



Joint Analysis and Lessons Learned Centre
NLLP Active Content Management – Ad-hoc Report



ANNEX 1
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NATO LESSONS LEARNED PORTAL ACTIVE CONTENT MANAGEMENT FOR INFORMATION ENVIRONMENT RELATED INPUTS (PERIOD FROM 01.01.2018 TO 01.02.2020)

THE CUSTOMER FOR THIS ACM REPORT IS NATO HQ INTERNATIONAL STAFF – PUBLIC
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This report is a result of NLLP Active Content Management conducted by the Joint Analysis and Lessons Learned Centre. The content is based on the data and information as available in the NLLP and provides the customer with findings for further consideration and exploitation.

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INTRODUCTION

1. JALLC Data Analysis Team identified in the framework of the NATO Lessons Learned Portal (NLLP) Active Content Management (ACM) several lessons and documents relating to Information Environment that could be further considered during the efforts to develop a NATO Information Environment Assessment (IEA) Capability.
2. As a result, JALLC Data Analysis Team conducted an initial analysis of the lessons and documents submitted in the last two years, resulting in this Ad-hoc Report. The report is structured in three sections: first section providing a quantitative overview of all IEA inputs identified within NLLP; the second section presenting initial qualitative findings; and the final section providing references and links to most relevant NLLP inputs considered in the scope of this report.
3. The methodology used for this report consisted firstly in identifying the IEA relevant inputs in the NLLP, as available to the JALLC analysts based on their access permissions, by conducting both word and acronym search followed by review of each document to validate its relevance for this report. Then, after a quantitative analysis of these documents, an initial content analysis was conducted leading to identifying relevant findings. Finally, these findings were grouped and reviewed from Capability Development point of view.

OVERVIEW OF IEA INPUTS IN NLLP

4. The initial search of the entire NLLP for the word “Information Environment” and for the acronym “IE”, disregard the submission date, resulted in a number of items that include¹:
 - a. 10 Lessons Identified;
 - b. 26 reports containing different Lessons identified, Lessons Learned and/or Best Practices;
 - c. 7 reports on various topics that include also the word “Information Environment”;
 - d. 3 documents labelled as Directives & SOPs; and
 - e. Other items that are distributed in the Tracking Area (at different level of staffing within the NATO LL Process) and in various communities of interest within the NLLP.
5. All these items have different level of classification and are labelled by the originator as relating to various topics (e.g. Land, Air, Maritime, and Cyber Defence Operations; Operations Planning and Assessment; Education, Training, Exercises & Evaluation; Consultation, Command & Control), most of them being also associated with Doctrine, Organization, Training, Leadership and Interoperability Lines of Capability Development.
6. However, given the number of search results and the status of some inputs, the JALLC Data Analysis Team scoped the data collection to the period 01 January 2018 – 01 February 2020 for which the initial analysis was conducted.

INITIAL FINDINGS FOR THE REPORTING PERIOD

7. The initial content analysis of the data collected shows that, in most of the cases, the NLLP inputs do not reflect individual and independent Information Environment issues but are aspects that are connected with other areas such as personnel, operations, targeting, PSYOPS, INFOOPS, STRATCOM or Cyber.
8. In the context of this report, the findings resulted from the initial analysis of the NLLP inputs can be grouped in the following categories:

¹ Most of these items can be further searched and analyzed by the customer according to the needs.

a. Relating to Overall Capability Development:

- IEA continues and should continue to be subject of different Transformational Activities (TACT) until the IEA Capability is in place;
- There are some NATO IEA studies considered to be conducted (a MARCOM IE Study with regard to Operation Sea Guardian) or already conducted (an IE Study conducted by JWC with findings to be implemented during TRJU I and TRJU II) that could provide additional inputs in support of IEA Capability Development;
- The US J7 / Joint Lessons Learned Division Report on “Competing in the Information Environment”, available in the NLLP, is a reference that should be considered in its entirety due to the insights provided on the IE approach (see relevant references below).

b. Relating to Individual Lines of Capability Development:

- *Doctrine:*
 - At political-military level, information is seen as a Joint Function since operations can be conducted both in physical and information environment;
 - The scenario developed for the exercises, including for Corp’s level exercises, needs to allow in-depth analysis of IE and real time analysis. To address this need it would be, most probably, required trained personnel and appropriate tools which makes this finding also relevant for Personnel, Training, and Materiel lines of development.
 - Federated Mission Networking (FMN) Civil - Military information sharing concept could be a positive example that the IEA capability should leverage on and ensure a comprehensive approach across all non-kinetic areas, to include partners (e.g. Nations, IOs, Academia) in order to improve the understanding of IE. This finding is also relevant for Interoperability line of development;
 - Terminology in the IE area is evolving and requires to be documented and formalized. At the same time, the boundaries and delineation between various non-kinetic capabilities (e.g. IE, INFOOPS, PSYOPS, Media, Military PA, STRATCOM) should be clarified. It is assumed that this clarification would determine the right deliverables from IEA and will place the IEA Capability at the right place in the HQ Battle Rhythm(s). As such, adjustments to the IE-relevant training design and content would be required, making this finding also relevant for the Training line of development;
 - Detailed IE-specific SOPs, based on overarching directives and policy, are required to formalise an IE forum (e.g. Commander’s Communication WG) that enables daily D&G from the Commander. Moreover, this forum ensures that Commander and Command Group have immediate access to IE updates and share a common Situational Awareness while the preparation of this forum would ensure cross-functional coordination at staff level, prior to presenting something for Commander’s decision. This forum was already identified as a best practice and appears to be also relevant for the Leadership line of development;
 - A coherent Alliance messaging in the IE can be ensured by guiding the national and interagency efforts through a wide and consistent IE doctrinal framework;
 - Recent exercises showed that STRATCOM D&G from SHAPE to Operational HQ were very limited, questioning this situation as a result of exercise artificiality or as a result of SHAPE limited ability to provide the STRATCOM D&G. As such, the STRATCOM D&G process should be reviewed and updated accordingly in the relevant doctrine;
- *Organization:*

- There is an ongoing consideration of the way the Information Fusion Cell is able to play in an exercise to avoid duplication of work with other non-kinetic entities, and to handle a complex IE, including the need to use a specific IE analysis software.
- *Training:*
 - A critical factor for the success of IEA is to train, educate and prepare commanders and their staff to lead, manage, and conduct operations in the IE. This finding is relevant also for the Personnel line of development.
- *Material:*
 - Unclassified network, common to multiple entities involved in the IE is needed to support a comprehensive approach;
 - A specific IEA software is required to handle high volume of information and to support an immediate and in-depth analysis and visualization. A good reference for new technologies supporting other capabilities in the JALLC Report on “New Technologies in support of Lessons Learned” (see relevant references below), especially the data files supporting the report.
- *Leadership:*
 - Leaders are expected to include informational aspects across all domains of operations. This requires understanding, training and right policies in place;
 - Leaders should commit for a continuous monitoring and improvement of IEA capability.
- *Personnel:*
 - Manning with IEA experts (especially social media) during exercises is very limited and have impact on the training delivered. Because of this shortfall, sometimes the IEA is not properly conducted.
 - Effective IEA is directly dependent on the availability of appropriate personnel with the right cultural background and analysis, assessment and language skills. This finding is relevant also for the Training line of development
- *Facilities:*
 - IEA capability should benefit of own communication facilities (e.g. VTC) taking into account that these communication means are limited and with priority for operational issues, especially on the ships or when an exercise is run in parallel with real operations. This need is also relevant for the Tools line of development.
- *Interoperability:*
 - The potential IEA software / platform should allow access to different entities involved in the IE.

REFERENCES AND LINKS TO NLLP DOCUMENTS

9. The main documents considered for this ACM Ad-hoc Report were extracted from NLLP as they were available to JALLC Analysts. However, they may not be available for all NLLP users. Therefore, whenever relevant, a mention is made directing the reader to the relevant HQ for further information.
10. Items in NLLP Main Library (in order to access them user should be signed-in):
 - a. **(NU NLLP)** Competing in the Information Environment, US Joint Staff – J7 / Joint Lessons Learned Division, January 2019:
[https://nllp.jallc.nato.int/IKS/Sharing%20Private/\(U_FOUO\)%20JLLD%20CIE%20Final%20Report%20-%202024%20Jan.pdf](https://nllp.jallc.nato.int/IKS/Sharing%20Private/(U_FOUO)%20JLLD%20CIE%20Final%20Report%20-%202024%20Jan.pdf)

- b. **(NU NLLP)** New Technologies in support of Lessons Learned, JALLC, January 2019:
<https://nllp.jallc.nato.int/IKS/Sharing%20Private/19-011%20JALLC%20Report%20-%20New%20Technologies%20in%20Support%20of%20Lessons%20Learned.pdf>
- data file relating to lessons learned challenges:
<https://nllp.jallc.nato.int/IKS/Pages/shareddocuments.aspx?docID=616&WebID=d5bbae55-0cbb-4aa4-aed3-38a6b78cb5d3&ListID=6fddfe53-e501-4db7-9f92-6ae0042c5ddb>
 - data file relating to new technologies features:
<https://nllp.jallc.nato.int/IKS/Pages/shareddocuments.aspx?docID=617&WebID=d5bbae55-0cbb-4aa4-aed3-38a6b78cb5d3&ListID=6fddfe53-e501-4db7-9f92-6ae0042c5ddb>
- c. **(NU NLLP)** Two case studies of successful strategic communication campaigns, US Army War College / Strategic Studies Institute, March 2019:
<https://nllp.jallc.nato.int/IKS/Sharing%20Public/US%20Army%20War%20College-two%20case%20studies%20of%20successful%20strategic%20communications%20campaigns.pdf>
- d. **(NU NLLP)** FMN, MPE, FMCM Information Sharing Guidebook, MCDC, 2016:
<https://nllp.jallc.nato.int/IKS/Sharing%20Public/FMCM%20Guidebook%20with%20Enclosures%201-5.pdf>
- e. **(NU NLLP)** Strategic Communication / Messaging in Peace 7 Stability Operations, SOLLIMS, November 2016:
[https://nllp.jallc.nato.int/IKS/Sharing%20Public/SOLLIMS_Sampler_Stratcomm-Messaging_\(Nov-2016\).pdf](https://nllp.jallc.nato.int/IKS/Sharing%20Public/SOLLIMS_Sampler_Stratcomm-Messaging_(Nov-2016).pdf)
- f. **(NS NLLP)** NATO-Georgia Exercise 2019, Summary and Lessons Learned, HQ SACT, APR 2019: <http://nllp.jallc.nato.int/cmnt/extra/ngex19/library/NATO-Georgia%20Ex%202019%20Summary%20and%20Lessons%20Learned.pdf>
- g. **(NS NLLP)** ARCADE THOR 2018 Post Exercise Report:
http://nllp.jallc.nato.int/IKS/Sharing%20Private/20180622_NR_G35_ATH18_PXR.pdf
11. **(NS NLLP)** Items in Tracking Area, still under staffing process with changes / follow-ups expected:
- a. ID 13553: STRATCOM – the status is Lesson Identified;
 - b. ID 13197: Sovereign Cyber Effects Provided Voluntarily by Allies in Exercises – the status is Lesson Identified; Internal to SHAPE;
 - c. ID 12604: Managing coherence of Information Environment - the status is Lesson Identified; Internal to JWC;
 - d. ID 12539: Targeting Process – the status is Lesson Identified sent for Remedial Action; Internal to AIRCOM;
 - e. ID 11989: Information Fusion Cell (IFC) in CPX – the status is Observation; Internal to JFCNP;
 - f. ID 11936: Social Media - the status is Observation Submitted; Internal to HQ AIRCOM;
 - g. ID 11510: Lack of Information Environment Study - the status is Lesson Identified; Internal to MARCOM;
 - h. ID 11085: Integration of lethal and non-lethal Targeting - the status is Lesson Identified for remedial Action; Internal to JFCNP.

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