre. This has allowed individuals with specialist skills deployed for relatively short periods to benefit from new information extremely quickly.

Sharing of Lessons (United Kingdom)

129. Significant efforts are made to share operational lessons with Allies. The national SOP for the LL process notes, "the security classification of the report should allow widest possible circulation to ensure lessons can be learned across the coalition; where possible it should be classified as NATO……..Rel ISAF."[27] Lessons are shared on the Defence Lessons Identified Management System (DLIMS) after an analysis phase. Lessons are scheduled to be reviewed on a bi-annual basis. While efforts to share are significant, and the effect on training is also significant, the methodology for tackling long-term institutional change shares problems of applicability and RA endorsement and tasking with other nations.

Data Collection Teams (United States)

130. Several nations employ LL data collection teams and LL centre LOs to collect lessons or information on operations thereby freeing the operational unit of this task and allowing it to focus on operations. The US Army's CALL deploys Theater Observation Detachments (TOD) as LOs, and Collection and Analysis Teams (CAAT) for specific issue analysis. Similarly, the US MCCLL deploys LOs on operations, to gather lessons; a practice proven to improve training quickly.

Limited Access LLDb (Italy)

131. The Italian LLDb offers users an option to restrict access of some lessons to certain users. A positive effect of this "need to know" approach is that user groups requiring increased confidentiality, such as Special Operations Forces (SOF), actually share most of their lessons widely. If they did not have an option to restrict viewing of some lessons, they would not share at all. It also allows a unit to use the same database to assess an observation for merit as it would use to share the lesson without copying from one Db to another.

Non-NATO Nations

132. Sharing of lessons between NNTCN and NATO is minimal. As in the case of NATO nations, most non-NATO nations' lessons and knowledge from operations is captured at source, communicated to the nation in question and incorporated into PDT, with little information exchange to or from NATO.

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[27] *Ibid*, paragraph 7a

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133. Sweden and Finland are notable for their establishment of SWEDINT and FINCENT respectively. These centres provide training for peace support operations. SWE and FIN form part of the Nordic Coordinated Arrangement for Military Peace Support (NORDCAPS) sharing community, but while this is a beneficial community of interest for military cooperation, it is reported that the sharing of lessons specifically has stalled due to national releasability considerations.

134. The sharing of lessons tends to be more successful within communities of common interest—the America/Britain/Canada/Australia group (known as ABCA), German/Austrian cooperation and Spain/Chile links—where nations have a historical and cultural relationship, in contrast to the poor sharing of lessons within the Alliance, and between Alliance and Partners.

135. The NU LLDb, available via the Internet to NATO and PfP nations, has received a limited number of lessons and cannot yet be considered a useful resource with its current content and low number of users. The (education) Partnership Real-Time Information Management and Exchange System (e-PRIME) information sharing portal available to NATO and PfP nations presents an opportunity for sharing lessons which is yet to be fully exploited, as observed in the JALLC report *Managing Partnerships*. The Bi-SC Military Cooperation Division (MCD) represents an opportunity to coordinate sharing efforts and to establish a systematic and regular communication of lessons between the Alliance and NNTCNs. NATO and NNTCNs would benefit from a concerted effort to coordinate the development and promotion of the NATO NU LLDb and e-PRIME.

SUMMARY OF LL PROCESSES IN NATIONS

136. LL processes among the nations are broadly similar, based on the simple process cycle of observing a problem, determining the root cause and potential RA, deciding on a course of action and AB, and tasking the AB. Methodologies vary in the details: the method of sourcing of observations (actively seeking observations or passively awaiting observations), the technical tools to communicate observations (bespoke LLDb, other software) and the methods to task the AB (technical tools such as TT, informal conversations, customised LLDb).

4
Themes in Lessons Learned

INTRODUCTION

137. Most organizational LL processes are similar and conform to the NATO Policy model. There are examples of good and bad practice, which are shared by many organizations. This chapter will highlight common problems and examples of BP. The features are presented in two sections: lesson staffing and lesson sharing.

COMMON FEATURES IN STAFFING LESSONS LEARNED

Perceptions of LL

138. A common theme observed was that lessons are perceived as negative, and were considered as a secondary task, associated with evaluation, assessment, and post-event administration. Lessons were considered to be bureaucratic outputs of exercises, training and operations, rather than value-added inputs into exercises, training and operations. The relationship between prior negative experience and future positive experience brought about by a LL process is not clear to many.

139. In some arenas, for instance ISAF RC South counter-IED training, the learning-experience-feedback relationship is clear, and the results are a very positive perception of the counter-IED training product, with effective learning and post-training updates from past students sent to the training teams to improve training. The value of the counter-IED process is closely associated with improved training and thus, lives saved. Other lessons are often learned in the longer-term and the benefits are less immediately observable.

Process Effectiveness

140. In the JALLC survey in support of this study, respondents were asked to rate the *Effectiveness* of their LL process, and *Organization*, *Leadership*, *Timeliness* and *Tools* as driving factors of the *Effectiveness*. During interviews, it became apparent that *Leadership* has a very significant role in determining effectiveness. *Leadership* determines and approves the *Organization*, appoints the right (or wrong) people to LL duties, and sets the priority for staff work affecting *Timeliness*. As such, leadership is the key input that influences the other factors considered in this analysis.

Leadership Engagement

141. The LL processes across NATO and operations that were examined were almost unanimously described as personality-driven. Successful processes engaged the COS or DOS support in issuing formal taskers, and involved them in the endorsement phase of the lesson. Where leadership did not engage in the LL process, tasking ABs with RA proved difficult, engaging branch or division LL OPRs was difficult, and staff engagement through the entire process was problematic; the process was essentially personality-stalled.

142. Leadership engagement is also needed to promote the role of lessons in the planning process. 66 per cent of survey respondents indicated that they actively used lessons as an input to planning future exercises and operations. However, during follow-up interviews, few could describe a meaningful, deliberate process whereby lessons were effectively applied to the planning process. In ISAF, the project team

found examples where lessons were available during the planning process, but not exploited. During the mission analysis and planning phases, leaders should ensure that lessons have been consulted to apply previous experience to future intentions. This is being addressed by SHAPE in forthcoming direction.[28]

143. Leadership engagement is also required to ensure that the administrative responsibilities of LL OPRs are adequately supported. Despite being custodians of potentially critical knowledge, LL OPRs are often multiple-hatted, poorly trained, inadequately supported and poorly resourced. Establishing lessons as an essential input to planning and decision-making, and reflecting its importance with leadership engagement, will reap benefits in effort, resources and lives saved.

Organization

144. Until recent changes to some NCS HQ structures, NATO LL branches have, been located predominantly within organizations under the J7 Training and Exercise branches, and often associated with evaluation activities. National LL branches have been observed to be located in:

- a J7 location at the Service level only;
- a J7 location up to the Joint level; and
- a separate Training and Doctrine (TRADOC) organisation.

145. Instances of each of the above structures have been observed to work well. Important factors are:

- the accessibility of leadership for endorsement and tasking of RA;
- the ease of communication of lessons from operations;
- the rapidity of influence on PDT; and
- the ease of communication between stakeholders at all levels.

146. An additional positive feature of organisations such as SWEDINT, FINCENT, NATO Centres of Excellence and similar organizations is their ability to share lessons among a wide COI.

Experience and Knowledge

147. The JALLC observed in this and several other projects that NATO staff officers occupy billets for which their training, and sometimes experience, is inadequate. The root cause of this symptom is the adequacy of national training or selection. The impact on the LL environment is that staff officers are reluctant to share lessons which may suggest poor individual performance, but which actually reveal a shortcoming in national training.

148. With specific reference to LLSOs, this study observed that most LLSOs are untrained and inexperienced in their role as information managers and managers of organizational change. 77 per cent of canvassed LL OPRs in the NCS were untrained for their LL duties. 62 per cent of LL OPRs on operations were unfamiliar with the

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[28] As stated in Chapter 1, SHAPE indicated that ACO Comprehensive Operational Planning Directive (COPD) dated 25 Feb10 provides this guidance. They also note that the revised AD 80-1 will provide guidance for planners to look to LL as inputs for operation/exercise planning. It must be noted that the COPS is a "trial version" and the new ACO Directive 80-1 has not been issued. While these documents address the observed shortfall, until they are issued as direction (not a trial version), accepted and widely implemented, the analysis comment remains valid.

NATO LL policy. Staff at the front end of the NATO LL process are largely untrained, and have little understanding of their role in the entire NATO LL process.

149. Typically, LLSOs have difficulty understanding their role in the LL process; applying methods to manage and share lessons (particularly lessons outside their area of military expertise); and conducting adequate analysis. The NATO LLSO Course addresses several of these areas in preparing LLSOs deploying on NATO operations or occupying NATO LL billets, as do phases of JWC ISAF MRT.

The Role of Analysis and Subject Matter Experts

150. Many lessons noted during the course of this project have lacked any basic analysis or sufficient description on which to base an analysis. This problem exists even for relatively simple lesson. There is a perception that analysis is a process, rather like evaluation and assessment, which requires external practice and support, or a suite of specialist techniques, to achieve. This may be the case for broad, often operational and strategic issues, but rarely is the case for straightforward in-house and tactical observations. Many LLSOs cited that analysis was not part of their job description, or that there were no analysis resources available to support them. The JALLC was perceived, in some quarters, to be the provider of supporting analysis to any observations that may be submitted to it.

151. The staffing of a lesson should not be conditional on external analysis. If the LLSO or observer has positively addressed key questions such as the following, then the AR may have been met:

- Does the lesson describe the root cause of the problem?

- Does the lesson relate to a unique situation?

- Does the proposed solution improve practice in this situation?

152. The application of experience and sound judgment should, in most cases, be sufficient to discover and describe the root causes of a problem and to identify an appropriate RA and AB. Where the LLSO is unable to answer the above questions with a "yes", given the support of in-unit SMEs, then external analysis assistance may be required.

Lessons in Routine Reporting

153. LL reporting both to the NATO chain of command and back to nations imposes an administration burden, which may include: changing the reporting format, translating the text, and transferring the document to the MS system. One interviewee in RC Central noted that *"One problem with Lessons Learned is that it starts with bureaucracy, and because of that, it is not liked."* In the example of the good practice of sharing by a national LLSO in TF Helmand, the LLSO used a national format for reporting. Although his reporting is not strictly in accordance with the ISAF LL SOP, it is effective. This highlights the point that for optimal sharing, stakeholders should expect and welcome various templates and styles, subject to a minimum requirement of information and supporting metadata[29]. However, LL reporting should complement, and be incorporated into, routine reporting.

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[29] A recommended minimum content of an observation would be an *Observation Description*, *Discussion*, *Recommendation*, *Originating Point of Contact*, and *Classification*.

Drafting observations

154. The Bi-SC LL Directive (Reference E) gives the LL reporting format in the *Observation, Discussion, Conclusion,* and *Recommendation* format, corresponding to "what happened", "why it happened", a concluding round-up (perhaps including an impact statement) and "what we can do about it". Variations on this structure are used and are acceptable. Observations can be brief and concise, and the recommended *Observation Discussion Conclusion Recommendation* format incorporates the minimum requirement for information.

155. Many lessons that were observed in LLDbs lack adequate description and detail, and require clarification from LL staff. In cases where observations are made anonymously, the lack of adequate information will immediately halt a lesson. Guidance, including examples, should be provided to ensure that observers include adequate information in their observations: essentially a business case for following up the observation, and for making the change. Commanders, before they approve a lesson for sharing, should ensure that sufficient information is included to make the issue clear and understandable as a stand-alone entity.

156. This project encountered many observations which fail to provide adequate data to identify the root cause of a problem. Descriptions often only include the symptom, and perhaps obvious causes of a problem. Such an observation in staffing cannot support the identification of the root cause and thus development of the appropriate RA. Adequate detail allows an RA and AB to be identified. In the drafting of observations, some extra time spent reflecting on the root causes usually saves considerable time during the staffing of the lesson, because the observer can exploit their proximity to the problem to conduct further investigation and add useful evidence.

COMMON PROBLEMS IN SHARING LESSONS

Categorization

157. Observations and lessons are derived from many different sources, environments and conditions and require different treatment. This project has observed that there are many types of lessons and their management should reflect this in order to avoid both unnecessary sharing and also inappropriate withholding.

158. Attempts at grouping lessons by type have focussed on factors including:

- outcome (positive or negative);
- risk (effect and likelihood);
- observation source;
- Action Body;
- applicability for sharing; and
- military level (tactical, operational, strategic).

159. Grouping lessons tends to be exclusive rather than inclusive and increases the risk of pigeon-holing in storage and stove-piping in solution. Lessons that cross functional boundaries or organizations risk being lost in administration due to a lack of ownership. Tactical lessons from operations that require, for instance, NATO HQ attention for national solution, risk delay and possible administrative loss if the lesson is staffed via the chain of command, particularly if operational and strategic commands (SC) are handling ostensibly tactical issues. This study has found that lessons can seldom be categorized in a way that facilitates both appropriate solution and appropriate sharing. Therefore categorization should be avoided. However, as noted

above, a minimum requirement for data and metadata is recommended to ensure that an adequate 'business case' for the lesson is presented, and adequate background data of the circumstances and stakeholders are available .

160. Multi-agency LL forums such as the ISAF LL Support WG[30] present the opportunity to share the information and to appoint an AB by consensus. This works to good effect in the Bi-SC Medical LL VTC group, but relies on the motivation of the COI and the authority of the stakeholders to volunteer and take responsibility for staffing and progressing lessons.

Classification

161. There are two key problem areas in classification: releasability and misclassification. In fact, most nations that responded to our survey indicated that releasability was frequently the cause of inability to share. The JALLC report *The Lessons Learned Process in ISAF* (Reference C) described these problem areas succinctly and in a way that can apply to lesson sharing across NATO and nations:

> *"Interviews confirmed that releasability continues to present problems for information sharing, though it is a subsidiary effect of national information sharing policies. That is to say, releasability is an expression of national policy. Misclassification, on the other hand, can be through error, through lack of training or neglect, through a misplaced desire to encourage senior leadership to pay attention to a document. National practices and default settings have primacy in classification. This is exacerbated with the widespread and default use of national CIS systems which request or require national classifications rather than mission or NATO classifications or with appropriate releasability caveats.*

> *A common theme in discussions about classification was that the staff officer's 'hands were tied', and expressions of frustration at being unable to share, or unable to share easily, were the norm. This is a sentiment that resonates throughout US forces, for instance, for sharing with other nations. Senior leaders are aware of the primacy of 'responsibility to share' over 'need to know', and General McChrystal's drive to share actively with Afghan partners is gaining much momentum at the HQ ISAF and subordinate levels. But this message needs to resonate in national MOD to force change. The security policy makers both within NATO and the nations should address the political and operational risks resulting from failure to share information with Allies, and to delegate the responsibility for security, and also the opportunity for combined knowledge, to the subordinate levels."*

Applicability

162. As a rule, any lesson which may improve performance, or prevent a similar problem, elsewhere within the Alliance, either within NATO operations or within NATO nations, is applicable for sharing using the NATO LLDb. In many units, lessons are observed to fall into two categories which affect lessons' applicability for sharing:

- Internal lessons on procedure which are unlikely to be shared, on the basis of relevance and confidentiality; and

- Lessons resulting from factors that cannot be resolved internally and therefore are shared upwards for assistance.

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[30] The ISAF LL Support WG comprises representatives from HQ SACT, SHAPE, HQ ISAF, JFC Brunssum, JWC, JFTC and JALLC. It meets via VTC and currently addresses procedural issues with the intent to address cross-cutting LI.

163. The criterion for applicability for sharing is, inappropriately, the requirement for assistance, not the requirement for others to benefit from the experience of the originating unit.

164. This perceived applicability of lessons is a significant roadblock to sharing lessons. Stakeholders are wary of sharing problems within and beyond their command. Reasons for reluctance to share include the perception that they are problems that:

- Only the current staff will encounter;

- Only the current staff can solve;

- Reflect poorly on the current staff; and

- Are of no interest to anyone else.

165. It appears that lessons are shared only when sharing is seen as the means of getting assistance necessary to resolve a problem—that is, when it benefits the person or body doing the sharing. It is rare for lessons to be shared solely for the benefit of other stakeholders likely to encounter similar problems. This is the crux of the problem of applicability. LL Policy and Directives do not explicitly tackle the problem of applicability, with practical examples that provide clear guidance to all stakeholders on the wider benefits of sharing information. Such guidance would allow organizations to better understand what may be of benefit to others, ensuring it is published, such as to the NATO LLDb, so that others may learn from their experience. These other organizations may then select what is applicable to them and extract from the LLDb what they feel is relevant to their planning process.

Perception of Externally Shared Lessons

166. The practical sharing of lessons outside units and HQs was observed to be limited, particularly within the NCS/ NFS, due to the issues cited above including applicability, communication systems, and internal releasability approval (as opposed to security releasability constraints). Some units, HQs, and nations were proactive in sharing information. 86 per cent of survey respondents indicated that their HQ/unit actively shares lessons. However, when survey respondents were asked with whom they shared, or communicated for the purpose of sharing, they reported a fairly small group.

167. Few units, HQ and nations cited a methodology for gathering lessons, nor a process for the incorporation of received lessons into their own LL process or planning processes. No LL directives or SOP were observed to include a process, including an endorsement process, to incorporate lessons from external sources for consideration and possible incorporation of lessons into their own working processes. The inclusion of the staffing of external lessons into LLWG and similar activities would be a simple solution to this gap in the exploitation of others' lessons.

168. A common theme prevailed, encapsulated thus; *"Military leaders have to be convinced that lessons from others can be a benefit"*[31]; *"the general attitude is that I am smarter than this person / organization"*[32]. The root cause for this can be described as trust in the information. Factors such as perceptions of data obsolescence, incomplete data and relevance to own situation reduce perceptions in the value of the information available. As cited previously, the benefit of informal networks is that value and applicability is implicit in the information sharing.

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[31] Quote of LL Sharing Survey response.

[32] *Ibid.*

Communication systems

169. Few operational units use the Mission Secret (MS) systems, for instance in ISAF or KFOR, to communicate LL, and no field units were observed to use the NATO Secret system, due to availability and prevalence of national systems for routine work. Most observations on operations are captured on a national CIS system at the battle group or brigade level. As noted previously, it is by exception that the information will be duplicated onto a NATO system. This creates a significant roadblock for the sharing and management of lessons and has also been cited as a PDT problem in the JALLC report, "ISAF Intelligence Orientation Course". The introduction of the Afghanistan Mission Network (AMN), rolled out in July 2010 to provide linkages between national and ISAF CIS systems, may alleviate this issue. This linking of national systems to the ISAF MS system may facilitate the exchange of lessons between nations and NATO.

170. The optimum route for sharing lessons from operations is through the NATO operational chain of command directly to the NATO LLDb. This allows visibility of the lessons on the NS WAN which, although limited in disposition across nations, remains the only secure system for sharing information NATO-wide. LL sharing from nations to NATO does occasionally occur, most recently from the Unites States' CALL and JCOA, Canada and the United Kingdom directly to the JALLC. This, again, is as an exception and the lessons arrived with significant delay, sometimes of up to one year.

Staff rotations

171. Staff rotations adversely impact NATO's ability to build organizational knowledge and progress lessons in two main ways:

- Knowledge and experience developed over a rotation are rarely converted from tacit knowledge into explicit knowledge, and are therefore lost: lessons which are not captured need to be learned again. On operations, this knowledge-loss cycle can be as short as three months. Perceptions that the operational environment is constantly changing must be measured against this short experience cycle; and

- Lessons often have a long life-cycle, from reporting as an observation to validation as an LL. The observer of a problem may well rotate out of post during the RA period. This requires the original observation to be well-prepared to ensure that the LI is well enough developed to give a strong business case for changing practice that is comprehensive and clear to stakeholders and successive rotations.

172. While LL processes are negatively impacted by rotations, lesson sharing also offers a solution. Interviewees in ISAF noted that, lessons are only as good as the handover, i.e. the verbal sharing of tacit knowledge is the only effective means of mitigating problems in the future. In many circumstances, verbal handovers do not occur at all. If, at the very least, a handover package included captured lessons with the basic "*what happened*", "*why it happened*" and "*how can we solve or avoid the problem*", then some recurring issues can be avoided. Thus tacit knowledge is converted to explicit knowledge within the organization. Staff should ensure that, during the course of their tour or posting, lessons are recorded and shared adequately to ensure that their successors at least have a reference for potential problems.

National Approaches to Sharing LL with NATO[33]

173. Few nations share lessons widely. Although the barriers to sharing can make transferring knowledge challenging, it is nevertheless achievable. In most cases, TCNs

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[33] This section is drawn from the JALLC report *The Lessons Learned Process in ISAF*, Reference C

generate FIR, AAR, Post Operation Reports (POR) and interim deployment reports which are sent exclusively to their national MOD, unit rear-party, or training and doctrine institutions. The practice of sharing this information equally with KFOR or ISAF and their nations is very much the exception rather than the rule. This was highlighted during a presentation at the 2009 NATO LL Conference where the former LL OPR from the Finnish contingent in RC North described the significant problems he faced in getting critical lessons from other ISAF national contingents.[34]

174. The reasons identified from data collection for reporting through national chains-of-command exclusively or as a priority over reporting to NATO include:

- National policy not to share lessons with NATO;

- Restriction of access to the NS network;

- Routine (what has always been done);

- Linguistic convenience (translating into English is burdensome and time-consuming); and

- Reciprocity.

175. Some nations do not share as a matter of policy. As an example, one nation's LL OPR indicated that some lessons are releasable to ISAF, but most are caveated to national eyes, or to bi-lateral allies. In other cases, nations do not have a policy or intent not to share, but practically do not do so. Although some discussed language abilities as an obstacle, it was in the context of an overall problem for their nation and nationals operating in NATO's English environment on operations, and not a problem specific to lessons. The extra staff effort of translation was cited as one cause for a lesson not being shared. Finally it appears that, in some cases, sharing of issues outside national channels simply does not occur to staff officers who generate products of potential LL interest.

176.   Leadership engagement can have a defining influence on the approach to sharing. In one instance a senior officer from a NATO nation's MOD visiting his forces in theatre directed that they cease sharing lessons. He stated, "*Lessons learned are a national issue: we do not share.*" Ironically, this same nation's national LL organization was cited by other nations for openness and willingness to share. A LL field officer observed, "*Sharing with ISAF means sharing with the Taliban.*"

BEST PRACTICES IN THE LESSONS LEARNED PROCESS

177. This section looks at some practices observed during the data collection that the JALLC considers "best practice" and that should be emulated by others where possible.

TF Helmand

178. The BP observed in TF Helmand was described in detail in Chapter 3. The key elements to sustaining this practice include honesty and transparency with regard to appraising own practices, adding staffing value to observations, such as the wider intelligence picture, historical data, etc. Working on NATO systems ensures that information is available in the first instance to the Alliance, and secondarily to individual nations. Finally, the inclusion of SME input is a key to ensuring that the information is valid, and recognized as authoritative by the target audience.

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[34] Presentation by Major Rolf Helenius – "LL in ISAF from the Finnish Perspective" delivered 21 October 2009 at the NATO LL Conference in Lisbon, Portugal.

Optional Confidentiality

179. Lessons are frequently described as "dirty laundry" — negative experience of performance — which reduces the desire to share. An additional aspect is the sensitivity of information. A "responsibility to share" mentality needs to complement a "need to know" approach. Some information, for operational reasons, must be secured. The Italian Joint Services LLDb allows units to select a "secrecy" option for a submitted observation, allowing only a small stakeholder group to view it. Although this keeps a proportion of observations hidden from the wider community of interest, the net result is that stakeholders who require secrecy for some specific issues, and who would otherwise not share any issues at all, in fact share most of their knowledge without caveats. The option to exclude specific lessons from wider view generally encourages sharing, rather than discouraging it.

SME Involvement from AR to RA

180. Some NATO commands and several nations involve stakeholders in the LL process at the AR formulation stage which has been reported as having yielded significant success. The US Air Force noted that SMEs recruited for analysis tasks not only applied expert knowledge to the analysis but also greatly facilitated the RA process when the SMEs redeployed back to their units. The German MoD observed increased stakeholder 'buy-in' to lessons when the stakeholders were involved in formulating the AR. Involving stakeholders in identifying problems and assisting in the analysis process greatly increases involvement and acceptance of the RA.

Specialist LL COI

181. The Bi-SC Medical LL Video Teleconference (VTC) group, chaired by HQ SACT, includes stakeholders from NATO HQ, SHAPE, HQ SACT, JWC, JALLC, and NATO School Oberammergau. The group uses both NU and NS LLDbs as its source for lessons requiring learning and/or staffing within the NATO medical community. The group circulates an agenda citing the LLDb references, ensuring that all stakeholders are focussed on the most up to date versions of lessons. Typically the group will tackle five to eight lessons per session. The group meets via VTC every three months to discuss the lessons, agreeing the appropriate AB, RA and timescale for the RA. The Action Plan and Milestones are appended to the LLDb entries, sharing the RA to stakeholders outside the group.

182. The reasons for the success of this group include:

- The members have common experience, knowledge and interests;
- Frequent and regular communication;
- Effective AB assignation; and
- Shared objectives.

183. The key enabling feature of the community is the communication, via VTC and the information shared in the LLDb. By close coordination the members are able to economize efforts while progressing LL.

Cross Reference of Lessons in Reporting and Databases

184. In many organizations, lessons are resolved, though LLDb entries are not updated and remain open and incomplete. JFC Brunssum LLSOs indicated that they receive no lessons from ISAF for action. These issues are passed to JFC Brunssum through formal letters from SHAPE, and frequently are actioned without further LLSO

awareness. As such, the problem is solved, the lesson is learned, but the ISAF LLDb reflects an open, unresolved issue that clutters the database.[35]

185. In contrast, lessons contained within JALLC reports are entered in the NATO LLDb and the reference number included in the report. SHAPE endorsement letters cite the LLDb reference number when tasking ABs, allowing easy reference to earlier work, and allowing the LL process loop to be closed. All LLSOs should communicate lessons via their LLDb to their higher HQ LLSO, and where linked to formal correspondence between commanders, the correspondence should reference the LLDb entry.

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[35] This issue has been addressed by ACO directive 80-1 (Reference H), particularly Annex C and D. However, at the time of data collection and analysis, the directive had only been recently released and had not been seen by many LLSOs. The benefit had yet to be realized.

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Conclusions and Recommendations

CONCLUSIONS

186. The LL process in NATO and across most NATO nations is working. Improvements that can be made are summarized below. The sharing of lessons is ineffective and presents one area where considerable improvement can be made. Conclusions are presented under the headings of *Procedural*, *Cultural*, *Structural* and *Technological*.

Procedural

187. <u>Process</u>. The analysis found that many organizations have an internal LL process, although few had sharing procedures in place. Where sharing did occur, it was generally direct to nations, or within smaller alliances where nations had historical, language or cultural ties. The lack of Alliance-wide sharing was clearly noticeable in NATO-led operations where some nations have LL processes working on national lines for the betterment of that nation's future rotations of troops. Few of the lessons from these national processes found their way to allied nations or NATO itself.

188. Additionally, few organizations could detail a process to incorporate lessons shared from other units/nations into their own unit, HQ or nation. Some lessons are being published for others to learn, but few are being read or actioned. A process for incorporating external lessons is notably absent from NATO policies and direction which details LL processes for internal lessons, including limited guidance on sharing lessons, but make no mention of surveying other units, organizations and nations for lessons that may be applicable to it.

189. There are good examples to be emulated. Counter-IED organizations exhibit many of the desired LL process elements very well, including observation, analysis, endorsement, and sharing. There is a clear leadership drive to use all information from all sources to rapidly improve the survivability of troops against this threat. Unfortunately, this unique success story is limited to one facet of NATO operations. Its emulation in other areas of NATO activity would bring significant benefit to the Alliance, and their troops.

Cultural

190. <u>Mindset</u>. The analysis frequently found a mindset against the sharing of LL. The need to know principle conflicts with the responsibility to share obligation. A *'what's in it for me?'* mindset persists in some quarters. This manifested itself in ways such as:

- Embarrassment over poor performance and not wanting to publically discuss the issue;

- Sharing lessons would allow these deficiencies to be passed to an adversary; and

- The staff effort to share is wasted effort.

191. Preference for national, over NATO, cooperation and sharing persists. There is new direction in ISAF highlighting the "responsibility to share" over the "need to know". This change in mindset needs to grow and spread to all activities across the Alliance.

192. A lack of understanding over what lessons could be of value to other organizations, compounded by a lack of guidance and direction, leads to many lessons

that would be of considerable value throughout the Alliance being held within the originating unit. Information received from external organizations is viewed with caution, on grounds of the applicability of the issue to the recipient, obsolescence of data or the rigour of description and analysis.

193. Leadership. Leadership engagement has, across NATO and all operations, been observed to be the key to "making or breaking" a LL process. Some LL processes have been described as personality-driven and others have been equally described as personality-stalled. The LL process often competes for leaders' attention with other pressing issues. LL OPRs duties are often delegated to an officer with the fewest immediate tasks who then acts as little more than a LL POC.

194. Investment. Investment in capturing staff officers' experience during rotations, particularly on operations, is limited. Rotations seriously degrade organizational capability. The capture of organizational knowledge, and particularly tacit organizational knowledge, is poor. Training for information and knowledge management in general and LL processes in particular has been limited.

195. Most LLSOs and OPRs indicated that they had no training for their duties. The NATO LLSO course was recently established to meet this need. The JWC PDT LL module helps for those deploying, though many LLSOs are not selected in sufficient time to attend this training.

Structural

196. Organization. LL branches can be located within an organization in a place which does not allow broad visibility of issues and access to authority to task ABs. Access to decision-makers and influencers can be limited. Effective LL branches are located where they can observe all facets of the organizations operations, and can access leadership when required.

197. Business Process. The LL process is a separate process outside normal work routine or battle rhythm, and particularly the reporting rhythm. The interface between internal and external process (between internal LIs and external LIs requiring assistance or tasking) is not clearly demarcated and formalized. Lessons are associated with evaluation, assessment and thus post-exercise, post-operational activities, rather than associated with improvement, BP, preparation and planning. Lessons are seen as outputs, not inputs.

198. Analysis Resources. Analysis is perceived as a specialist task when in many cases it may be adequately carried out with military judgement and in-house expertise. Because of the time lag in many LL processes, lessons are not learned by the incumbent rotation, but by their successors, resulting in a poor linkage between LL process and benefit.

199. The lack of analysis capability was frequently cited as a problem for LL. "Analysis" is not listed in the job descriptions of many LLSOs, nor is it in the descriptions of LL branch OPRs. There is a widespread belief that analysis of observations to develop LIs and RA plans requires an academically trained specialist, whereas most observations are satisfactorily analysed by an experienced officer/NCO with sound knowledge of the tactic, procedure or equipment under consideration.

200. Relationships. Some focus groups exist to address lessons from specific sources or on specific themes, such as ISAF or Bi-SC medical issues. These have been successful in creating the conditions for learning and sharing lessons.

Technological

201. <u>CIS Resources</u>. Information sharing technology, project management tools and TT systems are improving. However, technical and procedural interoperability remains a barrier, encouraging stove-piped communication and discouraging wide sharing of information. NATO and national security policies, including classification and releasability regulations, do not allow easy information sharing across networks. Bandwidth remains limited in ISAF for the Mission and NATO Secret LAN.

Critical Success Factors

202. The analysis team established three *Critical Success Factors* that the JALLC considers to have the greatest influence on the effectiveness of LL. These factors are:

a.   <u>Leadership</u>: Leadership is the key element in determining the effectiveness of a LL process. LL processes are frequently personality driven, wherein the commander's personal belief and support of the LL process is clearly reflected in the outcome. Many Commanders assign LLSOs and LL OPR duties to an experienced and motivated individual with breadth of scope to understand the full range of activities in the unit/branch; a requirement for an effective process. Others do not. Many tasks that a commander or CG do not monitor on a regular basis may languish in the background. Lesson tasks are frequently in this category.

b.   <u>Stakeholder Responsibility</u>: Involving those affected by a problem and/or its resolution early in the LL process pays considerable dividends in both ensuring the root problem is found and addressed, and in the timely implementation of the solution. Omitting a key office, branch or unit in the analysis, recommendations and RA invariably leads to overlooked factors or resistance to changes intended to advance the issue.

203. <u>Information Assurance</u>: Information assurance underpins both the information that forms lessons (the quality of the analysis, for example), and also the process which leads to the creation of observations and the resolution of LL (the process of appraisal). Stakeholders' trust in information is important: information must be managed carefully in accordance with the principles and procedures of IKM. Perceptions of poor quality quickly degrade the utility of information and knowledge, particularly when sharing between stakeholders. Information Assurance processes also apply to the creation of LL: honesty, openness and self-appraisal are essential to improved performance.

RECOMMENDATIONS

Primary Recommendations

204. HQ SACT: JALLC recommends that HQ SACT initiate the preparation of a STANAG proposal[36] with the purpose of facilitating lesson sharing between nations through standardization of lesson data and format. The STANAG should address, as a minimum, factors for sharing such as:

a. A standard template for the format of lessons[37]. A standard format would permit easier access, transfer and provision of lessons between lesson databases and with the NATO LLDb,

b. A minimum content[38] to allow effective learning from, and staffing of, lessons,

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[36] This proposal should be in accordance with AAP-3 *Directive for the Development and Production of NATO Standardization Agreements (STANAGs) and Allied Publications (APs)*.

[37] For example: *Observation*, *Discussion*, *Conclusion*, *Recommendation*

c. A common portal for posting lessons.

205. NATO HQ, HQ SACT and SHAPE. JALLC recommends that NATO HQ, HQ SACT and SHAPE revisit the LL Policy (Reference F), and the LL Directive (Reference E) to ensure that several themes are clarified. These include:

- LL organizations are centrally located within HQs or unit organizations in order to act effectively across departments, branches and sections. To achieve this, a LL organization should be within the Knowledge Management Directorate for Joint Force Commands, or within the Commander's staff or COS for other HQs. LLSOs must have close coordination with the BIM to ensure rapid incorporation of lessons into the HQ endorsement and tasking process. HQ SACT and SHAPE should ensure that each HQ, unit or operation has a LL organization with the necessary capability (staff and equipment), process and tools to support the LL process,

- Analysis and good observation and lesson preparation are within in-house capability of headquarters. Outside analysis support is usually only required for broad scope, high-level or unusually complex issues,

- LL guidance must concur with other IKM and related direction and guidance,

- All internal LL direction and guidance includes clear instruction on the process for staffing and sharing, where applicable, lessons outside headquarters, and also for incorporating lessons from outside the headquarters into the internal LL process. Instruction should include the appropriate communication tool (preferably the NATO LLDb), the processes for endorsement and authority to share, and the roles and responsibilities of the relevant stakeholders,

- Members of HQ LL WGs should have adequate knowledge of and authority within their branches to be able to act on behalf of the branch chief, conduct analysis and manage Remedial Action tasks.

206. HQ SACT and SHAPE. JALLC recommends that HQ SACT and SHAPE establish a high-level review board for lessons in NATO Military Authorities, and direct that NATO commands and units do likewise. The review board should be chaired by a CG lead (COS or DCOM) and should actively review lessons for validity, resourcing, progress, and closure.

Additional Recommendations

207. HQ SACT and SHAPE: JALLC recommends that HQ SACT and SHAPE ensure that Job Descriptions for LLSOs include:

a. The requirement to have received training in the duties and responsibilities of LLSOs, the NATO LL process, and basic analysis, via the NATO LLSO Course provided by HQ SACT,

b. The requirement to conduct analysis in support of lessons, and to support unit SMEs with analysis capability,

c. Clear direction on the requirement for LLSOs and LL OPRs to understand requirements and standards for classification and release of documents, including lessons.

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[38] For example: *Observation*, *Analysis*, *Remedial Action* and recommended *Action Body*.

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I.   HQ SACT; ACT Concept for the JALLC; 07 June 2004 TI-3592/Ser: NU251; NATO Unclassified

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Annex A
Glossary of Acronyms

AAR	After Action Report
AB	Action Body
ACO	Allied Command Operations
ACT	Allied Command Transformation
ADL	Advanced Distributed Learning
AO	Analysis Objective
AOO	Area of Operations
AR	Analysis Requirement
ARRC	Allied Command Europe Rapid Reaction Corps
BIM	Business and Information Management
BP	Best Practice
Bi-SC	of the two Strategic Commands
CAAT	Collection and Analysis Teams (USA)
CC	Component Command
CG	Command Group
CIS	Communication and Information System
COE	Centre of Excellence
COI	Community of Interest
COM	Commander
COMISAF	Commander ISAF
COS	Chief of Staff
DJSE	Deployable Joint Staff Element
DOS	Director of Staff
DOTMLPF	Doctrine, Organization, Training, Materiel, Leadership, Personnel, Facilities
DPP	Defence Planning Process
EAR	Emergent Analysis Requirement
e-PRIME	(education) Partnership Real-Time Information Management and Exchange System
ETEE	Education, Training, Exercises and Evaluation
Eurocorps	European Rapid Reaction Corps
FIR	First Impression Report
IED	Improvised Explosive Device
IJC	ISAF Joint Command
IKM	Information and Knowledge Management
ISAF	International Security Assistance Force
JALLC	Joint Analysis and Lessons Learned Centre
JAT	Joint Analysis Team (ITA)
JATT	JALLC Advisory and Training Team

JCOA	Joint Center for Operational Analysis (USA)
JFC	Joint Force Command
JFCOM	Joint Force Command (USA)
JFTC	Joint Force Training Centre
JLLIS	Joint Lessons Learned Information System
JWC	Joint Warfare Centre
KFOR	Kosovo Force
LAN	Local Area Network
LI	Lesson Identified
LL	Lesson Learned
LLDb	Lessons Learned Database
LLSO	Lessons Learned Staff Officer
MC	Military Committee
MCD	(Bi-SC) Military Cooperation Division
MILREP	Military Representative
MOD	Ministry of Defence
MS	Mission Secret
NS	NATO Secret
NCS	NATO Command Structure
NCO	Non-Commissioned Officer
NFS	NATO Force Structure
NNTCN	Non-NATO Troop Contributing Nation
NRDC	NATO Rapid Deployable Corps
NRF	NATO Response Force
NU	NATO Unclassified
OPR	Officer of Primary Responsibility
PDT	Pre-Deployment Training
PfP	Partnership for Peace
POC	Point of Contact
POW	Programme of Work
PRT	Provincial Reconstruction Team
PSA	Priority Shortfall Areas
RA	Remedial Action
RC	Regional Command
RSOI	Reception, Staging and Onward Integration
SACEUR	Supreme Allied Commander Europe
SACT	Supreme Allied Commander Transformation
SC	Strategic Command
SIPRnet	Secret Internet Protocol Router Network
SME	Subject Matter Expert
SOF	Special Operations Force

SOP	Standard Operating Procedures
SOS	Support of Staff
SWOT	Strengths, Weaknesses, Opportunities and Threats
TA	Target Audience
TCN	Troop Contributing Nation
TF	Task Force
TOD	Theater Observation Detachments
TT	Tasker Tracker
TTP	Tactics, Techniques and Procedures
VTC	Video Teleconference
WAN	Wide Area Network
WG	Working Group

Annex B
Lessons Learned Database Entries

The following Lessons will be entered into the JALLC-managed NATO LLDb. While these are the lessons the JALLC considers meets the requirements for LLDb entry in accordance with the Bi-SC LL Directive, they do not represent the only important findings of this report. Therefore, readers are encouraged to read the main body of this report in its entirety to ensure all findings are fully taken into consideration.

Lesson 1089
Lesson Sharing

Observation

Lesson sharing is sub-optimal across the Alliance. Much useful information and knowledge is duplicated, and negative lessons re-learned, due to poor information sharing techniques and policy.

Discussion

Information sharing and knowledge management across NATO is sub-optimal. Many lessons with potential value to other HQ and nations are held as tacit knowledge by individuals or, where captured as explicit knowledge, are not shared widely. Information and knowledge management can yield significant benefits if resources are invested in it, including staff time. Lessons can be observed and learned from others, but only if captured and shared widely. Where lessons are shared, this is done at the lesson closure stage. Ideally, lessons should be shared at the observation or lesson identified stage to permit other stakeholders visibility of issues, if not solutions.

Conclusion

The benefits of corporate knowledge and learning lessons rely upon the sharing of that information. Effective and open information and knowledge management is fundamental to a learning organization.

Recommendation

HQ SACT: JALLC recommends that HQ SACT initiate the preparation of a STANAG proposal[39] with the purpose of facilitating lesson sharing between nations through standardization of lesson data and format. The STANAG should address, as a minimum, factors for sharing such as:

a.   A standard template for the format of lessons[40]. A standard format would permit easier access, transfer and provision of lessons between lesson databases and with the NATO LLDb,

b.   A minimum content[41] to allow effective learning from, and staffing of, lessons,

c.   A common portal for posting lessons.

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[39] This proposal should be in accordance with AAP-3 *Directive for the Development and Production of NATO Standardization Agreements (STANAGs) and Allied Publications (APs)*.

[40] Currently the NATO LLDb requires an *Observation*, *Discussion*, *Conclusion*, *Recommendation*

[41] For example: *Observation*, *Analysis*, *Remedial Action* and recommended *Action Body*.

Lesson 1090

LL Branch Location

Observation

Lessons learned branches in many units and headquarters are unable to effect improvement to efficiency and effectiveness because of their location in the organizational structure.

Discussion

Lessons learned imply and rely upon organizational change. Lessons are derived from the identification of problems (or successes) and require analysis, endorsement, tasking and resourcing. Most importantly, the lessons learned process requires leadership oversight during the entire process to ensure success. This is more easily achieved when the LL branch is located in the organizational structure where access to Command Group authority, and independence from functional staffs, in particular Evaluation branches, can be assured.

Conclusion

Lessons learned branches can optimally fulfil their mission to improve efficiency and effectiveness by being located in close proximity to key leaders within the organizational structure.

Recommendation

HQ SACT and SHAPE. JALLC recommends that HQ SACT and SHAPE revisit the LL Directive (Reference E) to ensure that LL organizations are centrally located within HQs or unit organizations in order to act effectively across departments, branches and sections. To achieve this, a LL organization should be within the Knowledge Management Directorate for Joint Force Commands, or within the Commander's staff or COS for other HQs. HQ SACT and SHAPE should ensure that each HQ, unit or operation has a LL organization with the necessary capability (staff and equipment), process and tools to support the LL process.

Lesson 1091

Leadership in the Lesson Learned Process

Observation

LL Staff Officers (LLSO) rely upon leadership support to ensure that lessons are actioned and improvements realized. Without leadership sponsorship of lessons, the opportunity to improve efficiency and effectiveness may be lost.

Discussion

Many lessons, particularly long-term or inter-agency lessons, are never completed, due to a lack of ownership and leadership. In HQs leadership management, preferably by exception, of a complete LL process is important, particularly at the Endorsement, Tasking and Lesson Closure stages. Between HQs, leadership by a clear owner of a lesson is required: in the case of Bi-Strategic Command (SC) lessons, HQ Supreme Allied Commander Transformation (SACT) provides the lead. Ownership of lessons is important to ensure that lessons are completed and hence improve the effectiveness and efficiency of the Alliance.

Conclusion

Leadership is a critical success factor for the LL process.

Recommendation

HQ SACT and SHAPE. JALLC recommends that HQ SACT and SHAPE establish a high-level review board for lessons in NATO Military Authorities, and direct that NATO commands and units do likewise. The review board should be chaired by a Command Group lead (minimum COS or DCOM level) and should actively review lessons for validity, resourcing, progress, and closure.

Lesson 1092

Lessons Learned Staff Officers

Observation

LL staff officers (LLSO) are often untrained and inexperienced for the demands of their role. Some lessons do not receive any form of analysis to contextualize the issue, to elucidate the root causes, and to determine the appropriate Remedial Action (RA) and Action Body (AB).

Discussion

Opportunities to exploit experience and knowledge are being lost through a failure to analyze lessons and to exploit previous lessons in planning for subsequent activities. Analysis resources are scarce on operations and in HQs, but most lessons require only basic analysis and the application of sound military judgement to derive a benefit from the lesson. Many LL staff officers (LLSO) job descriptions do not specify analysis as a task, and some LLSOs feel unqualified to apply analysis to lessons themselves. Without root cause analysis, RA and an AB, lessons seldom progress to LL. Where LLSOs have added contextualizing information and analysis, such as the wider intelligence picture, trend analysis etc, the lessons have been greatly improved.

LLSO also benefit from training in knowledge management and lesson management, classification procedures, and being provided with access to a supporting Community of Interest (COI).

Conclusion

The exploitation of lessons is compromised by lack of analysis which has a tendency to prevent a lesson from achieving resolution. Investing in lessons rewards an organization with greater efficiency and effectiveness. Supporting LLSOs with training, leadership engagement and a positive working environment will have a beneficial effect on the HQ's efficiency and effectiveness.

Recommendation

HQ SACT and SHAPE: JALLC recommends that HQ SACT and SHAPE ensure that Job Descriptions for LLSOs include:

    a.   The requirement to have received training in the duties and responsibilities of LLSOs, the NATO LL process, and basic analysis, via the NATO LLSO Course provided by HQ SACT.

    b.   The requirement to conduct analysis in support of lessons, and to support unit SMEs with analysis capability.

    c.   Clear direction on the requirement for LLSOs and LL OPRs to understand requirements and standards for classification and release of documents, including lessons.

Annex C
Best Practices

The following potential Best Practices will be entered into the JWC-managed Best Practice database. While these are the Best Practices JALLC considers to meet the requirements for BPDb entry they do not represent the only important findings of this report. Therefore, readers are encouraged to read the main body of this report in its entirety to ensure all findings are fully taken into consideration.

Best Practice
National and NATO Reporting

Context

In ISAF, the TF Helmand LLSO prepares LI from incidents on the national CIS and transfers them on a daily basis to the ISAF MS system for sharing with RC South. This equal sharing to ISAF and national chains of command is unusual in Afghanistan.

Process

The LLSO receives VSI (Very Seriously Injured) or KIA (Killed in Action) reports and, within a 48-hour timeframe, adds 1) intelligence picture detail 2) observations of trends from other incidents 3) root cause analysis 4) any further useful information. He then submits the LI on his national CIS but additionally transfers the data to the ISAF Mission Secret system, and sends the report to RC (South) for dissemination to other RCs. Additionally he briefs incoming units with the findings as part of their Reception, Staging and Onward Integration package.

Benefit

This practice provides significant 'added value' to the learning potential of lessons. By contextualizing the event with the additional information, the LLSO contributes to an analysis of the event including the root causes. By sharing the lesson with both his national chain of command and his NATO chain of command, he ensures that all stakeholders are aware of the issue. By sharing the lesson both in report format and as part of an in-brief to new units, he ensures that both target audiences of troops in pre-deployment training, and troops already arrived in theatre, benefit from the lesson learned.

Applicable to

This BP is applicable to all headquarters.

HQ

HQ TF Helmand, Lashkar Gar, Afghanistan

Caveats

None

Best Practice
Confidentiality in Reporting Lessons

Context

In the Italian Joint LL Process, this BP usefully resolves the dilemma between 'need to know' and 'responsibility to share'.

Process

The Italian Joint Lessons Learned reporting process allows stakeholders, such as Special Operations Forces (SOF), to elect to keep some lessons confidential and screened from view by other stakeholders. Although this prevents a small proportion of lessons being viewed by LL stakeholders, the option has encouraged the SOF community to share all its lessons, and most of these enjoy unrestricted access for other stakeholders.

Benefit

The net result of allowing partial secrecy is to enhance sharing. By permitting the restriction of some lessons, the overall effect has been to provide the SOF stakeholders an environment to share lessons confidently. Had no such facility been prepared, the SOF stakeholders would not have shared any lessons at all.

Applicable to

This BP is applicable to all headquarters.

HQ

Italian Joint Headquarters

Caveats

None

Best Practice
Stakeholder Involvement in the Preparation of Analysis Requirements

Context

Drafting Analysis Requirements benefits from a wide stakeholder involvement because it helps to ensure buy-in into the analysis task, and the resulting LIs.

Process

Stakeholders and Subject Matter Experts are actively included in the formulation of Analysis Requirements, and some analysis tasks. Their experience and knowledge is exploited both to prepare the subject for the study, and for carrying out the analysis task itself.

Benefit

Several nations reported that involving a wide stakeholder group in the formulation of Analysis Requirements created a strong AR product which reflected real and current needs. Also, the resulting reports, including LIs, are well-received and RA actioned quickly. Additionally, Subject Matter Experts involved in the AR and analysis processes greatly facilitated the adoption and acceptance of RA, often because the SMEs were from training or doctrine organizations, and therefore optimally positioned to create the conditions for improvement.

Applicable to

This BP is applicable to all headquarters.

HQ

Several including Germany, USA

Caveats

None.

Best Practice
Leadership Engagement and Managing Lessons Learned Processes

Context

Leadership is key to a successful LL programme within an organization. While a perfectly good LL process may exist within an HQ, without sufficient leadership, its effectiveness is greatly diminished.

Process

The Germany Joint LL process operates an effective two-tier process. It ensures effective leadership engagement in the process while allowing routine management issues to be conducted at a working level. This ensures a very swift LL process.

Lessons are communicated via an LLDb which helps to coordinate lessons at the Joint and Service level. The endorsement and tasking processes are achieved by two coordinated committees which work closely and meet every two months.

Benefit

The synergy of lesson preparation, analysis, deconfliction, networking and prioritization at the working level, and the leadership engagement by the higher level committee, yields a highly effective national LL process.

Applicable to

This BP is applicable to all headquarters.

HQ

DEU Joint HQ

Caveats

None.

Best Practice
Specialist Communities of Interest

Context

In HQ SACT, the Bi-SC Medical LL Video Teleconference (VTC) group, focuses on LI involving medical issues. The synergy of the stakeholders creates the conditions for a very swift LL process.

Process

The Bi-SC Medical LL group, chaired by HQ SACT, includes stakeholders from NATO HQ, SHAPE, HQ SACT, JWC, JALLC, and NATO School Oberammergau. The group uses both NU and NS LLDbs as its source for lessons requiring learning and/or staffing within the NATO medical community. The group circulates an agenda citing the LLDb references, ensuring that all stakeholders are focussed on the most up to date versions of lessons. Typically the group will tackle five to eight lessons per session. The group meets via VTC every three months to discuss the lessons, agreeing the appropriate AB, RA and timescale for the RA. The Action Plan and Milestones are appended to the LLDb entries, sharing the RA to stakeholders outside the group.

Benefit

The reasons for the success of this group include:

- Shared subject matter expertise

- Frequent and regular communication

- Effective AB assignation

- Shared objectives

The key enabling feature of the community is the *communication*, via VTC and the information shared in the LLDb. By close coordination the members are able to economize efforts while achieving LL

Applicable to

This BP is applicable to all headquarters.

HQ

HQ SACT

Caveats

None.

Best Practice

Cross Reference of Lessons Learned Databases with Analysis and Lesson Management

Context

In many ISAF organizations, LLDb entries are not updated when lessons are resolved. The entries therefore remain open and incomplete. JFC Brunssum LLSOs indicated that they receive no lessons from ISAF for action. These issues are passed to JFC Brunssum through formal letters from COMISAF to COM JFC Brunssum, and frequently are actioned without further LLSO awareness. As such, the problem is solved, the lesson is *learned*, but the ISAF LLDb reflects an open, unresolved issue that clutters the Db.

Process

In contrast, lessons contained in JALLC reports are entered in the NATO LLDb and the reference number included in the report. SHAPE endorsement letters cite the LLDb reference number when tasking ABs, allowing easy reference to earlier work, and allowing the LL process loop to be closed. All LLSOs should communicate lessons via

their LLDb to their HHQ LLSO, and where linked to formal correspondence between commanders, the correspondence should reference the LLDb entry.

Benefit

This cross-referencing of lessons allows visibility of the entire LL process and informs stakeholders of process made and lessons learned. This prevents an incorrect impression of lessons unlearned.

Applicable to

This BP is applicable to all headquarters.

HQ

SHAPE

Caveats

None.

Annex D
Lessons Learned in the NATO Command Structure

1.   The internal LL processes of NCS HQ work adequately, using in-house business processes that are in accordance with the Bi-SC LL Directive (Reference E). However, a LL process between HQs, and between superior and subordinate HQs, does not function adequately. Whereas *'The LL process is designed to support the operational chain of command and not replace normal command responsibilities for reporting experience'* (Reference E, page 1) the LL process requires a sharing mechanism which cuts across command relationships, including the capability to both *pull* and *push* information.

2.   LL doctrine, policy and direction is consistent in emphasising LL as an *output* of operations, exercises, training and experimentation, with the result of a successful LL process being a Lesson *Learned*. This concept should be modified to emphasise the iterative nature of lessons and indeed all experience and learning: the cyclical, repetitive nature of the Boyd Cycle. Lessons should be included in operational, exercise and training planning. Currently viewed as a process *output*, LL do not form part of a staff officers critical information requirements in order to conduct his or her work. Commanders at all levels should ensure that one of the first questions asked in relation to any preparatory work is *"what has been done before?"*

JFC Naples

3.   The JFC Naples' LL process is overseen by the COS who chairs the regular LLWG, and internal lessons are successfully learned. Several problem areas were identified:

- Endorsement of RA.;

- Lack of coordination with higher and subordinate HQs;

- AR generation; and

- Lack of resources.

4.   In several instances, RA endorsed by SHAPE could not be endorsed by JFC Naples. This could be mitigated by increased coordination between the stakeholders in the analysis phase. A lack of effective coordination was also reported with subordinate HQs, with no clear method for coordinating the LL process between JFC Naples and the Component Commands. Approximately 20 per cent of JFC Naples' lessons require higher command assistance. While much improvement has been observed recently, the LL process would benefit from a formal coordination procedure, linking SHAPE, JFC Naples and the Component Commands.

5.   Interviewees noted a capability gap between their requirement for analysis and their ability to identify and staff analysis requirements for SHAPE. Interviewees emphasised the importance of analysis in formulating a robust lesson, but noted that managing lessons, particularly the management of post-exercise and post-operations reports, absorbs much LLSO's time, leaving little available time for analysis.

JFC Brunssum

6.   JFC Brunssum has a good working relationship with SHAPE, coordinating RA via formal letter and achieving resolution to issues: notably most ISAF lessons are derived from SHAPE rather than from HQ ISAF or the IJC. Internally, interviewees noted some

difficulty in obtaining adequate support from the network of LL POCs which form the LLWG. Few POCs had time available to attend LLWG, or to source and draft observations. LL POCs were often absent from LLWG altogether or the POC role rotated around branch staff with little continuity. The Director of Staff (DOS) tasks RA via the internal Tasker Tracker, in cases of complicated lessons; simpler RA are tasked verbally.

7.   JFC Brunssum hosts the ISAF LL Support Working Group: a meeting held via VTC on a regular basis (formerly three-monthly, now monthly). The group comprises representatives from JFC Brunssum, HQ SACT, SHAPE, HQ ISAF, JWC, JFTC and JALLC. The group focuses on creating the conditions for a successful LL process for ISAF issues, by establishing a community of interest of stakeholders across NATO for coordinating lessons. This forum has been successful in coordinating the development of the ISAF LL capability.

JFC Lisbon

8.   JFC Lisbon has experienced significant change in the last 12 months, with the PE review, a new directorate-based structure and a changed status to Joint Force Command. LL staff are double-hatted, and lessons comprise the minor, secondary element of their duties. Lessons are managed as outputs to exercises, with the LL process overseen by the COS. Many lessons are learned by informal mentoring within branches. There is little capture of explicit knowledge, or exploitation of previous knowledge in the planning of exercises. Communicating lessons is primarily for the purpose of engaging SHAPE support on problems: knowledge is systemically neither sought from nor offered to other peer HQs.

CC Mar Naples

9.   At the time of interview CC Mar Naples did not have a LL directive or SOP but carried out an effective LL process, supported by a LLWG chaired by the COS, which effectively solved problems and incorporated lessons from previous exercises into future planning. Lessons were effectively gathered, prioritised, endorsed, tasked and, most importantly, validated as learned by the command group. The LL process was internally focussed however, with limited communication with other maritime CCs, or JFC Naples, on LL issues.

CC Land Heidelberg

10.   CC Land Heidelberg conducts an internal LL process supported by a Standard Operating Instruction. Interviewees noted two distinct forms of lesson: operational lessons derived from deployments, which required immediate RA and quickly became obsolescent, and non-operational lessons which, without operational urgency, tended to *'drop off the radar'*. Endorsed lessons were exclusively internally sourced, with no lessons sought from external agencies for application at Heidelberg. Lessons were actively shared for staffing with JFC Brunssum, and shared routinely for DSJE hand-over and preparation with CC Land Madrid. Sharing is hampered due to the LLDb using Microsoft™ Access, which cannot be shared on the DHS. Ex ARRCADE CRICKET was cited as a useful forum for information exchange.

CC Air Ramstein

11.   CC Air Ramstein conducts an effective LL process, actively:

- Seeking lessons from other HQs and JALLC;

- Incorporating lessons into planning and exercise preparation;

- Endorsing actionable lessons via SMEs then the COS;

- Tasking lessons via the HQ Tasker Tracker; and

- Validating lessons during exercises.

12.   Interviewees reporting a high level of sharing lessons via the Joint Forces Air Component Command (JFACC) conferences. This community of interest comprises NATO HQs and also national representatives. Discussions yield real outputs, commitments and agreements: in essence the LL principles of Coordination, Cooperation and Communication.

13.   Interviewees noted that rotations negatively affected lessons in two ways. NRF rotations occurred quicker than the Remedial Action phase of a lesson, and staff rotations affected lesson management and, more severely, SME oversight and input. LL process continuity, including the continuity of staff involved in the process, is the greatest risk to the success of the process.

Allied Rapid Reaction Corps

14.   The ARRC manages an effective internal LL process and effectively coordinates working level management activity, including analysis within the LL branch, with higher level endorsement and tasking. Interviewees noted that some improvement could be made to:

- The continuity of HQ branch POCs;

- Leadership guidance on the prioritisation of lessons; and

- Common working level procedures and document templates across peer commands.

European Rapid Reaction Corps

15.   Eurocorps' LL capability recently benefitted from an increase in capacity and separation from the G5 branch. The LL cell is the hub for post-exercise report management, the LL process and evaluation. After exercises, the review process is swift, with lessons' collection, endorsement by COS and ACOSs, and RA completed on most lessons within two months. Difficult lessons are retained and reviewed regularly. Sharing is minimal, though LL progress is shared with JFC Brunssum and SHAPE.

Conclusion

16.   The NCS LL processes operate with varying success, relying upon the network of branch LL POCs to initiate, update and often solve lessons. The issue of resourcing was an important factor in the success of a LL process. Where LLSOs and, as importantly, LL POCs from the branches and divisions of the HQ, had adequate time to devote to lesson preparation, staffing and coordination, then the LL process proceeded adequately. Leadership engagement of the process, particularly during the endorsement, tasking and validation phases of the process, was also important.

17.   Communication between HQs was limited, with few HQs actively using the NATO LLDb, or indeed any other medium, to share lessons early and widely. This can be ascribed to a resistance to:

- Share internal lessons;

- Share lessons before resolution; and

- Use a separate LLDb—primarily caused by a paucity of time and available staff.

Annex E
National Lessons Learned Processes

1.   Most surveyed nations have functioning LL processes or, at the very least, a process for adapting pre-deployment training in response to in-theatre issues. Although it is recognized that the latter process represents more of an effective feedback mechanism rather than a tool for institutional change, most of these national processes are similar to the NATO process model. Many nations claim to share their lessons with NATO, and specifically with the JALLC. This, however, is not the case in practice, with few nationally sourced lessons reaching the NATO LLDb hosted by JALLC, although this trend is changing.

LESSONS LEARNED PROCESS IN NATO NATIONS

Germany

2.   The German national LL process is particularly effective at staffing lessons, with most lessons being resolved within a four to six week timescale. This success can be ascribed to the application of the spirit of the three Cs of the NATO Bi-SC LL process: *Coordination*, *Cooperation* and *Communication*. Lessons are actively sought from mission reports and end of tour reports, and also collected via a LLDb which is accessible at the Joint and Service level. The LLDb acts both as an archive and as a staffing tool. The analysis of lessons is carried out at the Service level.

3.   The endorsement and tasking processes are achieved by two committees that work closely together and meet every two months. The lower, working level committee comprises OF-4 staff and provides the relevant staffing; a decision-making and oversight level is provided by a committee of flag officers. The synergy of a) working level lesson preparation, analysis, deconfliction, prioritisation and networking; and b) the leadership engagement by the higher level committee, yields a highly effective national LL process.

United Kingdom

4.   The United Kingdom LL process enjoys success in terms of fast, positive influence on PDT, but in common with many other nations it encounters some problems in the areas of longer-term issues. Lessons are sourced from LLSOs deployed in theatre, from daily and weekly SITREPs from theatre to the Permanent Joint Headquarters (PJHQ) in Northwood, and from post-operational reports and interviews.

5.   Lessons are managed on the Defence Lessons Identified Management System (DLIMS) after an analysis phase. DLIMS is used by the British Army and Royal Air Force, and interviewees cited its main strengths as identifying lesson owners, and communicating an auditable project progression. The cooperation between the Joint and Service level staff is good, including the coordination of strategic, operational, and tactical lessons; indeed the staff await the further development of DLIMS to fully support this cooperation. The MOD noted problems with closing lesson projects. Key areas of friction were the endorsement of lessons and the tasking of RA to ABs.

6.   The Logistics LL process is particularly effective due to the coordination and communication of effort by the Logistics Capability Development Database. This tool allows reported issues to be 'tagged' with a Senior Point of Authority (i.e. an issue 'owner'), and tagged with the identity of working groups with a stake in the issue

(creating a community of interest). The tool is driven by a project management process, and the software interfaces with Microsoft™ Project. This addresses the key LL process components of leadership engagement, communication, coordination and cooperation.

7.   PDT for medics has been updated with operationally derived lessons within hours of reporting from theatre. This has allowed individuals to benefit from new information extremely quickly; particularly specialist skills teams who are deployed for relatively short periods and therefore have frequent training cycles.

United States

8.   The United States enjoys a number of LL agencies and, via a network of LL liaison officers (LO), produces a great deal of information, the majority of which is shared via the national Secret Internet Protocol Router Network (SIPRnet). Each Service and some Service branches manage their own versions of the Joint Lessons Learned Information System (JLLIS), with the Center for Army Lessons Learned opening its portal, the Army LL Information System (ALLIS) in May 2010.

9.   The Center for Army Lessons Learned (CALL) deploys Theatre Observation Detachments (TOD) as in-theatre LOs, and Collection and Analysis Teams (CAAT) for specific issue analysis. Each is supported by Reach-Back analysts based in Fort Leavenworth, Kansas. The TODs are effective at sourcing and sharing information with deployed units and, via CALL, with units and training establishments in the US. The CAATs are teams of SMEs drawn from outside CALL who are trained by CALL in observation techniques and tasked to source observations on specific issues.

10.   The specific issues are decided in two forums: a LL Directors' VTC held every quarter (including HQ SACT, JCOA, MCCLL), and a Collection Workshop. These two forums allow customers to be identified and customer requirements to be sourced, synthesized, prioritized, resourced and deconflicted with other collection and analysis efforts. Nonetheless, the JALLC analysis team observed national and international teams conducting concurrently very similar studies in ISAF.

11.   Similarly, the US MCCLL deploys LOs on operations, to gather lessons. This approach is proven to improve training quickly. An AAR builder feature of the Marine Corps version of JLLIS allows users to capture lessons directly into JLLIS as a direct product of a manoeuvre unit commander's routine AAR composition. This represents successful harmony of routine reporting with LL reporting.

12.   The US Air Force's A9L LL branch undertakes lesson gathering and analysis activities, and conducts a prolific publication programme. Reports are not shared on JLLIS, and the branch undertakes no monitoring of RA, focussing on problem identification and sharing analysis outputs. One good practice employed by the A9L branch is to utilise SMEs from potential ABs while conducting analysis. By exploiting expertise sourced from the organisations, which are most likely to be the ABs, the principle of 'customer buy-in' is achieved.

13.   A role of the Joint Chiefs of Staff Joint LL Branch is to harmonise overarching guidance for LL across the Department of Defense community, currently the Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3150.25D, promulgated on 10 October 2008. The instruction describes the LL process, focussing on observation collection, analysis and promulgation. Publication is part of the implementation phase, with limited description of any Remedial Action processes, including tasking, implementation or validation. This reflects a situation across the Services where the implementation of lessons by ABs is presumed rather than confirmed.

14.   Common problems experienced by US LL organizations include:

- Fast information sharing at the cost of analysis;

- Units often do not submit relevant post-exercise reports and other routine reports to the LL organizations;

- Tasking ABs for RA is difficult, and achieving real change is difficult. Effort is placed on sharing information, not tracking lesson identified to lesson learned;

- Ownership of lessons is unclear: LL organizations manage the information and the supporting analysis, and rely on recipient units to formulate RA and AB; and

- Formal feedback about the value of lessons is minimal.

Spain

15.   Spain carries out its LL processes on a service, rather than a joint, basis. Currently the centre of gravity for lessons is the Army and specifically units on or preparing for operations. The Army's LL branch falls within the Training and Doctrine Command, focussing effort on coordinating lessons gathering from theatre and dissemination to deploying units.

16.   Spain derives lessons from deployed units and post deployment interviews of unit commanders, as well as from a network of international LL LOs, for instance with the US Army's CALL and with Chile. Lessons are held at battle group (BG) level in theatre. Army lessons can easily be shared between garrison HQs, but there is no sharing of lessons for information or staffing between the Services or to higher authorities. Information exchange is done mostly on a personal level, sustained by pre-deployment reconnaissance and post-deployment interviews, with classified lessons being stored exclusively in hard copy format. Information sharing is limited and therefore systemic change is difficult.

Portugal

17.   Portugal currently has no formal LL process, but employs a process of pre-deployment reconnaissance, supported by After Action Reports (AAR), to inform PDT. This permits operational lessons to inform deploying units: however, the learning and sharing of lessons on a wider scale is difficult. Units preparing to deploy fall under the authority of the relevant Service, and upon deployment these units fall under the authority of the Ministry of Defence. MOD level deployment managers are unable to influence PDT directly.

18.   Interviewees reported a lack of analysis capability to support the management of lessons, and a lack of clarity of the management of long-term issues. Some joint level information exchange occurs, but this is largely internal, with little communication with external LL organisations including NATO.

19.   Portugal would benefit from a joint level LL database for sharing lessons more widely than the direct predecessor-successor liaison achieved during reconnaissance visits, and for managing lessons that require long-term RA.

Italy

20.   The Italian Operational Command's LL Division comprises sections tasked with evaluation, endorsement and correction of issues identified in lessons. The division runs Joint Analysis Teams (JAT), which actively gather specific lessons, supported by analysis conducted by Service-based SMEs. This model of active lesson gathering resulted from close liaison with the US's CALL. The MOD has no LL POCs in operational theatres, but gathers lessons via the JATs and an LLDb available in theatre, the content of which is actively critiqued by SMEs. In common with the USA,

there is no oversight of the implementation of LL, with the onus of improvement and institutionalisation of that improvement falling upon the recipient of the lesson. While Action Bodies are appointed by informal agreement, there is no validation phase and the lesson is considered learned once shared.

21.   The LLDb is customised software. They no longer use Microsoft software packages, like Microsoft™ Access, as these packages were found to be heavily reliant upon the user's local software configuration. To achieve a truly joint level of information sharing the Command developed the LLDb to have a functionality to allow secrecy of some LLDb items. While intended to restrict sharing, a positive effect of this 'need to know' approach is that user groups requiring increased confidentiality, such as Special Operations Forces (SOF), actually share most of their lessons widely. If they did not have an option to restrict view of some lessons, they would not share at all.

22.   The Carabinieri, as observed in the MSU in Pristina, operate a LL process sourcing lessons via an LLSO in theatre, and post-tour key leader interviews. The LLSO submits LL reports in the first instance to KFOR military police via HQ KFOR. Lessons are incorporated into PDT within one rotation.

Denmark

23.   The Danish Defence Command is currently reviewing the national LL process during significant organizational changes. Currently, observations from theatre are reported via normal operational chain of command routes and analysed by SMEs. LIs are sent to speciality schools and COEs for incorporation into training including PDT. The endorsement of lessons is undertaken at the School/COE level, with the outputs including changes to SOPs and modified training. However, the target audience of School/COE training is unit trainers, on a 'train the trainer' basis: these train the deploying troops some months after the lesson was initially observed. Little information is shared between operational and functional commands.

24.   Although the Danish process represents a complete LL process focussed on routine, as well as pre-deployment, training and systemic change, the result is sub-optimal. Many units reported needing to change SOPs on arrival in theatre due to the rapidly changing environment and the obsolescence of training. This is due to the stove-piped nature of the reporting, and the delay between endorsement by SME and delivery to the units of improved training via the trained training teams. The tempo of the Danish process could be increased by allowing wider communication of observations to allow deploying units notification of new issues concurrent with *practical* changes to a) PDT and b) routine training, followed by *systemic* changes to a) Train the Trainer packages and b) SOPs and doctrine in the longer term.

LESSONS LEARNED PROCESS IN NON-NATO NATIONS

Sweden

25.   The Swedish Armed Forces HQ in Stockholm accommodates each component command's HQ element and the Defence Force-level LL branch. This facilitated communication and coordination of Joint lessons. PDT and routine training is enhanced by frequent training staff reconnaissance to operational theatres such as ISAF. Lessons undergo an early process of prioritisation to ensure that appropriate resources, including leadership oversight, are allocated to important issues. Analysis support is provided by the appropriate Service Warfare School.

26.   There is limited sharing of lessons between component commands. The Land Warfare Centre analyses operational lessons and publishes revised guidance in training manuals. The Air Warfare School is yet to initiate a formal LL process and LL

sharing procedure beyond an effective flight safety improvement process. The success of the latter is ascribed to a positive participants' mindset and a non-attributable reporting methodology. The Maritime Component Command has a mature LL process which is supported by high-level leadership engagement during the tasking process, and which has coordinated with NATO for some years.

27. The Swedish Defence Forces have the components for and commitment to an effective LL process, but are currently developing an effective sharing medium, and staffing medium, to facilitate the process.

Finland

28. Finland's LL capability resides primarily at FINCENT and coordinates closely with the Pori Brigade Peace Support Operations Training Centre. LL POCs down to company level are provided with training in the LL Process, Planning, Data Collection, Analysis, Data Management and Dissemination. Interviewees identified a critical factor in the success of a LL process to be that the POC must be held responsible for handling a lesson throughout the organisation and throughout the process: in effect, the lesson manager. Currently the process is not formalised and therefore personality-driven: this is identified as a potential weakness, which is being addressed.

29. The Finnish Defence Forces have a successful LL process for straightforward tactical lessons using primarily updated training manuals and combined training to communicate RA. Typically a tactical lesson can be fully learned within six months. There is limited success with operational or higher level lessons. The coordinating staff at FINCENT has oversight and management responsibilities, but no influence over the tasking of AB.

Annex F
Transcript of Point Paper on JALLC Deployment to KFOR – 4 May 2009 to 16 May 2009

The following is a transcript of a Point Paper on JALLC Deployment to KFOR – 4 May 2009 to 16 May 2009 issued by the Commander, JALLC on 13 July 2009 (Reference A to the main body of this report).

REFERENCES

A: SOP 3014 *KFOR Lessons Learned Procedures,* 29 November 2003 NATO/KFOR Restricted

B: Bi-SC Directive 80-6 *Lessons Learned,* 23 July 2007 NATO Unclassified

C: FRAGO 3835 *Lessons Learned Policy in KFOR,* 05 1025Z NOV 07 NATO/KFOR Restricted

BACKGROUND

1. In late 2008 Allied Command Transformation tasked JALLC to undertake an analysis requirement studying Lessons Learned sharing mechanisms within NATO and amongst nations. The formal Analysis Requirement (AR) stated:

On an opportunity basis, examine national, and NATO, Lessons Learned processes and mechanisms for sharing Lessons Learned amongst the Troop Contributing Nations (TCNs) and between the TCNs and NATO, to improve timely employment of lessons and knowledge by NATO Forces and/or NATO-led Forces .

2. The AR was focused on the following Analysis Objectives:

AO-1. Examine the nations ' LL processes to identify good practices.

Sub AO-1.1. - Examine the nations ' LL processes.

Sub AO-1.2. - Examine the integration of lessons in the National Forces' pre-deployment training for NATO and/or NATO-led Operations.

Sub AO-1.3. - Examine the integration of lessons after NRF rotations.

AO-2. Examine the mechanisms used to share lessons and knowledge between NATO and the TCNs, and amongst the TCNs, to identify possible barriers.

3. JALLC initiated this AR with a visit to KFOR between 04 and 16 MAY 2009. During this period the analysis team visited HQ KFOR, MNTFs Centre, North, South, East and West, and the MSU and KTM. During these visits the JALLC team conducted semi-structured interviews with key leaders in the manoeuvre units, and individuals involved in the KFOR and national lessons learned processes.

4. During the team's out-briefing the COS KFOR noted that, with the JALLC report expected to be completed in early 2010, its utility to the present rotation in KFOR would be limited. The JALLC team therefore drafted this interim point-paper to highlight immediate findings and to provide some preliminary analysis in support of HQ KFOR, identified as a key stakeholder in the analysis project.

PRELIMINARY FINDINGS

Introduction

5. The JALLC team found a formal LL process in place in KFOR at the HQ KFOR and MNTF level. Formal lessons were gathered effectively and communicated to HQ KFOR according to SOP 3014 (dated 29 NOV 2003) and FRAGO 3835 Lessons Learned Policy in KFOR (dated 05 NOV 2007). In addition, national lessons gathering processes were effective in capturing information in theatre and communicating it back to follow-on units, pre-deployment training teams and lessons learned organizations at national level.

6. The TCNs conduct their own Lessons Learned processes. The JALLC team found that there are different LL processes amongst the TCNs, with different time periods before integration of the lessons and knowledge into the pre-deployment training (PDT).

7. While lessons gathering and learning at the tactical level appears to be in evidence, the absence of a Lessons Learned process oversight body (the Lessons Learned Analysis Team (LLAT)), as described in the SOP (Ref. A), challenges the gathering and the analysis of observations above the tactical level.

TCNs

8. The TCNs appear to have robust processes to capture lessons and to integrate them into the PDT, but with different rhythms. Only 5 out of 16 TCNs are able to integrate the lessons for the next rotation. Those TCNs who are able to integrate the lessons into the following rotation use either their own LL LNO in-theatre, accompanying the units, or the KLT as an opportunity to capture the lessons in time for the PDT.

9. All TCNs report that their LLDb / LL Archive are not able to be shared with other nations due to national restrictions (releasability rules and regulations). The use of the national languages on storing lessons in those LLDb / Archives was also raised as a difficulty on the sharing of lessons with other TCNs.

HQ KFOR

10. The SOP 3014 was issued before the Bi-SC Directive (Ref. B) and does not refer to that Directive or to the Bi-SC LL guidance that preceded the Directive. The FRAGO (Ref. C) in support of the HQ KFOR LL Process also does not refer that Directive or Bi-SC guidance. While broadly corresponding to the NATO LL process some further harmonization and simplification is possible. During the JALLC visit the team proposed some changes to the SOP.

11. The HQ KFOR / J3 / Lessons Learned Staff Officer (SO) currently receives timely AAR following MNTF exercises, and enjoys Command Group support in managing lessons derived from the training. The after action review (AAR) reporting process, detailed in SOP 3014, is fully used by the KFOR chain of command and represents a good practice on the flow and sharing of information and knowledge.

12. The LLSO billet in HQ KFOR rotates between HUN and FIN. This restricts the HQ to a maximum of 50% situational awareness of lessons learned issues via the NATO Secret WAN during a year through this billet. While this does not affect the circulation of lessons within the KFOR Mission Secret (MS) community and to JFC Naples, it inevitably reduces the capability of the HQ to monitor, independently, LL issues across NATO. Additionally it compromises HQ KFOR's contribution to the NATO LLDb, other than by means of liaison via JFC Naples.

13. Not all the MNTFs use the Key Leader Training (KLT), or any other previous visit to the theatre, as a mechanism to introduce their LL POCs to the KFOR LL Process and

to the other LL key personnel within KFOR. The KLT events, or a previous reconnaissance to the theatre, would be ideal opportunities to promote the KFOR lessons learned process. Firstly, LL POCs for the MNTFs could use the opportunity to meet and network; secondly the HQ KFOR could use the opportunity to train key leaders in lessons learned process and thirdly the benefit of the LL process could be demonstrated by injecting real-time lessons into the training and orientation. An important factor in a successful LL process is that the user/contributor can see a benefit for his/her effort.

14. The KFOR LLDb is not used often. Current data capture is restricted to the published AAR available on the MS WISE page, sorted by exercise and period. The last confirmed use of the KFOR LLDb is thought to be in 2007.

15. Some source information on the MS WISE page is obsolete, including the Bi-SC Lessons Learned Guidance and the Joint Analysis Handbook edition. JALLC has subsequently updated the LLSO with up-to-date directives (Bi-SC Directive 80-6 Lessons Learned, 23 JUL 2007), JALLC reports and resources.

16. The sharing of lessons on the KFOR portal is not simple and is not used often at the MNTFs level. The use of contemporary IT approaches on the sharing of knowledge like internet based forums and chats could be a way to facilitate the spread of lessons.

MNTFs

17. The Units seem to be able to integrate the lessons from the previous exercise or operation held in-theatre into the following event. That happens because the KFOR AAR process is followed at all levels (Unit, MNTF and HQ KFOR) within the Theatre.

18. MNTF LL points of contact (POC) frequently change, making continuity of communication amongst MNTFs and to HQ KFOR difficult. POCs are generally dual-hatted with other roles. The POCs for MNTFs are part of the KFOR LLAT, which oversees the gathering of observations and lessons, and manages the Remedial Action process on behalf of the Command Group. In the previous rotation (Dec-May 2009) the LLAT, comprising the MNTF POCs and HQ KFOR LLSO, never met. Thus within KFOR there has been no formal opportunity to coordinate lessons learned amongst MNTFs.

19. Routinely, incoming key leaders engage their predecessors before deployment, often informally and/or via Senior National Representative, which they reported to be the most pragmatic method to share lessons.

20. LL POCs at MNTF level prepare and communicate the AAR to HQ KFOR. The HQ KFOR LLSO spends some time editing AAR and also individual Observations submitted by MNTFs. This effort could be reduced with the promulgation of guidance from HQ KFOR to the MNTFs level, and by conducting some low-level training under the HQ KFOR / J3 / LLSO's supervision.

21. MNTF MS portals are used to post AAR and other lessons learned products. MNTFs did not routinely view other MNTFs portals for information, and MNTF portals were not viewable from HQ KFOR. This restriction, even within a mission network, impairs the portal users' ability to share information. The lack of connectivity between national and MS networks was the second most common barrier to sharing information. The prime barrier to sharing information was the releasability of information. Experience derived in a multinational environment was excluded from other TCNs by virtue of being reported on national means, not releasable to other nations, due to national releasability rules and regulations.

PRELIMINARY CONCLUSIONS AND RECOMMENDATIONS

22. The JALLC data gathering exercise provided the team with insights into both NATO and national lessons learned processes and general procedures of knowledge management and organizational learning. A formal process existed for capturing lessons within KFOR, which operated independently from formal and informal national systems of lessons learned.

23. JALLC offers an observation collection program (OCP), available on the JALLC website (www.jallc.nato.int), and also the NATO LLDb software to NATO headquarters and nations. OCP is a flexible data gathering tool which allows individuals, or teams, to collect and share observations. JALLC promotes the use of the NATO LLDb software tool as a dynamic and powerful resource to communicate lessons within organizations and to manage the staffing of lessons outside a HQ tasker tracker system. JALLC remains ready to support HQ KFOR with both these resources. JALLC recommends HQ KFOR to exploit OCP and to formally request to the JALLC the LLDb software and to make it available for the MNTFs, KTM and MSU.

24. The use of LL LNOs by some nations is perceived to be sound practice, shortening the time of integration of the lessons and the knowledge in the PDT. JALLC recommends the NATO Chain of Command to send this paper to the KFOR TCNs in order to influence them to consider the use of LL LNOs deployed with their own units within KFOR.

25. Regular meetings held in-theatre by the LNOs could be a way of sharing lessons from different Units from different TCNs, bridging the gaps found in the sharing mechanisms (national security policy and language). JALLC recommends HQ KFOR LL SO to conduct regular meetings with the Units' LL LNOs in-theatre and to publish the minutes of those meetings in the KFOR Mission Secret Wise Page.

26. The Key Leader Training events or previous reconnaissance to the Theatre would be ideal opportunities to promote the KFOR lessons learned process. JALLC recommends SHAPE to encourage the TCNs to send their LL key personnel to attend the KLT in theatre or to conduct a previous reconnaissance to the KFOR AOR, and to communicate the KLT events' dates in a timely manner to the nations.

27. The KFOR LL SOP should conform with Ref. B, and should encourage the routine sharing of lessons and pre-deployment training requirements amongst all troop contributing nations within KFOR.

28. The sharing of lessons on the KFOR portal should be simplified and broadened to allow users at MNTF level and above to view lessons and experience of peers in addition to, a functioning LLDb. JALLC recommends HQ KFOR to add a dedicated LL forum in the MS Wise page.

29. The Lessons Learned Analysis Team should convene regularly and frequently to share observations and insights, and to manage the Remedial Action process on behalf of the Command Group.